The Russian Academy of Sciences

Academicians and Corresponding Members 1993

Compiled by **Dr**, **Valery B. Sokolov**, Chief of The Scientific Management Department and **Dr. Jack L. Cross**, Project Leader



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Preface

In September, 1992, Iurii S. Osipov, President of the Russian Academy of Sciences, and I. M. Makarov, the Chief Scientific Secretary of the Russian Academy, officially authorized Valery B. Sokolov, D. Tech. S., and Dr. Jack L. Cross, to join together to update the materials gathered by Dr. Cross on the Academy to produce a "Directory to the revitalized Russian Academy of Sciences." It was hoped at that time to find grant money to aid in the project.

That hope was dashed, but Dr. Sokolov and Dr. Cross have continued to cooperate in an effort to accomplish the purpose of the original charter--as best they could. This list of the membership of the academy is one of the results or that cooperation.

The list is the most current list of members of the Russian Academy, and will be updated every two years to coincide with the election of new members. Several of the members listed in this edition do not have biographical sketches included, and we are working to improve those entries. The list is in two parts: the first part is an alphabetized listing of the Academicians of the Academy; the second, a listing of the Corresponding Members.

The Academy of Sciences in Russia is one of the most stable of institutions in that nation, and will continue to exercise a major influence in the development of science and technology. These are some of the principal men and women whose work has been recognized by their peers in Russia. Jack L. Cross
Austin, Texas
1995

Academicians

D. Econ. S. Born in 1930. Russian economist. Corresponding Abalkin, Leonid I., member of the Economics Department of the AN SSSR and the RAN in 1984; and, an academician in 1987. He was selected as director of the Economics Institute in Moscow in 1986. That institute was founded in 1955 and its scientists study general economic theory, agricultural and labor economics, and Russian economic development. He is leading research in population, manpower and labor protection. He has been a member of the Presidium of the AN SSSR and of the Russian Academy of Sciences since October 1988. Abrikosov, Aleksei A., D. PM. S. Born in June 1928. Russian theoretical physicist. He has been a corresponding member of the academy since 1964, and an academician since December 1987. He graduated from the Moscow State University in 1948 and worked at the Institute of Physical Problems from 1948 to 1965. From 1965 he has worked at theoretical Physics Institute of the AN SSSR and the RAN where he has been Chief of the Metal Physics laboratory. He has been a professor at Moscow State University since 1965. He was named Director of the L. F. Vereshchagin High Pressure Physics Institute in Troitsk in December 1988. His work has been in the fields of superconductivity, the theory of semimetals, statistical physics, quantum electrodynamics, the theory of plasma, and astrophysics. He received the Lenin Prize in 1966 (with L. P. Gorkov and V. L. Ginzburg) for work on the theory of superconductive alloys and the properties of superconductors in strong magnetic fields. He has produced four major monographs. (GSE vol. 1, p. 31; vol. 14, p. 191; vol. 23, p. 613.)

Avduevskii, Vsevolod S ., D. Tech. S. Born in 1920 in Berezovka, Odessa Oblast. Russian specialist in aeromechanics and the scientific and technical problems associated with space flight. Academician since 1979. He graduated from the S. Ordzhonikidze Moscow Institute of Aviation in 1944, and became a staff member at the P. I. Baranov Central Institute of Aircraft Engine Construction. He later was associated with a number of other research institutes. In 1955, he started teaching at the Moscow Institute of Aviation and was named a professor there in 1961. His works are on the theory of heat transfer, the boundary layer, combustion, and the gas dynamics of jets and separated supersonic flows. He produced a series of papers on spacecraft-based investigations of the Venusian atmosphere. Lenin Prize, 1970, and the Zhukovskii Medal for the best work in the theory of aviation in 1971. (GSE 30, p. 19.)

Avrorin, Evgenii N., D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Russian Academy of Sciences and of the Urals Department since December 1987; Academician in 1993. In 1992, he was listed as the Chief scientist of the Chelyabinsk-70 weapons design center located near Chelyabinsk. (NY Times News Service, 15 Feb., '92.)

Aganbegian, Abel G . Born in 1932 in Tbilisi. Russian economist. Corresponding member of the Siberian Department since 1964; academician of the Economics Department of the AN SSSR and the RAN and of the Siberian Department since 1974. He was named academician secretary of the Economics Department of the Academy of Sciences in 1986. He graduated from Moscow State University in 1955. From 1955 to 1961 he worked for the State Committee of the Council of Ministers of the U.S.S.R. on problems of labor and wages. In 1961, he became Chief of a laboratory of the Institute of Economics and Organization of Industrial Production of the Siberian Division of the AN SSSR and the RAN. He was named its director in 1966. From 1967 to 1971, he was the director of the Economics and Organization of Industrial Production Institute at Novosibirsk. His principal works are on labor productivity, wages, standard of living, and in developing models for future

economic planning. In 1988, he was one of the economics advisers to Mikhail Gorbachev. (GSE 1, p. 130.)

Ageev, **Mikhail D**. Corresponding member of the Problems of Machine Building and Control Processes Department of the AN SSSR and the Russian Academy of Sciences and the Far Eastern Department of the AN SSSR and the RAN since December 1987; academician in 1993.

Aleksandrov, Aleksandr D . Born in July 1912 in Volyn' in the Riazan Province. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1946, and an academician since 1964. He also hold membership in the Siberian Department of the Academy. He graduated from Leningrad State University in 1933, and began working there upon graduation. He served as the rector of Leningrad State University from 1952 to 1964. He has been at the Siberian Division (Department) since 1964. Aleksandrov's major contributions are in the field of geometry. He discovered methods for studying the metric properties of figures that opened a new field of research, the "irregular metric multiformities." The works of his school have produced near solutions to several classical problems of the theory of surfaces and have found a significant application in the theory of differential equations and the theory of elastic films. He has also done work in relativity theory. From 1964 to 1986, he headed the Mathematics Institute of the Siberian Department, moving in 1986 to the V. A. Steklov Mathematics Institute in St. Petersburg. Recipient of the State Prize in 1942, and of the international Lobachevskii Prize in 1951. (GSE vol. 1, p. 222; vol. 16, p.635; vol. 20, p. 652, and vol. 22, p. 178.)

Aleksandrov, **Evgenii B.**, D. PM. S. Born in 1936. Physicist. Corresponding member since 1979; academician in 1993. Winner--with others--of the 1978 State Prize for a series of studies on "Detection, Research and Implementation of New Optical Phenomena Conditioned by Coherence and Atomic State" (1955-1976).

Aleksandrov, Kirill S., D. PM. S. Born in 1931. He is a specialist in the field of crystallography and the physics of crystals. He was elected a corresponding member in 1972, and he has been an academician of the General Physics and Astronomy Department of the academy since 1984. He graduated from the Leningrad V. I. Ulyanova-Lenin Electrotechnical Institute in 1954 and began work at the A V. Shubnikov Crystallography Institute in 1958, and at the Physics Institute in Krasnoiarsk as a junior researcher; he was head of a laboratory and a Deputy Director from 1968 to 1981. Since 1983, he has been Director of that institute--the L. V. Kirenskii Physics Institute in Krasnoiarsk that was established in 1956 to study thin magnetic film physics, super strong stationary magnetic fields, ferro-electric physics, and radio spectroscopy. It is subordinate to the Krasnoiarsk Scientific Center of the academy's Siberian Department. He also became deputy chairman of the Krasnoiarsk Scientific Center in 1983. As a professor he has held the chair of Solid State Physics at the Krasnoiarsk State University since 1971. (Material from an unpublished manuscript: *Perasoval'nii Sostav, 1957-1989* Novosibirsk: Akademia Nauk SSSR Publishing House, 1989.)

Alekseev, Anatolii S. , D. PM. S. Born in 1928 in Pskov Oblast. Russian geophysicist. He was elected a corresponding member of the academy in 1972 and an academician in 1984. Since 1984, he has been an academician of the Information Sciences, Computer Technology and Automation Department of the National Academy and also of the Siberian Department. He graduated from Leningrad State University in 1952. From 1955 to 1963, he was on the staff of the St. Petersburg Division of the V. A. Steklov Institute of Mathematics of the AN SSSR and the RAN. In 1963, he joined the Computer Center of the Siberian Department, becoming Deputy Director of the center in 1980. He joined the Presidium of the Siberian Department in 1980. In 1964, he taught at the University of Novosibirsk, becoming a professor in 1970. Since 1980, he has been on the Presidium of the Siberian DSepartment. He Developed principles for geological data gathering from vibration sounding of the earth's interior. His major work has been in seismology. He has headed the Scientific Society for the Mechanical Mathematical Sciences in Energetics, the

Coordination of the Soviet Scientific Committee on the Earth's Vibration Processes, the Soviet Committee for Methods of Distance Finding, the Committee for Computing Technology, and the regional section of Siberia and the Far Eastern Scientific Service for Modeling Complex Mathematical Problems. Since 1976, he has been a member of the American Mathematical Society, and since 1981 a member of the American Photogrammetry Association, and since 1983 he has been a specialist (consultant) on sources of seismic control. In 1982, he received a State Prize and is the holder of a number of other medals recognizing his achievements. (Sib. Unpub. MSS., 1989) (GSE 30, p. 9.)

Alemasov, Viascheslav E., D. Tech. S. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1984; and academician in 1993. Since 1988, he has been chairman of the Kazan' Affiliate of the Academy.

Alferov, Zhores I ., D. PM. S. Born in 1930. Russian physicist. He has been an academician of the General Physics and Astronomy Department of the AN SSSR and the RAN since 1979. In 1963, he proposed that heterostructures be used for semiconductor lasers. The $\rm CO_2$ gas dynamic laser that resulted was proposed by Prokhorov and V. K. Koniukhov in 1967 and built in 1970. Since 1968, he has headed the Contact Phenomenon in Semiconductors laboratory of the A. F. Ioffe Physical Technical Institute. In 1984, he was awarded the U.S.S.R. State Prize for his work--with others--on "Isoperiodic Heterostructures of Multi-component (Quartenary) Solid Solutions of the Semiconductor Compounds $\rm A_3B_5$," published from 1971-1981. In December 1987, he was made director of the Ioffe Physical Technical Institute. In April of 1989 he became Chairman of the St. Petersburg Scientific Center and was elected a member of the Presidium of the academy. (GSE, 31, p. 318.)

Ambartsumian, Viktor A ., D. PM. S. Born in 1908 in Tiflis. Russian astrophysicist working in the physics of stars and nebulae, astronomy, the dynamics of stellar systems, and the cosmogony of the stars and galaxies. He is the founder of a school of theoretical astrophysics in the U.S.S.R. Corresponding member of the General Physics and Astronomy of the Academy since 1939; academician since 1953. Academician of the Armenian Academy of Sciences in 1943, and President of that academy since 1947. Since 1953, academician of the Nuclear Physics Department of the academy. Since 1957, member of the academy Presidium. Since 1967, academician of the Physical and Mathematical Sciences Department of the Armenian Academy of Sciences. He is a professor at the University of Erevan. He founded the Biurakan Astrophysical Observatory of the Armenian Academy of Sciences in 1946 and has been its Permanent Director since its founding. From 1948 to 1955 he served as Vice President of the International Astronomical Union, and has been its President since 1968. He won State Prizes for his work in 1946 and in 1950. He was a deputy to the Supreme Soviet from its third through its seventh sessions. In 1988, he was appointed an advisor to the national academy's Presidium. He has been on the editorial board of Science in the U.S.S.R. (GSE 1, p. 327.)

Anan'ich, B. V.

Andreev, Aleksandr F., D. PM. S. Born in 1939. Academician of the General Physics and Astronomy Department of the Academy since December 1987. Corresponding member since 1981. In 1985 he was awarded the Lenin Prize along with others for his work on "the tunnel transfer of matter and quantum crystallization." Since 1986, he has been Deputy Director of the S. I. Vavilov Physical Problems Institute in Moscow that was created in 1934 to do research in low temperature physics, plasma physics, theoretical physics, and power electronics. In 1984, he received the M. V. Lomonosov Prize in recognition of his scientific contributions along with K. O. Keshishev and A. Ia. Parshin.

Anasov, Dmitri V., D. PM. S. Listed as a senior researcher from 1970-1980s in the V. A. Steklov Mathematics Institute in Moscow. Academician of the Mathematics Department of the Academy in 1993.

Apresian, Iurii D., D. Philology S., Academician in 1993 of the Information Sciences, Computer Technology, and Automation Department of the Academy. In the Computer Linguistics Laboratory (No. 15) of the Problems of Information Transmission Institute in Moscow, under the guidance of Professor Iurii D. Apresian, D. Philol. S., he led in building a full-fledged multi-functional and multi-language linguistic processor for textual information on the basis of the "Meaning Text" approach , which is designed for the solution of one of the main problems in the field of artificial intelligence.

Arbatov, Georgii A., D. Hist. S. Born in 1923 in Kherson. Russian historian and economist. Corresponding member, 1970; academician, 1974--of the Economics Department of the Academy. Academician of the new Department, Problems of World Economics and International Relations, since August 1988. He graduated from the Moscow Institute of International Relations in 1949. From 1949 to 1962, he worked for the Foreign Literary Publishing House and for the journals Voprosy filosofii, Kommunist, and Problemy mira i sotsializma. From 1962 to 1964, he was head of a section of the Institute of World Economics and International Relations of the AN SSSR and the RAN. From 1964 to 1967 he was a member of the staff of the CC CPSU. Since 1967, he has been director of the USA and Canada Institute in Moscow that was founded in 1967 to support research on the history, international relations, economic policies, and the sociological and social composition of the USA and Canada. He was a member of the Central Auditing Committee of the CPSU from 1971 to 1976. He became a candidate member of the CC CPSU in 1976 and a member of the CC CPSU in 1981. He was a deputy to the 9th and 10th Convocations of the Supreme Soviet of the U.S.S.R. His works are on foreign policy and international relations. He has been a member of the Presidium since October 1988. (GSE 30, p. 16.)

Arnol'd, Vladimir I., D. PM. S. Born in 1937. Corresponding member of the Mathematics Department of the Academy since 1984; academician in 1993.

Atabekov, Iosif G . D. Bio. S., Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since December 1987; academician in 1993. He is also an academician of the Russian Academy of Agricultural Sciences. He graduated in 1956 from the All-Union Agricultural Institute with a specialty as a scientist-agriculturist. He has been on the Microbilogy Institute staff since 1978 and has been head of the The General and Comparative Virusology Laboratory of the institute. He has also held the Virology Chair of the biological faculty at Moscow State University since that time. The Virusology Laboratory personnel execute fundamental and applied studies of plant viruses and develop bacteriophages, create diagnostical test systems for viral diseases of berries, fruits, and flowers and develop technical cultures to be used in virusless plant-growing.

Bagaev, Sergei N. D. PM. S. Born in 1941. Physicist. Corresponding member since 1990 of the General Physics and Astronomy Department; academician in 1993. Specialist in laser physics and quantum electronics. He is a lead researcher and heads a Department of the Thermal Physics Institute in Novosibirsk of the Siberian Department of the RAN. He conducts experiments in optical spectroscopy, studying the quantum Doppler Effect of gases from cold to extremely high temperatures. He also acts as a consultant to the Medical Scientific Council of the Russian Academy of Sciences.

Bagdasar'ian, Khristofor. S ., D. Chem. S. Born in 1908 in Paris. Russian physical chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1968; and academician since 1981. He graduated from the Moscow Chemical Engineering Institute in 1931. He began work in the Karpov Institute of Physics and Chemistry as a senior scientist and laboratory Head in 1936. His work deals with the kinetics and mechanics of the reaction of free radicals and elementary photochemical and radiation chemical reactions. He is the author of the monograph "Theory of Radical Polymerization" that has been translated into several languages. (GSE 2, p. 539.)

Baev, A. A., D. Bio. S. Born in 1903. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department since 1970.

Bakeev, **Nikolai F**., D. Chem. S. Born in 1932. Corresponding member of the General and Technical Chemistry Department of the Academy since December 1987; academician in 1993. In 1987, he shared the V. A. Kargin Prize in physical chemistry with A. L. Volinskii and E. A. Sinevich.

Balashov, **Nikolai I** ., D. Phlg. S. Corresponding member of the Literature and Language Department of the Academy since 1984; academician in 1993.

Baldin, Aleksandr M ., D. PM. S. Born in 1926 in Moscow. Russian physicist. Academician of the Nuclear Physics Department of the Academy since 1981. He graduated in 1949 from Moscow Physical Engineering Institute where he became a professor in 1965. From 1949 to 1968, he served on the staff of the Institute of Physics of the AN SSSR. In 1968, he was appointed Director of the High Energy Laboratory of the Joint Institute for Nuclear Research in Dubna. His works include electromagnetic interactions of elementary particles and atomic nuclei and the physical principles of particle acceleration. He directed the conversion of the proton synchrotron of the Dubna center into the first accelerator of relativistic nuclei. State Prize, 1973.) (GSE 30, p. 21.)

Bannikh, **Oleg A** ., D. Tech. S. Born in 1931. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department since December 1987; academician since 1993.

Baraboshkin, Aleksei N., D. Chem. S. Born in 1925. Corresponding member since 1981, and academician of the General and Technical Chemistry Department of the RAN and of the Urals Department since December of 1987. Since 1978, he has been Director of the Electrochemistry Institute at Ekaterinsburg (Sverdlovsk) that is subordinate to the academy's Urals Department and that conducts research on the corrosion of alloys.

Barkov, Lev M . Born in 1928 in Moscow. Russian High Energy physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1972, and academician since 1984. He graduated from Moscow State University in 1952 and joined the Institute of Atomic Energy staff. In 1967, he joined both the staff of the Institute of Nuclear Physics of the Siberian Department in 1967 and the teaching staff of the University of Novosibirsk, receiving his professorship there in 1973. Since 1969, he has been Head of "Barkov's Department" of the Nuclear Physics Institute in Novosibirsk that was created in 1957 and that concentrates on controlled thermonuclear reactions and accelerator technology. His principal membership is in the Nuclear Physics Department of the RAN. In 1980, he established the chair of nuclear physics at Novosibirsk University that he occupies. His works are in neutron moderation and multiplication in uranium-water systems. He has investigated the production of pions and their interaction with matter. He has worked on developing devices with strong pulsed magnetic fields for the study of elementary particles. His works deal with neutron moderation and multiplication in uranium-water systems. He has investigated pion production and the interaction of pions with matter. (GSE 30, p. 22.)

Basov, Nikolai G., D. PM. S. Born in December 1922 in Voronezh. Since 1966, academician of the General Physics and Astronomy Department of the academy. Since 1967, member of the Presidium of the academy. He is one of the founders of quantum radio physics. He graduated from the Moscow Engineering Physics Institute in 1950. Since 1963, he has been the Chief of the Quantum Radiophysics Division of the P. N. Lebedev Physics Institute. He holds the Nobel Prize in Physics (1966) for fundamental work in the field of quantum electrodynamics. From 1973 to December 1988, he served as director of the P. N. Lebedev Physics Institute in Moscow that is the oldest and largest institute of its kind in Russia. Among the topics of research at the institute are lasers, quantum radiophysics, nonlinear optics, spectroscopy, plasma physics, theoretical astrophysics, particle physics, and theoretical biophysics. Since 1976, he has been vice chairman of the Executive Council of the World Federation of Scientific Workers. Since 1978, he has served as chairman of the Presidium of the Society for Knowledge in Moscow. Basov was the first to point out the possibility of using semiconductors in quantum electronics. From 1957 to 1961, he and his co-workers developed methods for fabricating semiconductor lasers. The

first gallium arsenide semiconductor laser built in the U.S.S.R. was made in the B. M. Vul laboratory. He received the Lenin Prize in 1959 and the Nobel Prize in 1964. He was one of Prokhorov's colleagues and collaborators. He was a member of the editorial board of Science in the U.S.S.R. (GSE vol. 3, p. 58; vol. 11, p. 588; vol. 16, p. 457; vol. 21, p. 257; vol. 30, p. 146; and vol. 31, p. 318.)

Bakhvalov, **Nikolai S** ., D. PM. S. Born in 1934. Corresponding member of the Mathematics Department of the Academy since 1981; academician in 1993.

Beletskaia, **Irina P**. Born in 1933 in Leningrad. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1974; academician in 1993. She graduated from Moscow State University in 1955 and joined the staff of the university becoming a professor in 1971. Her works are in the mechanisms of organic reactions. (GSE 30, pp. 23-4.)

Belotserkovskii, **Oleg M** ., D. PM. S. Born in 1925. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1979. Since 1963, he has been rector of the Physical Technical Institute in Moscow subordinate to the Ministry of Higher and Secondary Specialized Education. Since 1978, he has been Deputy Director of the Computer Center in Moscow. The center was established in 1955 and is now under the control of the Information Science, Computer Technology and Automation Department of the academy. This Department was created in 1984.

Beliaev, Spartak T ., D. PM. S. Born in 1923 in Moscow. Russian physicist. Corresponding member since 1964, and academician of the Nuclear Physics Department of the AN SSSR and the RAN and of the Siberian Department since 1968. He graduated from Moscow State University in 1952. From 1952 to 1962, he worked at the I. V. Kurchatov Institute of Atomic Energy. After 1962, he worked at the Institute of Nuclear physics of the Siberian Department of the AN SSSR and the Russian Academy of Sciences, and since 1965, he has served as rector of Novosibirsk University. Since 1969, he has been Head of Theory Laboratory of the Nuclear Physics Institute in Novosibirsk. From 1967 to 1978, he was a member of the Presidium of the Siberian Department. Since 1983, he has served as Head of the General and Nuclear Physics Division of the I. V. Kurchatov Atomic Energy Institute in Moscow. He has worked on relativistic plasma, the quantum theory of many particles, and the theory of the atomic nucleus. (GSE 3, p. 141.)

Beliakov, **Rostislav** A ., D. Tech. S. Born in 1919 in Murom, Vladimir Oblast. Russian aircraft designer. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981. Following graduation from the S. Ordzhonikidze Moscow Institute of Aviation in 1941, he worked in the aviation industry, and was named principal designer at the A. I. Mikoyan Experimental Design office in 1971 where he supervised the design of various kinds of fixed-wing aircraft. He holds the State Prize and the Lenin Prize. (GSE 30, p. 24.)

Bekhtereva, Natalia P ., D. Med. S. Born in 1924 in Leningrad. Russian physiologist. Since 1975, academician of the National Medical Academy of Sciences Medical and Biological Sciences Department. Corresponding member of the Physiology Department of the Academy since 1970, and academician since 1981. Granddaughter of V. M. Bekhterev. She graduated from the I. P. Pavlov First Leningrad Medical Institute in 1947. She worked at the Institute of Experimental Medicine of the Medical Academy from 1950 to 1954 and at the A. L. Polenov Neurosurgical Institute of the Ministry of Health from 1954 to 1962. In 1962, she became head of the neurophysiology Department of the Institute of Experimental Medicine, becoming its Director in 1970. She was the first scientist in Russia to implant electrodes in the human brain on a long-term basis for diagnostic and medicinal purposes. (GSE 30, p. 23.)

Bogatikov, **Oleg A.** , D. GM. S. Born in 1934. In 1985, he received the A. E. Fersman Prize in geochemistry and mineralogy for his research. He has been a corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department since December 1987. He was elevated to academician status in 1993. Since 1977, he has worked

as Head of a laboratory of the Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry Institute in Moscow.

Bogdanov, **Aleksei A** ., D. Chem. S. Corresponding member of the Biochemistry, Biophysics and Chemistry of Physiologically Active Compounds Department of the Academy since 1984. Elevated to academician status in 1993.

Bogoliubov, **Mikhail N**. Born in 1918 in Leningrad. Russian linguist and specialist on Iran. Corresponding member of the Literature and Language Department of the Academy since 1966; academician since 1993. He graduated from Leningrad State University in 1941 and has been a professor there since 1959. His works deal with the Khorezmian, Sogdian, and Yaghnolic languages. (GSE 3, p. 396.)

Bogomolov, Aleksei F ., D. Tech S. Born May 1913 in the village of Sitskoe in present-day Smolensk Oblast. Russian radio engineer. Academician of the General Physics and Astronomy Department of the Academy since 1984. He graduated from the Moscow Power Engineering Institute in 1937 and began working there upon graduation. He became a professor in 1958. His principal works are in radio engineering and radio physics. In 1979, he was listed as a senior researcher in an unidentified laboratory of the Space Research Institute in Moscow. He helped to develop large antennae to receive transmission from a television center via artificial satellites. He has been an academician since 1984. (GSE 3, p. 397.)

Bogomolov, Oleg T . Academician of the Economics Department of the Academy since 1981. Since 1969, he has been Director of the Economic World Socialist System Institute in Moscow that was founded in 1961 and studies theoretical and practical principles and problems of building a world socialist economic order. In 1977, he was a member of the editorial council for publications of the Institute of the History of Natural Science and Technology of the Russian Academy of Sciences.

Boldirev, Vladimir V ., D. Chem. S. Born in 1927. Inorganic Chemist. Specialist in the field of Solid State and Kinetic Heterogeneous Reactions. Academician since 1990 of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy. He pioneered in the classification of physical reactions of solids. He graduated from the Tomsk State University in 1948 and joined its faculty. From 1958 to 1963 he held the chair of radiation chemistry at the Tomsk Polytechnical Institute. From 1964 to 1975, he worked at the Chemical Kinetics and Combustion Institute in Akademgorodok, heading the Laboratory of Chemical Kinetic Reactions in the Solid State. In 1967, he was named Deputy Director of that institute, and in 1975 he became its Director. In 1976, he became director of the Physico-Chemical Institute's Foundation for the Recasting of Mineral Raw Materials. He has been a professor since 1963, holding the; chair of Solid State Chemistry at the Novosibirsk State University. Since 1971, he has chaired the Scientific Council on the problems of solid state chemistry of the Siberian Branch. From 1976 to 1988, he was Head editor for the chemical series scientific journal Izvestia of the Siberian Department of the SSSR. He has authored 78 scientific works, co-authored another 450, been credited with 95 inventions and holds eight patents.

Bolkhovitinov, **Nikolai N**. Born in 1930. Corresponding member of the History Department of the Academy since December 1987; academician in 1993.

Bolotin, **Vladimir V** . Born in 1926 in Tambov. Russian specialist in mechanical engineering. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1974; academican in 1993. He graduated from the Moscow Institute of Railroad Transportation in 1948. He was head of a subdepartment at the Moscow Power Engineering Institute in 1958. From 1958 to 1964, he was associated with the Institute of Mechanics of the AN SSSR. His work is in the mechanics of deformable media. (GSE 30, p. 27.)

Bol'shakov, **Vladimir N** ., D. Bio. S. Born in 1934. Corresponding member of the General Biology Department and of the Urals Department since 1979, and academician of both Departments since December 1987. Deputy Director of the Zoology Institute in Leningrad from 1971 to 1977. Since 1977, he has been Director of the Plant and Animal Ecology

Institute in Ekaterinsburg (Sverdlovsk) that is subordinate to the academy's Urals Department. It was founded in 1948 and does research in the fauna and flora of the Urals Region, soil science, animal pathology, radiobiology, and cartography. It is the leading ecological research institute in Russia. In 1986, he was given the V. N. Sukachev Gold Medal named after the famed botanist, geographer, and plant scientist for his own work in botanical research.

Bongard-Levin, **Grigorii M** ., D. Hist. S. Born in 1933. Corresponding member of the History Department of the Academy since 1981; academician since 1993.

Borisevich, Nikolai A ., D. PM. S. Born in September 1923 in the village of Luchnoi Most, Igumen District, in Minsk Province. Academician of the General Physics and Astronomy Department of the Academy since 1981. He graduated from the University of Byelorussia in 1950. Deputy Director and Chief of the Physics of Infra Red Radiation laboratory of the Minsk Physics Institute from 1955 to 1969. Since 1969, he has been President of the Byelorussian Academy of Sciences and an academician of the Physical and Mathematical Sciences Department of the Byelorussian Academy of Sciences. His basic scientific works are on the luminescence of complex molecules in the gaseous phase, infrared spectroscopy and quantum electronics. He developed optical methods for determining the temperature of excited molecules as well as other characteristics. He established the dependence on temperature of intensity integrals for infrared absorption bands and created a new type of dispersion filter for the infrared zone of the spectrum. He has proposed quantum generators with selective losses. Winner of Lenin Prize in 1980 for his work--with others--on the spectroscopy of free complex molecules. He was a deputy to the 7th and 8th sessions of the Supreme Soviet. Academician since 1981. (GSE 3, p. 466.)

Borovik-Romanov, Viktor Andrei S. , D. PM. S. Born in March 1920 in Petrograd. Russian Physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1966, and an academician since 1972. He graduated from Moscow State University in 1947. He worked at the Moscow State Institute of Measures and Measuring Instruments from 1948 to 1955. From 1956 he worked at the Institute of Physical Problems. Since 1963, he has served as Deputy Director of the S. I. Vavilov Physical Problems Institute in Moscow. He was named Chief of the Low Temperature Magnetic Properties laboratory of the Vavilov Institute in 1964. His scientific work has been in experimental investigation of antiferromagnetism. He discovered the phenomenon of piezomagnetism. Since 1984 he has been acting Director of the S. I. Vavilov Physical Problems Institute in Moscow that was founded in 1934 to research in low temperature physics, plasma physics, theoretical physics, and power electronics. (GSE vol. 3, p.479; vol. 23, p. 729, and vol. 31, p. 316.)

Borovkov, Aleksandr A. , D. PM. S. Born in 1931 in Moscow. Russian mathematician. Corresponding member of the Mathematics Department of the AN SSSR and the Russian Academy of Sciences and of the Siberian Department since 1966, and academician since 1992. He graduated from Moscow State University in 1954 and became a professor at Novosibirsk University in 1966, holding a chair in the theory of probability and mathematical statistics. In 1961, he became Head of the Probability Theory and Mathematical Statistics Department of the Mathematics Institute in Novosibirsk. He is the Deputy Director of the Mathematics Institute of the Siberian Department. Winner--with others--of the 1979 State Prize for a cycle of works on asymptotic methods of the theory of probability. His major work has been in the theory of probability. He is an honored scientist of the former Soviet Union. (GSE 3, p. 479.)

Boiarchuk, **Aleksandr** A., D. PM. S. Born in 1931. Astronomer. Corresponding member of the General Physics and Astronly Department of the Academy since 1976; academician since December 1987. Since 1979, he has been Deputy Director of the Crimean Astrophysical Observatory, that was organized in 1948 to conduct solar, stellar, and planetary research and to investigate gas and dust nebulae.

Brekhovskikh, **Leonid M** ., D. PM. S. Born in 1917 in the village of Strunkino, Arkhangelsk Province. Russian physicist. Corresponding member since 1953; academician

of the Oceanology, Atmospheric Physics, and Geography Department since 1968. Originally elected to the Earth Sciences Department. Academician secretary of the Oceanology Department since 1969. He graduated from the University of Perm' in 1939. He has been a professor at Moscow State University since 1953. From 1954 to 1964, he was director of the Acoustics Institute that was founded in 1953 and that researched bioacoustics, hydroacoustics, quantum acoustics, and ultrasonics--it also had two research ships attached to it. He headed a Department at the university from 1964. His early work was on the scattering of X-rays in crystals and liquids. In 1942 he began working in acoustics and wave propagation. He studied propagation of sound and electromagnetic waves in heterogeneous media. He developed a theory of wave fields from point sources in stratified media and, in particular, produced a complete theory for so-called lateral waves that play an important role in seismological surveys. He discovered the extra long-range propagation of sound in the sea (jointly with L. D. Rozenberg) in 1946. He received the State Prize in 1951. (GSE 4, p. 62.)

Budyko, **Mikhail I**., D. PM. S. Born in 1920 in Gomel. Russian geophysicist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1964; academician since 1993. Originally elected to Earth Sciences Department. He graduated from the Leningrad Polytechnic Institute in 1942 and began working at the A. I. Voeikov Main Geophysical Observatory in St. Petersburg, becoming its Director in 1954 and serving in that position until 1973. The Observatory is subordinate to the State Committee for Hydrometeorology, and was established in 1849 to study the atmospheric processes and phenomena affecting weather. His works are in physical climatology, bioclimatology, and actinometry. With A. A. Grigorev, he formulated the periodic law of geographical zonality. He received the Lenin Prize in 1958 for work on the heat balance of the earth's surface. In 1981, he was awarded the A. P. Vinograd Prize for geochemistry and analytical chemistry. (GSE 4, p. 155.)

Bunkin, Boris V., D. Tech. S. Born in July 1922 in the village of Aksinino, Moscow Oblast. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1968; an academician since 1974. He graduated from the Moscow Aviation Institute in 1947 going to work on the staff there immediately. Since 1950 he has been with the Moscow Engineering Physics Institute. His major works are on radio engineering and in electronics. (GSE 4, p. 180.)

Bunkin, Fedor V., D. PM. S. Born in 1929 in Moscow. Radio Physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1976; academician in 1993. He graduated from Moscow State University in 1952. He was made a professor there in 1971. He joined the staff of the Institute of Physics of the Moscow academy in 1955. Since 1976, he has been Chief of theoretical Department of the Oscillation Division of the P. N. Lebedev Institute in Moscow and since 1976, Chief of "Bunkin's subdepartment" of the Theoretical Department of the Oscillation Division. Since 1983, he has served as Deputy Director of the General Physics Institute in Moscow that was established in 1983 to study lasers, solid-state physics, fusion, spectroscopy, and fiber optics. His works are in electromagnetic radiation. He has directed research in the interaction of high-intensity electromagnetic radiation with gaseous, liquid, and solid media. (GSE 30, p. 29.)

Burtsey, Vsevolod S. , D. Tech. S. Born in 1927 in Moscow. Russian scientist in control processes and computer technology. Corresponding member since 1976 of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy; academician since 1993. He graduated from the Moscow Power Engineering Institute in 1951 and joined the staff of the Institute of Precision Mechanics and Computer Technology. He became a professor at the institute in 1965 and its Director in 1973. From 1973 to July 1987, he was the Director of the S. A. Lebedev Precision Mechanics and Computation Techniques Institute in Moscow that was established in 1948 subordinate to the academy's General Physics and Astronomy Department for the purpose of developing computer hardware and software, concentrating on high speed computers. His works have

included the principles and methods of building digital computers, theoretical and practical problems of automatic control, and the principles of implementing multiprocessing systems. Recipient of the State Prize, 1972; Lenin Prize, 1966. (GSE 30, p. 29.) Buslaev, Iurii A., D. Chem. S. Born in 1929 in Syzran. Russian inorganic chemist. Corresponding member, 1968; academician, 1981--of the Physical Chemistry and Technology of Inorganic Materials Department. Academician secretary to the Department since October 1988. He graduated from the Moscow D. I. Mendeleev Chemical Engineering Institute in 1952. He has worked in the N. S. Kurnakov Institute of General and Inorganic Chemistry of the AN SSSR and the RAN since 1952. Since 1967, he has been deputy director of the Kurnakov Institute in Moscow, that was established in 1934 to study metal alloys, rare earth elements, and the chemistry of complex compounds and polymers. Since 1969, he has served as Chief of the Inorganic Polymers laboratory of that institute. His works are in the chemistry of transitional metals, the syntheses of their complex compounds, multiple bonds in inorganic chemistry, polymerization of inorganic compounds, and obtaining new classes of refractory substances. (GSE 4, p. 211.)

Buchachenko, **Anatolii L**., D. Chem. S. Born in 1935. Corresponding member of the General and Technical Chemistry Department of the Academy since December 1987; academician since 1993. Since 1966, senior researcher in the Chemistry Physics Institute in Moscow.

Biushgens, **Georgii S** ., D. Tech. S. Born in 1916 in Moscow. Russian scientist in the field of mechanics. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981. He graduated from the Moscow Aviation Institute in 1940 and began work at the Central Aerohydrodynamics Institute in Moscow. Since 1973, he has been Deputy Director of the Institute, that does aerodynamic strength calculations on aircraft. His works are in the dynamics, stability, controllability, and aerodynamics of airplanes. Lenin Prize, 1961. (GSE 4, p. 31.)

Chazov, Evgenii I ., D. Med. S. Born in 1929 in Gorkiy. Russian doctor of internal medicine. Academician of the Physiology Department of the Academy since 1979. Since 1972, member of the Presidium of the Academy of Medical Sciences. He is an honored scientist of the former RSFSR (1974). He graduated from the Kiev Medical Institute in 1953 and worked at the First Moscow Medical Institute and at the Institute of Internal Medicine of the Academy of Medical Sciences. He was made professor and Director of the Institute of Internal Medicine in 1965. In 1968, he became deputy minister of health of the U.S.S.R. and head of the emergency cardiology division of the A. L. Miasnikov Institute of Cardiology. In 1976, he helped establish and became general Director of the All-Union Cardiology Research Center in Moscow that has ten institutes under its jurisdiction. His work has concentrated on thrombosis, myocardial infarction, myocardial metabolism and circulatory insufficiency. He has been President of the All-Union Society of Cardiologists since 1975. He is a member of several societies and scientific academies across the world. He was a delegate to the 25th Congress of the and has been a deputy to the Supreme Soviet of the U.S.S.R. since 1974. (GSE 29, p. 75.)

Chanturiya, V. A.

Chelyshev, **Evgenii P** ., D. Phil. S. Born in 1921. Corresponding member of the Literature and Language Department of the Academy since 1981. Academician since December 1987. Academician Secretary of the Department since October 1988.

Chernii, Gorimir G., D. PM. S. Born in 1923 in Kamenets-Podolskii. Russian scientist in mechanics. He served in the Red Army from 1941 to 1945. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981. He graduated from the Moscow State University in 1949. From 1949 to 1958, he was on the staff of the Central Institute of Aircraft Engine Construction. He became a professor at Moscow State University in 1958, and became Director of the University Research Institute in Mechanics in 1960. His works are in aerodynamics. He holds the State Prize. In 1976, he was awarded the S. A. Chapligin Prize in technical sciences for his work in engineering. (GSE 29, p. 125.)

Chernous'ko, Feliks L., C., PM. S. Born in 1938. Corresponding member of Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987; academician in 1993. Since 1972, he has headed the Optimal Control of Motion Laboratory of the Physical Mechanics Division of the Problems of Mechanics Institute in Moscow.

Cherskii, Nikolai V ., D. Tech S. Born in 1905 in the settlement of Olga, in Primore Krai. Russian scientist whose specialties are in the mechanics and the development of petroleum and gas deposits. Corresponding member of the Geology, Geophysics, Geochemistry and Mining Sciences Department and of the Siberian Department since 1968, and academician of both Departments since 1981. He graduated from the Institute of Water Transport Engineers in Vladivostok in 1931 and from the Academy of the Petroleum Industry in 1951. From 1953 to 1955, he worked in ;the Yakutsk scientific geological management. In 1955, he became Deputy Director and from 1964 to 1988, he was chairman of the Yakutsk Scientific Center. He joined the Presidium of the Siberian Department of the academy in 1969. He has served as the Director of the Institute of Physical and Technical Problems of the North since 1973. His works include the design of gas wells, the development of methods for calculating the reserves of natural gas deposits and for exploiting gas hydrate deposits, and container-pipeline transportation. He was codiscoverer of the property of natural gas of forming deposits in the crust in the form of a solid gas hydrate. He served as a deputy to the 7th, 8th, and 9th convocations of the Supreme Soviet. He holds a number of medals recognizing his scientific contributions. (GSE 29, p. 131.)

Chirikov, Boris V. D. PM. S. Born in 1928. Physicist. Specialist in theoretical and statistical physics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984, and academician since 1992. He has authored and co-authored 100 scientific works of which 10 are monographs. From classical dynamics, he developed the theory of dynamic chaos. He graduated from the Moscow State University in 1952. He worked in the Thermal Technical Laboratory of the Institute of Atomic Energy imeni I. V. Kurchatov. In 1958, he joined the staff of the Nuclear Physics Institute of the Siberian Department in Akademgorodok, in 1964, he headed one of its laboratories, and in 1985 was made head of the Theoretical Department of the Institute. He has been a professor at the Novosibirsk State University since 1974, holding the chair in general physics. He is on the editorial board of five natural science journals, including Nuclear and Statistical Physics journals. He is also on the Scientific Council for Nuclear Physics of the Siberian Department of the Russian Academy of Sciences.

Chudakov, Aleksandr E. , D. PM. S. Born in 1921 in Moscow. Russian physicist. (Son of E. A. Chudakov.) Corresponding member of the Nuclear Physics Department of the Academy since 1966, and academician since 1987. He graduated from Moscow State University in 1947. From 1946 to 1971, he was on the staff of the Institute of Physics of the AN SSSR. In 1971, he joined the Institute of Nuclear Research of the AN SSSR. Since 1976, he has been Head of the Lepton High Energy Department of the Lepton High Energy and Neutrino Astrophysics Laboratory of the Nuclear Research Institute in Moscow. His works include the study of the properties of cosmic rays. He developed a method for measuring the energy of a particle that caused a cosmic ray shower. Together with S. N. Vernov and others, he discovered the earth's outer radiation belt. Lenin Prize, 1960. (GSE 29, p. 190.)

Chupakhin, **Oleg N.**, Corresponding member of the General Technical Chemistry Department of the Russian Academy of Sciences and of the Urals Department since 1987; academician in 1993.

Demirchian, Kamo S., C. Tech. S. Born in 1928. Academician deputy secretary of the Physical Technical Problems of Power Engineering Department of the Academy since July 1986. Academician of that department since 1984. In 1985, he was awarded the P. N. Iablochskii Prize for his work.

Denisiuk, **Iurii** N ., D. PM. S. Born in 1927 in Sochi. Russian physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1970; academician since 1993, He graduated from the Leningrad Institute of Precision Mechanics and Optics in 1954 and has worked and headed a laboratory there since 1961. His principal works are in physical optics. He developed a method of holography with recording in a three-dimensional medium. (GSE 8, p. 133.)

Derevianko, Anatolii P ., D. Hist. S. Born in 1943. Archeologist. Specialist in the fields of archeology and of the ancient history of Siberia and the Far East. Corresponding member of the History Department of the Academy since 1979, and academician since December 1989. He graduated from the Blagoveshchenskii Pedagogical Institute in 1963 and from graduation until 1976 he worked as an aspirant in the Department of the Humanities Research Institute studying the economics and industrial development of Siberia in the Museum of History and Culture. In 1983 he became Director of the History, Philology, and Philosophy Institute of the Siberian Branch in Akademgorodok. He was active in Komsomol organizational activities in the late 70s. He joined the Presidium of the Siberian Department in 1980. From 1980 to 1982, he was rector of the Novosibirsk State University. He is author of 120 scientific works of which 15 are major monographs; he has co-authored 105 scientific works of which six are important monographs. His "History of Science and Culture of Mankind" and "History of the Peoples of Central Asia" both published by UNESCO are major contributions to the literature. He received his doctorate from the German Archeology Institute in the GDR in 1987. In 1991, an agreement was signed between the Siberian Department of the RAN and the Gorni Altai Republican Soviet that established an open international non-govermental organization for international research: The Altai International Centre for Humanitarian and Biospheric Research. The center will involve the collaboration of three major bodies: the United Institute of History, Philology and Philosophy in Akademgorodok-Novosibirsk, the Cytology and Genetics Institute in Akademgorodok-Novosibirsk, and the Gorno-Altai Republican Soviet in Gorno-Altaisk, Russia. As head of the United Institute of History, Philology and Philosophy, Derevianko will play a major role in the development of this international research center's development.

Deriagin, Boris V ., D. Chem. S. Born in 1902. Russian scientist in the field of physical chemsistry and molecular physics. Corresponding member of the General and Technical Chemistry Dedpartment of the Academy since 1946; academician in 1993. Originally elected to the Chemical Sciences Department. Also a member of the Physical Chemistry and Technology of Inorganic Materials Department. He graduated from Moscow State University in 1922. Since 1935, he has been Director of the Laboratory of Thin Layers (now the division of surface phenomenon) of the Institute of Physical Chemistry of the Russian Academy of Sciences. He developed the teaching on surface forces and their effect on the property of diverse systems. M. V. Lomonosov Prize, 1958. (GSE 8, p. 143.)

Deviatkov, N. D., Senior Researcher in the Radio Engineering and Electronics Institute in Moscow since '73; academician of the General Physics and Astronomy Department of the Academy in 1993.

Deviatikh, Grigorii G ., D. Chem. S. Born in 1918 in Viatka Province. Russian chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1968, and academician, 1974. He graduated from the chemistry Department of inorganic chemistry at the University of Gorkiy in 1941. He is head of the Department of inorganic chemistry at the University of Gorkiy, and since 1972 he has headed an unidentified laboratory at the Institute of Chemistry of the AN SSR in Gorkiy. Since 1982, he has served as Deputy Director of the Chemistry Institute in Gorkiy, that researches the creation of pure compounds. In 1985, he was awarded the Lenin Prize for his work on the development of pure substances. His work is in the separation of stable isotopes and the preparation and analysis of extremely pure substances. In 1980, he received the A. S. Popov Prize. In 1981, he was the recipient of the D. I. Mendeleev Gold Medal for his work in research in the chemical sciences. In 1988, he was named head of

the new Institute of the Chemistry of Viscose Substances in Nizhnii Novgorod. (GSE 8, p. 170.)

Dianov, **Evgenii M** ., Corresponding member of the Physical Chemiostry and Technology of Inorganic Materials Department of the Academy since December 1987; academician since 1993. Since 1976, he has been Head of the Fiber Optics subdepartment of the Theoretical Department of the P. N. Lebedev Physics Institute in Moscow.

Dmitrievskii, **Anatolii** N. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy in 1987; academician in 1993.

Dobretsov, Nikolai L., D. GM. S. Born in 1936. Corresponding member since 1984, and academician of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the RAN and of the Siberian Department since December 1987. He graduated from the G. V. Plekhanov Mining Institute in St. Petersburg in 1957. He worked in the geological field party on the Altai Geological Expedition of 1957-1960. He joined the Geology and Geophysics Institute of the Siberian Department in 1960, working in the Metamorphic Formation Laboratory from 1972 to 1980. From 1971-72 he worked in the chemistry laboratory of the Tectonics and Geophysics Institute of the National Academy. From 1980 to 1988, he served as Director of the Geology Institute of the Buriat Scientific Center in Ulan Ude that was established in 1973. Since 1988, he has been the chairman of the Ulan Ude Scientific Center. In 1988, he was named Director of the Institute of Geology and Geophysics of the Siberian Branch of the National Academy. He has been designated a professor since 1972. He has chaired the commission on metamorphosis and metamorphogeny of mineral deposits and head of the Petrography Committee of the national academy.

Dobrovol'skii, Gleb V ., D. Bio S. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1984; academician since 1993, and dean of Soil Science Faculty at Moscow State University since 1971. In 1987, he received the V. V. Dokuchaev Gold Medal for his research.

Dolgoplosk, Boris A . Born in 1905 in Lukoml, Vitebsk Oblast. Russian chemist-specialist in the chemistry of macromolecular compounds. Corresponding member of the General and Technical Chemistry Department of the Academy since 1958, and academician since 1964. He graduated from the Department of chemistry of Moscow State University in 1931. From 1932 to 1946, he was scientific Director of the Central Scientific Research Laboratory at the SK-1 Plan in Yaroslavl and from 1946 to 1961, he was Director of the All-Union Institute of Synthetic Rubber. From 1961 to 1963, he was Director of a laboratory at the Institute of Chemical Physics. In 1963, he became Director of a laboratory at the Institute of Petrochemical Synthesis. His works are in polymerization processes, and in the synthesis of rubbers. From 1953 to 1962, he studied the stereospecific polymerization of dienes and the synthesis of stereoregular rubbers. Recipient of the State Prize, 1941, 1949; S. V. Lebedev Prize of the Presidium of the AN SSSR, 1947 and 1963. In 1984, he received the Lenin Prize for his work of more than 20 years on the catalytic action of metalorganic compounds during polymerization. (GSE 8, p. 345.)

Dollezhal, Nikolai A., C. Tech. S. Born in 1899 in Zaporozhe Oblast. Russian scientist and power engineer. Academician of the Physical Technical Problems of Power Engineering Department of the Academy since 1962; academician in 1993. Originally elected to the Technical Sciences Department. Also a member of the Problem of Machine Making, Mechanics and Control Processes Department of the Academy. He graduated from Moscow Higher Technical School in 1923. From 1932 to 1934, he was technical Director of the Nitrogen Mechanical Engineering Institute in St. Petersburg. From 1935 to 1938, he was Head engineer of the Bolshevik factory in Kiev, and from 1942 to 1953, he directed the All-Union Design, Planning and Scientific Research Institute of Chemical Mechanical Engineering in Moscow. In 1953, he became Director of a Scientific Research Institute. He

developed the theory of automatic valves in a piston compressor. He was the head designer for the reactor in the world's first atomic electric power plant. Recipient of the State Prize, 1949, 1952, 1953, 1970; Lenin Prize, 1957. (GSE 8, p. 349.)

Dorodnitsin, Anatolii A., D. Tech. S., born 1910 in Tula District Russia. Academician of the Mathematics Department of the Academy since 1953. He graduated in 1931 from Grozny Oil Institute, received his candidate degree in Physical and Mathematical Sciences from the Main Geophysical Observatory in St. Petersburg in 1939, and his doctorate in technical sciences from the Zhukovskii Central Aero-hydrodynamic Institute in 1942, was made a professor in 1949 and elected as an academician of the academy in 1953. He worked from 1936 to 1941 at the Main Geophysical Observatory, in 1941 at the Zhukovskii Central Aero-hydrodynamic Institute, from 1944-1946, he was professor of Moscow Aviation Institute, from 1945 to 1955, he was a senior researcher and head of a Department of the Steklov Mathematical Institute in Moscow, from 1948-1951, professor at Moscow State University; from 1952 to the present he has been a professor, head of the Aerodynamics Group, head of the Applied Mathematics Group, head of the Mathematical Physics Group of the Moscow Physical-Technical Institute, and from 1955 to 1989, he served as Director of the computing center of the academy in Moscow. From 1989 to the present he has served as Director Emeritus of that center. Since 1960 he has been editor in chief of the journal of Computational Mathematics and Mathematical Physics. His research interests have included: aero-hydrodynamics, computational mathematics, and mathematical physics, geophysics, informatics, mathematical modeling, and ecological problems.

Druzhinin, Igor P. Corresponding Member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy and of the Far Eastern Department of the Academy since December 1987; academician of both in 1993.

Dubinin, Nikolai P ., D. Bio. S. Born in 1907 in Kronstadt. Russian geneticist. Corresponding member of the General Biology Department of the Academy since 1946, and academician since 1966. He graduated from Moscow State University in 1928. From 1932, he worked in a number of SRIs of the AN SSSR. He was a member of the Presidium of the Siberian Department from 1958 to 1960. Since 1966, he has been Director of the General Genetics Institute in Moscow, that was founded in 1966 and that studies plant, animal and microorganisms selection and radiation, space and evolutionary species. His works are in problems of general and evolutionary genetics and the connection between genetics and agriculture. With Serebovskii he discovered the divisibility of the gene and the phenomenon of complementation and with Sidorov, he demonstrated the effect of gene position, elaborated the idea of the integrity and structure and function of the chromosome, and found the presence of lethal and sublethal mutations in populations. His work includes studies of radiation and evolutionary genetics. Lenin Prize, 1966. He is a member of several foreign academies of sciences and of the British Society of Geneticists. (GSE 8, p. 428.)

Dykhne, **Aleksandr M**. , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987; and academician in 1993.

Evtikhiev, Nikolai N ., D. Tech S. Born in 1932. Evtikhiev has been a corresponding member of the Machine Building, Mechanical and Control Processes Department of the academy since 1979, and academician of the Information Science, Computer Technology, and Automation Department of the AN SSSR and the RAN since 1987. Since 1975, he has been rector of the Radio Engineering, Electronics and Automation Institute in Moscow. The institute is directly subordinate to the Ministry of the Electronics Industry. Its scientists do research in electrooptics, laser technology, semiconductor electronics, reliefography, and automated control systems.

Egorov, **Anatolii G** ., D. Phil S. Born in 1920 in Skopin, Riazan Oblast. Russian philosopher. Corresponding member, 1962, and academician of the Philosophy and Law Department of the Academy since 1974. Academician secretary of the Department from 1975 to 1988. He graduated from the Moscow State Pedagogical Institute in 1941. In 1946,

he began a career of teaching and journalism, becoming editor-in-Head of Politicheskoe samoobrazovanie in 1956. In 1961, he was deputy head of the CC CPSU Department of Agitation and Propaganda and, in 1965, editor-in-Head of Kommunist and, in 1974, Director of the Marxism-Leninism Institute under the CC CPSU. At the 22nd Congress he was made a member of the Central Auditing Commission and at the 23rd and 24th Congresses he was a candidate member of the CC CPSU. (GSE 9, p. 81.)

Eliakov, Georgii B ., D. Chem S. Born in 1929 in Kostroma. Russian chemist and biochemist. Corresponding member of; t;he; Biochmistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1970, and academician since December 1987. He is also a member of the Far Eastern Department and since 1980, he has been deputy chairman of that Department. He graduated from the Department of chemistry at Moscow State University in 1952. From 1955 to 1959, he worked in Moscow. Since 1959, he has been in Vladivostok where in 1962, he organized and headed the Chemical Laboratory of Natural Physiologically Active Compounds of the Far Eastern Department of the Siberian Department of the AN SSSR and the RAN (Russian Academy of Sciences). Since 1964, he has been Director of the Bio-organic Chemistry Institute (Pacific) in Vladivostok that is subordinate to the Far Eastern Department and that studies the exploitation of marine and terrestrial plant and animal sources of natural drugs. He has also been Head of the Steroid and Terpenoid Chemistry Laboratory of that institute. His works are in the synthesis of triterpenoid glycosides, triterpenoids, sterols, and glycosides from the roots of ginseng and other plants of the Araliaceae family. (GSE 9, p. 115.)

Emelianov, Stanislav V .., D. Tech. S. Born in May 1929 in Voronezh. He has been a corresponding member of the academy since 1970, and an academician of the Information Science, Computer Technology, and Automation Department of the AN SSSR and the RAN since 1984. Member of the Presidium since October 1988. Russian scientist in the field of automated control. He graduated from the Moscow Aviation Institute in 1952. He created a new line of development in the theory of automated control, the theory of systems with variable structure. Such systems are used to control non-stationary units, as in buildings, movement control systems of aircraft, and in the automated landing systems of the supersonic passenger aircraft Tu 144. Systems with variable structure are also used in the metallurgical, chemical and food industries. He received the Lenin Prize in 1972. Since 1976, he has been a deputy director of the Systems Research SRI in Moscow. Since 1977, he has been director of the International Scientific Research Institute of Control Problems in Moscow that was established in 1977. (GSE 9, p.121.)

Ershov, Iurii L., D. PM. S. Born in 1940 in Novosibirsk. Russian mathematician. Since 1970, he has been a corresponding member of the Mathematics Department of the AN SSSR and the RAN and also a member of the Siberian Department, and an academician since 1990. He has authored 103 scientific pieces of which two major monographs are significant--"The Theory of Numbers" (1977) and "The Solution of Problems in Constructing Models" (1980). He has co-authored 12 publications of which the most famous is "Mathematical Logic." He graduated from the University of Novosibirsk in 1963 becoming a professor there in 1967. In 1967, he was head of a Department in Mathematical Logic, holding the chair in algebra and mathematical logic. From 1973 to 1976, he served as dean of the mathematical faculty at the Novosibirsk University. He was named rector in 1985. His works include the theory of algorithms, the theory of models, and number theory. Since 1968, he has been a member of the Association for Symbolic Logic. He has been on the Presidium of the Siberian Department since 1986. He is on the Scientific Council on the problems of mathematical modeling of the AN SSSR and the Russian Academy of Sciences. He is also on the Accreditation Commission for Symbolic Logic. He is an honored Scientist of the Soviet Union and the editor of a scientific journal. (GSE 9, p. 134.)

Efremov, **Veniamin P** ., D. Tech. S. Corresponding member of the Information Sciences, Computer Technology and Automation Department of the Academy since 1984; academician since 1993.

Efuni, Sergei N., D. Med. S. Corresponding member of the Physiology Department of the Academy since 1979; academician since 1993.

Eneev, Timur M . Born in 1924 in Groznyi. Russian specialist in mechanical and control processes. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1968; academician inl 1993. Graduate of Moscow State University in 1948. From 1950 to 1953, he worked as a researcher at the V. A. Steklov Institute of Mathematics. In 1953, he became a senior researcher at the Institute of Applied Mathematics of the AN SSSR. His works include the dynamics and flight control of spacecraft and the application of celestial mechanics to problems of cosmogony. Lenin Prize, 1957. (GSE 30, , p. 229.)

Entov, R. M.

Favorskii, **Oleg N**., D. Tech. S. Born in 1929. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981; academician in 1993.

Faddeev, Ludwig D. , D. PM. S. Born in March 1934 in Leningrad, son of D. K. Faddeev. Russian mathematician and theoretical physicist. Academician of the Mathematics Department since 1976. Member of the Presidium since October 1988. He graduated from Leningrad State University in 1956. He became a professor at Leningrad State University in 1969. From 1976 to 1987, he served as deputy director of the V. A Steklov Mathematics Institute in Leningrad. In November of 1987, he was made director of that institute, that has operated since 1934 as the Leningrad independent branch of the Moscow Steklov Mathematics Institute. It conducts research on mathematical geology, mathematical physics, logic and number theory. Faddeev is also Chief of the Number Theory and Modern Algebra Department of the Leningrad institute. His works deal primarily with mathematical and theoretical physics. He worked on the three-body problem of classical mechanics in 1963 producing the Faddeev equations, and he solved the inverse problem in scattering theory for the N-dimensional Case in 1966. In 1967, he developed a method for quantifying fields with infinite dimensional symmetry groups such as the Yang-Mills field and the Einstein gravitational field, by means of continual integration. In 1971, he received the State Prize and in 1975, he was the recipient of the prestigious Dannie Heineman Prize for Mathematical Physics of the American Physical Society. In 1975, he formalized the quantification of particle-like solutions (solitons) of field-theory equations. Methods developed by him are employed in various fields of mathematics, in quantum mechanics, and in the theory of elementary particles. From 1985 to 1987, he has served as Vice President of the International Mathematical Union when he became president. He is a member of the editorial board of Science in the U.S.S.R. (GSE 27, p. 86.) Fedorenko, Nikolai P ., D. Econ. S. Born April 1917 in Zaporozh'e Oblast, Ukrainian SSR. Russian economist. He was elected a corresponding member in 1962. Since 1964, he has been an academician of the Economics Department of the Academy of Sciences. Since 1977, he has been a board member of the GKNT General Assembly. Since 1985, he has been on the Presidium of the Academy. He graduated from the Military Chemical Academy in 1942. From 1949 to 1962 he taught at the Moscow Institute of Fine Chemical Technology where he headed the Department of Chemical Industrial Economics and served as a Deputy Director of the institute. In 1963, he became Director of the Central Economic Mathematical Institute of the national academy. He is editor-in-Head of Economics and Mathematical Methods that is a major Soviet economics journal. His principal works deal with Soviet economics: the economics of the chemical industry, optimal functioning of the national economy, and the use of mathematical methods and electronic computers in planning and management. State prize, 1970. In 1979, he received the G. M. Krzhizhanovskii Prize named after the well-know power engineer for his work in energy

planning. In 1981, he received the V. S. Nemchinov Prize for economics and statistics. (GSE 3, p. 370.)

Fedosov, **E. A** . Born in 1929. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984.

Fedotov, Sergei A., D. PM. S. Born in 1931 in Leningrad. Russian geophysicist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1970; academician in 1993. Also a member of the Far Eastern Department. He graduated from Moscow State University in 1953. From 1957 to 1971, he worked at the O. Iurii Shmidt Institute of Earth Physics of the AN SSSR. Since 1971, he has been Director of the Volcanology Institute at Petropovlovsk-Kamchatskii (of the Far Eastern Department of the Russian Academy of Sciences) that was established in 1961 to study volcanism in the Kurile-Kamchatka zone. In 1975, he was elected vice-President of the International Association of Volcanology and Chemistry of the Earth's Interior. His principal works deal with the internal structure and seismicity of the earth, properties of the earth's mantle, the mechanism of deep magmatic and volcanic activity, and long-term earthquake predictions. (GSE 27, p. 137.)

Fokin, Aleksandr V ., Maj. Gen., D. Chem S. Born in 1912 in Kizyl-Arvat in the Turkmen SSR. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Russian Academy of Sciences since 1968, and academician since 1974. Deputy-principal secretary of the Presidium of the academy since 1971. He graduated from the Military Academy for Protection Against Chemical Attack in 1935. Worked as an engineer in the chemical industry until WWII. From 1941 to 1947 he served in the Red Army. In 1947, he worked at the military academy from which he had graduated with an advanced degree in 1939, and he headed a subdepartment there from 1959 to 1970. In 1974, he became Director of a major laboratory at the Institute of Physical Chemistry of the AN SSSR in Moscow. Since 1981, he has served as Director of the A. N. Neimeianov Elementoorganic Compounds Institute in Moscow that is subordinate to the General and Technical Chemistry Department of the academy. It was established in 1955 and does research on hetero-organic compounds, polymers, and the organic chemistry of isotopes. His work has involved synthesizing ethylene oxide and propylene oxide through the direct oxidation of olefins by atmospheric oxygen. He has investigated esters of cyanoformic acid and the production of transformer oils by the chlorination of biphenyl. He is one of the developers of the current method for concentrating and preserving fragments of radioactive isotopes. He has been Academician Secretary since 1985. In 1988, he was appointed an advisor to the national academy's Presidium. (GSE 27, p. 285.)

Fomenko, A. T.

Fortov, **Vladimir E**. Born in 1946. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987; academician in 1993. Since 1979, head of the Penetration Mechanics Laboratory of the Chemical Physics Institute in Moscow.

Fradkin, Efim S., D. PM. S. Born in 1924 in Gomel Oblast, Byelorussian SSR. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1970; academician in 1993. He served in the Soviet army from 1942 to 1947. In 1948, he graduated from the University of L'vov. He began working at the Institute of Physics of the AN SSSR and the RAN in 1948. Since 1972, he has been Head of the Functional Integration Techniques Department of theoretical Laboratory of the P. N. Lebedev Physics Institute in Moscow. His works are in quantum field theory, quantum statistics, and hydrodynamics. Recipient of the State Prize, 1953. (GSE 27, p. 313.)

Fridlender, G. M.

Fridliander, **Iosif** N . Born in 1905 in Andizhan. Russian physical metallurgist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1976, and academician since 1984. He graduated from the N. E. Bauman Moscow Higher Technical School in 1937. His work deals with the

physical metallurgy of light alloys. Recipient of the State Prize, 1949; Lenin Prize, 1963. (GSE 28, p. 381.)

Frolov, Ivan T . Born in 1929 in Dobroe, Lipetsk Oblast. Russian philosopher. Corresponding member of the Philosophy and Law Department of the Academy since 1976, and academician since December 1987. He graduated from the Department of philosophy of the Moscow State University in 1953. From 1962 to 1965, he worked as an editor, first in Moscow, and then in Prague. From 1965 to 1968, he was engaged in party work. From 1968 to 1977, he was editor-in-Head of the journal Voprosy filosofii. His work is in dialectical materialism, philosophical problems in contemporary natural science, and the social and philosophical problems of the scientific and technological revolution. In the 1970s, he was on the editorial council for publications of the Institute of the History of Natural Science and Technology of the AN SSSR. (GSE 28, p. 389.)

Frolov, Konstantin V . Born in 1932 in Kirov, Kalugo Oblast. Russian authority on machine vibrations. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1976. Since 1984, he has been an academician and since 1985, he has been academic secretary of the Department . Since 1985, he has been a Vice President of the AN SSSR and the RAN. In March of 1986, he was elected a candidate member of the Central Committee of the CPSU. He graduated from the Briansk Institute of Transportation Machine Building in 1956 and joined the staff of the Institute of Machine Science (now the A. A. Blagonravov State Scientific Research Institute of Machine Science in Moscow.) Since 1975, he has served as the Director of that institute that was established in the 1930s and that does research in the dynamics and kinetics of machinery friction and wear, mechanical engineering, and strength considerations. It is jointly subordinate to the Ministry of the Machine Tool and Tool Building Industry and to the Problems of Machine Building, Mechanics, and Control Processes Department of the AN SSSR and the RAN. He founded the branch of biomechanics dealing with the effects of exposure to machine vibrations and formulated the scientific principles underlying the theory of systems used to protect human operators from such vibrations. (GSE 28, p. 390.)

Fursenko, **Aleksandr A** . D. Hist. S. Born in 1927. Corresponding member of the History Department of the Academy since December 1987; academician in 1993.

D. Bio. S. Born in 1922 in Mechebilovo in Barvenkovo Raion, Galazii, Grigorii I. Kharkov Oblast. Russian botanist and hydrobiologist. Specialist in Limnology, forestry, and geobotany. Corresponding member of the Siberian Department and of the Oceanology, Atmospheric Physics, and Geography Department of the Russian Academy of Sciences since 1970, and academician since 1992. He graduated from the University of Irkutsk in 1942. In 1949, he joined researchers at the Eastern Siberian Affiliate of the Siberian Department. In 1954, he worked at the Baikal Limnology Station of the AN SSSR, and from 1961 to 1987, he was the organizer-Director of the Limnology Institute in Irkutsk that was created to study the lakes and man-made seas in the area between the Urals Mountains and the Pacific Ocean, particularly Lake Baikal. His research is on the habitat of ligneous vegetation on the shores of Lake Baikal and adjoining mountain ranges in order to reconstruct the postglacial period's climate, water level, and topography as a means to find ways to protect and use the natural resources of Lake Baikal. He has written 287 scientific works that include eight monographs In 1987, he was named Director of the Baikal Ecological Museum of the Irkutsk Scientific Center. He has served as deputy chairman of the Scientific Council on the problems of hydrobiology, ichthyology and the utilization of biological water resources. He is Vice President of the all union hydrobiological society. He also heads the Eastern Siberian Affiliate's Geographical Society. (GSE 6, p. 48.)

Galeev, Albert A., D. PM. S. Born in 1940. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987; academician since 1993. From 1973 to 1988, he was assistant to the Director of the Space Research Institute in Moscow, and since 1976, he has been Chief of the Interplanetary Plasma and

Ionosphere Division of that institute. In 1988, he assumed the Directorship of the Space Research Institute. Together with R. Z. Sagdeev, he has been a leader in the development of new ideas in physical kinetics.

Galimov, E. M., D. Geo. & Min. S. The Geochemistry of Carbon Laboratory, under his direction, in 1973 began studies on the history of carbon in the earth's crust, including the history of life, the geochemical role of carbon and organic matter, and oil formation. Professor Galimov was elected an acasdemician of The Geology, Geophysics, Geochemistry, and Mining Sciences Department in 1993.

Gamkrelidze, Tamaz V ., D. Phlg S. Born in 1929. Since 1969, academician of the Physical and Mathematical Sciences Department of the Georgb ian Academy of Sciences. Academician of the Literature and Language Department of the Russian Academy since 1984. He is Director of the Oriental Studies Institute in Tbilisi that was founded in the 1960s and that is primarily concerned with the study of languages. It has eight Departments that include ancient and oriental languages, Indo-Persian languages, and a Phonetics Laboratory. The other Departments are basically historical-cultural area study centers.

Ganiev, **Rivner F** . Corresponding member since December 1987 of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy; academician since 1993.

Gaponov-Grekhov, Andrei V ., D. PM. S. Born in 1926 in Moscow. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1964 and an academician since 1968. He graduated from the University of Gorkiy in 1949. From 1952 to 1955 he worked at the Gorkiy Polytechnic Institute and from 1955 he worked in the Scientific Research Radiophysical Institute at the University of Gorkiy. He has written fundamental works in the fields of electrodynamics, plasma physics, physical electronics, the electrodynamics of the nonlinear medium and the theory of the variations of distributed nonlinear systems. Together with M. A. Miller, he proposed a method of the channelization and acceleration of particles and of plasma with the help of non-uniform high-frequency fields. He has conducted research on induced cyclotron radiation that has allowed the construction of masers on a cyclotronic resonance for which he received the State Prize in 1967. Since 1977, he has served as Director of the Applied Physics Institute at Gorkiy that was created in 1977. Research in the institute includes plasma physics, hydrophysics, quantum electronics, and high power electronics. (GSE 6, p. 89.)

Gasparov, M. L.

Gazenko, Oleg G., D. Bio. S. Born in 1918 in Nikolaevka, Stavropol Krai. Russian physiologist. Corresponding member of the Physiology Department of the Academy since 1966, and academician since 1976. He graduated from the Second Moscow Medical Institute in 1941. Since 1956, he has taken part in the organization of work on space biology and medicine that helped make manned space flights and their equipping possible. Since 1969, he has been Director of the Biomedical Problems Institute in Moscow. The institute conducts research in space biology and medicine. It is responsible for all aspects of the cosmonauts' health and safety. His principal works deal with space physiology, particularly in the influence of weightlessness on the organism. (GSE 5, p. 170.)

Gvishiani, Dzhermen M., D. Phil. S. Born in 1928 in Akhaltsikhe, Georgian SSR. Philosopher and sociologist. Corresponding member of the Philosophy and Law Department of the Academy since 1970, and academician since 1979. He graduated from the Moscow Institute of International Relations in 1951. From 1951 to 1955, he served in the Soviet navy. In 1955, he began work with the State Committee for New Technology of the Council of Ministers of the U.S.S.R., and in 1965, he became vice-chairman of the GKNT. In 1969, he was made head of the Laboratory for Research Into Complex Problems of Management of the Institute for Concrete Social Research of the AN SSSR. He has been chairman of the governing council of the International Institute for Applied Systems Analysis in Vienna since 1972. In the 1970s, he was on the editorial council for publications of the Institute of the History of Natural Science and Technology of the AN SSSR. Since 1977, he has been

director of the All-Union Systems Research SRI in Moscow, subordinate to the Information Sciences, Computer Technology and Automation Department of the Academy. He halled research on information problems stressing the principles of managing fundamental science. He was on the editorial board of Science in Russia. (GSE 6, p. 493.)

Gelfand, Izrail M ., D. PM. S. Born in August 1913 in the small town of Okna now located in the Odessa Oblast. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1953 and an academician since 1984. He has been a professor at Moscow State University since 1943 and served as President of the Moscow Mathematical Society from 1966 to 1970. In 1940, Gelfand constructed the theory of commutative normed rings, that--although only one of the chapters in his book-subsequently served as the starting point for the theory of rings with involution. This theory of infinite-dimenional representations of groups developed by Gelfand had another starting point, and was subsequent to normed rings. He has made contributions to the theory of generalized functions, the theory of topological linear spaces, dynamic systems, automorphic functions, inverse problems in spectral analysis, and computational methods. He has also done significant work in the cytology and neurophysiology of the cerebellum. Since 1976, he has been Head of the Bionics Laboratory of the M. V. Keldysh Applied Mathematics Institute (Moscow) that was established in 1966 to research space vehicle design, cybernetics, computer software, robotics, MHD, and laser fusion. He is an honorary foreign member of the Academy of Arts and Sciences in Boston (1964), the London Mathematical Society (1966), the Irish Academy of Sciences (1970), and the National Academy of Sciences in the United States (1970.) (GSE, 6, p. 158.)

Georgiev, Georgii P., D. Bio. S. Born in 1933 in Leningrad. Russian biologist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1970. Academician since December 1987. He graduated from the First Moscow Medical Institute in 1956, went to work at the A. N. Severtson Institute of Animal Morphology of the AN SSSR, and in 1963 became head of a laboratory of the Institute of Molecular Biology of the Academy. His work is in molecular biology. He discovered in animal cells a new type of ribonucleic acid-nuclear RNA, similar to DNA--the predecessor of messenger RNA in 1961. He discovered informosomes, particles in the cell nuclei that contain messenger RNA, and he decoded their structure in 1964. He was on the editorial board of Science in Russia. (GSE 6, p. 299.)

Ginzburg, Vitalii L., D. PM. S. Born in 1916 in Moscow. Russian physicist. Academician since 1966. Originally elected to the General and Applied Physics Department. Principal membership in the General Physics and Astronomy Department. He also holds membership in the Nuclear Physics Department of the Academy. He graduated from Moscow State University in 1938. From 1940, he worked at the Institute of Physics of the AN SSSR. He became a professor at the University of Gorkiy in 1945. Since 1971, he has been Head of Theoretical Laboratory of the Nuclear Physics Division of the P. N. Lebedev Physics Institute in Moscow and since 1976, Head of the Theoretical Physics Department. His works are on the theory of wave propagation in the ionosphere, radioastronomy, problems in the origin of cosmic rays, thermodynamic the theory of ferroelectric phenomena, the theory of superconductivity, optics, the theory of radiation, and astrophysics. In 1940, he worked out the quantum theory of the Cherenkov-Vavilov effect and the theory of Cherenkov radiation in crystals. With L. D. Landau, he formulated a phenomenological theory of superconductivity. In 1950-51, he worked on problems in thermonuclear reactions. Since 1958, he has researched problems in the theory of excitons and in crystal-optics. He has worked on the theory of magnetic-braking cosmic radio frequency radiation and a radio astronomy theory on the origin of cosmic rays. State Prize, 1953; Lenin Prize, 1966. (GSE 6, p. 411.)

Gitel'zon, **Iosif I.**, D. Bio. S. Born in 1928. Biophysicist. Specialist in biosynthesis, blood regulatory systems, and ocean bioluminescence. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds

Department of the Academy since 1979, and academician since 1992. He graduated from the Moscow State University in 1951 and from the Krasnoiarsk Medical Institute in 1952. He worked at the Krasnoiarsk Agricultural Institute from 1953 to 1957. In 1957, he joined the Physics Institute Krasnoiarsk. In 1961, he headed the Laboratory of Photo Biology of that institute. In 1981 he headed all laboratories and in 1985, he was made Director of the Biophysics Institute of the Siberian Department located in Krasnoiarsk. He is a professor, holding a chair in physiology and biochemistry of animals and humans at the Krasnoiarsk State University. He is an honored scientist of the former Soviet Union. In April 1991, the Presidium of the Siberian Department of the RAN established the International Center for Closed Ecological Systems that is intended to work closely with other scientists throughout the world working on man-made biospheres--something that Russian scientists had developed in BIOS-3 in the 1970s and 1980s. Dr. Gitel'zon, as Director of the Institute of Biophysics is also heading up this new international research institute.

Glebov, Igor A., D. Tech S. Born in 1914 in Petrograd (St. Petersburg). Russian specialist in electric power. Corresponding member of the Physical Technical Problems of Power Engineering Department of the AN SSSR and the RAN since 1974 and academician since 1976. He graduated from the M. I. Kalinin Leningrad Polytechnical Institute in 1938. He served in the Soviet army from 1941 to 1946. From 1946 to 1951, he was a staff member of a SRI of the academy and of an SRI of the Food Processing Industry from 1951 to 1961. He joined the staff of the All-Union SRI of Electric Machine Building in 1961, becoming its director in 1973. The Electrical Machine Building Scientific Research Institute is located in St. Petersburg and was established in 1956. It has become the center for Russian research and development of electric machine manufacturing. His own works are on electric power systems, applications of mathematical modeling in power engineering, design of electric machines and semiconductor converters. He is President of the International Conference of Large High-tension Electric Systems. Since 1979, chairman of Science and Technology Commission of the Council of the Union of the U.S.S.R. Supreme Soviet. Since 1979, he has been on the Presidium of the academy. Until 1989, he served as chairman of the St. Petersburg Scientific Center that was founded in 1982 and since 1979 he has headed the InterDepartmental Coordinating Council of the U.S.S.R. Academy of Sciences. This council has some 14 Scientific Councils subordinate to it. He was awarded a State Prize in 1968. In 1976, he was given the P. N. Iablochskii Prize for his work in electrical engineering. (GSE 30, p. 385.)

Glukhikh, Vasilii A., D. Tech. S. Born in 1919. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981; academician since December 1987. Since 1974, he has been Director of the D. V. Efremov Electrophysical Apparatus Scientific Research Institute in St. Petersburg. The institute was established in 1946 for the purpose of designing and building particle accelerators. It does research in fundamental and plasma physics. It is directly subordinate to the State Committee for the Utilization of Atomic Energy.

Godunov, Sergei K., D. PM. S. Born in 1929. Mathematician Specialist in applied and computer mathematics and the theory of differential equations. He has been a corresponding member of the Mathematics Department since 1976; academician in 1993. He graduated from the Moscow State University in 1951 and began work at the V. A. Steklov Mathematics Institute and at the Institute of Applied Mathematics of the AN SSSR and the RAN. He was also given a professorship at Moscow State University. In 1969, he joined the staff of the computer center of the Siberian Department of the AN SSSR. Since 1978, he has been Head of the Mathematics and Physics and Chemistry Laboratory and Head of the Applied Mathematics Department of the Novosibirsk Computer Center. From 1969 to 1980, he worked at the Computer Center, and in 1981 he was named Deputy Director of that institute. Since 1986, he has been acting Director of the Computer Center in Novosibirsk that conducts research on applied mathematics, long-range weather forecasting, formulation of mathematical models, and the development of computational methods. His work has been in numerical methods of solving equations of mathematical

physics and the qualitative investigation of quasi-linear hyperbolic equations. In 1987 he headed the Department of differential equations of the Steklov Institute. He has been a professor at the Novosibirsk State University since 1977, holding a chair in differential equations. He is an honoredScientist of the academy and editor of a journal. He received the Lenin Prize in 1959, the A. N. Krilov Prize in 1972, and has received a number of medals and recognitions of his scientific contributions. (GSE 30, p. 380.)

Golant, Viktor E. , D. PM. S. Born in 1928. Corresponding member of the General Physics and Astronomy Department since 1984; academician in 1993. Since 1964, he has headed the Plasma Physics Laboratory under the Mathematical Physics Division of the A. F. Ioffe Physical-Mechanical Institute in St. Petersburg. He is a specialist in the field of controlled thermonuclear fusion. He is author of some 140 scientific works on this problem.

Golitsin, Georgii S. , D. PM. S. Born in 1935. Russian physicist. Corresponding member, 1979; academician since 1987 of the Oceanology, Atmospheric Physics and Geography Department. In 1976, he was Chief of the Climatology laboratory of the Physics of the Atmospheric Physics Institute in Moscow that was established in 1956 and that uses modern physical mathematical means to probe the atmosphere from earth and space by optical and radiophysical methods. He was elected to the Presidium of the academy in June 1988. He has headed the Climate Theory Department of the Atmospheric Physics Institute which has four laboratories: the climate theory laboratory, the upper atmosphere physics laboratory, the atmosphere-ocean interaction laboratory, and the mathematical ecology laboratory. In 1990, he became Director of the Atmospheric Physics Institute in Moscow. He is the recipient of the A. A. Friedman prize for his works on "Study of the General Circulation of Atmosphere and Convection."

Gol'danskii, Vitalii I ., D. PM. S. Born in 1923 in Vitebsk. Russian physical chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1962, and academician since 1981. He graduated from Moscow State University in 1944. From 1942 to 1952, he worked at the Institute of Chemical Physics (returning there in 1961) and from 1952 to 1961, he worked at the Institute of Physics of the AN SSSR. Since 1978, he has been Head of the Structure of Matter Division of the Chemical Physics Institute in Moscow. He is also Head of the Nuclear and Radiation Chemistry Laboratory of that institute. Since October of 1988, he has been Director of the Chemical Physics Institute in Moscow. Winner--with others--of the 1980 Lenin Prize for works on "Discovery and Research of Abnormally Rapid Polymerization in the Solid Phase." (1959-1978). He was awarded the D. E. Mendeleev Prize for chemistry in 1966, and in 1977, he received the V. G. Khlopin Prize for inorganic chemistry. He was recognized by the award of the Lenin Prize in 1980. (GSE 7, p. 243.)

Gonchar, Andrei A . Born in 1931 in Leningrad. Russian mathematician. Corresponding member of the Mathematics Department since 1974, and academician since 1987. He became Academician Secretary of the Mathematics Department in October 1988. He graduated from Moscow State University in 1954 becoming a professor there in 1967. Since 1965 he has been associated with the V. A. Steklov Institute of Mathematics of the Academy. His work includes the theory of analytic functions and the theory of approximations. (GSE 30, p. 386.)

Gorchakovskii, P. L.

Gorinin, Igor V ., D. Tech. S. Born in 1926. Academician of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1984. Specialist in materials science and technology. Holder of the Lenin and U.S.S.R. State Prizes for his research.

Gor'kov, Lev P ., D. PM. S. Born in 1929. Physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1966 and academician since December 1987. Since 1966, he has been Chief of the Superconductor Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow. He was originally elected to the General and Applied Physics Department.

Gramberg, Igor S. , D. GM. S. Born in 1922. Corresponding member of the Geology, Geochemistry, Geophysics, and Mining Sciences Department since 1979, and, academician since December 1987. Since 1975, he has been Director of Affiliated Research Organization (ARO), Geology and Mineral Resources of the World Oceans Institute under the Ministry of Geology. The institute is subordinate to the Northern Marine Geological-Geophysical Scientific Production Association of the Ministry of Geology. Located in St. Petersburg and established in 1947, the institute researches the terrestrial geology and geophysics of the Arctic and Antarctic Oceans.

Granberg, Aleksandr G., D. Econ. S. Born in 1936. Specialist in planning for the national economy and the development of modeling of economic research. Academician of the Economics Department of the Academy since 1992. He graduated from the Moscow State University in 1960 and began working at the Computer Center of GOSPLAN, and at the Moscow Institute of the National Economy. From 1963 to 1969, he was at the Novosibirsk State University, and from 1965 he has held the chair on applied mathematical methods for economic planning. In 1969, he joined the Economy and Organization of Industrial Production Institute of the Siberian Department, heading the sector on economicmathematical modeling and methods of optimizing territorial planning, becoming its Deputy Director in 1975 and its Director in 1985. He has been on the Siberian Presidium since 1986. He has been head of the Scientific Council of the Academy on the Economic Sciences since 1985. In 1988, he became Head editor of the journal Economics and the Organization of Industrial Production. He received the Lenin Komsomol Prize in 1968. In the early 1990s the Siberian Department established the Siberian International Center for Regional Studies in Novosibirsk that had as its Scientific Research Director Professor Granberg. The Center's base institution is the Institute of Economics and Industrial Engineering of the Siberian Department in Akademgorodok-Novosibirsk of which Dr. Granberg is also the Science Director. In the process of being organized at present, the center will involve the Siberian Department, the International Regional Science Association and Geographic Union will be its founders and its activities will involve research groups from universities and research centers from the United States, Germany, Canada, Sweden, Israel, Hungary in research into regional economics.

Griaznov, **Vladimir M.**, D. Chem S. Born in 1922. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981; academician in 1993.

Guliaev, Iurii V ., D. PM. S. Born in 1935. Corresponding member of the General Physics and Astronomy Department of the academy since 1979, and academician of the Information Science, Computer Technology, and Automation Department since 1984. From 1972 to 1988, he was deputy director of the Radio Engineering and Electronics Institute in Moscow that does basic research in radio wave propagation, new electronic devices for detection, generation, and amplification of radio signals. In 1988, he was named Director of the Radio Engineering and Electronics Institute in Moscow. In 1988, he was also named Chairman of the Saratov Scientific Center under the AN SSSR and continues in that position under the Russian Academy of Sciences.

Gurfinkel, **Viktor S** ., D. Med. S. Born in 1922. Corresponding member of the Physiology Department of the Academy since December 1987; academician in 1993.

Il'in, Iurii V., D. Chem S., Head of the Genome Mobility Laboratory of the Molecular Biology Institute in Moscow. He graduated from the Moscow State University Chemistry Department in 1966, and defended his thesis on the study of the structure of the chromatine deoxynucleoproteids in 1970, and defended his dissertation on the mobile elements of the Drosophila in 1981. He joined the institute in 1966. His scientific interests at present are on genome organization, mobile genetic elements, and the control of gene expression. In 1993, he was an academician in the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy.

Il'in, Vladimir A . Corresponding member of the Information Sciences, Computer Technology, and Automation Department of the Academy since December 1987; academician since 1993.

Il'ichev, Viktor I . Born in 1932 in the village of Tikhonovo, Vladimir Oblast. Russian hydrologist and hydroacoustics specialist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the AN SSSR since 1976 and, academician since 1981. He graduated from the University of Gorkiy in 1955. Between 1955 and 1974 he was on the Acoustics Institute staff. In 1974, he became director of the Pacific Ocean Oceanology Institute in Vladivostok established in 1973 to study the complex hydrophysics of water masses, sea swell, energy exchange, and the interactions of the ocean. It is subordinate to the academy's Far Eastern Scientific Center (now an academy Department.) Since March 1986, he has served as chairman of the Far Eastern Department of the academy. He has been a vice-president of the academy and a member of the Presidium since October 1987. His works deal with acoustic and hydrodynamic cavitation, the resistance of liquids to cavitation, and marine hydrology. (GSE 30, p. 440.) Isaev, Aleksandr S. D. Bio. S. Born in 1933 in Moscow. Biologist, Forester, Entomolgist. Corresponding member since 1976, and academician of the General Biology Department of the National Academy and of the Siberian Department since 1984. He graduated from the Leningrad S. M. Kirov Academy of Forest Technology in 1954. From 1954 to 1960, he was a forest appraiser at the Moscow Unified Aviation Forest-Planning Expedition of the Ministry of Forestry of the U.S.S.R. and the V. N. Sukachev Institute of Forestry and Timber of the Siberian Department of the AN SSSR in Krasnoiarsk. From 1954 to 1960 he worked with a forest protection organization, and from 1960 to 1988, with the Forestry and Timber Institute serving as its Director from 1977 to 1989. He was chairman of the Krasnoiarsk Affiliate of the Siberian Department from 1978 to 1988. His work includes the study of biogeographic forest communities, relationships between insect pests and forests, and the population dynamics of insects. He was on the Presidium of the Siberian Branch from 1980 to 1988. He headed the Scientific Council on the Biological Sciences from 1985 to 1988. In 1988 he was made chairman of the government committee on forestry of the national academy. He was a delegate to the 25th and 26th Congresses. (GSE 30, p. 444.)

Ishlinskii, Aleksandr Iurii D. PM. S. Born July 1913 in Moscow. Russian scientist in mechanics. Since 1948, he has been an academician of the Mechanics Department of the Ukrainian Academy of Sciences, and since 1960, he has been an academician of the Mechanics and Control Processes Department of the Academy. He graduated from Moscow State University in 1935 and has been a professor there since 1944. From 1948 to 1955 he was Director of the Institute of Mathematics of the Ukrainian Academy of Sciences, Since 1964, he has been the Director of the Problems of Mechanics Institute in Moscow that was established in 1965 to conduct research on gas dynamic processes, including combustion instability, plasma, laser beams, and shock waves. Since 1971, he has been a board member of the GKNT general assembly. His main work is concerned with theories of elasticity, plasticity, vibrations, and gyroscopes. He has studied the problems of shock absorption for instruments during sudden deceleration (1958), developed the theory of the space gyrocompass and other gyroscopic instruments (1952-63), and conducted important research on the general theory of inertial navigation and autonomous control systems (1957-1968). He has been chairman of the All-Union Council of Scientific and Technical Societies since 1970. He has been Vice President of the World Federation of Engineering Organizations since 1971. Lenin Prize, 1960. (GSE 11, p. 255.)

Ivanov, Mikhail V . D. Bio. S., Born in 1930. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Substances Department of the Academy since 1970, and academician since December 1987. Since 1979, he has been Director of the Microbiology Institute in Moscow, that was established in 1930. In 1992, it encompassed over 20 laboratories and research groups. Areas of study and research include the following: the varieties of the microbial world and new forms of microorganisms--studied in almost all of the laboratories; ecological and geochemical studies of halophilic, thermophilic, acidophilic microorganisms in various types of soil, in water depth and bottom sediments of the World oceans, and in glaciers in the

Antarctica--all of which focuses on their roles in the cycle of substances in the bio-sphere--in the processes of formation, and the variation and destruction of the deposits of soil treasures. These studies have led to the development of a new branch of biotechnology: the bio-geotechnology of metals that includes the bacterial enhancement of oil recovery from oil pools; the study of the cytology, physiology and biochemistry of microorganisms as producers of physiologically active compounds such as enzymes, lipids, etc., and, the study of viruses that cause diseases in plants and the development of measures to fight such diseases.

Ivanov, Vadim T., D. Chem. S. Born in 1937 in Feodosiia, Crimean Oblast. Russian chemist. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Substances Department of the Academy since 1987. He graduated from Moscow State University in 1960. In 1963, he joined the staff of the Institute of the Chemistry of Natural Compounds of the AN SSSR--now the M. M. Shemiakin Institute of Bio-organic Chemistry. Since 1971, he has headed the Peptide Chemistry Laboratory of the institute in Moscow that was founded in 1939. His works are on the synthesis and structure of biologically active peptides and proteins and the mechanisms of their reactions. He received the Lenin Prize--with Iu. A. Ovchinnikov--in 1978. (LDA 89-89-11358.) (GSE 30, p. 463.)

Kabanov, Viktor A . Born in 1934 in Moscow. Russian chemist. Corresponding member of the General and Technical Chemistry Department of the Academy in 1968, and academician since 1987. He graduated from Moscow State University in 1956, a student of V. A. Kargin. Since 1970, he has headed the subdepartment of high molecular-weight compounds at Moscow State University. Since 1972, he has been Head of the Electrochemical Properties of Metals and Semiconductors Laboratory of the Electrochemistry Institute in Moscow that was established in 1958 to study electron and proton transfer in batteries. He discovered and explained the phenomenon or rapid low-temperature polymerization of solid monomers during phase transformations. In 1984, he was the recipient of the S. V. Lebedev Prize in organic chemistry. (GSE 11, p. 318.)

Kabachnik, Martin I., D. Chem S. Born in 1908 in Ekaterinsburg (Sverdlovsk). Russian organic chemist. Academician of ;the; General and Technical Chemistry Department of the Academy since 1958. He graduated from the Second Moscow Chemical Engineering Institute in 1931. Since 1954, he has been the Head of the Phosphor-organic Chemistry Laboratory of the Element-organic Compounds Institute. Since 1977, he has been Deputy Director of the A. N. Nesmeianov Element-organic Compounds Institute in Moscow. His works are in the chemistry of organophosphorous compounds and theoretical problems of organic chemistry. Recipient of the State Prize, 1946. (GSE 11, p. 316.)

Kagan, Iurii M., D. PM. S. Born in July 1928 in Moscow. Physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1970, and an academician since 1984. He graduated from the Moscow Physical Engineering Institute in 1950. In 1956, he began working at the Atomic Energy Institute. In 1962, he was made a professor at the Moscow Physical Engineering Institute. His major interests are in the kinetic theory of gases--he created the theory of transport phenomena in gases with rotational degrees of freedom. He has also researched problems in molecular physics, solid-state theory, and theories of metals and imperfections systems. He predicted, for instance, the existence of quasi-localized levels in the phonon spectrum. He has worked with the theory of the Mossbauer effect, and studied the interaction of nuclear radiation with matter. (GSE 11, p. 336.)

Kadomtsev, **Boris B** ., D. PM. S. Born in November 1928 in Penza. Russian physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1962, and academician since 1970. He graduated from Moscow State University in 1951 and began working immediately at the Institute of Physics and Energetics in Oblinsk. He began working at the Atomic Energy Institute in 1956. Since 1973, he has been chairman of the Plasma Physics Division of the State Committee for the Utilization of Atomic Energy. His principal researches are in plasma physics and in the problem of

controlling thermonuclear fusion. He has predicted some types of transient plasma and has laid the foundations for the theory of the diffusion and thermal conduction in turbulent plasma (the transport phenomena). He has also provided a quantitative explanation of the anomalous behavior of plasma in a magnetic field. In 1966, he discovered the instability of plasma involving the so-called trapped particles. He has published three major theoretical works in his field. He received the State Prize in 1970 and in 1984, he was awarded the Lenin Prize for the creation of a new branch of physics--high temperature plasma physics. He was on editorial board of Science in the U.S.S.R. (GSE 11, p. 333.)

Kafarov, Viktor V ., D. Tech. S. Born in 1914 in the Lithuanian SSR. Chemical engineer. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1966, and academician since 1979. He graduated from the Kirov Institute of Chemical Engineering in Kazan' in 1938. In 1944, he began working at the Mendeleev Institute of Chemical Engineering in Moscow, becoming head of a subdepartment in 1960. His research is on the processes of and equipment used in chemical engineering as well as on the cybernetics of chemical engineering processes. (GSE 11, p. 334.)

Kardashev, Nikolai S., D. PM. S. Born in 1932 in Moscow. Russian Astronomer. Corresponding member of the General Physics and Astronomy Department of the Academy since 1976; academician in 1993. He graduated from Moscow State University in 1955. Since 1973, he has been Chief of the Radioastronomy Laboratory of the Space Research Institute. Since 1979, he has been deputy director of the Space Research Institute in Moscow that was created in 1965 as the Civilian Space Agency in Russia. Since 1985, he has served as Vice President of the Committee on Space Research. His research has been in experimental and theoretical astrophysics. He was the first to point out the possibility of observing radio-frequency lines of highly excited atoms of hydrogen, helium, and other elements. He has also contributed to the design of radio telescopes. (GSE 30, p. 532.)

Kazanskii, Vladimir B ., D. Chem. S. Born in 1931 in Moscow. Russian physical chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1974; academician since 1993. He graduated from Moscow State University in 1954, and from 1957 to 1967, he was on the staff of the Institute of Chemical Physics of the AN SSSR. Since 1967, he became Deputy Director of the N. D. Zelinskii Organic Chemistry Institute in Moscow that was founded in 1934 to conduct theoretical and chemical research and to produce catalysts. Since 1969, he has also been Head of the Catalyst Synthesis Laboratory of the institute. His works deal with the reactive centers on the surfaces of oxide catalysts, with the role of adsorbed free radicals in catalytic oxidation, and with radiation-catalyzed processes. (GSE 30, p. 533.)

Keldysh, Leonid V. , D. PM. S. Born in April 1931 in Moscow. Russian physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1968, and an academician since 1976. He graduated from Moscow State University in 1954, and went to work at the Institute of Physics. He became a professor at Moscow State University in 1969. His principal works have dealt with quantum many-particle theory and with solid-state physics. He is author of a number of monographs on the theory of semiconductor characteristics in strong electric fields. Since 1976, he has been Chief of "Keldysh's subdepartment " and of the Theory of Superconducting Department of the Nuclear Physics Division of the P. N. Lebedev Physics Institute in Moscow. From 1972 until 1988, Keldysh was Director of the P. N. Lebedev Physics Institute Branch in Troitsk and in 1988 he became Director of the Moscow Institute itself. From 1976, he also served as a Deputy Director of the Spectroscopy Institute in Troitsk that is subordinate to the academy's General Physics and Astronomy Department. (GSE, 12, p. 395; 31, pp. 315-316.)

Keylis-Borok, **Vladimir I** ., D. PM. S. Born in 1921. Academician of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987. Since 1963, Head of the Computational Geophysics Laboratory of the O. Iu.

Shmidt Earth Physics Institute in Moscow. Foreign member of the US National Academy of Sciences, the American Science and Arts Academy, and the Royal Astronomical Society (UK).

Khain, Viktor E. Born in 1913 in Baku. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1966, and academician, 1987. Originally elected to the Earth Sciences Department. He graduated from the Azerbaijan Industrial Institute in 1935 and conducted research at various geological institutions in Azerbaijan until 1954. He was a professor at the Azerbaijan Industrial Institute from 1949 to 1954, and at Moscow State University from 1961. In 1957, he became a senior researcher at the Institute of Geochemistry and Analytic Chemistry of the AN SSSR and, in 1972, he became a senior researcher at the Geological Institute of the Russian Academy of Sciences. His works deal principally with regional geology (the Caucasus, Carpathians, and other areas) tectonics, petroleum geology, and the history of the geological sciences. He has proposed a classification of tectonic movements. He is working on the problem of the principal stages of evolution of the earth's crust. He is deputy editor-in-Head of lithological and paleogeographic atlases of the Russian Platform and its boundary areas, and of the U.S.S.R. With A. B. Ronov, he has compiled the first maps of continental lithological formations. He is directing work on the compilation of international tectonic maps and since 1971, he has been vice chairman of the Commission for the Geological Map of the World. He is honorary member of a number of geological societies throughout the world. (GSE 28, pp. 547-8.)

Khalatnikov, Isaak M., D. PM. S. Born in October 1919 in Dnepropetrovsk. Russian physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1972, and an academician since 1984. He graduated from the University of Dnepropetrovsk in 1941. From 1945 to 1965, he worked at the Physical Problems Institute of the AN SSSR and the RAN. Since 1954, he has been a professor at the Moscow Physicotechnical Institute. Working with L. D. Landau, he helped to originate the theory of quantum fluids and developed it in its application to liquid helium. He has authored works on relativistic cosmology that deal with the behavior of the universe in the early stages of its development--in these areas working with E. M. Lifshits and V. A. Belinskii. He has written, too, on the foundations of quantum electrodynamics with A. A. Abrikosov and L. D. Landau. From 1965 to 1989, he served as Director of the L. D. Landau Theoretical Physics Institute of the AN SSSR. The institute is engaged in research in all aspects of theoretical physics, especially the theory of solids. The institute is subordinate to the academy's General Physics and Astronomy Department. He has been Chief of that institute's Gravitational Theory Laboratory since 1964. Since 1988, he has served as a Vice President of the AN SSSR. He received the State Prize in 1953. (GSE vol. 11, p. 406; vol. 14, p. 191, and vol. 28, p. 552.)

Kharadze, Evgenii K., D. PM. S. Born in 1907. Astronomer. Academician of the Physical and Mathematical Sciences Department of the Georgiian academy since 1955. Member of the academy's Presidium since 1981. Academician of the General Physics and Astronomy Department of the AN SSSR and the RAN in Moscow since 1984. Since 1932, he has been the Director of the Astrophysical Observatory in Abastummani which is at the highest altitude of any astrophysical observatory in Russia. It studies the upper atmosphere, stars, planets, the sun and the moon. It also does research in the areas of modern astrophysics, and stellar astronomy. His major scientific contributions are in the study of interstellar media, the structure of the galaxy, variable and transient stars and their spectral characteristics, and the upper atmosphere of the earth. Under his direction, research on the diffusion medium in the galaxy led to the determination of the electron density of planetary nebulas and the discovery of the polarization of radiation of the Crab Nebula. He helped to develop a new astronomical device for the study of the physical properties of the surface of the moon. From 1978 to 1986, he served as President of the Georgiian Academy of Sciences. (GSE 7, p. 211.)

Khariton, Iulii B. Born in 1904 in St. Petersburg. Russian physicist. His scientific specialties are chemical physics and the atomic nuclei. Academician of the Nuclear Physics Department of the Academy since 1953. Originally elected to the Physical Mathematical Sciences Department. He graduated from Leningrad Polytechnic Institute in 1925. In 1921, he started working at the Physicotechnical Institute under N. N. Semenov. From 1926 to 1928, he was sent to work at the Cavendish Laboratory in Great Britain where under Rutherford he conducted research on the nature of scintillations and the sensitivity of the eye. He received his Ph.D. there. In 1931, he began work at the Institute of Chemical Physics of the AN SSSR. He later worked at other institutes. In 1939, with Iakov B. Zeldovich, he calculated the chain reaction of nuclear fission. He was scientific Director of "the Installation" where the thermonuclear bomb was developed and where Sakharaov worked for almost 20 years. He is a recipient of three State Prizes and the Lenin Prize. In 1983, he was the recipient of the M. V. Lomonosov Gold Medal for his scientific work. (GSE 28, p. 564.)

Khlopkin, Nikolai S., C. Tech. S. Born in 1923. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1976; academician in 1993.

Khokhlov, Aleksandr S., D. Chem S. Born in 1916 in Moscow. Russian chemist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1964; academician in 1993. He graduated from Moscow Institute of Fine Chemistry Technology in 1941. From 1948 to 1952, he researched at the Institute of Biological and Medical Chemistry of the Academy of Medical Science of the U.S.S.R. From 1952 to 1954, he headed a laboratory at the Institute of Experimental Cancer Pathology and Therapy (now the Institute of Experimental and Clinical Oncology.) From 1954 to 1959, he headed a section of the All-Union Antibiotics Institute. In 1959, he became Deputy Director of the M. M. Shemiakin Institute of Bio-organic Chemistry and head of one of its laboratories. He has served as Deputy Director since 1960 of the Shemiakin Bio-organic Chemistry Institute in Moscow. Since 1975, Head of the Isolation and Purification of Natural Substances Laboratory of the Shemiakin Bio-organic Chemistry Institute. His works are in antibiotics, antineoplastic agents, microbial bioregulation, and other natural substances. (GSE 28, p. 598.)

Khristianovich, Sergei A . Born October 1908 in St. Petersburg. Russian scientist in mechanics. He was a member of the national academy's Presidium from 1946 to 1956. While a corresponding member of the national academy since 1939, he has been an academician of the Physical Technical Problems of Power Engineering Department of the Academy since 1943 (originally elected to the Physical Mathematical Department). Since 1977, he has been a board member of the GKNT general assembly. After graduation from Leningrad State University he joined the staff of the State Hydrologic Institute, and was a staff member of the Central Aerodynamic and Hydrodynamic Institute from 1937 to 1953. He was named professor at the Moscow Physicotechnical Institute in 1947. He was a staff member of the Institute of Chemical Physics of the national academy from 1956-1957. From 1957-1961 he was deputy chairman of the Siberian Division of the AN SSSR, and from 1957 to 1965, he also served as Director of theoretical and Applied Mechanics Institute of the Siberian Department. From 1965 to 1972, he was associated with the All-Union SRI of Physico-Technical and Electronic Measurements Institute, and in 1972, he took a position at the Institute of Problems in Mechanics of the national academy. His principal works are on the mechanics of liquids and gases and on the mechanics of deformable solids. He supervised the development of the first transonic wind tunnels in Russia (1944-47). He has researched the propagation and reflection of weak shock waves (1955-63), steam-gas turbines and methods of intracycle removal of sulfur from mazut at steam power stations (1960-76). State prizes: 1942, 1946, and 1952. (GSE 28, p. 612.)

Khrushchov, **Nikolai G**., D. Bio. S. Born in 1932. Corresponding member of the General Biology Department of the Academy since 1979; academician in 1993. Since 1976, he has been Deputy Director of the N.K. Koltsov Developmental Biology Institute in Moscow, and

in the late 1980s he was named Director, replacing Dr. Aleksei V. Yablokov, D. Bio. S., who is now the Deputy Chairman of the Committee of Ecology of the Russian Government. Since 1969, Khrushchov headed the Histogenesis Laboratory of the N. K. Koltsov Developmental Biology Institute in Moscow.

Khublarian, Martin G., D. Tech S. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1984; academician in 1993. Since 1991, he has directed the research of the Water Problems Institute in Moscow. Since its establishment in 1967, the institute has developed some 47 mathematical models ranging from the sedimentation in a tidal river mouth to a model and program for estimating the effect of the accumulation of algae and suspensions on the temperature and gas regime of the near-surface layer of a water body. It has developed flow meters, temperature measurement thermometers, developed some nine major methodologies for prediction and planning for water development, protection, and use, and created several large data banks containing hydrologic information in Russia and the rest of the world. Cartographic materials that its scientists have created include an atlas of content and transfer of moisture over Russian territory, bathymetric maps of the Aral Sea, a hydrographic map of the northern Caspian Sea, diagrammatic maps of world water reservoirs, map of ground water flow of Central and Eastern Europe, and a map of surface and ground water runoff in Mongolia derived from space photography.

Kim, Maksim P., D. Hist. S. Born in 1908 in Putsilovka, Ussuriisk Raion, Primore Krai. Russian historian. Corresponding member of the History Department of the Academy since 1976, and academician since 1979. Son of a peasant. He graduated from the Moscow Institute of History, Philosophy, and Literature in 1934. Until 1951, he was a teacher in the higher educational system of Moscow. In 1951, he began teaching at the Institute of History of the U.S.S.R. of the AN SSSR. From 1954 to 1971, he was head of the subdepartment of the Academy of Social Sciences under the CC CPSU. He was editor-in-Head of Istoriia SSSR from 1956 to 1960. His work is in the history of Soviet culture. He is also deputy head of the editorial Committee of the multivolume work, The History of the U.S.S.R. from Remote Antiquity to the Present. (GSE 12, p. 457.)

Kirillin, Vladimir A., D. Tech. S. Born in 1913 in Moscow. Soviet state and party figure and specialist in energetics and thermophysics. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1953, and academician since 1962 when he was elected to the Technical Sciences Department. He served as vice-President of the academy from 1963 to 1965. In 1965 he was Department chairman of the Council of Ministers of the U.S.S.R. and as chairman of the GKNT (Committee for Science and Technology). From 1985 to 1988, he was Academician Secretary of the Physical Technical Problems of Power Engineering Department. He graduated from the Moscow Power Engineering Institute in 1936. He worked at the Kashir State Regional Electric Power Plant, at the Unifold Boiler Construction Bureau, and at the Moscow Power Engineering Institute where he became a professor in 1952. He served in the Soviet Navy during WW II, was deputy minister of higher education from 1954 to 1955, vice-chairman of the State Committee on New Technology in 1955, and Head of the Department of science, higher educational institutions, and schools of the Central Committee of the CPSU from 1955 to 1962. His main work is in thermophysical properties of various substances, water and water vapor, heavy water and its steam at high parameters, and thermodynamic properties of a great number of solids at high temperatures. He has been involved in the development of MHG generators that directly convert heat into electric energy. He became a candidate member of the CC CPSU in 1961 and a full member of that body in 1966. Since 1980, he has been Deputy Director of the High Temperature Institute in Moscow, that investigates thermophysical and electrophysical properties of matter at high temperatures. In 1988, he was appointed an advisor to the national academy's Presidium. Recipient of the State Prize, 1951, and the Lenin Prize, 1966. (GSE 12, p. 507.)

Kiriukhin, **Vladimir** I., D. Tech. S. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1984; academician in 1993.

Kishkin, **Sergei** T . Born in 1906 in Lugansk, now Voroshilovgrad. Russian scientist in physical metallurgy. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1960, and academician since 1966. honoredworker in Science and Technology of the RSFSR. He graduated from the Bauman Moscow Higher Technical School in 1931. From 1948 to 1960, he was head of a subdepartment at the Moscow Institute of Aviation. His work is in physical metallurgy. Recipient of the State Prize 1942, 1949, 1968. (GSE 12, p. 524.)

Klimov, **Dmitrii M** ., D. PM. S. Born in 1933. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981; academician since 1993. Since 1978, he has been Deputy Director of the Problems of Mechanics Institute in Moscow that was established in 1965 to conduct research on gas dynamic processes, including combustion instability, plasma, laser beams, and shock waves.

Knipper, **Andrei** L., D. GM. S. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987; academician in 1993. Since 1989, he has been the Director of the Geology Institute in Moscow, which is a major research center for tectonics research and the development of mathematical methods of geological research.

Knorre, Dmitrii G., D. Chem S. Born in 1926. Chemist, Biochemist, specialist in chemical kinetics of complex reactions, bioorganic chemistry, and molecular biology. Corresponding member since 1968, and academician since 1981. Principal membership in the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the academy and of the Siberian Department since 1981. He graduated from the D. I. Mendeleev Moscow Chemico-Technological Institute in 1947. He worked at the Chemical Physics Institute from 1947 to 1960 when he joined the Siberian Department in a laboratory studying natural polymers and joined the Department of biochemistry of the Novosibirsk Institute of Organic Chemistry. In 1962, he acted as Head of the Natural Polymers Laboratory of the Organic Chemistry Institute in Novosibirsk that was established in 1958 and whose basic work is in the study of aromatic and heterocyclic chemistry and in natural products. He was named Director-organizer of the Novosibirsk Bioorganic Chemistry. He was named to the Presidium of the Siberian Branch in 1988. From 1967 to 1983, he was a professor on the faculty of natural sciences holding the chair in molecular biology from 1979. He is an honored scientist of the former Soviet Union. He received the Laureate Prize of the Soviet Ministry in 1987, and the M. M. Shemiakin AN SSSR Prize in 1988. He holds other recognitions and awards for his work. (GSE 12, p. 554.) Kochetov, Nikolai K., D. Chem. S. Born in 1915 in Moscow. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the 1960, and academician, since 1979. He graduated from the M. V. Lomonosov Institute of Fine Chemical Technology in Moscow in 1939. Since 1966, he has been Director of the N. D. Zelinskii Organic Chemical Institute in Moscow that was established in 1934 to do both theoretical and experimental chemical research. It produces chemical catalysts. Since 1970, he has also been Head of the Carbohydrates Laboratory of the institute. He is a corresponding member of the Medical and Biological Sciences Department of the Academy of Medical Sciences. He is a specialist in organic synthesis, the chemistry of medicinal substances, and the chemistry of natural products. He has developed several new methods of organic synthesis. (GSE 13, p. 355.)

Kochina, Pelageia Ia., D. PM. S. Born in 1899 in Astrakhan. Russian scientist in the field of hydrodynamics. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1958 and also member of the Siberian Department from that same date. She started work in 1919 at the Main Geophysical Observatory and graduated from Petrograd University in 1921. From 1925 to 1931, she

taught at the Institute of Transportation in Leningrad and from 1931 to 1935 at the Institute of Civil Aviation Engineering. In 1935, she began working at the Institute of Mathematics and in 1939 at the Institute of Mechanics of the AN SSSR. In 1959, she began work at the Institute of Hydrodynamics of the Siberian Department. Since 1971, she has been at the Institute of Problems of Mechanics of the AN SSSR and the RAN where she has been Head of the Mathematics Division of that institute. Her works include the theory of filtration, dynamic meteorology, the theory of tidal flow in basins, and the movement of groundwater and of crude oil in porous media. Recipient of the State Prize, 1946. (GSE 13, p. 356.)

Kolesnikov, Konstantin S. , D. Tech. S. Born in 1919. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981, and academician since December 1987. Since 1966, prorector of the N. E. Bauman Moscow Higher Technical School. This school is a training center for design and technological engineers and conducts machine building research.

Kolotyrkin, **Iakov M** ., D. Chem. S. Born in 1910. Academician of the General and Technical Chemistry Department of the Academy since 1970. Since 1957, he has been Director of the L. Ia. Karpov Physical Chemistry Scientific Research Institute of the Ministry of the Chemical Industry located in Moscow. Established in 1918, the institute specializes in electrochemistry, chemical kinetics, corrosion of metals and alloys, polymerization processes, aerosols research, and radiation chemistry.

Kondrat'ev, Kirill Ia. , D. PM. S. Born in 1920 in Rybinsk. Russian geophysicist. Specialist in the field of the physics of planets' atmospheres and the history of the cosmos. Corresponding member, 1968, and academician of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1984. He graduated from Leningrad State University in 1946, and began working there at once, becoming a professor in 1958 and serving as rector of the university from 1964 to 1970. Beginning in 1961, he also worked at the A. SI. Voeikov Main Geophysical Observatory located in St. Petersburg. His works are in radiation problems in satellite meteorology, atmospheric physics, and actinometry. They also include the study of the "Greenhouse Effect." Since 1969, he has been a member of the International Academy of Astronautics. (GSE 13, p. 362.)

Kondrat'eva, Elena N ., D. Bio S. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981; academician since 1993. In 1976, she was listed as a junior researcher in the X-Ray Astronomy subdepartment of the Spectroscopy Laboratory of the P. N. Lebedev Physics Institute in Moscow.

Konopatov, Aleksandr D . Born in 1922 in Krasnodar Krai. Russian scientist in the physics and technology of power generation. Corresponding member of thie Physical Technical Problems of Power Engineering Department of the Academy since 1976; academician in c 1993. He graduated from the Moscow Institute of Aviation Technology in 1945. His research is primarily in gas dynamics, the stability of operation of power plants, and their reliability, efficiency, and lifetimes. Recipient of the State Prize, 1970; Lenin Prize, 1976. (GSE 30, p. 535.)

Konovalov, Anatolii N. , D. PM. S. Born in 1936. Mathematician. He is a specialist in mathematical modeling and computer experimentation. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1990; academician since 1993. He heads a laboratory of the computer center of the Siberian Department of the RAN. He has written 41 scientific works of which five are monographs. He is also credited with 34 inventions. He is a professor at the Novosibirsk State University in Akademgorodok where he has guided the academic work of 18 aspirants for the candidate degree. He was on the Scientific Council on the complex problems of mathematical modeling of the AN SSSR. He is also on the Siberian Department's Scientific Council on mathematics and informatics and he is an honored consultant-specialist of the council. He received the State Prize in 1988.

D. GM. S. Born in 1934. Geologist. Specialist in general Kontorovich, Aleksei Z., geology and the geochemistry of oil and gas. Academician since 1990. Deputy Director of the Institute of Geology and Geophysics of the Siberian Department in Akademgorodok-Novosibirsk. He is the author of 26 research works and co-author of 360 publications. His monographs "The Geology of Oil and Gas of the Siberian Platform," (1976) and "Prognosis of Oil and Gas Reserves" (1981) are thought to be most significant. He is a professor at the Novosibirsk State University where he has directed the doctorate work of eight students and the postgraduate work of 55 aspirants for the candidate degree. He is on the Scientific Council on problems of the geology and geochemistry of oil and gas of the Russian Academy, of the Lithology Committee, and is coordinator of the studies on Oil and Gas in the Vostok Region of the Scientific Council for the "Sibir" program of the Siberian Department. He is head of the Novosibirsk Oblast Scientific Technical Oil and Gas Development Department imeni Academician I. M. Gubkina. In 1974, he received the I. M. Gubkin Prize named after the renowned petroleum geologist and engineer, sharing it with A. A. Trofimuk and V. S. Vishemirskii.

D. Chem. S. Born in 1931 in Iukhnov, Kaluga Oblast. Russian Koptyug, Valentin A., organic chemist. Corresponding member of the General and Technical Chemistry Department of the AN SSSR and the RAN since 1968; and, academician since 1979. He graduated from the D. I Mendeleev Moscow Institute of Chemical Technology in 1954. In 1960, he became head of a laboratory at the Novosibirsk Institute of Organic Chemistry of the Siberian Division (now Department) of the AN SSSR. In 1966, he became head of the Department of organic chemistry at the University of Novosibirsk. Since 1969, he has been Chief of the Study of Molecular Mechanism laboratory of the Organic Chemistry Institute in Novosibirsk established in 1958 to study aromatic and heterocyclic chemistry and natural products. Since 1980, he has chaired the Siberian Department of the academy and from that date until its demise he was a Candidate member of the CC CPSU. He has served as one of the Vice Presidents of the national academy since 1980. In 1988, he was installed as president of the International Union of Pure and Applied Chemistry. His works include studies of reaction mechanisms of aromatic compounds and molecular rearrangements with the participation of carbon ions. (GSE 13, p. 378.)

Koropachinskii, Igor Iu. D. Bio. S. Born in 1928. Biolgist and Dendrologist. Corresponding member of the General Biology Department of the Russian Academy of Sciences and of the Siberian Department since December 1987, and academician since 1992. He has authored and co-authored 85 scientific works of which 12 are important mongraphs. He graduated from the Siberian Forestry Technology Institute in 1951. He was an aspirant, assistant, docent, and held the chair in Forest Culture at that institute. He was a senior researcher at the V. N. Sukachev Forestry and Timber Institute (in Krasnaiorsk) from 1960 to 1962. From 1962 to 1976, he was Deputy Directory of that institute and from 1977 to 1983, he was Director of that institute. In 1983 he was named the Director of the Central Siberian Botanical Garden in Novosibirsk that was started in 1958 in order to exchange seeds and plants with other botanical gardens in Russia and abroad to enrich Siberian flora. He has been a professor at the Siberian Technological Institute since 1982 where he has guided the work of 13 aspirants for the candidate degree. He is deputy chairman of the Scientific Council on the environmental problems.

Koroteev, **Viktor** A ., C. GM. S. Corresponding member of the Geology, Geochemistry, Geophysics and Mining Sciences Department and of the Urals Department since December 1987; academician since 1993. Since 1975, he has been Director of the V. I. Lenin Ilmenskii State Reserve in Miass in Cheliabinsk Oblast. This organization was established in 1920 to conduct geological and biological research in the forests of the Southern Urals Mountains. Deputy chairman of the Urals Department since August 1988.

Kostiuk, Platon G., D. Bio. S. Born in 1924 in Kiev. Russian physiologist and a specialist in neurophysiology and electrophysiology. Member of the Presidium of the academy since August of 1988. He has been a corresponding member of the Physiology Department of the AN SSSR and the RAN since 1966; and, academician since 1974. He has

served as academician secretary of the Physiology Department since 1975. He has also been an academician of the Biochemistry, Physics, and Theoretical Medicine Department of the Ukrainian academy of sciences since 1969 and a member of the GDR Republic Academy of Naturalists since 1966. He graduated from the University of Kiev in 1946 and from the Kiev Medical Institute in 1949. He became head of the Institute of Animal Physiology of the University of Kiev in 1956. In 1958, he became head of the division of general physiology of the nervous system that he had organized at the A. A. Bogomolets Institute of Physiology of the Ukrainian AN SSR. Since 1966, he has been director of that institute in Kiev. Established in 1953, the institute does research on basic and applied problems of physiology. His works have included work on cellular mechanism of nervous activity. He was the first in the U.S.S.R. to use microelectrodes in the study of nerve cells. He was awarded the I. P. Pavlov Prize in 1962. Since 1970, he has been director of the Experimental Medical Institute in St. Petersburg. In 1977, he received the I. M. Sechenov Prize for his work. (GSE 13, p. 439.)

Kotel'nikov, Vladimir A . D. Tech S. Born August 1908 in Kazan'. Russian radio engineering scientist. Academician of the General Physics and Astronomy Department of the Academy since 1953. Son of a Kazan' University professor. He graduated from the Moscow Institute of Power Engineering in 1931, and taught there, becoming a professor in 1947. Since 1953, he has been an academician of the General Physics and Astronomy Department. From 1954 to 1988, he served as the director of the Radio Engineering and Electronics Institute in Moscow, that does basic research in radio wave propagation, new electronic devices for detection, generation, and amplification of radio signals. He has been Vice President of the academy since 1970. Since 1971, he has been a board member of the GKNT general assembly. Since 1979, he has served as first Vice President of the Academy of Sciences of the U.S.S.R. His work has been on the improvement of radio reception. His papers on potential noise immunity are significant. He has directed work on radio location of Mars, Venus, and Mercury. He is an honorary member of the American Institute of Electrical and Electronics Engineering (1964), and a foreign member of the Czechoslovakian Academy of Sciences (1965). He was awarded U.S.S.R. state prizes in 1943 and 1946, and received the Lenin prize in 1964. He was on the editorial board of Science in Russia. In 1974, he received the A. S. Popov Gold Medal that is named after the Russian physicist and electrical engineer. In 1982, he received the M. V. Lomonosov Gold Medal. Recipient of the M. V. Keldysh Gold Medal in 1987 for his scientific work. (GSE 13, p.

Kotliakov, Vladimir M., D. Geo. S. Born in 1931 in the settlement of Krasnaia Poliana, now in the city of Lobnia, Moscow Oblast. Russian glaciologist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1976, and academician since 1988. He graduated from the Department of geography at Moscow State University in 1954. In 1968, he became Head of the Glaciology Laboratory of the Geography Institute of the AN SSSR in Moscow. Since 1986, he has been Director of the Geography Institute in Moscow. He has been deputy secretary of the Department since April 1988. His works are on glaciology, the earth's snow cover, and glaciation in the Antarctica, the Caucasus, and the Pamirs. In 1961, he founded a series of published collections--Materials on Glaciological Research: A Chronicle of Discussion--of which he is editor-in-Head. (GSE 30, p. 535.)

Koval'chenko, Ivan D ., Born in 1923. Corresponding member of the History Department of the Academy since 1972, and academician since December 1987. Academician secretary since April 1989.

Koval'chuk, Boris M., D. Tech. S. Born in 1940. Engineer. Specialist in the fields of electronics and electrotechnics and electrophysics. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987, and an academician since 1992. He has authored 130 scientific works and is credited with 11 inventions. He graduated from the Tomsk Polytechnical Institute imeni S. M. Kirov in 1962 and worked at the Nuclear Physics Electronics, and Automation Institute

in Tomsk from 1962 to 1970. In 1970 he became head of a laboratory of the Department of high energy electrotechnics and in 1978, he was made Head of the Pulsed Power Laboratory of the High Currents Electronics Institute in Tomsk. He is on the Scientific Council on Pulsed Power. Chairman of the section on the physical technical problems of controlling the sources of extra high power energy of micro and nano wave bands. He headed the base for the production of pulsed energy, including work on the synthesis of thermonuclear war heads on guided missiles, the study of the physics of powerful electronic and ionic rays, the generation of SVCh radiation, and research in laser technology. He has guided the research of two doctoral candidates and the work of five aspirants for the candidate degree. He was given the Laureate Lenin Komsomol Prize in 1968. He received the State Prize in 1981. He also has been awarded a medal in recognition of his work.

Kovalev, Sergei N., D. Tech. S. Born in 1919. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981.

Krasnoshchekov, **Pavel S.**, C. PM. S. Corresponding member of the Information Sciences, Computer Technology, and Automation Department of the Academy since 1984; academician in 1993. Since 1971, he has been a senior researcher of unknown affiliation at the Computer Center in Moscow.

Krasovskii, **Aleksandr** A . Born in 1921 in Kirovgrad. Russian scientist in the field of automatic control systems. He graduated from the N. E. Zhukovskii Air Force Engineering Academy where he now works. He became a professor there in 1954. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1968; academician in 1993. His works are in the theory of automatic control. He has made substantial contributions to the theory of automatic self-adjusting systems and air flight control systems. (GSE 13, p. 487.)

Krasovskii, Nikolai N. Born in 1924 in Ekaterinsburg (Sverdlovsk). Russian scientist in the field of mechanics and control processes. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Russian Academy of Sciences and of the Urals Department since 1968. He graduated from the Urals Polytechnic Institute in 1949, becoming a professor there in 1957 and a professor at Urals University in 1959. Since 1970, he has been the Director of the Institute of Mathematics and Mechanics of the Russian Academy of Sciences. His works are on the stability of motion and the dynamics of control systems. (GSE 13, p. 487.)

Krayevskii, Aleksandr A., D. Biochem. S., Academician of the Biochmistry
Biophysics, and Chemistry of Phsiologically kActive Compounds Department of the
Academy in 1993. He is head of the Chemical and Biological Analysis of Biopolymers and
Cells laboratory of the Molecular Biology Institute in Moscow. He graduated from the
Moscow Institute of Fine Chemical Technology in 1955. His thesis dealt with the synthesis
of polyenic aliphatic fatty acids in 1963, and he defended his dissertation on peptidyl-
transferase center of ribosomes: substrate specificity and mechanism of action in 1976.
His present interests are in the molecular mechanisms of enzymes action including DNA
dependent and RNA dependent DNA polymerases, and the strategy of synthesis of
selective inhibitors of HIV reproduction.

Kropotkin, Petr. N., D. GM. S. Born in 1910 in Moscow. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1966; academician in 1993. Originally elected to Earth Sciences Department. He graduated from the S. Ordzhonikidze Moscow Geological Prospecting Institute in 1932. Since 1959, he has headed the Tectonics and Geophysics Laboratory of the Geological Institute of the Russian Academy of Sciences. His main work is in the regional geology of Kazakhstan and the Far East, and geotectonics. (GSE 13, p. 520.)

Kudriavtsev, Vladimir N ., D. Jur. S. Born in 1923 in Moscow. Russian jurist. Corresponding member of the Philosophy and Law Department of the AN SSSR and the Russian Academy of Sciences since 1974; and, academician since 1984. From 1952 to 1960

he taught and researched at the V. I. Lenin Military Political Academy. From 1960-63 he was deputy Chief and Chief of organizational inspection division of the Military Collegium of the Supreme Court of the U.S.S.R. In 1963 he joined the All-Union Institute for the Study of the Causes of Crime and the Development of Crime Prevention Measures. From 1969 to 1973 he was director of that institute. Since 1973, he has served as director of the State and Law Institute in Moscow that was established in 1938 and is Russia's most prestigious and important facility for conducting research on governmental, legal and political affairs. Its research directly affects Russian legislation. His principal works are on criminal law and criminology. Since 1975, he has been deputy chairman of Soviet Sociological Association, Moscow. Since 1983, he has served as a member of the Presidium of the Soviet Committee for the Defense of Peace. Since 1985, he has been member of the Presidium of the academy and in 1988 he was named a vice-president of the academy for the Social Sciences. Since 1988, he has been the academician secretary of the Philosophy and Law Department of the AN SSSR and the RAN. (GSE 30, p. 536.)

Kukushkin, **Iurii S** ., D. Hist. S. Born in 1929. Corresponding member of the History Department of the Academy since 1979; academician since December 1987. Since 1971, dean of the History Faculty at the M. V. Lomonosov Moscow State University.

Kunaev, Askar M., D. Tech. S. Born in 1929. Academician of the Physical Chemistry and Technology of Inorganic Materials Department of the national academy since 1981. Since 1972 he has been an academician of the Chemical and Technological Sciences Department of the Kazakh academy. He was the Director of the Metallurgy and Ore Dressing Institute in Alma Ata from 1970 to 1988. The institute was established in 1956 to develop new methods of extracting and producing metals used in industry such as alumina, low-grade bauxite and rhenium. It is subordinate to the Chemical Technical Sciences Department of the Kazakh Academy of Sciences. From 1974 to 1986, he served as President of the Kazakh Academy of Sciences.

Kuntsevich, Anatolii D., D. Chem. S., Lt. Gen. Born in 1934. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981. Academician since December 1987.

Kurdiumov, Georgii V., D. PM. S. Born in 1902 in Rylsk, in Kursk Oblast. Russian physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1946, and academician since 1953. Originally elected to the Physical Mathematical Sciences Department. Principal membership is in the General Physics and Astronomy Department. Since 1969, academician of the Ukrainian Academy of Sciences Physical and Technical Problems of Materials Sciences Department. He graduated from the Leningrad Polytechnical Institute in 1926. From 1925 to 1932, he worked at the Leningrad Physicotechnical Institute. In 1932, he joined the Dnepropetrovsk Physicotechnical Institute. In 1944, he became Director of the Institute of Metallurgy and Metal Physics of the Central SRI of the Ministry of Ferrous Metallurgy. In 1962, he became Director of the Institute of Solid State Physics of the Russian Academy of Sciences. Since 1975, he has served as deputy chairman of the Noginsk Scientific Center. Kurdiumov pioneered in studies of martensite transformations in crystalline materials, that is of fundamental importance for the theory of phase transitions and heat treatment of steels and alloys. He is a member of the German Academy of Sciences (1970) and of other academies throughout the world. Recipient of the State Prize, 1944. In 1979, he received the D. K. Chernov Gold Medal in recognition of his contributions in physics. (GSE 14, p. 123.)

Kurlenia, Mikhail V . D. Tech. S. Born in 1931. Engineer. Specialist in mining mechanics. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department and of the Siberian Department since December 1987, and academician since 1990. He has written 24 scientific works and co-authored 105 others. He has 95 inventions and of his scientific writings, seven are major monographs--all on aspects of mining. He graduated from the Tomsk Polytechnical Institute Imeni S. M. Kirov in 1953 and worked there until 1960. In 1960, he joined the Mining Institute of the Siberian Department in Novosibirsk where, in turn, he was a senior researcher, head of a

laboratory and a Department, and in 1988, he was named Director of that institute. He became a member of the Presidium in that year. He has been a professor since 1986. He has supervised the work of two doctoral and 16 candidate aspirants. He edits a mining journal.

Kursanov, Andrei L., D. Bio S. Born in 1902. Russian plant physiologist and biochemistr-son of L. I. Kursanov. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Materials Department of the Academy since 1953. He graduated from Moscow State University in 1926. From 1952 until August 1988, he served as Director of the Timiriazev Plant Physiology Institute in Moscow that was founded in 1889. It is subordinate to the academy's Biochemistry, Biophysics, and Chemistry of Physiologically Active Materials Department and does research in soil science, plant physiology and solar technology involving photosynthesis. In 1954, he founded and became editor-in-Head of the journal Fiziologiia rastenii (Plant Physiology.) His works have included studies of enzyme actions in living plant cells. In collaboration with A. I. Oparin, he studied tannin in tea and other plants. He developed the theory of transfer of organic substances in plants and of the deposit of these substances in reserve. In 1984, he received the M. V. Lomonosov Gold Medal for his scientific research. (GSE 14, pp. 132-3.)

Kurzhanskii, **Aleksandr B.** , D. PM. S. Born in 1939. Corresponding member of the Problems of Machine Building and Control Processes Department since 1981 and of the Urals Department since 1988; academician in 1993.

Kusakin, O. I.

Kutepov, **Aleksei M**. D. Tech. S. Born 1931. In 1979, he was given the I. I. Popzunov Prize for his research, and he became a corresponding member of the Physical Chemistry and technology of Inorganic Materials Department of the Academy in 1987; academician in 1993. In 1985, he was a deputy chairman of the GKNT--the State Committee for Science and Technology.

Kuznetsov, Fedor A., D. Chem. S. Born in 1932. Physical Chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1984, and academician since December 1987. He also is a member of the Siberian Department of the Academy. He graduated from the Leningrad State University in 1955. He began work at the Inorganic Chemistry Institute of the Siberian Department in 1958, served as an aspirant, a junior researcher, and senior researcher in a major laboratory in that institute. From 1971 to 1983, he has acted as Head of the Epitaxial Layers Laboratory and of the Electronics Materials Laboratory of the Inorganic Chemistry Institute in Novosibirsk, being named its Director in 1983. The institute was established in 1957 in cooperation with the N. S. Kurnakov General and Inorganic Chemistry Institute for the purpose of studying complex compounds, splitting uranium and plutonium, and the extraction and investigation of rare earth metals. He has been a professor at the Novosibirsk University since 1976, holding the chair in inorganic chemistry since 1986. He is the Head editor of Izvestiya. In 1988 he was named chairman of the Scientific Council on Inorganic Chemistry. He is a member of the Electrochemical Society of the USA--since 1979. Recipient of the State Laureate Prize in 1981.

Kuznetsov, Nikolai A ., D. Tech. S. Corresponding member of the Machine Building, Mechanics and Control Processes Department of the academy since December 1987; and academician since 1993. Since 1991, he has been director of the Problems of Information Transmission Institute in Moscow which was established in December 1961 by a decision of the Presidium of the AN SSSR "On the reorganization of the laboratory of information transmission systems into the Institute for the Problems of Information transmission." From 1962 to 1990 under Professor M. S. Pinsker, D. PM. S., and since 1991, in the Mathematical Information Theory Laboratory under Professor N. A. Kuznetsov--scientists in the laboratory have worked on the probabilistic, algebraic and combinational aspects of information and coding theory, carried out fundamental studies on the potential performance of various systems for information transmission and storage, on the construction of new classes of codes using concatenation approaches, on convolution codes and

founding probabilistic decoding algorithms, on the application of algebraic geometry methods in coding theory, and on methods of source coding and the design of data compression algorithms.

Kuznetsov, **Nikolai D** ., Gen. Lt. Eng. Born in 1911 in Aktiubinsk. Russian scientist, specialist in jet engines. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1974. He graduated from the N. E. Zhukovskii Air Force Academy in 1938. From 1943 to 1946, he was a deputy Head designer and from 1946 to 1956, he was a Head designer. Since 1956, he has been a general designer. Under his leadership, engines for Tu-114, Tu-154, Au-22, and Il-62 aircraft and the Tu-144 supersonic passenger aircraft were developed. He was a deputy to the 6th, 7th, and 8th convocations of the Supreme Soviet of the RSFSR. Lenin Prize, 1956. (GSE 13, p. 576.)

Kuznetsov, **Nikolai T.**, D. Chem. S. Born in 1931. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since December 1987; academician in 1993.

Ladyzhenskaia, Olga A. , D. PM. S. Born in 1922. Corresponding member of the Mathematics Department of the Academy since 1981; academician in 1993. Since 1962, she has been Head of the Mathematics Physics Department of the V. A. Steklov Mathematics Institute in St. Petersburg. According to one Russian Mathematician, she is the best specialist on partial differential equations in Russia--if not in the world.

Laptev, **Vladimir V**. Born in 1924. Corresponding member of the Philosophy and Law Department of the Academy since 1979. Academician since December 1987.

Larkin, Anatolii I ., D. PM. S. Born in 1932. Corresponding member of the General Physics and Astronomy Department of the Academy since 1979; academician in 1993. Since 1969, Chief of the Quantum Mechanics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow, whose scientists study theoretical physics--theory of solids, low temperature physics, elementary particle theory, plasma theory and laser radiation.

Laskorin, Boris N., D. Tech. S. Born in 1915 in Brest. Russian chemical engineer. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1966, and academician since 1976. He graduated from the University of Kiev in 1938 and received his Doctorate of Technical Sciences degree in 1956. He became a professor in 1958. His works are in the chemistry and technology of inorganic materials--in physicochemical sorption and extraction processes. In 1983, he received the V. G. Khlopin Prize for work in inorganic chemistry. (GSE 14, p. 242.)

Laverov, **Nikolai P.** Born in 1930. Corresponding member since 1979. Academician of the Geology, Geophysics, Geochemistry, and Mining Department of the national academy since December 1987. Since 1987, he has been President of the Kirghizstan Academy of Sciences. He was named vice-President of the Russian Academy of Sciences for the Earth Sciences Section in October, 1988. Since 1990, he has been the Director of the Geology of Ore Deposits, Petrography, Mineralogy and Geochemistry Institute in Moscow.

Lavrent'ev, Mikhail M . Born in July 1932 in Moscow. Russian mathematician. He has been a corresponding member of the Mathematics Department of the academy since 1968 and an academician of that Department since 1992. He worked in that Department from 1955 to 1957. He graduated from Moscow State University in 1955. He joined the Siberian Department in 1957. He has been a professor at the Novosibirsk State University since 1963, holding the chair in mathematical problems in geophysics. From 1980 to 1986, he directed the Computer Center of the Siberian Department. In 1986 he was named Director of the Mathematics Institute in Novosibirsk that was founded in 1957 to research theoretical and applied mathematics. He is the son of M. A. Lavrentiev, the first head of the Siberian Department. He was named to the Presidium of the Siberian Department in 1987. Since 1988, he has been Head editor of the Siberian Mathematics Journal. He is a member of the Society of Mathematical Geology. He is an honored scientist of the former Soviet Union. He received the Lenin Laureate Prize in 1962, the State prize in 1987. He has received a number of other medals and recognitions. (GSE 14, p. 302.)

Lazarev, V. B., Junior researcher in 1979 in the S. I. Vavilov Physical Problems Institute in Moscow, where he worked with Lev A. Vaynshteyn.

Leonov, **Leonid M**. Born in 1899. Academician of the Literature and Language Department of the Academy since 1972.

Leont'ev, **Anatolii I** ., Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987; academician in 1993.

Letnikov, Feliks A . D. GM. S. Born in 1934. Geologist. Specialist in the fields of geology, geochemistry and petrological processes forming the earth's crust. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department and of the Siberian Department since December 1987, and academician since 1992. He has authored and co-authored 230 works of which 15 are monographic in length and substance. He graduated from the All-Union Correspondence Polytechnical Institute in 1961. He served on geological expeditions from 1957 to 1965. In 1965, he headed a laboratory of experimental and theoretical petrology, and in 1980 he was named Deputy Director of the Earth's Crust Institute in Irkutsk. He has been a professor since 1978, holding the chair in mineralogy and petrology at the Irkutsk State University. He has directed the research of three doctoral students and 23 aspirants for the candidate degree. He is on the commission on experimental mineralogy and of the commission on metasomatosis of the Department of Geology, Geophysics, Geochemistry and Mining Sciences of the Russian Academy of Sciences. He is a member of group participating in the program "Lithosphere" and "Cybernetic Geodynamics of the Earth's Crust." He is editor of the journal "Geology and Geophysics."

Likhachev, Dmitrii S. Born in 1906 in St. Petersburg. Russian literary critic and cultural historian. Corresponding member, 1953, and academician since 1970. Principal membership in Literature and Language Department. He graduated from Leningrad State University in 1928. He began his work at Pushkin House in 1939 (Institute of Russian Literature) and became head of the institute's sector of ancient Russian literature in 1954. From 1946 to 1953, he was a professor at Leningrad State University. His writings are many and distinguished. He has emphasized the aesthetic distinctiveness of the culture of ancient Rus' and the problems of the general theory of art. His works are characterized by a concentration on social ideology, literature, folk poetry, and the fine arts. He is a foreign member of the Bulgarian (1963), Austrian (1968), Serbian (1972), and Hungarian (1973) academies of sciences. He holds honorary degrees from Torun (1964), Oxford (1967), and Edinburgh (1970). Recipient of the State Prize in 1952 and 1969. In 1985, he received the V. G. Belinskii Prize for criticism. (GSE 14, p. 496.)

Lisitsyn, Aleksandr P ., D. Geog. S. Born in 1923 at the Shatilov Selection Station, Orel Oblast. Russian geologist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1974; academician in 1993. He graduated from the Moscow Geological Prospecting Institute in 1950 and immediately joined the Institute of Oceanography of the AN SSSR. Since 1967, he has been Head of the Physical Geological Research Laboratory and Head of the Geophysics Division of the P. P. Shirshov Oceanology Institute in Moscow. He has established general patterns for the distribution and transport of suspended sedimentary material and the calculation of absolute weights of suspended materials in the oceans. He has identified global zones of sedimentary material in the world ocean. Recipient of the State Prize in 1971 and 1977. (GSE 30, p. 554.)

Litavrin, Gennadii G. D. Hist. S. Corresponding member of the History Department of the Academy since December 1987; academician in 1993. He is a member of the Slavic and Balkan Studies Institute in Moscow in the department The History of the Peoples of Central and Southeastern Europe from antiquity to World War II, where research on the socioeconomic and political history of Slavic and Balkan studies of Central and Southeastern Europe from antiquite to 1945 and the nationalism issue and language

situation in Central and Southeastern Europe are under his direction and that of T. M. Islamov. (LDA-11378.)

Logachev, Nikolai A., D. GM. S. Born in 1929. Geologist. Specialist in studies of the Geology of the Continental Shelf. Corresponding member since 1979, and academician of the Geology, Geophysics, and Geochemistry Department and of the Siberian Department since 1984. He graduated from the Irkutsk State University in 1952. He began work upon graduation at the Eastern Siberian Branch Geology Institute that became the Earth's Crust Institute. In 1976 he was named Director of that institute that was established in 1949 and is subordinate to the academy's Siberian Department. Research at the institute includes geology, geophysics, and seismology. Since 1977, he has served as chairman of the Irkutsk Scientific Center. He was named to the Presidium of the Siberian Branch of the Academy in 1980. He has been a member of the American Geophysical Society since 1984. He was a delegate to the 26th National Congress. Winner--with others--of the 1978 State Prize in Science and Technology for "The History of the Development of the Relief of Siberia and the Far East" 15 Vols. In 1988, he received the Soviet Ministerial Prize. He has also received other medals and recognitions for his work in scientific research. (1964-76).

Logunov, Anatolii A., D. PM. S. Born in 1926 in a village in Kuibishev Oblast. Russian theoretical physicist. Since 1986, he has been a full member of the Central Committee of the CPSU. He has been a corresponding member of the national academy since 1968. Since 1972, he has been an academician of the Nuclear Physics Department of the Academy. Since 1974, he has been Vice President of the academy of sciences of the U.S.S.R. Since 1974, he has served as a board member of the GKNT general assembly. He graduated from Moscow State University in 1951 and began to teach there immediately. From 1956-63, he was deputy director of the laboratory of Theoretical Physics of the Joint Institute for Nuclear Research in Dubna. From 1963 to 1975, he was director of the Institute of High Energy Physics at Serpukhov when he was replaced by Lev D. Soloviev. Since 1977, Logunov has been rector of M. V. Lomonosov Moscow State University. His principal studies are in quantum field theory and the physics of elementary particles. He developed a method of dispersion relations and established the relationship between different physical processes at high energies. In 1967-68, he proposed and developed a new approach to the problem of the multiple production of particles at high energies (inclusion processes). He was a member of the editorial board of Science in the U.S.S.R. The scientific center of the Institute of High-energy Physics was created under his direction and a 70 GeV proton accelerator was put in operation there in 1967, for which a Lenin Prize in Science and Technology was awarded. In 1984, he was the recipient of the U.S.S.R. State Prize in Science and Technology for co-authoring papers published in 1955-56 entitled, "The Renormalization Group Method in Field Theory." In 1980, he received the A. M. Liapunov Gold Medal named after the applied mathematician for his work in scientific research. (GSE 14, p. 650 and 20, p. 394.)

Lukinov, **Ivan I** ., D. Econ. S. Academician of the Economics Department of the Academy since 1984. Vice President of the Ukrainian Academy of Sciences since 1979. Director of the Economics Institute in Kiev since 1976. Subordinate to the Economics Department of the Ukrainian Academy, the institute conducts research on the economics of industry and agriculture and the history of the Ukrainian economy.

L'vov, Dmitrii S ., Corresponding member of the Economics Department of the Academy since December 1987; academician in 1993.

Lyakishev, Nikolai P ., D. Tech. S. Born in 1929. Corresponding member since 1981. Academician of the Physical Chemistry and Technology of Inorganic Materials Department of the Russian Academy of Sciences since December 1987. From 1978 to 1988, he was Director of the I. P. Bardin Ferrous Metallurgy Scientific Research Institute in Moscow that is directly subordinate to the Ministry of Ferrous Metallurgy. The institute was established in 1944 and does research in the development of precision alloys. Since 1988, he has been Director of the Metallurgy and Ore Dressing Institute in Alma Ata that was

founded in 1956 to develop new methods of extracting and producing metals used in industry such as alumina, low-grade bauxite and rhenium.

Magnitskii, Vladimir A . Born in 1915 in Penza. Russian geophysicist and specialist in the physics of the earth. Corresponding member of the Geology, Geophys, Geochemistry, and Mining Sciences Department of the Academy since 1964, and academician since 1979. He graduated from the Moscow Institute of Engineers for Geodesy, Aerial Photography, and Cartography in 1940. He taught there from 1940 to 1954 and later at Moscow State University where he is heads the geophysics division. His works deal with the structure and processes of the earth's interior. (GSE 15, p. 319.)

Makarov, Igor M., D. Tech. S. Born October 1927 in Saratov. A Russian automatic control scientist. Since 1974, he has been a corresponding member of the Mechanics and Control Processes Department of the academy; and an academician since December 1987. He was named Chief scientific secretary of the AN SSSR and the Russian Academy of Sciences in June 1988. He graduated from the Ordzhonikidze Moscow Institute of Aviation in 1950 and joined the staff at the Institute of Problems of Control. In 1961, he began teaching at the Moscow Institute of Radio Engineering, Electronics, and Automation. He became professor there in 1972. From 1962 to 1975 he worked in the administrative apparatus of the Central Committee of the CPSU. Since 1975, he has served as one of the seven deputy ministers of Higher and Secondary Specialized Education of the U.S.S.R. established in 1959 and that controls over 890 institutions. Since 1975, he has served as a board member of the GKNT general assembly. In 1984, he received the U.S.S.R. State Prize in Technology for his work--with others--for the development and introduction of management systems with the use of computers. His main works are on the theory of automatic control systems, the principles of building and designing automation equipment, the selection of structures for integrated engineering systems, and the theory of design, analysis and quality evaluation. (GSE 30, p. 557.)

Makarov, Valerii L., D. PM. S. Corresponding member since 1979; academician in 1993. Head scientific secretary of the Siberian Department since 1981. Since 1974, he has been Deputy Director of the Mathematics Institute in Novosibirsk and Head of the Economic Mathematics Department of that institute. From 1966, he served as director of the Central Economic-Mathematical Institute in Moscow (1963). Since 1984, he has been Director of the Organization and Management Problems Scientific Research Institute in Moscow. The institute does research under a program called "Creating a New Concept of Managing the Economy Using Modern Technologies in Economic-Mathematical Modeling" overall supervision of Dr. Makarov which include studies on improvements in managing the socialist economy under L. I. Abalkin; in biospheric and ecological research under G. I. Marchuk; on the prospects of socioeconomic development--substantiation and forecasting--under Iu. V. Iuremenko; on Man-Science-Society under V. A. Iadov; on mathematical methods of modeling and managing the national economy with the application of a new generation of computers under A. A. Samarskii; on the development of the automated system of planning estimates--on the increased cooperation with the automated control system of branch, Departmental and territorial managers during further computerization of the national economy under S. A. Aivazian; on the development of the theory of mathematical modeling of the socialist economy--on analysis and cost accounting mechanisms of management and planning under V. L. Makarov; on the scientific and methodological basis for determining the efficiency of production at various levels of the national economy with the use of mathematical modeling and in coordination with the general system of economic management under D. S. L'vov; on the transition to new methods of economic management at all levels of the national economy--on economic norms in an economy of the intensive type under E. G. Iasin; on the improvement of planning and management of socialist natural resources under K. G. Gofman; on territorial city planning--on the use of mathematical methods for optimizing structure of capital investments under M. M. Albegov; on the elaboration of the methodology for the program "Social Development and Raising the Living Standard" under A. Iu. Sheviakov; on the

development of the methodology of balance estimates and substantiations--the creation and use of economic-mathematical methods and models under A. Iu Sheviakov; on mathematical, program-algorithmic and informational aspects of methods in applied statistics of informatics used in economic research, management and planning under S. A. Aivazian; and on modeling the influence of the parameters of the economic mechanism on the dynamics of economic growth under N. Ia. Petrakov.

Marakushev, Aleksei A., D. GM. S. Born in 1925. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1981; academician in 1993. He has been a senior researcher at the Experimental Mineralogy Institute in Chernogolovka since 1975. The institute was established in 1969 to investigate the physical chemical conditions of the formation of minerals, ores, and rocks and the origin and migration of magmas in the earth's crust and mantle.

Marchenko, Vladimir A., D. PM. S. (Mathematical Physics) Born in 1922. Recipient of the Lenin Prize in 1962. Academician of the Mathematics and Cybernetics Department of the Ukrainian Academy of Sciences since 1969. Awarded the N. M Krilov Prize in Mathematics, Mathematical Physics and Theoretical Cybernetics in 1983. Academician of the Mathematics Department of the Academy since December 1987. Recipient of the State Prize for Science and Technology in 1989.

Marchuk, Gurii I., D. PM. S. Born in 1925 in Petro-Khersonets, Grachevka Raion, Orenburg Oblast. Russian mathematician. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1962, and academician since 1968. He is also a member of the Siberian Department of the Academy. He was originally elected to the Earth Sciences Department. From 1980 to 1986, he was the chairman of the GKNT(the State Committee for Science and Technology) that develops and monitors a unified state policy for science and technology. From 1981 to 1990, he was a full member of the former Central Committee of the CPSU. He graduated from Leningrad State University in 1949. From 1953 to 1962, he worked at the Physics and Energetics Institute in Obninsk; from 1962-64 he was assigned to the Institute of Mathematics of the Siberian Department of the AN SSSR. In 1969, he was made deputy chairman of the Presidium of the Siberian division, and from 1969 to 1980, he was a member of the Presidium of the Siberian Department. His principal works lie in computer science and applied mathematics. He constructed an algorithm for the numerical solution of the equations of neutron transport that has become the foundation for calculating the critical parameters of nuclear reactors. He has also conducted theoretical studies on the methods of short-term weather forecasting and the dynamics of the atmosphere and the ocean. He is presently working on solving problems of automated control systems. Since 1980, he has been Director of the Computational Mathematics Department in Moscow, that was established in 1980 and that conducts research in applied mathematics, long-range forecasting, the formulation of mathematical models of atmospheric and immunological systems, and the development of computation methodology. From 1980 until the fall of the government, he was a deputy chairman of the U.S.S.R. Council of Ministers. In 1980, he served as chairman for the exhibition of the Achievements of the National Economy. In 1982, he was deputy chairman of the Interdepartmental Council to Study Innovations in Socialist Countries. In 1983, he became chairman of the Committee for Cooperation in Scientific and Technical Research in CEMA. From October 1986 to 1991, he was President of the Academy of Sciences. Lenin Prize, 1961; Recipient of the State Prize, 1979--for a cycle of works on the development and application of statistical modeling methods for the solution of multidimensional tasks of radiation transfer--with others. In 1975, he received the A. A. Fridman Prize in recognition of his research. In 1980, he was given the M. V. Keldysh Gold Medal for his work in statistics and mathematics. (GSE 15, p. 456.)

Markov, Moisei A., D. PM. S. Born in 1908 in Rasskazova in Tambov Oblast. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1953, and academician since 1966. He has served as academician secretary of the Nuclear Physics Department from 1967 to 1988. He graduated from Moscow State University in

1930. He has been at the Institute of Physics of the AN SSSR and the RAN since 1934. In 1953, he developed a compound model of elementary particles and predicted the possibility of excited states of hadrous (resonances) in 1955. In 1957, he conducted fundamental research on neutrino physics. In 1958, he proved the expediency of neutrino experiments at great depths underground in accelerators. He developed the theory of the possible existence of elementary particles of extremely great mass (Maximous) and also of friedmons (particles with microscopic total mass and dimensions that are virtually closed universes in structure.) Since 1971, he has been chairman of the InterDepartmental Commission for Nuclear Physics. Since 1978, he has served as Head of the High Energy Electrons Laboratory of the P. N. Lebedev Physics Institute in Moscow. In 1988, he was appointed an advisor to the national academy's Presidium. His main works are in quantum mechanics and the physics of elementary particles. (GSE 15, p. 484.)

Martynov, Vladlen A. , D. Econ S. Born in 1929. Corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988; academician in 1993. Since 1972, he has been a Deputy Director of the World Economics and International Relations Institute in Moscow, and in 1989 he was elevated to the directorship of the World Economics and International Relations Institute in Moscow which was established in 1956 taking the place of the Institute of World Economy and World Politics (1927-1947) and that from 1947 to 1956 was part of the Economics Institute of the AN SSSR.

Maslov, Viktor P ., D. PM. S. Academician of the Mathematics Department of the Academy since 1984. He was awarded the State Prize in Science and Technology for a series of work done with others from 1973 to 1976. In 1983, he received the A. M. Liapunov Gold Medal for his mathematical contributions to Russian science. In 1985 he received the Lenin prize for his work "Global Asymptotic Methods of the theory of Linear Equations with Partial Derivatives."

Matrosov, Vladimir M., D. PM. S. Born in 1932 in Shipunovo, Altai Krai. Russian specialist in theoretical mechanics and applied mathematics. Corresponding member of the Problems of Ma; chine BUilding, Mechanics and Control Processes Department of the Academy since 1976, and academician since December 1987. He graduated from Kazan' Aviation Institute in 1956 where he taught until 1975, becoming a professor there in 1970. From 1975 to 1980, he was Director of the Siberian Energetics Institute. In 1980, he was named Director of the Irkutsk Computer Center. He has been a professor since 1970 holding a chair in applied mathematics at the Irkutsk State University. He is an honored scientist of the former Soviet Union. He became rector of the V. I. Lenin Kazakh Polytechnical Institute and Director of the Irkutsk Computer Center in 1983. He was the Director of a series of works published from 1962-1981, for which he--among others-received the U.S.S.R. State Prize in 1984. The work was entitled "The Development of the Method of Lyapunov Vector Functions for the Analysis of the Stability and Other Dynamic Properties of Nonlinear Systems." His works are in the dynamics of non-linear systems and the stability of motion. (GSE 30, p. 561.)

Matveev, Viktor A., D. PM. S. Academician of the Nuclear Physics Department of the Academy in 1993. He has headed The Nuclear Research Institute in Troitsk since 1987. The institute was founded in 1970 by a joint decree of the Central Committee and the Council of Ministers of the Soviet Union, located in Troitsk, and assigned the task of researching atomic, nuclear and elementary particle physics and neutrino astrophysics on the basis of accelerators, neutrino telescopes and special experimental complexes. Lenin Prize winner.

Mel'nikov, Pavel I ., D. GM. S. Born in 1908. Corresponding member since 1968, and academician of the Oceanology, Atmospheric Physics, and Geography Department and of the Siberian Department since 1981. Geologist. Specialist in geochronology, engineering geology, and hydrogeology. He graduated from the Leningrad Mining Institute in 1935. From 1935 to 1956, he worked as a scientific researcher at the Permafrost Station in Siberia. In 1960, he was named Director of the Far Eastern Department's V. A. Obruchev

Permafrost Institute, that was established in 1956 to conduct glaciological and geocryological studies and expeditions. It is subordinate to the academy's Siberian Department. He served as its Director until 1988, when he received emeritus status. He has been a professor at the Yakutsk State University since 1963. He was a member of the branch office of the Oceanology, Atmospheric Physics and Geography Department of the AN SSSR from 1971. He headed the Scientific Council on the Earth's Cryogenics from 1970. He is the recipient of numerous awards and medals. (GSE 16, p. 103.)

Mesiats, Gennadii A., C. GM. S. Born in 1936. Corresponding member since 1979; and an academician of the General Physics and Astronomy Department and of the Siberian Department since 1984. He is also a member of the Urals Department. He is a specialist in the fields of electronics and electrophysics. He received the Lenin Komsomol Prize in 1968, and the Laureate State Prize in 1978. Since 1986, as chairman of the Urals Department, he has served as a member of the Presidium of the Academy of Sciences of the U.S.S.R. In 1988 he was named a vice-president of the Academy of Sciences for the Urals Department. From 1977 to 1986, he served as director of the High Current Electronics which is subordinate to the Urals Department Institute in Tomsk, The institute researches thermonuclear and accelerator physics and laser technology and was created in 1977 from the High Current Electronics laboratory of the Atmospheric Optics Institute. Since 1986, he has been chairman of the Urals Department, and from November of 1986 to 1988, he served as the director of the Electrophysics Institute in Ekaterinsburg (Sverdlovsk) that was established in 1986.

Migulin, Vladimir V ., D. PM. S. Born in July 1911 in Sereda--present-day Furmanov-in Ivanovo Oblast. Russian radio physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1970, and Deputy Academician Secretary of that Department since 1984; academician of the Department in 1993. He graduated from Leningrad Polytechnic Institute in 1932. He worked at the Institute of Physics of the academy from 1934 to 1941, and at the Heat Engineering laboratory of the academy from 1946 to 1951. From 1951-54 he was Director of the Physicotechnical Institute in Sukhumi. He has taught at the Moscow State University since 1935--becoming a professor in 1948--and he served as Deputy General Director of the International Atomic Energy Agency from 1957-59. Since 1972, he has been Vice President of the International Radio Union. From 1969 to 1988, he served as Director of the Terrestrial Magnetism, Ionosphere, and Radio Wave Propagation Institute at Troitsk that was established in 1939. It is a leading facility in the U.S.S.R. for the study of magnetism and the ionosphere. It also investigates spherics, radio astronomy, solar physics, and cosmic rays. He has published seven major works dealing with the theory of oscillation, the propagation of radio waves and other problems of radio physics. He was awarded State Prizes in 1946 and 1953 and has received numerous other awards of recognition for his scientific work. (GSE, 16, p. 287.)

Mikaelian, Andrei L., D. Tech. S. Born in 1925. Corresponding member of the Information Science, Computer Technology, and Automation Department since 1984; academician in 1993. Together with V. I. Bobrinev he proposed high capacity holographic memory devices in 1966, based on the recording of a large number of holograms on the same surface (or volume) of photographic material. (GSE 7, p. 522.)

Mikhalevich, Vladimir S .,D. PM. S. Born in 1930. Since 1973, academician of the Mathematics, Mechanics, and Cybernetics Department of the Ukrainian Academy of Sciences. Academician of the Information Sciences, Computer Technology, and Automation Department of the AN SSSR and the RAN since 1984. In 1971, he was awarded the N. M. Krylov Ukrainian SSR Academy of Sciences Prize for his work on methods of optimization. In 1973, he received the Ukrainian SSR State Prize for undesignated research. In 1981, he was awarded--among a group of authors--the U.S.S.R. State Prize for series of work on development and widespread introduction of modern mathematical methods of optimization published from 1962-79. Since 1982, he has been Director of the V. M. Glushkov Cybernetics Institute in Kiev that was established in 1957 and given its present name in

1961. The institute researches in theoretical and economic cybernetics, computer engineering and design, system engineering, automatic control design, biomedical cybernetics, and science policy.

Milanovskii, Evgenii E. Born in 1923 in Moscow. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Acadedmy since 1976; academician in 1993. He graduated from the Department of geology at Moscow State University in 1949. In 1972, he became head of the subdepartment of historical and regional geology at the university. His works deal with the regional geology of the Caucasus, the East African rift system and Iceland; the tectonics and the neotectonics of the alpide folded belt, and the theory of rift formation and orogeny. In 1985, he received the A. P. Kapinskii Prize in geology for his scientific achievements. (GSE 30, p. 562.)

Minachev, Khabib M., D. Chem S. Born in 1908 in Novye Bikshiki, now Ial'shiki Raion, Chubash ASSR. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1972, and academician since 1979. He graduated from Moscow State University in 1939 and began work at the Organic Chemistry Institute of the AN SSSR. In 1963, he became head of one of its laboratories. His work is in the catalytic transformations of hydrocarbons. In 1987, he shared the N. D. Zelenskii Prize for organic chemistry with Oleg M. Nefedov, and V. V. Kharlamov.(GSE 16, p. 325.)

Minkin, V. I.

Mirzabekov, Andrei D., D. Chem. S. Born in 1937. Corresponding member since 1981, and academician and Academician Secretary to the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department since October 1988, and member of the Presidium of the Academy from that date. Since 1985, he has been Director of the Molecular Biology Institute in Moscow that was founded in 1959. It studies recombinant DNA and the structural characteristics of nucleic acids, proteins, enzymes, viruses, and biopolymers.

Mitenkov, Fedor M $\,$. Born in 1924. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1979; academician in 1993.

Mitropol'skii, Iurii A ., D. Tech. S. Born in 1917. Academician of the Ukrainian academy since 1961. Since 1966, Academician Secretary of the Mathematics and Cybernetics Department of the Ukrainian Academy of Sciences. Academician of the Mathematics Department of the AN SSSR since 1984. Recipient of the State Prize for Science and Technology in 1980. Since 1958, he has been Director of the Mathematics Institute in Kiev which issubordinate to the Mathematics Department of the Ukrainian Academy of Sciences. Awarded the V. I Vernadskii Prize for Geology, Geochemistry and Hydrophysics in 1985. Ukraine Academy of Sciences Hero of Socialist Labor Prize recipient in 1986. In 1986, he received the A. M. Liapunov Gold Medal for his scientific contributions to Russian science.

Mishchenko, E. F., D. PM. S. Born in March 1922 in Moscow. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1951 and an academician since 1984. He graduated from Moscow State University in 1951, becoming a professor at the Moscow Physicotechnical Institute in 1959. He joined the staff of the V. A. Steklov Mathematics Institute in Moscow in 1951 and since 1967, has served as its Deputy Director. His work has dealt with the ordinary differential equations and their applications to the theory of vibrations. He also works in control theory. He has received numerous recognitions, including the Lenin Prize which he received in 1962. (GSE 30, p. 563.)

Mishin, **Vasilii P** . Born in 1917 in Moscow Oblast. Russian scientist in mechanics, control processes, and the physico-technical problems of power engineering. Academician since 1966. Principal membership in the Problems of Machine Building, Mechanics and Control Processes Department of the Academy. He graduated from the Sergo Ordzhonikidze

Moscow Aviation Institute in 1941 and worked in research and design organizations thereafter. He was promoted to professor at that institute in 1959. His works are principally in applied mechanics. Lenin Prize, 1957. He received the S. P. Korolev Gold Medal named for the famed rocket scientist in 1967 in recognition of his work. (GSE 16, p. 375.)

Moiseev, I. I.

Moiseev, Nikita N ., D. PM. S. Born in 1917 in Moscow. Specialist in general mechanics and applied mathematical sciences. Academician since 1984. He graduated from Moscow State University in 1941. From 1948 to 1950 he taught at the N. E. Bauman Moscow Higher Technical School. From 1950 to 1955, he taught at the University of Rostow. In 1956 he became a professor at the Mocow Physicotechnical Institute. In 1961, he was appointed Deputy Director of the computer center of the AN SSSR and still holds that post under the Russian Academy of Sciences. In 1969, he was also made Head of an unidentified laboratory under the Symbolic Information Processing Department of the Computer Center in Moscow. Since 1971, he has been dean of the Management and Applied Mathematics Faculty of the Physical Technical Institute in Moscow, under the Ministry of Higher and Secondary Specialized Education in Moscow. Created in 1952, this institute trains scientists for academy of science institutes and design bureaus. In 1977, he was made a co-director of the Computer Center in Moscow, that is now subordinate to the academy's Information Science, Computer Technology and Automation Department. His works are principally concerned with the dynamics of a solid containing a liquid, asymptotic and numerical methods in mathematical physics, the theory of linear and quasi-linear motions, and optimal control theory. (GSE 16, p. 419.)

Mokronosov, Adolf T ., D. Bio S. Born in 1928. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981, and academician since December 1987. He has been the Director of the K. A. Timiriazev Plant Physiology Institute in Moscow since 1988. One of the oldest of the Academy's scientific research institutes, it researches soil science, the physiology of plants, and solar technology and photosynthesis.

Molin, Iurii N., D. Chem. S. Born in 1934. Specialist in chemical physics. Corresponding member since 1974, and academician of the General and Technical Chemistry Department of the Russian Academy of Sciences and of the Siberian Department since 1981. He graduated from the Moscow Physico-Technical Institute in 1957. He worked at the Chemical Physics Institute of the AN SSSR from 1957 to 1959. In 1959, he joined the staff of the Chemical Kinetics and Combustion Institute of the Siberian Department. In 1967, he headed a laboratory of that institute, and in 1971, he became its Director. The institute was organized in the 1960s to study chemical physics and electron and nuclear magnetic resonance. Since 1978, he has also acted as Head of the Fast Liquid Phase Reactions Laboratory of the Chemical Kinetics and Combustion Institute. He was named to the Presidium of the Siberian Branch in 1986. He has been a professor, holding the chair in chemical physics at the Novosibirsk University, since 1977. He was Head editor of *The Journal of Structural Chemistry* from 1977 to 1988. He is an honored scientist of the former Soviet Union. He received the Lenin; Prize in 1986 and holds a number of other awards and medals. (GSE 30, p. 563.)

Myasnikov, Veniamin P . Corresponding member of the Problems of Machine Building, Mechanics and Control Processes of the AN SSSR and the Russian Academy of Sciences since December 1987; academician in 1993. Also member of the Far Eastern Department and deputy chairman of the Far Eastern Department since August 1988.

Myasoyedov, **Nikolai F.**, D. Chem. S. Since 1983, deputy director of the Molecular Genetics Institute in Moscow which was created in 1977 to research the molecular structure of biopolymers and the enzymology of primary genetic processes.

Nakoriakov, Vladimir E ., D. Tech. S. Born in 1935. Engineer. Specialist in the mechanics of heterological systems and solid state physics. Since 1981, he has been a corresponding member of the Problems of Machine Building and Control Processes

Department of the AN SSSR and the RAN and an academician and deputy chairman of the Siberian Department since December 1989. He is author and co-author of 250 scientific works of which six are significant monographs and he is credited with eight inventions. He graduated from the Tomsk Politechnical Institute in 1958 and from 1958 to 1964, he worked at the Transportation Energetics Institute. In 1965 he joined the staff of the Thermal Physics Institute. In 1974, he was named Head of the Two-Phase Laboratory of Thermal Physics Institute in Novosibirsk, becoming Deputy Director in 1986, and in 1988, he was named the Director of that institute that was founded in 1959 to study heat transfer, thermal physics of ionized gases, and gas dynamics. He is responsible for experiments leading to the development of a theory that shows a greater velocity being achieved in filtration through heat exchange during condensation and a forced flow in various media. He has been a professor at the Novosibirsk University since 1976 and served as prorector and rector of that university from 1983 to 1985. While serving at the university, he guided the doctoral work of six students and the research of 40 aspirants for the candidate degree. He was named to the Siberian Department Presidium in 1983, becoming deputy chairman of the Siberian Department in 1985. He received the Government's Laureate Prize in 1983 and holds other medals and awards.

Natochin, Iurii $\,V\,$., D. Bio. S. Born in 1932. In 1980, he received the L. A. Orbeli Prize in physiology for his research. Corresponding member of the Physiology Department of the Academy since December 1987; Academician in 1993.

Negin, Evgenii A . Born in 1921 in Bor, Gorkiy Oblast. Russian scientist in mechanics. Academician of the Problems of Machine BUilding, Mechanics and Control Processes Department of the Academy since 1979. He graduated in 1944 from N. E. Zhukovskii Air Force Engineering Academy, and since 1949, he has been engaged in scientific research, primarily in gas dynamics. Recipient of the State Prize, 1951 and 1953; Lenin Prize, 1959. (GSE 30, , p. 565.)

Nesterikhin, Iurii E. , D. PM. S. Born in October 1930 in Ivanovo. Russian physicist. He has been a corresponding member of the General Physics and Astronomy Department of the academy and of the Siberian Department since 1970 and an academician of both Departments since 1981. He graduated from Moscow State University in 1953, worked at the Atomic Energy Institute from 1954 to 1961 and at the Nuclear Physics Institute of the Siberian Department from 1961 to 1967. From 1968 to 1987, he served as Director of the Automation and Electrometry Institute in Novosibirsk. The institute develops model problem-oriented systems based on computer aided measurement, automation, and control standards. It was founded in 1957. His major work has been in measuring the parameters of a plasma by using lasers and optical interferometry of image converters. He also has developed equipment for measuring the density, temperature and other characteristics of a plasma. He was on the Presidium of the Siberian Department from 1976 to 1987. He is editor in Chief of Avmetriia that is published by the Siberian Department. (GSE 17, p. 474.)

Nefedov, Oleg M. , D. Chem. S. Born in 1931. Since 1970, Chief of the Carbene Chemistry laboratory of the N. D. Zelenskii Organic Chemistry Institute in Moscow. Corresponding member of the General and Technical Chemistry Department of the Academy since 1979; and, academician since December 1987. Academician secretary to the Department since June 1988 and since that date he has been a member of the Presidium of the Academy and Vice President for the Chemotechnical Sciences Sector. In 1987, he shared the N. D. Zelinskii Prize in organic chemistry with Kh. M. Minachev, and V. V. Kharlamov.

Nigmatulin, Robert I ., D. PM. S. Born in 1940. Engineer. Corresponding member of the Machine Building, Mechanics, and Control Processes Department and of the Siberian Department since December 1987, and academician since 1990. He has written 40 scientific works of which four are significant monographs. He has 21 inventions and has co-authored another 130 scientific publications of which three are monographs. He graduated from the Moscow Technical Correspondence School imeni N. E. Bauman in 1963 and from the Moscow State University in 1965. He began working at the Bauman school.

From 1963 to 1986, he worked at the Institute of Mechanics, as a junior and senior researcher, leader of a sector and head of a laboratory. In 1986, he was named Deputy Director of the Handling Problems of the North Institute in Tiumen. He was a professor at the Moscow State University from 1978 to 1986, and held a chair at the Tiumen State University from 1986. As a professor there he has guided the work of 10 doctoral students and 35 aspirants for the candidate degree. He is on the national committee on theoretical and applied mechanics. He is an honored scientist of both the Academy and of the former State Committee for Science and Technology (GKNT).

Nikolskii, N. N., D. Bio. S. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. He has been the Director of the Cytology Institute in St. Petersburg since 1988. Before the breakup of the Soviet Union, Nikolskii headed the Scientific Council of the Academy on the problems of cell biology. The Cell Cycle Physiology Laboratory of the institute, headed by Professor Nikolaskii, studies the effects of growth factors on cells--particularly the EGF-the epidermal growth factor.

Nikolskii, Sergei M., D. PM. S. Born in April 1905 in Talitsa, Ekaterinsburg (Sverdlovsk) Oblast. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1968 and an academician since 1972. He graduated from Ekaterinoslav Institute of Public Education (now the University of Dnepropetrovsk) in 1929. He started work at the university in Dnepropetrovsk in 1939 and in 1940 he moved to the V. A. Steklov Institute of Mathematics in Moscow. In 1947, he became a professor at the Moscow Physicotechnical Institute. His work deals primarily with functional analysis, the theory of approximation of functions, the theory of imbedding of classes of differentiable functions of many variables, direct methods of calculus of variations and the theory of boundary value problems for partial differential equations. His approximation theory studies are important. He found asymptotically exact estimates for approximation of functions by trigonometric and algebraic polynomials. He developed a theory of optimal quadrature formulas. Nikolskii developed methods of approximation by entire exponential-type functions that enabled him to derive direct and inverse imbedding theorems for generalized Holder classes of functions of many variables. He also provided new formulations of boundary value problems for high order elliptic equations with strong degeneracy at the boundary and investigated these formulations by a variational method. Since 1973, he has been Head of the Nuclear Physics Division, and since 1976 he has been Head of "Nikolskii's Department" and since 1977 he has been Head of the Cosmic Ray Laboratory of the P. N. Lebedev Physics Institute in Moscow. Since 1986, Nikolskii has served as Deputy Director of that institute. State Prize, 1952, and the P. L. Chebyshev Prize, 1972. (GSE vol. 18, p. 215 and vol. 20, p. 15.)

Nikonov, Aleksandr A . Born in 1918. From 1979 to 1984, he was the Academician Secretary of the Economics and Management of Agricultural Production Department of the V. I. Lenin Academy of Agricultural Sciences. He has been an academician of the Economics Department of the RAN since 1984. Since 1984, he has served as President of the V. I. Lenin Academy of Agricultural Sciences that was founded in 1929 and is the highest scientific institution in Russia in the fields of agriculture, water resource management, and forestry.

Novikov, Ivan I ., D. Tech. S. Born in 1916 in a village in the Riazan Oblast. Russian scientist in the physics of heat and heat engineering. He has been a corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy and a member of the Siberian Department since 1958; academician in 1993. He graduated from Moscow State University in 1939 and began work in a scientific institute of the Soviet Navy. From 1948 to 1950, he headed the Physics of Heat subdepartment of the Moscow Power Engineering Institute and from 1950 to 1956, he headed the scientific and technical Department of the Ministry of the Medium Machine-building Industry of the U.S.S.R. From 1956 to 1958, he was Director of the Moscow Physical Engineering Institute, and from 1958 to 1964, he was Director of the Institute of the Physics of Heat of the Siberian

Department of the AN SSSR. From 1964 to 1967, he was 1st vice chairman of the State Committee on Standards of the U.S.S.R., and from 1966 to 1970, he was head of the subdepartment of Physical and Engineering Measurements at the Moscow Physical Engineering Institute. Since 1970, he has headed a laboratory for electron microscopy and physical research methods at the Baikov Metallurgical Institute of the AN SSSR and the RAN. His works have dealt with problems associated with atomic energy, the thermodynamics of gases and solids, similarity theory in the physics of heat, and the study of thermophysical properties of heat-transfer agents. Recipient of the State Prize, 1951, 1953. (GSE 18, p. 307.)

Novikov, Sergei P ., D. PM. S. Born in March 1938 in Gorkiy. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1966 and an academician since 1981. He graduated from Moscow State University in 1960. He became a professor at Moscow State University in 1966. Since 1963, he has worked at the V. A. Steklov Institute of Mathematics. His main works deal with geometry and topology and associated problems in algebra and the general theory of relativity. Since 1978, he has acted as Head of the Mathematics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow, that was created in 1965 from the Physical Problems Institute. The Landau institute is engaged in research in all aspects of theoretical physics, especially the theory of solids. The main branch of this institute is located in Chernogolovka. Lenin Prize, 1967, and the Fields Prize of the International Mathematical Union, 1970. In 1980, he received the N. I. Lobachevskii Prize in mathematics. (GSE vol. 18, p. 308 and vol. 27, p. 192.)

Novozhilov, Genrikh V. Born in 1925 in Moscow. Russian aircraft designer, a student of S. V. Ilyushin. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984. He graduated from the S. Ordzhonikidze Moscow Aviation Institute in 1949, and worked in the aviation industry, becoming the principal designer at the S. V. Ilyushin Experimental Design Office in 1970. He directed the development of the Il-76T transport plane and the Il-86 Soviet wide-body airbus passenger plane. Lenin Prize, 1970. (GSE 30, p. 567.)

Obraztsov, Ivan F., D. Tech. S. Born in 1920 in Kalinin Oblast. Russian scientist in structural mechanics and the theory of the strength of aircraft. Academician of the Problems of Machine Building, Mechanics, and Control Processes Department of the AN SSSR and the RAN since 1974. Member of the RSFSR Council of Ministers. In 1944, he graduated from the S. Ordyhonikidze Moscow Institute of Aviation, taught and became a professor there in 1957. He served as rector of the institute from 1958 to 1972. Since 1968, he has been President of the Znanie Society of the RSFSR. Since 1972, he has served as the Minister of the RSFSR Ministry of Higher and Secondary Specialized Education of the RSFSR. He was a deputy to the 7th and 8th convocations of the Supreme Soviet of the RSFSR. (GSE 18, p. 364.)

Okhotsimskii, Dmitrii E. , C. PM. S. Born in 1921 in Moscow. Russian scientist in mechanics. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1960; academician in 1993. From 1945 to 1966, he worked at the Institute of Mathematics of the AN SSSR. Since 1966, he has been at the Institute of Applied Mathematics of the AN SSSR and the Russian Academy of Sciences. He has been a professor in the Department of mechanics and mathematics at Moscow State University since 1961. In 1967, he headed the Engineering Mathematics Laboratory of the M. V. Keldysh Applied Mathematics Institute in Moscow. Originally elected to the Technical Sciences Department. His works are in flight dynamics, control of aircraft flight, and the development of algorithms for the behavior of complex cybernetic locomotive and manipulative systems with elements of artificial intelligence where the systems adapt to an unknown situation. Recipient of the State Prize, 1970; Lenin Prize, 1957. (GSE 19, p. 116.)

Okun', Lev. B., D. PM. S. Born in 1929 in Kaluga Oblast. Russian theoretical physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1966;

academician in 1993. He graduated from the Moscow Physics and Engineering Institute in 1953. Since 1954, he has worked at the Institute of Experimental and Theoretical Physics. His work is in weak interactions, composite models of elementary particles, and the theory of elementary particles. (GSE 18, p. 424.)

Oleynik, Aleksandr Ia. (Hydromechanics) Born in 1929. Corresponding member of the Mechanics Department of the Ukrainian Academy of Sciences since 1973; academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy in 1993. Director of the Hydromechanics Scientific Research Center in Kiev since 1972. The institute studies high velocity hydrodynamics. Recipient of the State Prize for Science and Technology in 1981. Awarded the A. N. Dinnik Prize for Mechanics and Machine Building in 1990.

Osiko, Viacheslav V., D. PM. S., Born in 1932. Russian physicist. Academician of the General Physics and Astronomy Department of the Academy since 1987. Since 1981, he has also been a corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy. From 1969 to 1976 he was Chief of the Solid State Physics Department of the Oscillation Laboratory of the P. N. Lebedev Physics Institute in Moscow. Since 1976 he has headed his own subdepartment in the Integrated Optics Department of the Lebedev Physics Institute. In 1983, he was appointed Deputy Director of the General Physics Institute in Moscow that was established in 1983 to research lasers, solid state physics, fusion, spectroscopy and fiber optics.

Osipov, **Gennadii V**., D. Phil. S. Born in 1929. Corresponding member of the Philosophy and Law Department of the Academy since December 1987; academician in 1993. In 1991, he was made director of the Sociopolitical Studies Institute in Moscow which was organized in 1991.

Osipov, Iurii S ., D. PM. S. Born in 1936. He has been a corresponding member since 1984; and academician of the Machine Building, Mechanics and Control Processes Department and of the Urals Department since December 1987. From 1972 to 1981, he was Chief of an unidentified laboratory of the Mathematics and Mechanics Institute located in Ekaterinsburg (Sverdlovsk) that was established in 1962 and that develops the theory of function and control, algebra and problems of mathematical physics. Since 1981, he has been director of the Central High Altitude Hydrometeorological Observatory in Moscow, that was established in 1970 and that is a part of the nation's meteorological observation network and is directly subordinate to the State Committee for Hydrometeorology and Environmental Control. He has been President of the Russian Academy of Sciences since 1990.

Osipov, **Viktor I.**, Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987; academician in 1993.

Osip'ian, Iurii A., D. PM. S. Born in 1931 in Moscow. Russian physicist. He was made a vice-president of the academy in 1988. He has been a corresponding member of the General Physics and Astronomy Department of the AN SSSR and the RAN since 1972; and, an academician since 1981. He graduated from Moscow Institute of Steel in 1955. From 1955 to 1962 he was on the staff of the Institute of Metal Physics of the Central Scientific Research Institute of Ferrous Metallurgy. From 1962-63 he was deputy director of the Crystallography Institute of the AN SSSR. In 1970 he was appointed professor at the Moscow Physicotechnical Institute. His main work has been in solid state physics. He has investigated the interaction of dislocations and electrons in solids and discovered new phenomena in solids, for example: the photoplastic effect, electron paramagnetic resonance in dislocations, and dislocation conductivity. His work forms the basis of a new field--"dislocation solid state physics." Since 1973, he has been director of the Solid State Physics Institute in Moscow that was created in 1962 and whose main branch is in Chernogolovka. It does research in the fields of crystallography, high pressure physics, metallurgy, semiconductors, superconductors, and magnetic fields. He was co-winner of the 1978 Lenin Prize for studies on "New Means of Synthesis and Study of the Structure of Organic Phosphorus Compounds" (1954-75.) (GSE 30, p. 600.)

Ostrovskii, M. A.

Ovodov, Iurii S., Born in 1937. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy and of the Far Eastern Department in 1993. Head of the Carbohydrate Chemistry Laboratory of the Bioorganic Chemistry Institute in Vladivostok since '69, which was established in the mid-1960s and which studies the exploitation of marine and terrestrial plant and animal sources of natural drugs. Professor Ovodov has been a deputy director of the institute since 1969.

Ovsiannikov, Lev V. , D. PM. S. Born in 1919 in Gorkiy Oblast. Russian mathematician and engineer. Corresponding member of Problems of Machine Building, Mechanics and Control Processes Department and of the Siberian Department since 1964, and academican of both Departments since December 1987. He graduated from Moscow State University in 1941 and the St. Petersburg Air Force Academy in 1945. In 1949, he began work at the Siberian Department of the AN SSSR. He joinded the Hydrodynamics in 1959, and he became assistant-Director of that institute 1970. He was appointed a professor at the University of Novosibirsk in 1963, holding the chair in hydrodynamics from 1966. He served as Dean of the Engineering Mathematics Faculty from 1967 to 1970. He joined the Presidium of the Siberian in 1976. From 1976 to 1989, he was Director of the M. A. Lavrentev Hydrodynamics Institute in Novosibirsk that researches the mechanics of fluids gases, and plasma. His work includes the theory of group properties of differential equations, transonic gas dynamics, and hydrodynamics of flows with free surfaces. He is on the national committee on theoretical and applied mechanics. He received the Lenin Prize in 1958, and the State Prize in 1987. (GSE 18, p. 612-3.)

Oyzerman, Teodor Ilich ..., D. Phil. S. Born in 1914 in Petroverovka, Oktiabrskii Raion, Odessa Oblast. Russian philosopher. Corresponding member, 1966, and academician since 1981. Veteran of the Great Patriotic War, 1941-1945. He graduated from the Department of philosophy of the Moscow Institute of Philosophy, Literature, and History of the AN SSSR in 1938. From 1954 to 1968, he headed a subdepartment of the history of foreign philosophies of the Department of Philosophy of Moscow State University. In 1971, he became head of the section on the History of Western European and American Philosophy at the Institute of Philosophy of the Academy. His works deal with pre-Marxist history, Marxist and contemporary Western European philosophy and the theory of the history of philosophy. (GSE 18, p. 415.)

Panchenko, A. M.

Panin, Viktor E. , D. PM. S. Born in 1930. Specialist in mechanics and solid state physics. Corresponding member since 1981, and academician since 1987--of the Machine Building and Control Processes Department. He graduated from the Tomsk State University in 1952. From 1955 to 1979, he was on the staff of the Siberian Physico-Technical Institute, heading the Department of the physics of metals of that institute from 1969 to 1979. In 1979, he joined the Department of solid state physics and materials and headed that Department from 1979 to 1980. He was named Deputy Director of the Atmospheric Optics Institute in 1981--that was established in 1969 and engages in research on spectroscopy, laser probing of the atmosphere and other electro-optical devices--and served in that capacity until 1984. In 1984, he became Director of the Physics of Strength of Materials Institute. He was named a deputy chairman of the Presidium of the Tomsk Scientific Center in 1983. He has been a professor at the Tomsk State University since 1970. He is an honored scientist of the former Soviet Union. He was a member of the GKNT. He was also Chairman of the "special-purpose" program for powder metallurgy.

Pariyskiy, Iurii. N.

Paton, Boris E., D. Tech. S. Born November 1918 in Kiev. Russian metallurgist and specialist in welding technology. Son of E. O. Paton. Since 1958, he has been an academician of the Physical and Technical Problems of Materials Science Department of the Ukrainian Academy of Sciences. Since 1962, he has been an academician of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy

(originally having been elected to the Technical Sciences Department). Since 1963, he has been a member of the Presidium of the Academy. He graduated from Kiev Industrial Institute in 1941. He has been affiliated with the E. O. Paton Institute of Electrical Welding of the Ukrainian Academy of Sciences since 1942. He headed a laboratory there from 1942-50, was assistant director of the institute from 1950-53, and has been director since 1953. From 1961 to 1966, he was a candidate member of the CC CPSU and has been a member of the Central Committee of the CPSU since 1966. Since 1962, he has served as president of the Ukrainian Academy of Sciences. Since 1964, he has been a member of the Presidium of the Committee for Lenin Prizes and State Prizes in Science and Technology. Since 1966, he has been one of five deputy chairmen of the Council of the Soviet Union. From 1966 until its demise, he was a full-member of the Central Committee of the Communist Party of the Soviet Union. In 1973 and 1974, he was deputy chairman of the Soviet of the Union of the Supreme Soviet of the U.S.S.R. From 1977, he served as a board member of the GKNT General Assembly. His works have included: developing electroslag welding, producing unique high-pressure vessels for the power and chemical industries and the manufacture of large assemblies for ships and hydroelectric generators and for other purposes; developing programs for improving the welding industry in the U.S.S.R. and accelerating technical progress; developing special purpose smelting plants and of a new branch of quality metallurgy known as special-purpose electrometallurgy. He is a member of the Bulgarian (1969) and the Czechoslovakian (1973) Academies of Science. He was a member of the editorial board of Science in the U.S.S.R. State Prize, 1950; the Lenin prize, 1957. In 1981, he was the recipient of the M. V. Lomonosov Gold Medal for his contributions to science. (GSE 19, p. 339.)

Pavlov, **Dmitrii S** ., Corresponding member of the General Biology Department of the Academy since December 1987; academician in 1993.

Petrakov, **Nikolai Ia** . Corresponding member of the Economics Department of the Academy since 1984; academician in 1993. Since 1973, he has been a deputy director of the Central Economic and Mathematics Institute in Moscow. The institute engages in contemporary mathematical economic work and has a major responsibility for developing national economic and industrial plans. In late 1990, he was named Director of a new institute--the Market Problems Institute in Moscow.

Petrianov-Sokolov, **Igor V** ., D. Chem S. Born in 1907 in Gorkiy Oblast. Russian physical chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1953, and academician since 1966. In 1930, he graduated from Moscow State University and began working at the L. Ia. Karpov Physical Chemistry Institute, becoming a division head there in 1938. Since 1947, he has been a professor at the D. I. Mendeleev Moscow Institute of Chemical Engineering. He has concentrated his work in studying the laws of filtration of aerosols. He invented new types of filtering materials. He has been editor-in-Head of Khimiia i zhizn (Chemistry and Life) since 1964. Recipient of the State Prize, 1941; Lenin Prize, 1966. (GSE 19, pp. 494-5.)

Petrov, Rem V., D. Med. S. Born in 1930. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department since 1984. Also academician of the Academy of Medical Sciences. Vice president of the Academy for Biology since October 1988. Editor-in-Chief of Science in the U.S.S.R. In 1978, he was awarded the I. I. Mechnikov Prize in biology. In 1987, he received the I. I. Mechnikov Gold Medal in recognition of his contributions to the chemical and biological sciences. He heads the Immunology Division of the M. M. Shmiakin Bioorganic Chemistry Institute in Moscow, which has 18 laboratories. He also heads up the Science-Educational Center of the Institute.

Petrovskii, **Boris V** ., D. Med. S. Born in 1908 in Essentuki. Russian surgeon and public figure and organizer of public health care. He is a candidate member of the Central Committee of the CPSU. Since 1957, academician of the Clinical Medical Department of the Academy of Medical Sciences. Academician of the Physiology Department of the Academy since 1966. He graduated from the medical faculty of the First Moscow State University in

1930. From 1941 to 1944, during WWII, he was Head surgeon of evacuation hospitals at the front. He was a professor of the subdepartment of general surgery at the Second Moscow Medical Institute in 1948 and 1949 and of the subdepartment of stationary surgery at the University of Budapest from 1949 to 1951. Beginning in 1956, he was head of the Department of stationary surgery at the First Moscow Medical Institute and since 1963, he has been Director of the Surgery Research Center in Moscow. In 1965 he was appointed Minister of Public Health of the U.S.S.R. Since 1977, he has been a board member of the General Assembly of the GKNT. His work is in the treatment of cancers of the esophagus and congenital and acquired defects of the heart. Recipient of the State Prize, 1971; Lenin Prize, 1960. (GSE 19, p. 513.)

Pitaevskii, **Lev. P** ., C. PM. S. Born in 1933 in Saratov. Corresponding member of the General Physics and Astronomy Department of the Academy since 1976; academician in 1993. He graduated from the University of Saratov in 1955. In 1958, he joined the staff of the Institute of Physical Problems of the national academy. Since 1969, he has been a senior researcher in the Superconductors Laboratory of the S. I. Vavilov Physical Problems Institute in Moscow. In 1971, he became a professor at the Moscow Polytechnical Institute. His works have dealt largely with low-temperature physics, plasma physics, quantum mechanics, electrodynamics, and the theory of metals. In 1980, he received the L. D. Landau Prize in theoretical physics. (GSE 30, p. 605.)

Platonov, **Vladimir P** ., D. PM. S. Born in 1939. Academician of the Belorussian academy's Physical and Mathematical Sciences Department since 1972, and an academician of the Mathematics Department of the Academy since 1987. He was elected President of the Belorussian Academy of Sciences in March 1987. He has been the Director of the Mathematics Institute in Minsk since 1977. Founded in 1959, the institute is primarily a school of studies in advanced mathematics for those who have received their candidate degree.

Plate, Nikolai A., D. Chem. S. Born in 1934 in Moscow. Russian chemist. Corresponding member of the General and and Technical Chemistry Department of the Academy since 1974, and academician since 1987. He graduated in 1956 from Moscow State University--a V. A. Kargin student. Since 1956, he has been working at Moscow State University where in 1966, he was appointed head of the Polymer Modification Laboratory. Since 1963, he has been working at the Institute of Petrochemical Synthesis of the AN SSSR. Since 1985, Director of the A. V. Topchiev Petroleum Refining and Petrochemical Synthesis Institute in Moscow. The institute researches the physics of reservoirs, reservoir modeling, enhanced recovery techniques, and petrochemical refining processes It was established in 1959 and is subordinate to the academy's General and Technical Chemistry Department. He formulated the principles of polymer modification through reactions in macromolecular chains. He developed the statistical theory on the reactivity of links in a polymer chain. (GSE 20, p. 206.)

Pogorelov, Aleksei V ., D. PM. S. Born in March 1919 in Korocha in what is now Belgorod Oblast. Russian mathematician. He has been a corresponding member of the academy since 1960 and an academician of the Mathematics Department of the Academy since 1976. He was originally elected to the Physical Mathematical Sciences Department. He has been a corresponding member of the Ukrainian academy since 1951 and an academician of the Mathematics and Cybernetics Department of the Ukrainian academy since 1961. Since 1978, he has been on the Presidium of the Ukrainian Academy of Sciences. He graduated from the N. E. Zhukhovskii Air Force Engineering Academy in 1945, and taught at the University of Kharkov from 1947. He joined the Physics Technical Institute of Low Temperatures of the Ukrainian AN SSSR in 1960. He developed a complete theory of convex surfaces and has done research on bending of surfaces. He has published studies on the foundations of geometry and on the development and successful application of far-reaching geometric methods for the study of deformations of thin shells. He was a deputy to the 8th Convocation of the Supreme Soviet of the Ukrainian SSR. State Prize, 1950; the N. I. Lobachevskii Prize, 1959, and the Lenin Prize, 1962. (GSE 20, p. 260.)

Pokrovskii, Nikolai N . D. Hist. S. Born in 1930. Historian. Specialist in research on the CPSU, source study, and the problems of feudalism. Corresponding member of the History Department and the Siberian Department since December 1987, and academician since 1992. He has authored and co-authored 150 scientific works of which six are major monographs. He graduated from Moscow State University in 1952. From 1964 to 1965, he worked as head of a Department and Deputy Director of the Vladimir-Suzdal Museum. In 1966, he joined the staff of the History, Philology, and Philosophy Institute of the Siberian Department. In 1975, he headed the sector on the feudalism period, and on the archeography and source study of that institute. He has been a professor at the Novosibirsk State University since 1977, holding the chair in the history of the U.S.S.R. In that capacity he has guided the work of one doctoral student and 14 aspirants for the candidate degree. He is chairman of the Archeography Commission of the Russian Academy of Sciences (1970), and head of the Siberian Department's Archeography Commission. In 1991, he was named Deputy Director for scientific research for the History Institute of the Siberian Department of the RAN. He also serves on the board of two archeological journals published by the Siberian Department.

Ponomarev, Boris N . Born in 1905 in Zaraisk, now in Moscow Oblast. Russian statesman and party figure. Corresponding member of the History Department of the Academy since 1958, and academician since 1962. Son of an office worker. He joined the Red Army in 1919. From 1920 to 1923, he did Komsomol and party work as secretary of the district committee and on the Riazan Provincial Committee of the Komsomol and as a secretary of a factory party organization. He graduated from Moscow State University in 1926 and from the Institute of Red Professors in 1932. From: 1926 to 1928, he did party work in the Donbas and in Turkmenia. From 1932 to 1934, he was Deputy Director of the Institute of Party History of the Institute of Red Professors. From 1934 to 1936 he was Director of the Institute of Party History of the Moscow Committee of the ACP (Bolshevik). From 1937 to 1943, he worked for the Executive Committee of the Comintern. From 1944 to 1946, he was Head of the Department of the CC CPSU ACP (Bolshevik). From 1947 to 1949, he was deputy Head and Head of the Soviet Information Bureau of the Council of Ministers of the U.S.S.R. In 1948, he became first deputy Head of the Central Committee and from 1955 to 1961, he was a deputy Head of the CC CPSU. In 1961, he became a secretary of the CC CPSU. At the 19th Party Congress he was elected a candidate member of the Central Committee and at the 20th and 22nd through the 25th Congresses, he was a member of the CC CPSU. In May 1973, he became a candidate member of the Politburo of the CC CPSU. He was a deputy to the 5th through the 9th Convocations of the Supreme Soviet of the U.S.S.R. His works are mainly in the history of the CPSU, the foreign policy of the U.S.S.R. CPSU, international communist movements, and the theory of scientific socialism. In 1932, he became head of the subdepartment of party history of the Institute of Red Professors and then of the subdepartment in that subject at the Academy of Social Sciences under the CC CPSU. (GSE 20, p. 402.)

Ponomarev-Stepnoy, **Nikolai N.**, C. Tech. S. Born in 1928. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academiy since 1984, and an academician since December 1987. Since 1977, he has been a deputy chairman of the Nuclear Reactor Division of the I. V. Kurchatov Atomic Energy Institute in Moscow

Popov, **Evgenii P**., Major General Engineers, D. Tech. S. Born in 1914 in Moscow. Russian scientist in mechanics and control processes. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1960; academician in 1993. Originally elected to the Technical Sciences Department. He graduated from the N. E. Bauman, Moscow Higher Technical School in 1939. From 1939 to 1943, he served as a mechanic in an air force squadron. From 1943 to 1964, he taught at the A. F. Mozhaiskii Leningrad Air Force Engineering Academy, becoming a professor in 1948. Between 1964 and 1971, he was chairman of the section on applied problems of the Presidium of the AN SSSR and has been head of a subdepartment of the Moscow Higher

Technical School since 1971. His works are in control theory, non-linear automatic control systems, automatic aircraft control, and control systems for manipulators. Recipient of the State Prize, 1949 and 1972. (GSE 20, p. 411.)

Pospelov, Germogen S. , D. Tech. S. Born in 1914 in the Moscow Oblast. Automatic control scientist. Since 1966, corresponding member of the Mechanics and Control Processes Department, and academician of the Information Sciences, Computer Technology Department of the Academy since 1984. He graduated from Moscow Power Engineering Institute in 1940 and served as an engineer in an air regiment during WW II. From 1946 to 1964, he taught at the N. E. Zhukovskii Air Force Engineering Academy where he became a professor in 1957. From 1964 to 1975, he served as deputy chairman and chairman of the section on applied problems of the Presidium of the AN SSSR. Since 1974, he has been Head of the Automated Control Systems Laboratory of the Computer Center in Moscow that was at that time subordinate to the academy's Mathematics Department. After 1984 it was made subordinate to the Information Sciences, Computer Technology, and Automation Department of the academy. His works are in automation of aircraft, the theory of nonlinear automatic systems, and the theory of control of large systems. Recipient of the State Prize, 1972. (GSE 20, pp. 461-462.)

Pozhela, Iuras K., D. PM. S. Born in 1925. Academician of the Physical, Technical, and Mathematical Sciences Department of the Lithuanian academy since 1968. He has been an academician of the Information Sciences, Computer Technology, and Automation Department of the Academy since 1984. From 1967 to 1984, he served as the Director of the Semiconductor Physics Institute in Vilnius that was founded in 1967. He has served as Vice President of the Lithuanian Academy of Sciences from 1972 to 1984 when he became its President. He has served as President of the Lithuanian academy since 1984.

Primakov, Evgenii M., D. Econ. S. Born in 1929 in Kiev. Russian economist specializing in international affairs and historian. Corresponding member of the Economics Department of the Academy since 1974, and academician since 1988, when he was made Academician Secretary of the Problems of World Economics and Internation Relations Department of the Academy. He graduated from the Moscow Institute of Oriental Studies in 1953. Between 1953 and 1962, he served on the State Committee for Television and Radio Broadcasting. From 1962 to 1970, he worked at the Asia and Africa desk of Pravda as an analyst, and later as associate editor. In 1970, he became assistant Director of the Institute of World Economy and International Relations of the AN SSSR. From 1978 to 1985, he was director of the Oriental Studies Institute in Moscow. Since 1985, he has been Director of the World Economics and International Relations Institute in Moscow, that was established in the mid-1950s. He became Academician Secretary to the Department in October 1988. He has written much on the economic, political, and social processes in Egypt and other Arab countries, on new manifestations and trends in the relations between developing nations and imperialist countries, and on certain theoretical problems of continuing international development. Nasser Prize, 1975. (GSE 20, p. 537.)

Prokhorov, Aleksandr M., D. PM. S. Born in June 1916 in Atherton, Australia. Russian Physicist. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1960, and an academician since 1966. He has been Academician Secretary of the General Physics and Astronomy Department of the Academy since 1973. He graduated from the Leningrad State University in 1939 and from 1939-1941 and from 1944 to 1946 he was an "aspirant" at the Institute of Physics of the AN SSSR. He began working at the institute in 1946, becoming head of a laboratory in 1954 and Deputy Director of the institute in 1968. In 1959, he became a professor at Moscow State University. In 1961, he was Chief of the Oscillation laboratory and in 1965, Chief of the P. N. Lebedev Physics Institute's Oscillation Division in Moscow. He won the 1964 Nobel Prize in Physics for fundamental work in the field of quantum electrodynamics. Together with N. G. Basov, he developed a fundamentally new method of generating electromagnetic waves using quantum systems, devising the first molecular generator using beams of ammonia molecules--a beam-type maser--in 1954-55. With his colleagues he

also developed methods for creating paramagnetic masers (1957-58). Since 1968, he has been Deputy Director of the Lebedev Physics Institute in Moscow. Since 1969, he has been editor-in-Chief of the Great Soviet Encyclopedia. He has been on the Presidium of the academy since 1970. In 1971 he became Director of a subdepartment at the Moscow Physicotechnical Institute. Since 1983, he has served as Director of the General Physics Institute in Moscow that was set up in 1983 to research lasers, solid-state physics, fusion, spectroscopy, and fiber optics. It is subordinate to the academy's General Physics and Astronomy Department. He received the Lenin Prize in 1959. He has been a member of the American Academy of Arts and Sciences since 1971. (GSE vol. 21, p. 257; vol. 3, p. 684; vol. 11, p. 587 and 607; vol. 16, p. 457; vol. 30, p. 146, and vol. 31., p. 318.)

Prokhorov, Iurii V ., D. PM. S. Born in December 1929 in Moscow. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1966 and an academician since 1972. He graduated from Moscow State University in 1949 and became a professor there in 1957. He began working at the V. A. Steklov Mathematics Institute in 1949. His principal works are in probability theory, particularly asymptotic methods. He has researched classical limit theorems, investigating conditions under which the strong law of large numbers and other so-called local theorems can be applied to sums of independent random variables. He has made major contributions to the queuing theory. Since 1969, he has been a Deputy Director of the V. A. Steklov Mathematics Institute in Moscow, that was established in 1921 and that does research in pure mathematics and mathematical physics. Since 1976, he has headed the Probability Theory Department of the Steklov Institute. He was on the Head Editorial Board of the third edition of the Great Soviet Encyclopedia. He received the Lenin Prize in 1970. (GSE 21, p. 257.)

Prokoshkin, Iurii D., D. Pm. S. Born in 1929 in Moscow. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1970; academician in 1993. He graduated from Moscow State University in 1952. From 1953 to 1963, he worked at the Joint Institute for Nuclear Research in Dubna. In 1963, he became Director of a section of the Institute of High Energy Physics at Serpukhov. Since 1982, he has been Deputy Director of that institute. He directed the team which discovered the "H meson." His work is in the physics of elementary particles, the formation of Pi-mesons and the investigation of Beta-decay of pions and the capture of pions by the nuclei of bounds hydrogen. From 1968 to 1972, he and his colleagues conducted experiments on the detection of anti-helium-3. (GSE 21, p. 261.)

Pugachev, Vladimir S., D. Tech. S. Born in 1911 in Riazan. Russian scientist in mechanics, problems of control, and mathematics. Academician of the Problems of Machine Building, MNechanics and Control Processes Department of the Academy since 1981. He graduated from the N. E. Zhukovskii Air Force Academy in 1931 and taught and researched at the academy until 1972. He has held a professorship there since 1939. He became head of a laboratory of the Institute of Problems of Control in 1956. He has taught at the S. Ordzhonikidze Moscow Institute of Aviation since 1972. His works are in the statistical theory of control processes, flight dynamics, and the theory of canonical expansion of random functions. Recipient of the State Prize, 1948. (GSE 21, p. 343.)

Purin, Bruno A., D. Chem. S. Born in 1928. Academician of the Chemical and Biological Sciences Department of the Latvian Academy since 1971. He has served as its President since 1984. Corresponding member of the Physical Chemistry, and Technology of Inorganic Materials Department of the Academy since 1984 and academician of that Department since 1987. Since 1967, he has been the Director of the Inorganic Chemistry Institute in Riga that was founded in 1946 and that is involved with the plasma chemistry of inorganic compounds, the reactivity of metals in different media, and selective extraction and determination of elements and their compounds.

Pushcharovskiy, Iurii M ., D. GM. S. Born in 1916 in Petrograd. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1976, and academician since 1984. He graduated from

the Department of geology and pedology at Moscow State University in 1941. In 1946, he started working at the Geological Institute of the AN SSSR and in 1969, he was made head of the laboratory of the tectonics of zones adjacent to oceans. He devised a new scheme for the tectonics of the northeastern U.S.S.R. and the Arctic and developed new ideas on the structure and structural development of the Pacific geosynclinal belt, the presence of gas and oil in the belt, and the structure and tectonic evolution of the Pacific, Indian, and Arctic Oceans. He originated a theory of the structure of foredeeps. He is co-author and editor of tectonic maps of Eurasia, the Pacific region, the Arctic, and Cuba and the Caribbean region. Recipient of the State Prize, 1969. In 1979, he received the A. P. Kapinskii Prize in geology for his scientific accomplishments. (GSE 30, p. 615.)

Puzyrev, Nikolai N., D. GM. S. Born in 1914. Geophysicist. Specialist in seismology and of the seismic zones of the earth's crust. Corresponding member since 1966, and academician of the Geology, Geophysics, Geochemistry, and Mining Sciences Department and of the Siberian Department since December 1984. He graduated from the Leningrad State University in 1941. He worked in the oil industry and in a geophysical organization in Kazakh, was a research worker at the Institute of Geophysical Methods. He joined the Geology and Geophysics Institute of the Siberian Department in 1959, heading a seismometry laboratory in the seismology Department. From 1966 to 1987, he was Deputy Director of the Geology and Geophysics Institute in Novosibirsk, that was begun in 1958 for the purpose of discovering and developing Siberia's mineral resources. Since 1969, he has also been Head of the Geophysics Division of that institute. In 1987, he was named head of a laboratory on the problems of seismology. Since 1988, he has been Director of the Institute itself. He is a professor at the Novosibirsk State University. He received the State Prize in 1987, the O. IuriiShmidt Prize in 1987, and holds a number of other recognitions and awards. (GSE 21, p. 366.)

Raushenbakh, Boris V., D. Tech. S. Born in 1915 in Petrograd. Russian scientist in mechanics and control processes. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984. He graduated from the Leningrad Institute of Civil Aviation Engineers in 1938, where he specialized in theory, and began work at the Jet Scientific Research Institute. In 1947, he began teaching at the Moscow Physicotechnical Institute, being named a professor there in 1959. He is a corresponding member of the International Academy of Astronautics. Lenin Prize, 1960. In 1987, he was awarded the B. N. Petrov Gold Medal, named after the well-known automation scientist, for his work in control sciences. (GSE 21, p. 508.)

Rebane, Karl K., D. PM. S. Since 1973, President of the Estonian Republic Academy of Sciences. Corresponding member since 1976 and academician of the General Physics and Astronomy Department of the Academy since December 1987. In 1981, he received the P. N. Lebedev Gold Medal for his work in physics.

Reshetney, Mikhail F., D. Tech. S. Born in 1924. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1976, and academician since 1984. Engineer. Specialist in the mechanics of machine construction, especially in the engineering of the composition of computer materials and systems construction. He was instrumental in creating "Orbit" and "Ekran" of the Siberian Far East. He graduated from the Moscow Aviation Institute in 1950 and worked at an experimental construction design bureau. He was a delegate to the 25th and 27 congresses. He is an honored scientist of the former Soviet Union. He was awarded the Lenin Prize in 1980 and holds other awards and medals. (GSE 30, p. 618.)

Reshetniak, Iurii G., D. PM. S. Born in 1929. Russian mathematician. Specialist in Differential Geometry. Corresponding member of the Mathematics Department of the Academy since 1981, and academician since December 1987 of the Mathematics Department of the AN SSSR and the Russian Academy of Sciences and of the Siberian Department. Since 1968, he has been a senior researcher and Head of the Geometry Department of the Mathematics Institute in Novosibirsk. He graduated from the Leningrad State University in 1961 and worked in the Leningrad Department of the Mathematics

Institute imeni V. A. Steklov from 1954 to 1957. In 1957, he joined the Mathematics Institute in Siberia, becoming a Department head (geometry) in 1960. He has been a professor at the Novosibirsk State University since 1962, holding the chair of mathematical analysis.

Reshetnikov, Fedor G ., D. Tech. S. Born in 1919 in the village of Mar-Buda, Sumy Oblast. Russian physical chemist and metallurgist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1974; academician in 1963. He graduated from the M. I. Kalinin Moscow Institute of Nonferrous Metals and Gold in 1941 and from the F. E. Dzerzhinskii Artillery Academy in 1944. Since 1966, he has been Deputy Director of the All-Union Inorganic Materials Scientific Research Institute in Moscow. His works are in the development of the technology and physicochemical principles of processes for obtaining rare and radioactive metals and nuclear fuels (carbides, nitrides, and other compounds) for fuel elements in atomic power plants. Recipient of the State Prize, 1951. (GSE 22, p. 135.)

Reutov, Oleg A. , D. Chem S. Born in 1920 in Makeeva, Donetsk Oblast. Russian chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1958, and academician since 1964. He graduated from Moscow State University in 1941. In 1945, he was a researcher in the university's chemistry Department. In 1957, he was head of a university laboratory dealing with theoretical problems in organic chemistry, and he was also head of a laboratory of isotope application in organic chemistry at the Institute of Heteroorganic Compounds of AN SSSR. In 1969, he became the United Nations U.S.S.R. expert on chemical and biological warfare. In 1984, he was awarded the Lenin Prize for his work in the discovery of new methods for the synthesis and creation of numerous compounds. (GSE 22, pp. 145-6.)

Riabchikov, **Igor D** ., D. GM. S. Born in 1937. Corresponding member of the; Geology, Geophysics, Geochemistry and Mining Sciences Department of the Academy since 1984; academician in 1993.

Riutov, Dmitrii D., D. PM. S. Born in 1940 in Moscow. Russian Physicist. Specialist in plasma and theoretical physics and in the physics of powerful rays from charged particles. Corresponding member of the General Physics and Astronomy Department and of the Siberian Department since 1976, and academician since 1992. He has authored or coauthored some 125 scientific works of which five are monographs. He has participated in the development of the theories of plasma phenomena, solid state electronics, ionic rays, and the physics of the development of thermonuclear power. He graduated from Moscow Physicotechnical Institute in 1962. He was a staff member of the Institute of Atomic Energy from 1962 to 1968 when he joined the Institute of Nuclear Physics of the Siberian Department of the AN SSSR. Since 1974, he has been Chief of the Plasma Physics Laboratory of the Nuclear Physics Institute at Akademgorodok-Novosibirsk, and he has served as the institute Deputy Director since 1981. In 1989, he was named the Chief scientific secretary of the Nuclear Physics Institute in Akademgorodok-Novosibirsk. Its scientists research controlled nuclear thermonuclear reactions, particularly magnetic confinement fusion, and accelerator technology. His works are in plasma physics, particle-beam heating of a plasma in open magnetic traps, high current electron beams, and thermal insulation of dense plasma. Since 1973, he has held the chair in plasma physics at the Novosibirsk State University. He is a member of the European Plasma Physics Society. He is on the editorial board of "Nuclear Fusion," "Plasma Physics and Controlled Fusion, " "Laser and Particle Beams," and "Plasma Devices and Operation." (GSE 30, p. 619.)

Ronov, Aleksandr B ., D. GM. S. Born in 1913 in Poltava. Russian geologist and geochemist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1966; academician in 1993. Originally elected to the Earth Sciences Department. He graduated from Leningrad State University in 1938 and worked at the Radium Institute of the AN SSSR from 1939 to 1943. From 1944 to 1950, he worked at the academy's Institute of Earth Physics, where he developed a volumetric

method for studying the process of sedimentation and the vertical movements of the earth's crust. In 1950, he began working at the V. I. Vernadskii Institute of Geochemistry and Analytic Chemistry where, in 1954, he became head of the Laboratory for the Geochemistry of Sedimentary Rocks. Scientists in this laboratory study the evolution of the geochemistry sedimentation processes on the earth , using data which point to the distribution of volumes, masses and ratios, as well as the chemical composition of sedimentary rocks of different ages and in different structural zones of the earth's crust. In 1984, he received the V. I. Vernadskii Gold Medal named for the reknowned geochemist. (GSE 22, p. 270.)

Roshchevskii, Mikhail P . Corresponding member of the Physiology Department of the Russian Academy of Sciences and of the Urals Department since December 1987; academician in 1993. He became chairman of the Komi Scientific Center in February 1984. He was named a deputy chairman of the Urals Department in August 1988.

Rudenko, Iurii N., C. Tech. S. Born in 1931 in Donetsk Oblast. Engineer. Specialist in power engineering. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1976, and academician since 1987. Following graduation from the Leningrad Correspondence Industrial Institute in 1955, he held positions at the Orsk-Khalitovo Metallurgical Combine and later at the Leningrad Polytechnic Institute--until 1960. From 1960 to 1963, he was a group leader and the head of the operational mode service of the Interconnected Dispatcher Control of the Siberian Integrated Power Grid. In 1963, he joined the faculty of the Siberian Power Engineering Institute of the Siberian Department of the AN SSSR, becoming its Director in 1973. Academician secretary to the Physical Technical Problems of Power Engineering Department since 1988. He was on the national committee's working group on organizing a conference on the construction of large power engineering systems. In 1985 he served as deputy chairman of the Academy's Council on the Problems of Power Engineering. He was a delegate to the 27th congress. He received the State Prize in 1986, and holds other orders and medals for his scientific contributions. (GSE 30, p. 621.)

Rumiantsev, Valentin V., D. PM. S., Head of the Mechanics Department of the Computing Center, was born in 1921 in the Saratov district. Corresponding member Information Sciences, Computer Technology, and Automation Department of the Academy in 1970 and an academician of the Russian Academy in 1992. He received his master of science in Mechanics from Saratov State University in 1945, his candidate degree from the Institute of Mechanics of the academy in 1948, his doctorate in physical and mathematical sciences from that same institute in 1953. In 1956, he was made a professor of theoretical mechanics at Moscow State University. From 1948 to 1964, he was a junior researcher, a senior researcher, and a head of the Department of Analytical Mechanics of the Institute of Mechanics. From 1965 to the present he has served in various capacities from senior researcher, to head of the laboratory of stability theory and mechanics control systems, to head of the Department of mechanics of the Computing Center. He has served a professor of the chair of theoretical mechanics on the faculty of Mechanics and Mathematics at Moscow State University. His interests are in analytical mechanics, the theory of stability and stabilization, applied mathematics, mathematical modeling in the technical and natural sciences.

Rundkvist, Dmitrii V ., D. GM. S. Born in 1930. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department of the Academy since 1984; academician in 1993. Since 1972, he has been Deputy Director of the Geology Scientific Research Institute in St. Petersburg that researches the patterns of the formation and distribution of petroleum and gas deposits in the Krasnoiarsk region of Russia.

Rusanov, A. I.

Rusanov, **Vladimir D.**, D. PM. S. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1984; academician in 1993.

Rybakov, **Boris** A ., D. Hist. S. Born in 1908. Ribakov has been an academician since 1958. Originally elected to the Historical Sciences Department. From 1956 to 1988, he was Director of the Archeology Institute in Moscow. This institute was established in 1937 as the Institute of the History of Material Culture. It took its present name in 1959. It hosts numerous national conferences on archaeology and publishes a journal. In 1983, he was awarded the B. D. Grekov Prize for his historical and archeological research. He is leading compilation on "Ancient CivilizationS: Man, Society, and Culture," a part of a projected 20-volume work

Ryzhov, **Iurii** A . D. Tech S. Born in 1930. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981, and academician since December 1987. From 1976 to 1987, he was prorector of the Ordzhonikidze Aviation Institute in Moscow, that trains engineers for work in aircraft and aircraft component design. In 1987, he became rector of that institute.

Rzhanov, Anatolii V ., D. PM. S. Born in 1925 in Ivanova. Russian physicist. Academician of the Siberian Department and corresponding member of the General Physics and Astronomy Department of the Academy since 1962. Academician of the Information Science, Computer Technology, and Automation Department of the Academy since 1984. He graduated from the Leningrad Polytechnic Institute in 1941. From 1944 to 1962, he worked at the Institute of Physics of the AN SSSR and since 1968, he has been Director of the Institute of Semiconductor Physics of the Siberian Department of the AN SSSR and the RAN in Novosibirsk. He joined the Presidium of the Siberian Department in 1976. The Physics Institute was established in 1964 to research microelectronics with emphasis on the physics of semiconductors, lasers, non-linear optics, and the stability of semiconductor materials. He has taught at the University of Novosibirsk since 1963 becoming a professor there in 1966. His works are in the physics of dielectrics and semiconductors and in semiconductor electronics. He discovered and studied the piez electric effect in polarized barium titanate ceramics, and he produced and conducted research on samples of point-contact and fused germanium diodes and triodes. (GSE 22, p. 528.)

Sadovskii, Mikhail A., D. Tech. S. Born in 1904 in St. Petersburg. Russian physicist. Corresponding member, 1953, and academician, 1966. Since 1970, academician of the Physical Chemistry and Technology of Inorganic Materials Department, and since 1970, an academician of the Urals Department of the RAN. He graduated from the Leningrad Polytechnic Institute in 1930. From 1932 to 1941, he worked at the Institute of Seismology of the AN SSSR and from 1941 to 1944, in the special projects section of the Presidium of the AN SSSR. He was Deputy Director of the Institute of Chemical Physics from 1946 to 1963. From 1963 to August 1988, he was Director of the O. Iurii Shmidt Earth Physics Institute that was established in 1956 and that is the leading center for the study of earthquakes and other seismic phenomena. It is subordinate to the academy's Geology, Geophysics, and Geochemistry Department. He was originally elected to the Earth Sciences Department. In 1985, awarded the Lomonosov Medal for his work in geophysics and geology. His works are in the problems of the theory of explosions, the study of the destructive action of explosions, and the seismic effects of large-scale explosions. He substantiated the law of similarity for explosions. He participated in large-scale, directional blasting in Russia and is one of the founders of the science of the physics of explosions. Recipient of the State Prize in 1948, 1949, 1951, and 1953. Lenin Prize, 1962. In 1986, he received the M. V. Lomonosov Gold Medal for his contributions to Russian Science. (GSE 22, p. 544.)

Sagdeev, Roald Z., D. PM. S. Born in December 1932 in Moscow. Russian physicist. He has been a corresponding member since 1964 and an academician since 1968 of the General Physics and Astronomy Department of the AN SSSR and the RAN and of the Siberian Department. He graduated from Moscow State University in 1955, worked at the Atomic Energy Institute from 1956 to 1961, and from 1961 to 1970, he was head of a laboratory at the Institute of Nuclear Physics of the Siberian Department, that was created

in 1957 to research controlled nuclear reactions, particularly magnetic confinement fusion and to study accelerator technology. From 1970 to 1973, he was at the Institute of High Temperature Physics of the AN SSSR that was founded in 1962 to study thermophysical and electrophysical properties of matter at high temperatures. From 1973 to 1988, he was Director of the Space Research Institute in Moscow, subordinate to the academy's General Physics and Astronomy Department. The Space Research Institute was established in 1965 to centralize and coordinate Soviet civilian space programs and is the principal research facility for such studies. Sagdeev's main researches are in plasma physics. He has studied fluctuations and instabilities in plasma and has discovered the existence of so-called collisionless shock waves. He has developed the theory of transfer processes in Tokamaks. Since 1986, he has been the Director organizer of the Systems Research Institute of the AN SSSR and the Russian Academy of Sciences. He received the Lenin Prize in 1984--with others for helping to create high temperature plasma physics. R. Z. Sagdeev has also been a leader in the development of new ideas in physical kinetics. (GSE 22, p. 548.)

Sakovich, Gennadii V., D. Chem. S. Born in 1931. Chemist. Specialist in general and technical chemistry. Corresponding member of the General and Technical Chemistryi Department of the Academy since 1981, and academician since 1992. He has authored 12 scientific works and co-authored 500 others of which five are monographs. He is also credited with 200 inventions. He graduated from the Tomsk State University in 1963 and from that date until 1966, he was an aspirant, and special assistant for the chair of inorganic chemistry of that university. Thereafter he worked at institutes and branches of the chemical profile that have the highest scientific ranking. He has been a professor since 1971. He has directed the work of three doctoral students and of 25 aspirants for the candidate degree. He is a leading member of the Academic and Natural Sciences Council. He is an honored Scientist of the Soviet Union. He received the State Prize in 1970 and the Lenin prize in 1984. He also holds medals recognizing his work.

Salganik, Rudol'f I., D. Bio. S. Born in 1923. Biologist and molecular geneticist. Corresponding member of the; Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981, and academician since 1992. He has written or co-authored some 268 scientific works of which his monographs "Macromolecules in the Functioning Cell" (1978), "The Cell Nucleus" (1979) are well known. He graduated from the Moscow State Medical Institute in 1944. Until 1957, he worked at the Kiev Medical Institute, and at the Nutrition Institute of the Ukraine Ministry of Health. In 1957, he joined the Cytology and Genetics Institute of the Siberian Department as head of the Laboratory of Nucleonic Acids and, in 1961, he was named deputy of the institute. From 1970 to 1975, he was the organizer Director of biologically active substances research. He has been a professor at the Novosibirsk State University since 1971, holding the chair in molecular genetics. In that capacity he has guided the work of 31 aspirants for the candidate degree. He is chairman of the Novosibirsk Independent All-Union biochemical substances scientific circle. He is editor of the biochemistry series of the journal "Izvestia." Winner--with others--of the 1979 State Prize in Science and Technology for the cycle of work on the realization of "Reverse Transcription" devoted to the enzymatic synthesis of structural genes and their use in the study of the genetic apparatus of living creatures and of viruses (1973-1977). Josef Riman, Director of the Czech Institute of Molecular Genetics was also a member of this group of honorees. He received the Lenin Prize in 1990 and holds a number of other medals and recognitions for his accomplishments.

Samarskii, Aleksandr A., D. PM. S. Born in February 1919 in Amvrosievka in what is now Donetsk Oblast. Russian mathematician. He has been a corresponding member of the Mathematics Department of the Academy since 1966 and an academician since 1976. He graduated from Moscow State University in 1945 and became a professor there in 1959. His main work has been in mathematical physics and computer mathematics. He has made use of computational algorithms that are successfully applied to the computer solutions of

important problems in various fields of science and engineering. In 1967, he was Head of the Laser Fusion Laboratory of the M. V. Keldysh Applied Mathematics Institute in Moscow. Since 1984, he has served as Deputy Director of the M. V. Keldysh Applied Mathematics Institute in Moscow, that is subordinate to the Information Science, Computer Technology and Automation Department of the national academy. State Prize, 1954, and the Lenin Prize, 1962. (GSE 22, p. 577.)

D. Bio. S. Born in 1937. Biologist. Specialist in molecular Sandakhchiev, Lev. S., biology and biotechnology. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981, and academician since 1992. He has authored and co-authored 103 scientific works. He graduated from the Moscow Chemico-Technological Institute imeni D. I. Mendeleev in 1959. From 1959 to 1974, the worked at the Novosibirsk Institute of Organic Chemistry, as a senior laboratory assistant, a junior researcher, a senior researcher, and head of a laboratory. In 1974, he joined the All-Union Molecular Biology Institute of the Ministry of Medicine and Microbiology Industry of the SSSR, as a Department head, and Deputy Director, becoming Director of that institute. In 1986, the became general Director of Scientific Production Organization "Vektor." He serves on the scientific council for the government's program on "Human Genomes", "New Methods of Bioengineering", and is member of the council on the physico-chemical problems of biology and biotechnology. and of the priority authority group on "The Science of Life and Biotechnology." He received the State Prize in 1985.

Sarabianov, **Dmitrii V**. Corresponding member of the Literature and Language Department of the Academy since December 1987; academician in 1993.

Sarkisian, Artem S., D. PM. S. Born in 1926. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1981; academician since 1988. He is Deputy Secretary of the Department. Since 1971, he has headed the Marine Current Dynamics Department of the P. P. Shirshov Oceanology Institute in Moscow.

Sarkisov, **Ashot A.** , Vice Adm Eng. Born in 1924. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981; academician in 1993.

Savin, Anatolii I. Born in 1920. Academician of the Information Sciences, Computer Technology and Automation Department of the Academy since 1984.

Sedov, Leonid I. , D. PM. S. Born in November 1907 in Rostov-on-Don. Russian scientist in mechanics and applied mathematics. He has been a corresponding member of the Mathematics Department of the Academy since 1946 and an academician since 1953. His principal membership is in the Mechanics and Control Processes Department. He was originally elected to the Technical Sciences Department. He graduated from Moscow State University in 1930. He became a professor there in 1937. From 1930 to 1947, he served on the staff of the Central Aerohydrodynamics Institute. In 1945, he also joined the staff of the Institute of Mathematics of the AN SSSR. His most important works are in the fields of hydromechanics, aeromechanics, and continuum mechanics. In 1965, he became chairman of the Scientific Council on Liquid and Gas Mechanics of the AN SSSR. Since 1974, he has been Head of the Statistical Mechanics Department of the V. A. Steklov Mathematics Institute in Moscow. He has found solutions to the problem of impact of bodies against water and problems of hydroplaning. He has also solved problems dealing with strong explosives and with gas dynamics. State Prize 1952. (GSE 23, p. 277.)

Semikhatov, M. A.

Semikhatov, **Nikolai A** ., D. Tech. S. Corresponding member of the Problems of Machine Building and Control Processes Department since 1984, and of the Urals Department since 1988; academician in 1993.

Sergeev, **Evgenii** M., D. GM. S. Born in 1914 in Moscow. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1966, and academician since 1979. He graduated from

Moscow State University in 1940 and served in the Red Army from 1941 to 1943. He began working in the Department of geology at the Moscow State University in 1940, becoming a professor in 1953. In 1954, he became head of the subdepartment of soil science and engineering geology, and in the years 1954 to 1957 and 1963 to 1964, he served as dean of the Department of geology at the university. He became prorector in 1964 and since 1974 he has been first prorector of Moscow State University. His works are in engineering geology, soil sciences, and hydrogeology. (GSE 23, p. 362.)

Sevostianov, Grigorii N ., D. Hist. S. Born in 1916. Academician of the History Department of the Academy since December 1987.

Shafarevich, Igor R. , D. PM. S. Born in 1923 in Zhitomir. Russian Mathematician. Corresponding member of the Mathematics Department of the Academy since 1958; academician in 1993. Originally elected to the Physical Mathematical Sciences Department. He graduated from Moscow State University in 1940 and started teaching there in 1944; he became a professor in 1953. In 1943, he was associated with the Institute of Mathematics of the AN SSSR. His works are in algebra and the theory of algebraic numbers. Lenin Prize, 1959. (GSE 29, p. 516.)

Shatalin, Stanislav S. , C. Econ. S. Born in 1934 in Pushkin, Leningrad Oblast. Russian economist. Corresponding member of the Economics Department of the Academy since 1974, and academician, 1987. He graduated from the economics Department of Moscow State University in 1958. From 1959 to 1965, he was a research worker and head of the intersector balance section of the SRI of Economics of the State Planning Committee of the U.S.S.R. (GOSPLAN). From 1965 to 1976, he was a Deputy Director of the Central Economic Mathematical Institute of the AN SSSR and in 1976 he became Deputy Director of the Systems Research Scientific Research Institute in Moscow and in 1977, Department head of the All-Union SRI of Systems Research for the State Committee for Science and Technology (GKNT) and for the AN SSSR. He also became the head of the subdepartment of mathematical methods of economic analysis in the economics Department at Moscow State University. His primary work is in constructing mathematical economic models and in national economic planning. In 1985, he joined the staff of the newly organized Economics and Forecasting of Scientific-Technical Progress Institute in Moscow. Recipient of the State Prize, 1968. In 1987, he received the V. S. Nemchinov Prize for economics and statistics. (GSE 29, p. 546.)

Shcheglov, **Aleksei D** ., D. GM. S. Born in 1926. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department and of the Far Eastern Department since 1979; academician in 1993. Since 1979, he has been Director of the Geology Institute in Vladivostok that studies the laws of distribution of deposits of useful minerals in the Far East and since 1980 deputy chairman of the Far Eastern Center of the academy.

Shchegolev, **Igor F**. , D. PM. S. Born in 1929. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987; academician in 1993. Since 1974, he has acted as Chief of the Low Temperature Physics Laboratory of the Structure of Matter Division of the Chemical Physics Institute in Moscow.

Sheindlin, Aleksandr E .., D. Tech. S. Born in 1916 in Kuybyshev. Russian specialist in heat physics and power engineering. Academician of the Physical Technical Problems of Power Engineering Department of the Academy since 1974. In 1937, he graduated from the Moscow Power Engineering Institute and first worked as an engineer in a factory and then as an assistant at the institute. From 1945 to 1947, he worked at the Moscow Power Engineering Institute receiving a doctorate of technical sciences degree in 1954, becoming a professor in 1955. In 1960, he became head of a laboratory at the Institute of High Temperatures of the AN SSSR, becoming the institute's Director in 1961. Since 1967 he has also been head of a subdepartment of the Moscow Physicotechnical Institute. He directed the construction and operation of the world's first experimental model magneto hydrodynamic installation (U-02 in 1964) for the direct conversion of heat energy into electricity and the first such industrial installation (U-25 in 1971.) From 1961 to 1989,

he was Founding-Director of the High Temperatures Institute in Moscow that was created in 1962 to research thermophysical and electrophysical properties of matter at high temperatures. It is subordinate to the academy's Physical and Technical Problems of Power Engineering Department. Lenin Prize, 1959; Recipient of the State Prize, 1976; Polzunov Prize, 1963. (GSE 29, p. 571.)

Shemiakin, Evgenii I., D. Tech. S. Born in 1929 in Novosibirsk. Russian scientist specializing in the mechanics of rocks. Since 1976, corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department of the Academy, and academician since 1984. He graduated from Leningrad State University in 1952. From 1955 to 1960, he was a researcher at the Institute of Chemical Physics of the AN SSSR. From 1960 to 1971, he was head of a laboratory of the Institute of Theoretical and Applied Mechanics of the Siberian Department of the AN SSSR. Since 1965, he has been a professor at the University of Novosibirsk. From 1971 to 1987, he served as Director of the Mining Institute of the Siberian Department at Novosibirsk that was established in 1944 to work in mineral exploration, develop mining machinery development, improve ore processing, develop environmental protection against mine wastes, and solve problems of cold region mining. He joined the Presidium of the Siberian Department in 1980. From 1980 to 1988, he was deputy chairman of the Siberian Department. In 1987, he became head of the Examination Board for the Council of Ministers of the U.S.S.R. His works are on the study of rocks, the effects of blasting and shock on rocks, and the deformation mechanics of solids. (GSE 29, p. 577.)

Sheremet'evskii, Nikolai N ., D. Tech S. Born in 1916. Academician of the Information Science, Computer Technology, and Automation Department of the Academy since 1984. Since 1973, he has been Director of the Electromechanics Scientific Research Institute located in Moscow and directly subordinate to the Ministry of the Electrical Equipment Industry. The institute does research in electrical drive systems and remote control devices.

Shilo, Nikolai A., C. GM. S. Born in 1913 in Piatigorsk. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department of the Academy since 1964, and academician since 1970. He is also member of the Far Eastern Department. He graduated from the Leningrad Institute of Mines in 1937 and worked for various geological institutions in northeastern U.S.S.R. In 1960 he became Director of the Complex Scientific Research Institute (the Northeastern Integrated Scientific Research Institute) at Magadan. Since 1977, he has been chairman of the Presidium of the Far Eastern Department. Since 1980 he has been on the Presidium of the Russian Academy of Sciences. In 1988, he was appointed advisor to the national academy's Presidium. His works are in the geology and geochemistry of mineral deposits, including gold, silver, tin, mercury, tungsten, platinum, and copper. In 1985, he received the V. A. Obruchev Prize in geology for his lifetime contributions to the geological sciences. (GSE 29, p. 596.)

Shilov, Aleksandr E. , D. Chem. S. Born in 1930. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1981; academician in 1993. Since 1973, he has been Deputy Director of the Chemical Physics Institute in Moscow that was established in 1931 in St. Petersburg and moved to Moscow in 1943. It studies the application of chemical kinetics in various fields. It also maintains a center for combustion research. Since 1978, he has also been Head of the Chemical Kinetics and Catalysis Division of the Chemical Physics Institute in Moscow.

Shilov, Igor. A . Corresponding member of the General Biology Department of the Academy since 1984; academician in 1993.

Shipunov, **Arkadii G**. , D. Tech S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984; academician in 1993.

Shirkov, Dmitrii V., D. PM. S. Born in 1928 in Moscow. Physicist. Corresponding member of the Nuclear Physics Department and of the Siberian Department since 1960;

academician in 1993. He graduated from Moscow State University in 1949. From 1950 to 1960, he worked at the V. A. Steklov Institute of Mathematics of the AN SSSR and at the Joint Institute for Nuclear Research in Dubna. From 1960 to 1969, he worked at the Siberian Department of the AN SSSR. In 1961, he was designated a professor at the University of Novosibirsk. Also member of the Siberian Department. Recipient of U.S.S.R. State Prize in Science and Technology in 1984 for co-authorship of papers entitled, "The Renormalization Group Method in Field Theory." His work is on the theory of elementary particles, the theory of superconductivity, and the theory of neutron transport and moderation. Lenin Prize, 1958. He received the State Prize in 1984. (GSE 29, p. 602.)

D. PM. S. Born in 1943. Mathematician. Specialist in computer and Shokin, Iurii I., applied mathematics. Corresponding member of the Information Sciences, Computer Technology and Automation Department of the Academy since 1989; academician in 1992. He has authored 30 scientific works of which three are monographs and co-authored 120 publications of which three are significant monographs. He graduated from the Novosibirsk State University in 1966 and worked at the Computer Center of the Siberian Department from 1969 to 1975. From 1976 to 1983, he headed a laboratory of the Theoretical and Applied Mechanics Institute of the Siberian Department. In 1983, he was named director of the Computer Center in Krasnoiarsk subordinate to the Siberian Department. Since 1983, he has been a professor at the Krasnoiarsk State University where he has held the chair of applied mathematics and mechanics and supervised the academic research of 15 aspirants for the candidate degree. He is a commission member of the GKNT, and on the natural sciences committee for developing research methods into the dynamics of fluids, and on the working group of the natural sciences federation on information processes. In 1991, he was named the Director of the Computer Technology Institute of the Siberian Department of the RAN in Novosibirsk, and in 1992 he became Head scientific secretary for the Siberian Department of the RAN.

Shpak, Vladimir S., D. Tech. S. Born in 1909 in Pskov. Russian chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy in 1968, and academician since 1981. He graduated from the Lensovet Leningrad Institute of Technology in 1931 where he worked from 1932 to 1975, becoming a professor in 1955. From 1948, he also worked at the Institute of Applied Chemistry of which he was the Director from 1952 to 1977. His work deals largely with commercial chemistry developments. (GSE 29, p. 627.)

Shults, Mikhail M. , D. Chem S. Born in 1919 in Petrograd. Russian physical chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1972, and academician since 1979. He graduated from the chemistry Department of Leningrad State University in 1947 and performed research in the Department until 1952. In 1952 and 1953, and again from 1959 to 1972, he headed a laboratory at the university scientific research institute of chemistry and from 1953 to 1959, he taught in the chemistry Department. In 1965, he became a professor at the I. V. Grebenshchikov Institute of Silicate Chemistry of the AN SSSR, and since 1972 he has been its Director. The institute was established in 1948 to conduct research on the physical chemistry of silicates, and it has worked on developing new methods of grinding and polishing glass. It is subordinate to the academy's Physical Chemistry and Technology of Inorganic Compounds Department. His works are in the physical chemistry of glass and thermodynamics of heterogeneous equilibrium processes. Recipient of the State Prize, 1973. (GSE 29, p. 641.)

Shumakov, **Valerii I.**, D. Med. S. Born in 1931. Academician of the Physiology Department in 1993. He has been director of the Transplants and Artificial Organs Scientific Research Institute in Moscow since 1974. The institute is developing an artificial heart and other organ and tissue transplants.

Shumnii, **Vladimir K.**, D. Bio. S. Born in 1934. Biologist. Specialist in the field of experimental genetics. Corresponding member of the General Biology Department of the Academy since 1979, and academician since 1992. He graduated from the Moscow State

University in 1958 and joined the Institute of Cytology and Genetics of the Siberian Department upon graduation passing successively through positions as laboratory assistant, junior and senior researcher, and from 1970 to 1985, Deputy Director and in 1985, Director of that institute. He is chairman of the Scientific Council on the Biological Sciences (1988). He joined the Presidiums of the Siberian Department and of the National Academy in Moscow in 1980. He has been a professor since 1979, holding the chair in cytology at the Novosibirsk State University. He is chairman of the Siberian Department's V. I. Vavilov Genetics and Selection Society. The Altai International Centre for Humanitarian and Biospheric Research. was established in 1991. The center will involve the collaboration of three major bodies: the United Institute of History, Philology and Philosophy in Akademgorodok-Novosibirsk, the Cytology and Genetics Institute in Akademgorodok-Novosibirsk, and the Gorno-Altai Republican Soviet in Gorno-Altaisk, Russia. As Director of the Institute of Cytology and Genetics of the Siberian Department located in Akademgorodok-Novosibirsk, Dr. Shumni will play a major role in the development of this international research institute.

Shveykin, Gennadii P ., D. Tech S. Born in 1926 in the city of Karabash, Cheliabinsk Oblast. Russian chemist. Corresponding member since 1976, and academician since 1987 of the Physical Chemistry and Technology of Inorganic Materials Department and of the Urals Department. He graduated from the S. M. Kirov Urals Polytechnical Institute in 1951 and joined the staff of the Institute of Chemistry of the Urals Department of the RAN. Since 1972, he has been Director of the Chemistry Institute in Ekaterinsburg (Sverdlovsk). The Institute of Chemistry, established in 1958, does research in high temperature synthesis of pure refractory combinations and polymer chemistry. He is also a member of the Urals Department. His work deals with the chemistry of refractory metals and their compounds. (GSE 29, p. 649.)

Sidorov, **Anatolii** F. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987; academician in 1993.

Simonov, Pavel V ..., D. Med. S. Born in 1926. Academician secretary to the Physiology Department of the Academy since October 1988. Corresponding member of the Physiology Department of the Academy since 1981; academician since 1987. From 1961 to 1983 he was Deputy Director and since 1983, he has been Director of the Higher Nervous Activity and Neurophysiology Institute in Moscow that was created in 1961 to research the general, comparative, and pathological physiology of the nervous system--including the physiology and morphology of Pavlovian conditioning and inhibition. The institute is subordinate to the Academy's Physiology Department. Since 1969, he has been Head of the Physiology of the Emotions Laboratory of that Institute. In 1979, he was awarded the I. P. Pavlov Prize in anatomy and physiology for his contributions to Russian Physiology.

Sinai, **Ia**. **G.**, D. PM. S. Academician of the General Physics and Astronomy Department of the Academy in 1993. He has been a senior researcher in the Mathematics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow. since '78.

Sitarian, Stefan A $\,$. D. Econ. S. Corresponding member of the Economics Department of the Academy since 1984; academician since December 1987.

Siuniaev, Rashid A. , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984; academician in 1993. Since 1975, he has been the Chief of the Relativistic Astrophysics Department of the Space Research Institute in Moscow that was established in 1965 and that coordinates the civilian space program in Russia.

Skarlato, Orest A., D. Bio. S. Born in 1920. Corresponding member of the General Biology Department of the Academy since 1981; academician in 1993. Since 1974, he has been Director of the Zoology Institute in St. Petersburg, that was established in 1931 and that has the primary responsibility for the study of Russia's fauna and for coordinating zoological research at other Soviet institutes.

Skok, **Vladimir I** ., D. Bio. S. Born in 1932. Corresponding member of the Biochemistry, Physiology, and Experimental Medicine Department of the Ukrainian Academy of Sciences since 1973. He has been an academician of the Physiology Department of the Academy since 1987. Secretary of the Ukrainian Department of Biochemistry, Physiology, and Experimental Medicine since 1974. He was named Vice President of the Ukrainian academy in 1988.

Skrinskii, Aleksandr N., D. PM. S. Born in 1936 in Orenburg. Russian physicist. Corresponding member since 1968, and academician of the Nuclear Physics Department of the AN SSSR and the RAN and of the Siberian Department since 1970. He graduated from Moscow State University in 1959. He joined the staff of the Institute of Nuclear Physics of the Siberian Department of the AN SSSR in 1959, becoming Deputy Director in 1972 and Director in 1977. He has been a professor at the University of Novosibirsk since 1969, holding the chair in nuclear physics. Since 1977, he has been Head of the Storage Rings Laboratory and Director of the Nuclear Physics Institute in Novosibirsk that is subordinate to the academy's Siberian Department. The institute was created in 1957 and is the leading nuclear research facility in Siberia. It studies controlled thermonuclear reactions, particularly magnetic confinement fusion, and accelerator technology. The institute is located on the shores of Lake Ob in Akademgorodok which is 35 km south of Novosibirsk. There are 21 research institutes and the Novosibirsk University located in Akademgorodok. The institute employs approximately 3, 000 scientific workers. His work includes high energy physics and physics and technology of charged-particle acceleration. In 1980, he was named to the Presidium of the Siberian Department of the Academy. Since 1988, he has served as Academician Secretary to the Nuclear Physics Department of the AN SSSR and the Russian Academy of Sciences. He developed, with others, a method of colliding beams. Lenin Prize, 1967. (GSE 23, p. 513.)

Skripov, Vladimir P. Corresponding member of the Physical Technical Problems of Power Engineering Department and of the Urals Department since December 1987; academician in 1993. In 1982, he received the I. I. Popzuinov Prize for his scientific work. Skulachev, Vladimir P. Born in 1935 in Moscow. Russian biochemist. Corresponding member of the Biochemistry, Biophysics, and chemistry of Physiologically Active Compounds Department of the Academy since 1974; academician in 1993. He graduated from Moscow State University in 1957, and joined the staff of the university in 1960. Head of the Department of bio-energetics of the interDepartmental laboratory of bio-organic chemistry from 1965 to 1973, and in 1973, he became head of that laboratory. His works are in the mechanics of biological oxidation. Recipient of the State Prize, 1975. Lenin Komsomol Prize in Science & Technology, 1967. The A. N. Bakh Prize, 1972. (GSE 23, p. 514.)

Smirnov, **Georgii** L., D. Phil. S. Born in 1922. Corresponding member of the Philosophy and Law Department of the Academy since 1981. Academician since December 1987. Since 1983, he has been Director of the Philosophy Institute in Moscow.

Smirnov, G. V., D. Econ. S. Academician of the Economics Department since 1993. He is a leading researcher in the Africa Institute and is heading a study on economic cooperation between the Soviet Union and the developing African States together with L. N. Aksiuk, Iurii M. Osipov, and one on control over exports in the African countries with S. A. Bessonov, G. I. Ruinstein.

Sobolev, Nikolai V., D. GM. S. Born in 1935. Geologist. Specialist in Mineralogy and petrology. Corresponding member of The Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1981, and academician since 1992. He graduated from L'vovsk State University in 1958. He worked at the Mineralogical museum at the university. In 1960 he joined the Geology and Geophysics Institute of the Siberian Department, working as a junior and senior researchers and head of the Laboratory of High Pressure Minerals (1973). In 1983, he became Deputy Director of that institute. He has been a professor since 1985. He was chairman the Scientific Council on the Natural Sciences for the Presidium of the Siberian Department for diamond deposits in 1983. He

became Vice President of the Mineralogy Society in 1982 and a member of the Mineralogy Specialists Association in 1982. In 1986 he became a member of the American Geophysical Society. He received the Lenin Prize in 1976.

Sobolev, Viktor V ., D. PM. S. Born in August 1915 in Petrograd. Russian Astronomer. He has been a corresponding member of the General Physics and Astronomy Department of the Academy since 1958, and an academician since 1981. He graduated from Leningrad State University in 1938, and became a professor there in 1948. His principal works have dealt with theoretical astrophysics. He has developed a theory of the spectra of variable stars. He has introduced new methods into the theory of radiation transfer and applied them to the solution of many astrophysical problems. He has investigated physical processes in gaseous nebulae and in the atmosphere of stars and planets. (GSE vol. 24, p. 218, and vol. 2, p. 450.)

Sokolov, Boris S., D. GM. S. Born in 1914 in Vyshnii Volochek, in what is now Kalinin Oblast. Russian geologist and paleontologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1958, and academician since 1968. He graduated from Leningrad State University in 1937 and taught there from 1937 to 1945 and from 1945 to 1958. In 1958, he started working at the Institute of Geology and Geophysics of the Siberian Department of the AN SSSR. He has been on the Novosibirsk University faculty from 1960, becoming a professor there in 1964. Since 1960, he has been Head of the Stratigraphy of Precambrian and Paleozoic Laboratory of the Geology and Geophysics Institute in Novosibirsk that was established in 1958 to discover and develop Siberian mineral resources. In 1972, he was made vice-President of the International Paleontological Union. He has been Academician Secretary of the geology, geophysics and geochemistry section of the Russian Academy of Sciences since 1975. His work is in the Paleozoic corals, Proterozoic and Cambrian Organisms, the history of the development of the organic world during the Precambrian, and the biostratigraphy during the first half of the Paleozoic. He identified the Wend complex. In 1974, he was elected President of the All-Union Paleontological Society of the AN SSSR. In 1975, he became a member of the Presidium of the Russian Academy of Sciences. Since 1968, he has been an honorary member of the Geological Society of Sweden, and since 1963, a member of the Geological Society of France. Lenin Prize, 1967. He received the coveted A. P. Karpinskii Gold Medal in 1979 for his work in geological research. (GSE 24, p. 280.)

Sokolov, Vladimir E., D. Bio. S. Born in 1928 in Moscow. Russian zoologist. Corresponding member of the General Biology Department of the Academy since 1970, and academician since 1985. Academician secretary of the General Biology Department of the National Academy of Sciences since 1985, and on the academy's Presidium since that date. He graduated from the biology Department of Moscow State University in 1950. From 1953 to 1956, he worked at the Moscow Institute of the Fish-Processing Industry. In 1956, he joined the subdepartment of vertebrate zoology at Moscow State University, becoming a professor there in 1966. Since 1967, he has been Director and laboratory head of the A. N. Severtsov Evolutionary Morphology and Ecology of Animals Institute in Moscow, that was founded in 1949 and subordinate to the academy's General Biology Department, the institute studies the evolutionary process and analyzes the transformation of living creatures. It also researches porpoises, lower aquatic animals, and soil biology. DIn 1973, he became President of the All-Union Theriologic Society. His works are in ecological morphology, hydrobionics, ecology, and mammalian taxonomy and chemical communication. In 1975, he received the A. N. Severtsov Prize in biology and animal morphology. (GSE 24, p. 282.)

Solomenko, Nikolai S. Born in 1923. Academician of the Problems of Machine Building and Control Processes Department of the Academy since 1984. In 1983, he was elected a member of the U.S.S.R. National Committee on Theoretical and Applied Mechanics. Since 1985, he has serveed as First Deputy Chairman of the Presidium of the St. Petersburg Scientific Center that was founded in 1982. He is author of more than 140 scientific works

in the field of mechanics and control processes. He is a holder of the U.S.S.R. State Prize for his research. He heads the Scientific Council on Problems of Automation and Control of the Academy's Inter-Agency Coordinating Council in St. Petersburg.

Spasskii, Igor D., D. Tech. S. Corresponding member of the Problems of Machine Building and Control Processes Department of the Academy since 1984. Academician since December 1987. Holder of the Lenin and U.S.S.R. State Prizes for his work in developing large power machine building complexes.

Spirin, Aleksandr S., D. Bio S. Born in 1931 in Kaliningrad, Moscow Oblast. Russian biochemist. Academician of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the AN SSSR and the RAN since 1970. He graduated from Moscow State University in 1954, where he studied under A. N. Belozerskii. From 1962 to 1967, he was head of a laboratory at the A. N. Bakh Institute of Biochemistry of the AN SSSR. Since 1967, he has been director of the Pushchino Protein Research Institute that was established in 1967 as one of four institutes comprising the Science Research Center at Pushchino. It conducts research on protein structure and the biosynthesis of polypeptide chains. Since 1974, he has also been Chief of the Mechanisms of Protein Biosynthesis laboratory of the institute. His works are in the biochemistry of nucleic acids and the biosynthesis of proteins. Lenin Prize, 1976. (GSE 24, p. 426.)

Stepanov, **Iurii S** ., D. Phlg. S. Born in 1930. Corresponding member of the Language and Literature Department of the Academy since 1984; acadmician in 1993.

Stepin, Viacheslav S., D. Phil. S. Corresponding member of the Philosophy and Law Department of the Academy since December 1987; academician in 1993. In 1988, he was named the Director of the Philosophy Institute in Moscow that dates back to 1929 and researches all aspects of philosophy. It was in this institute that the first sociological sections were formed. The Institute for Sociological Research and the Institute of Concrete Social Research both grew out of this institute.

Strakhov, Vladimir N., D. PM. S. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987; academician in 1993. In 1991, he was Director of the O. Iurii Shmidt Earth Physics Institute in Moscow and head of the Earth's Bowels and Planet's Physics Department as well as head of the Geopotential Fields Interpretation Theory Laboratory of that Department. (Letter of Dr. V. N. Strakhov dated 14 November 1991.)

Stroev, E. A.

Struminskii, Vladimir V ., D. Tech. S. Born in 1914 in Orenburg. Russian specialist in aerodynamics, aircraft, and the theory of airplane design. Academician of the Problems of Machine Building and Control Processes Department of the Academy since 1966. Also member of the Siberian Department. He graduated from Moscow State University in 1938, worked at the N. E. Zhukovskii Central Aerodynamic and Hydrodynamic Institute from 1941 to 1966. He served as Director of the Institute of Theoretical and Applied Mechanics of the Siberian Department from 1966 to 1971. In 1971, he became Director of the Department of Physical Aeromechanics in the Institute of Problems of Mechanics of the AN SSSR. His works are in the theory of three-dimensional boundary layer and the vortex wing theory. His contributions have been important in achieving supersonic flight speeds. Recipient of the State Prize, 1947 and 1948; the N. E. Zhukovskii First Prize and Gold Medal, 1947, and the Lenin Prize, 1961. (GSE 24, p. 606.)

Strunnikov, Vladimir A. D. Bio. S. Born in 1914 in Tambov. Russian geneticist. Corresponding member of the General Biology Department of the Russian Academy of Sciences since 1976, and academician since December 1987. He graduated from Tashkent Agricultural Institute in 1936. He worked at the Central Asian SRI of Sericulture from 1936 to 1939 and from 1945 to 1963. He became head of the breeding and genetics section in 1938. From 1963 to 1968, he was a professor at the University of Tashkent. Since 1968, he has headed the Laboratory of Reproduction and Sex Regulation at the N. K. Koltsov Institute of Developmental Biology of the Russian Academy of Sciences. His works are in the genetics and selection of the silkworm. In 1981, he was given the I. I. Mechnikov Gold

Medal in recognition of his contributions to Russian scientific development. (GSE 30, p. 665.)

Styrikovich, Mikhail A ., D. Tech. S. Born November 1902 in St. Petersburg. A high temperature scientist and thermal power engineer. He was a corresponding member of the national academy from 1946 until 1964. Since 1964, he has been an academician of the Physical Technical Problems of Power Engineering Department of the academy. Since 1965, he has served on the Presidium of the Academy. From 1977, he was a board member of the GKNT general assembly. He graduated from the Leningrad Institute of Technology in 1927. From 1928-46, he worked at the Boiler and Turbine Institute and taught at the Moscow Power Engineering Institute from 1939-71. From 1939-60 he worked at the Institute of Power Engineering of the Academy becoming head of the Department of mass exchange of the Laboratory of High Temperatures that since 1962 has been called the Institute of High Temperatures of the Academy. His principal research thrusts are in the development of heat and power installations, working processes of steam boilers, problems of heat transfer in boiling liquids under high pressures. He developed standards for thermal and aerodynamic calculations of boiler units. He has done research in aerodynamics, heat and mass exchange, scale formations under conditions of two-phase flow, structure of boiling boundary layers, and mass exchange and physicochemical processes in magneto hydrodynamic generators. He is an honorary Vice President of the International Executive Council of the World Energy Conference and Vice President of the International Center for Heat and Mass Transfer. In 1988, he was appointed an advisor to the national academy's Presidium . (GSE 25, p. 183.)

Subbotin, Valerii I ., D. Tech S. Born in 1919 in Baku. Russian specialist in high temperature physics. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1968; and, academician since December 1987. He was made a member of the Presidium in October 1988. He graduated from Baku Industrial Institute in 1942. From 1943 to 1948, he served on the board of the Caucasus Power Engineering Complex and from 1948 to 1953, he was a research worker at the Institute of Power Engineering of the Azerbaijan Academy of Sciences. In 1953, he joined the staff of the Institute of Physics and Energetics in the city of Obninsk, becoming deputy director in 1969. He is also head of the subdepartment of high-temperature physics at the Moscow Physical Engineering Institute where he became a professor in 1960. Lenin Prize, 1964. (GSE 25, p. 187.)

Surkov, Viktor S., D. GM. S. Born in 1926. Geologist. Geophysicist. Specialist in regional geology and geophysics. Corresponding member since 1979, and academician since December 1987--of the Geology, Geophysics Geochemistry, and Mining Sciences Department of the Academy. He graduated from the Kazan State University imeni V. I. Ul'ianov-Lenin in 1950. From 1950 to 1962, he worked in the Siberia-physics Ministry of Geology of the U.S.S.R., and was the Head engineer on several scientific expeditions. In 1962, he joined the Siberian Scientific Research Institute of Geology, Geophysics and Mineral Raw Materials subordinate to the Geology Ministry of the SSSR, becoming Deputy Director in 1971, and Director in 1973. The institute researches petroleum and gas deposits in the Krasnoiarsk region. It is under the Ministry of Geology. He became General Director of "Sibgeo" (NPO) in 1987. He is the scientific curator for the Geology Ministry of Russia for the regional geological and geophysical collections of Siberian and the Far East. He heads the section on regional geophysics of the national council for geophysical research. He holds several medals awarded for his scientific accomplishments.

Sushchenia, Leonid M., D. Bio. S. Born in 1929. Corresponding member since 1979, and academician of the Biological Sciences Department of the Byelorussian Academy of Sciences since 1980. Academician of the Russian Academy of Sciences General Biology Department in 1993.

Sviderskii, **Vladimir** L. , D. Bio. S. Born in 1931. Corresponding member since 1981. Academician of the Physiology Departmenta of the Academy since December 1987. Since 1982, he has been Director of the I. M. Sechenov Evolutionary Physiology and Biochemistry

Institute in St. Petersburg. that is subordinate to the academy's Physiology Department. It was created in 1956 and studies the problems of evolutionary physiology and the biological effects of radiation. In 1986, he was the recipient of the L. A. Orbeli Prize in physiology for his contributions to Russian physiology.

Svishchev, Georgii P ., D. Tech. S. Born in 1912 in St. Petersburg. Russian scientist, specialist in aviation and mechanics. Academician of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since 1976. Since 1985, member of the Presidium of the national academy of sciences. In 1988, he was appointed an advisor to the national academy's Presidium. He graduated from the Moscow Institute of Dirigible Construction in 1935 and worked in a design bureau for dirigible construction. From 1940 to 1954, he worked in the N. E. Zhukovskii Central Aerohydrodynamics Institute, becoming Deputy Director in 1950. From 1954 to 1967, he headed the P. I. Baranov Central Institute of Aircraft Engine Construction. In 1967, he was made Director of the N. E. Zhukovskii Aerohydrodynamics Institute of the Ministry of the Aviation Industry in Moscow. Established in 1918, the institute performs aerodynamic strength calculations on aircraft and coordinates research on aviation technology. His works were in aerodynamics of aircraft and engine installations. Recipient of the State Prize, 1946 and 1952. (GSE 23, p. 637.)

Armen L., D. Bio. S. Born in 1910 in Susha, Nagorno-Karabakh Autonomous Oblast. Russian botanist. Corresponding member since 1966, and academician since 1972 of the General Biology Department of the Russian Academy of Sciences. Since 1971, he has been an academician of the Biological Sciences Department of the Armenian Academy of Sciences. He graduated from the All-Union Institute of Sub-tropical Crops in Tbilisi in 1932. From 1938 to 1948, he headed a subdepartment at the University of Erevan and from 1944 to 1948, he was Director of the Botanical Institute of the Armenian Academy of Sciences. From 1949 to 1961, he was a professor at Leningrad State University, while also serving as head of a Department of the Botanical Institute of the AN SSSR. He has been Vice President of the International Union of Biological Sciences since 1970, and, since 1973 he has been President of the All-Union Botanical Society. From 1978 to 1986, he was Director of the V. L. Komarov Botany Institute in St. Petersburg. This institute was founded in 1714 and is one of the most important in the world. It is the primary botanical research institute in Russia. His works deal with the systematics, evolutionary morphology, and phylogeny of higher plants; the origin of angiosperms, and with phyto-geography and paleobotany. He is a member of the U.S. Academy of Sciences and of many other foreign societies. V. L. Komarov Prize, 1969. (GSE 25, p. 33.)

Talanov, **Vladimir I.**, D. PM. S. Born in 1933. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987; academician in 1993. Since 1960 he has been a senior researcher in the Radio Physics Scientific Research Institute at the Gorkiy State University, that was established to research in plasma physics, spectroscopic systems and microwave devices.

Tarchevskii, **Igor A** ., D. Bio S. Born in 1931. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981, and academician since December 1987. Since 1976, he has been Director of the Biology Institute at Kazan', that is subordinate to the academy's Kazan' affiliate. Established in 1945, the institute studies the natural resources of the Tatar Autonomous Republic.

Tartakovskii, Vladimir A ., D. Chem. S. Born in 1936. Corresponding member of the General and Technical Chemistry Department of the Academy since 1987; academician in 1993. In 1958, he was listed as a senior researcher in the N. D. Zelinskii Organic Chemistry Institute in Moscow. (LDA 11378.)

Tatarinov, **Leonid P** ., D. Bio. S. Born in 1926 in Tula. Russian geologist. Corresponding member of the General Biology Department since 1974 and academician since 1981. He graduated from Moscow State University in 1949; worked at the Paleontology Institute in Moscow from 1955 heading its laboratories from 1960 to 1972,

and, became its Director in 1975. The institute was established in 1930 to do research in paleobotany, paleozoology, and paleoecology. It is subordinate to the academy's General Biology Department. His work is in evolutionary zoology. Recipient of the State Prize, 1978. (GSE 25, p. 412.)

Tavkhelidze, **Albert N** ., D. PM. S. Born in 1930. Corresponding member since 1984; academician in 1993. Since 1974, academician of the Physical and Mathematical Sciences Department of the Georgian Academy of Sciences. From 1977 to 1987, he was Director of the Nuclear Research Institute in Moscow that was created in 1971 to conduct theoretical physics research in particle physics, astrophysics, and quantum mechanics. It has a meson factory. It is subordinate to the Nuclear Physics Department of the academy. Since 1986, he has been President of the Georgian Academy of Sciences.

Tikhvinskii, Sergei L., D. Hist. S. Born in 1918 in Petrograd. Russian historian and diplomat; ambassador extraordinary and plenipotentiary. Corresponding member of the History Department of the Academy since 1968, and academician since 1981. He carried out diplomatic work in China, Great Britain, and Japan from 1939 to 1957. In 1958, he became a professor at the Moscow Institute of International Relations. He has served as Director of the Institute of Sinology of the Russian Academy of Sciences since 1960. He was assistant Director of the Institute of the Peoples of Asia of the AN SSSR from 1961 to 1963 and of the Institute of the Economics of the World Socialist System of the AN SSSR in 1963 and 1964. In 1974, he became editor-in-Head of Novaia i noveishaia istoriia (Modern and Contemporary History). In the 1970s, he was on the editorial council for publications of the Institute of the History of Natural Science and Technology of the AN SSSR. His works deal with the modern history of the Far East, particularly China, and the history of International Relations. From 1968 to 1974, he represented the U.S.S.R. on the executive board of UNESCO. In 1971, he became chairman of the Palestinian Society of Russia of the Russian Academy of Sciences. He is a member of the Commission for Publication of Diplomatic Documents under the Ministry of Foreign Affairs of the U.S.S.R. (GSE 25, p. 649.)

Tikhodeev, **Nikolai N**. Born in 1927. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1979; academician in 1993.

Tishchenko, **Marat N.** Born in 1931 in Kharkov. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since December 1987; academician in 1993. He graduated from the S. Ordzhonikidze Moscow Institute of Aviation in 1956, and began work in the aviation industry. Since 1970, he has been Head designer at the M. L. Mil' Experimental Design Office. His work is mainly in the design of several types of helicopters. He holds the Lenin Prize. (GSE 30, p. 668.)

Titov, Vladimir M., D. PM. S. Born in 1933. Specialist in the physics and the mechanics of impulses, and of their explosive processes. Corresponding member of the Problems of Machine Building and Control Processes Department of the Academym since 1979, and academician since 1992. He graduated from the Moscow Physico-Technical Institute in 1957. In 1960 he joined the Institute of Hydrodynamics of the Siberian Department. In 1974, he became Deputy Director, and in 1986 he was made Director of that institute. He is a professor, holding the chair in the physics of explosive processes at the Novosibirsk State University. He is on the nation Scientific Council on Theoretical and Applied Mechanics (1976) and Head editor of The Physics of Corrosion and Explosionsince 1981.

Tolstikov, **Genrikh A.** , D. Chem S. Born in 1933. Academician of the General and Technical Chemistry Department of the Russian Academy of Sciences since 1987, and first deputy chairman of the Urals Department since 1988. Since 1977, he has been Director of the Chemistry Institute in Ufa. Established in 1960, it studies the methods of processing sulfur crudes into fuels. Chairman of the Bashkir Affiliate since 1984.

Tolstoi, **Nikita** I ., D. Phlg. S. Corresponding member of the Language and Literature Department of the Academy since 1984. Academician since December 1987.

Topornin, Boris N . Born in 1929. Corresponding member of the Philosophy and Law Department of the Adaemy since December 1987; academician in 1993. The State and Law Institute in Moscow is under the direction of Boris N. Topornin, It traces its beginnings back to the establishment of a section on Soviet Construction at the Socialist Academy-the Communist Academy-in 1923 and was initially organized as the Soviet Construction Institute in 1925. It passed through several name changes and reorganizations until in 1960 its present name was finally adopted.

Toporov, V. N.

Trapeznikov, Vadim A., D. Tech. S. Born in 1905 in Moscow. Russian scientist in electrical-machine building, automation, and control processes. Academician since 1960. Originally elected to the Technical Sciences Department. He graduated in 1928 from the Moscow Higher Technical School and served on the staff of the All-Union Electrotechnical Institute until 1933. From 1930 to 1941, he taught at the Moscow Power Engineering institute becoming a professor in 1939. He joined the staff of the Institute of Automation and Telemechanics (now the Institute of Problems of Controls) in 1941 and became its Director in 1951. He became head of a subdepartment of the Moscow Physicotechnical Institute in 1954 and chairman of the National Committee of the U.S.S.R. on Automatic Control in 1959. He was selected as first deputy chairman of the GKNT in 1965. From 1951 to 1987, he served as Director of the Control Problems Institute in Moscow. The institute was founded in 1939 and is jointly subordinate to the academy's Mechanics and Control Processes Department and the Ministry of Instrument Making, Automation Equipment and Control Systems. It specializes in automation research, systems analysis and computer modeling. His works have included design, construction of electrical machines and transformers, developing techniques for building high-speed automatic devices and modular automatic systems, methods of simulating automatic control systems, and studies of the economics of scientific and technological progress. Recipient of the State Prize, 1951. (GSE 26, p. 318.)

Trefilov, Viktor I ., D. PM. S. Born in 1930. Academician of the Physical and Technical Problems of Materials Science Department since 1973. Since 1987, he has been an academician of the Physics, Chemistry, and Technology of Inorganic Materials Department of the Academy. He has acted as Director of the Problems of Materials Science Institute in Kiev since 1973, that was established in 1955 to develop high temperature materials, to study problems of the structure of solids, and to coordinate all powder metallurgy in Russia. He has served as a Vice President of the Ukrainian academy since 1974 and was reelected in 1988.

Tretiakov, Iurii D., D. Chem. S. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1984, and academician since December 1987.

Trofimuk, Andrei A., D. GM. S. Born in 1911 in Brest Oblast. Russian petroleum geologist. Corresponding member, 1953, and since 1958, he has been an academician of the Geology, Geophysics, Geochemistry, and Mining Department of the National Academy and of the Siberian Department. He graduated from the University of Kazan' in 1933 and began work in the petroleum industry. In 1953, he became Deputy Director and in 1955, the Director of the All-Union Oil and Gas Scientific Research Institute. In 1957, he was made Director of the Geology and Geophysical Institute of the AN SSSR in Novosibirsk that was established in 1958 to conduct basic geological research in the discovery and development of the mineral wealth of Siberia. Since 1958, he has acted as Head of the Petroleum Geology Laboratory of the Geology and Geophysical Institute in Novosibirsk. Since 1963, he has been on the Presidium of the National Academy. He has served as deputy chairman of the Siberian Department since 1965. In 1985, he became chairman of the Scientific Council for the Siberia Program. In 1988, he was appointed advisor to the national academy's Presidium. His work is in prospecting and developing petroleum deposits. He took part in the discovery of the Volga-Urals Oil-Gas Region, and helped develop methods for exploiting those deposits. He was a deputy to the 6th through the 8th convocations of the

Supreme Soviet of the U.S.S.R. State Prizes in 1946 and 1950. In 1974, he shared the I. M. Gubkin Prize with V. S. Vishemisrskii and A. E. Kontorovich. The prize is named after the renowned petroleum geologist and engineer. (GSE 26, p. 371.)

Trubachev, **Oleg N.**, D. Phlg. S. Born in 1930 in Volgograd. Russian linguist. Corresponding member of the Literature and Langauage Department of the Academy since 1972; academician in 1993. He graduated from the Dnepropetrovsk Univerity in 1952. He became deputy director of the Russian Language Institute in 1966 and has served as head of the institute's sector on etymology and onomastics. His works are on the etymology of Slavic languages and on East Slavic onomastics. He has been editor-in-Head of Etimologiia since 1963. (GSE 26, p. 389.)

Trubetskoi, $Kliment\ N$. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987; academician in 1993.

Trukhanovskii, Vladimir G . Born in 1914. Russian historian. Corresponding member of the History Department of the Academy since 1964; academician in 1993. He graduated from the M. N. Pokrovskii Pedagogical Institute in 1940 and from the Higher Diplomatic School of the Ministry of Foreign Affairs of the U.S.S.R. in 1941. From 1941 to 1953, he was in diplomatic work. In 1947, he became head of the subdepartment of world history and then of the subdepartment of the history of International relations and foreign policy of the U.S.S.R. at the Moscow State Institute of International Relations. From 1957 to 1960, he served as Deputy Director of the Institute of History of the AN SSSR where he was a senior research worker from 1953 to 1957. In 1960, he became editor-in-Head of the journal Voprosy istorii (Problems of History). In the 1970s, he was on the editorial council for publications of the Institute of the History of Natural Science and Technology of the AN SSSR. His works deal with 20th century Britain and with the history of the International relations and foreign policy of the U.S.S.R. (GSE 26, p. 394.)

Trutnev, Iurii A . Born in 1927 in Moscow. Russian theoretical physicist. Corresponding member since of the Nuclear Physics Department of the Academy since 1964; academician in 1993. He graduated from Leningrad State University in 1950. His main works are in theoretical physics. He is a holder of the Lenin Prize. (GSE 26, p. 397.) Tsidilkovskii, Isaak M. , D. PM. S. Russian physicist. Corresponding member of the General Physics and Astronomy Department and of the Urals Department since December 1987; academician in 1993. In 1964, he was listed as a senior researcher of unknown affiliation at the Metal Physics Institute in Ekaterinsburg (Sverdlovsk) that was established in 1932 to work in magnetism and metal physics. In 1978, he received the A.

Tsypkin, **Iakov**, **Z**. , D. Tech. S. Born in 1919. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1974; academician in 1993.

F. Ioffe Physics Prize.

Tuchkevich, Vladimir M. , D.PM. S. Born in 1904 in Chernovtsy Oblast. Russian physicist. Academician of the Physical Technical Problems of Power Engineering Department of the Academy since 1970. Since 1971, he has been on the Presidium of the academy. He graduated from the University of Kiev in 1928, and joined the staff of the Ukrainian Meteorological Institute. From 1931 to 1935, he was on the staff of the All-Ukrainian Institute of Roentgenology and from 1935-36 on the staff of the Leningrad X-Ray Institute. In 1936, he joined the staff of the Leningrad Physicotechnical Institute, becoming its Director in 1967. He taught at the Kharkov Electrical Engineering Institute from 1931 to 1935, and at the Leningrad Polytechnic Institute from 1935 to 1960. From 1967 to 1987, he served as Director of the A. F. Ioffe Physical Technical Institute in St. Petersburg that was founded in 1918 to do research in semiconductor physics, mathematical physics, plasma physics, and astrophysics. According to one source the institute employs approximately 2500 scientists, 500 of whom hold the doctors degree. It is subordinate to the academy's General Physics and Astronomy Department. His main works are in the physics of semiconductors and the development of semiconductor devices.

He devised the X-Ray dosimeter and developed a system for demagnetizing ships. In 1988, he was appointed an advisor to the national academy's Presidium. Lenin Prize, 1966. In 1982, he shared the B. P. Konstantinov Prize in physics with B. A. Mamirin and L. Sh. Tsemekhman. (GSE 26, p. 408.)

Tupolev, Aleksei A., D. Tech. S. Born in 1925 in Moscow Russian aircraft designer. Academician of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984. He graduated from the Moscow Institute of Aviation in 1949. In 1942, he joined the staff of his father's experimental design office where he became a senior designer in 1963 and Head designer in 1973. He has directed the design of several supersonic aircraft. Recipient of the State Prize, 1967. (GSE 26, p. 439.) Turpaev, Tigran M., D. Bio. S. Born in 1918 in Astrakhan. Russian physiologist. Corresponding member of the Physiology Department of the Academy since 1972; acadmician in 1993. He graduated from the Department of biology of Moscow State University in 1941. From 1941 to 1946 he served in the Red Army. In 1948, he was a research worker at the A. N. Severtsov Institute of Animal Morphology of the AN SSSR and in 1961, he became head of one of that institute's laboratories. In 1969, he was made Head of the Physiology Laboratory of the N. N. Koltsov Developmental Biology Institute in Moscow and from 1976 to 1988, he served as Director of that institute. Founded in 1967, the institute researches the mechanisms of growth and development on the molecular, subcellular and cellular tissue, and whole organism levels. It is subordinate to the academy's General Biology Department. His works are primarily in comparative physiology and the physiology of the transmission of nerve impulses in chemical synapses. He is presently heading the general physiology reearch group in the N. K. Koltsev

Utkin, Vladimir F., D. Tech. S. Born in 1923. Academician of the Mechanics Department of the Ukrainian Academy of Sciences since 1976. Academician since 1984-of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy. Member of the Presidium since October 1988.

Developmental Biology Institute in Moscow. (GSE 26, p. 517.)

Vainshtein, Boris K., D. PM. S. Born in July 1921 in Moscow. Russian crystallographer. He has been a corresponding member of the academy since 1962, and an academician since 1976 of the General Physics and Astronomy Department. He was originally elected to the Physical Mathematical Sciences Department. He graduated from Moscow State University in 1945, and from the Institute of Steel in 1947. He began work at the A. V. Shubnikov Crystallography Institute in 1949. He headed a laboratory there from 1958, and became the institute's Director in 1962. His principal works are in the field of structural analysis of crystals, the theory of the diffraction of electrons and roentgen rays, and research on the structure of albumen molecules. Vainshtein, Z. G. Pinkser and others developed a method of structural electronography and worked out its theoretical foundations. He was the first to define the position of hydrogen atoms in a series of crystals and to analyze the structures of many complex and organic compounds. The A. V. Shubnikov Crystallography Institute in Moscow was established in 1944 to investigate the structure and physical properties of crystals. (GSE 4, p. 470.)

Valiev, Kamil A., D. PM. S. Born in January 1931 in the village of Verkhnii Shander, Mamadysh Raion, Tatar ASSR. Russian specialist in semiconductor microelectronics. Since 1972, he has been a corresponding member of the academy, and an academician of the Information Sciences, Computer Technology, and Automation Department since 1984. In 1985, he was elected deputy academician-secretary of the academy's new Information Sciences Department. He graduated from Kazan' University in 1954. From 1957 to 1964 he taught at the Kazan' Pedagogical Institute. He was made a professor in 1966. He was head of a Department at a ministerial Scientific Research Institute from 1964-5, and Directororganizer of the Microelectronics Scientific Research Institute at Zelenograd, under the Ministry of the Electronics Industry from 1965 to 1977. In 1977, he was named the head of a Department at the Institute of Space Research of the AN SSSR. In 1984, he became Director of the Microelectronics Institute in Yaroslavl that is jointly subordinate to the

General Physics and Astronomy Department and to the Information Sciences, Computer Technology, and Automation Department of the academy. The institute is a center for solving computer technology problems. His principal works deal with electron paramagnetic resonance, nuclear magnetic resonance and the production technology of integrated circuits. He also became a Deputy Director of the Institute of General Physics of the academy in 1984. He holds the Lenin Prize and the Azerbaijan SSR State Prize. (GSE 30, p. 676.)

Vasil'ev, Oleg F., D. Tech. S. Born in 1925 in Moscow. Russian scientist in the fields of applied hydrodynamics and hydraulics. Academician of the Problems of Machine Building, Mechanics, and Control Processes Department of the Russian Academy of Sciences and of the Siberian Department since 1992. He has authored or co-authored 250 scientific works of which four are major monographs. He graduated from the Moscow Institute of Hydromelioration in 1948 and taught at the Moscow Institute of Engineering and Construction until 1959. In 1970, he began working in the Department of applied hydrodynamics in the Institute of Hydrodynamics of the Siberian Department of the AN SSSR. The institute was established in 1957 to conduct theoretical and experimental research on gases, plasma, and the mechanics of fluids. From 1977 to 1980, he served as Deputy Director and head of a Department and as a specialist at the Institute of Applied Systems Analysis in Austria. In 1980, he organized and was head of a Laboratory on the Hydrophysics and Ecology of Reservoirs of the Hydrodynamics Institute of the Siberian Department. In 1985 he was the organizer, and in 1987 was named the Director of the Water and Ecological Problems Institute in Barnaul that was subordinate to the Siberian Department. His works are in the theory of non-stationary and eddy currents of liquids and gases, the hydraulics of open river beds, pipe systems, and hydraulic works. Since 1962, he has been a professor at the Novosibirsk State University, and from 1980 to 1987, he was on the faculty of the Engineering Institute in Novosibirsk. He has directed the work of three doctorate students and 25 aspirants for the candidate degree. He has been on the Council on the Biosphere since 1970, on the Council on Mathematical Modeling since 1987; on the Presidium's National Committee on Theoretical and Applied Mechanics, and a member of InterDepartmental Association Reservoir Research. He was made an honorary member of the Hungarian Hyodrological Society in 1978 and received an honorary doctorate in engineering sciences from an East German University in 1985. (GSE 4, p. 525.) Vatolin, Nikolai A., D. Tech. S. Born in 1926. Academician of the Physical Chemistry and Technology of Inorganic Materials Department and of the Urals Department since 1981. Since 1967, he has been Director of the Metallurgy Institute at Ekaterinsburg (Sverdlovsk) that is subordinate to the academy's Urals Department. The institute develops physical-chemical fundamentals for new metallurgical processes. From 1980 to 1988, he served as deputy chairman of the Urals Department.

Velikhov, Evgenii P ., D. PM. S. Born in 1935 in Moscow. Russian theoretical physicist. Since 1974, he has been an academician of the General Physics and Astronomy Department of the Academy and since 1984, he has acted as academician secretary of the Information Science, Computer Technology, and Automation Department of the Academy. He graduated from Moscow State University in 1958 and began working in the Institute of Atomic Energy at once becoming head of one of its Departments in 1962. He has been a professor at Moscow State University since 1968. From 1971 to 1988, he served as deputy director of the I. V. Kurchatov Atomic Energy Institute in Moscow. In December of 1988, he was named director of this important institute that was created in 1943 to develop nuclear weapons. It is the largest institute in Russia that concentrates on nuclear research that includes all aspects of atomic energy, including plasma and solid state physics, fission and fusion reactors, and lasers. The institute is directly subordinate to the State Committee for Utilization of Atomic Energy. Since 1977, he has served as Vice President for the Physical and Mathematical Sciences Section of the academy. Since 1978, he has headed the Geophysical laboratory of the High Temperatures Institute in Moscow. Since 1978, he has served as a member of the Board of the general assembly of the GKNT. Since 1984, he has

been deputy director for science of the Industrial Lasers Scientific Research Center in Troitsk that is under the U.S.S.R. Academy of Sciences. The center is comprised of scientific research divisions, a design bureau, and an experimental production facility that develops and introduces laser tools and methods into industry. His works are in low-temperature physics, plasma and magnetic hydrodynamics. Current member of Editorial board of Science in the U.S.S.R. Since 1986, he has been a Candidate Member of the Central Committee of the CPSU. In 1986, he was the recipient of the M. D. Millionshchikov Prize in atomic power engineering. (GSE 4, p. 565.)

Vinogradov, Vladimir A . Born in 1921 in Kazan'. Russian economist. Corresponding member of the History Department of the Academy since 1966, and academician since 1988. Deputy secretary since April 1988. He graduated from the Moscow Institute of International Relations in 1948 and began work in the Presidium of the AN SSSR. Since 1967, he has simultaneously headed a sector of the Institute of World Economics and International Relations. Since 1961, he has been deputy to the Head scholarly secretary of the Presidium of the AN SSSR. From 1954 to 1960, he taught in the subdepartment of political economy at Moscow State University. In the 1970s, he was on the editorial council for publications of the Institute of the History of Natural Science and Technology of the AN SSSR. His work is in the economic history of the U.S.S.R. and other socialist countries. He is vice-President of the International Economic History Association (1968) and on the Soviet Commission on UNESCO Affairs. Since 1972, he has been Director of the Scientific Information on Social Sciences Institute in Moscow that was established in 1969. The institute collects sociological data and compiles bibliographic and reference works. In 1970, he received the N. G. Chernishev Prize. (GSE 5, p. 481.)

Vinogradov, Mikhail E. , D. Bio. S. Born in 1927. Corresponding member o;f the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1984; academician since 1993, Since 1959, he has been Head of the Plankton Laboratory and since 1968, he has served as Deputy Director of the P. P. Shirshov Oceanology Institute in Moscow that was established in 1946 and is now the largest Russian research institute for the marine sciences. It is subordinate to the academy's Oceanology, Atmospheric Physics, and Geography Department. Since 1977, he has been Head of the Biology Division of the Shirshov Oceanology Institute.

Vitushkin, **Anatolii G** . Born in 1931 in Moscow. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1976; academician since 1993. He graduated from Moscow State University in 1954. He joined the Steklov Institute of Mathematics staff in 1965. His works are in mathematical analysis and its application. (GSE 30, p. 679.)

Vladimirov, Vasilii S ., D. PM. S. Born in 1923 in Leningrad Oblast. Russian mathematician. He became an academician of the Mathematics Department of the Academy in 1970, and Deputy Academician Secretary of the Department in August 1988. He graduated from Leningrad State University in 1948. He began working at the V. A. Steklov Institute that same year. In August 1988, he was selected to be the Director of the famous V. A. Steklov Mathematics Institute in Moscow. His works are on transport equations, quantum field theory, generalized solutions of equations in convolutions, holomorphic functions of many complex variables, the theory of multi-dimensional linear passive systems, the geometric theory of numbers, quadratic formulas for functional integrals, the monte-carlo method, and pulur-subharmonic functions. Recipient of the State Prize, 1953. (GSE 5, p. 535.)

Voitsekhovskii, Bogdan V . Born in 1922 in Soroka, Virinitsa Oblast. Russian hydrodynamics specialist. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy and of the Siberian Department since 1964, and academician since 1990. He graduated from the Moscow Engineering Physics Institute in 1953. Since 1958, he has been head of a division of the Hydrodynamics Institute of the Siberian Department of the AN SSSR and the Russian Academy of Sciences, and from 1965 to 1973, he served as its Deputy Director. In 1973 he

was named head of a laboratory at the Hydrodynamics Institute. The institute performs theoretical and experimental research in the mechanics of fluids, gases, and plasma. His works are in the detonation of gases, high-head pulsed and continuous jets, pulse hydraulic drives and their uses in breaking rocks, percussion drilling, and metal-working. From 1963 to 1973, he was a professor holding the chair in explosive processes at the Novosibirsk State University. He has written 13 scientific works of which two are major monographs, co-authored another 72, and has 99 inventions to his credit. Lenin Prize, 1965. (GSE 5, p. 55.)

Volobuev, Pavel V . Born in 1923 in Evgenovka, Kazakh SSR. Russian historian. Corresponding member of the History Department of the Academy since 1970; academician since 1993. He graduated from Moscow State University's history Department in 1950. He became a senior researcher at the Institute of History of the AN SSSR in 1955 and head of its section for the publication of the multi-volume history of the U.S.S.R. in 1966. In 1969, he became Director of the Institute of the History of the U.S.S.R. of the Russian Academy of Sciences. His works concern the economics, politics, and social bases of the history of the Great October Socialist Revolution and its historiography. (GSE 5, p. 576.)

Vol'pin, Mark E., D. Chem. S. Born in 1923. Academician of the General and Technical Chenistry Department of the Academy since December 1987. Since 1967, he has been Deputy Director of the A. N. Nesmeianov Elementoorganic Compounds Institute in Moscow. Corresponding member since 1979. In 1982, he was the recipient of the A. N. Nesmeianov Gold Medal for his work in chemistry. The award was named after the renowned organic chemist.

Vonsovskii, Sergei V., D. PM. S. Born in August 1910 in Tashkent. Russian physicist. He has been a corresponding member of the academy since 1953, and an academician since 1966 of the General Physics and Astronomy Department. He was originally elected to General and Applied Physics Department. He graduated from Leningrad State University in 1932, and from 1932 to 1939, he worked at the Urals Engineering Physics Institute in Ekaterinsburg (Sverdlovsk). From 1939 to 1947, he worked at the Metallography Institute, and at the Physics of Metals and Metallurgy of the Urals branch of the AN SSSR. His principal works have dealt with the theory of the magnetic and electric properties of metals and semiconductors, the theory of ferromagnetism, and the theory of superconductivity. He proposed the so-called polar model (with S. P. Shubin) and the s-d model of ferromagnetics. On the basis of these models, Vonsovskii and his colleagues constructed a general theory of ferromagnetics close to the Curie point, and he has explained fractional atomic moments and some characteristics of kinetic properties as well as describing the effect of the multiplicity of the magnetic ions of these substances. Since 1967, he has been Deputy Director of the Metals Physics Institute in Ekaterinsburg (Sverdlovsk). From 1971 to 1986, he served as chairman of the Urals Scientific Center. In 1988, he was appointed an advisor to the national academy's Presidium. (GSE vol. 31, p. 315, and vol. 5, p. 590.)

Vorob'ev, Vladimir V. D. Geog. S. Born in 1929. Geographer. Specialist in the field of economic geography. Corresponding member since 1981, and academician of the Oceanology, Atmospheric Sciences and Geography Department since 1992. He graduated from the Moscow State University in 1952. From 1952 to 1955, he worked in the Eastern Branch of the AN SSSR. From 1955 to 1958, he was an aspirant there. In 1958 he began work at the Geography Institute of the Siberian Branch in the Far East as a junior and then a senior researcher, and eventually headed a sector of the institute. From 1967 to 1976, he was its Deputy Director and in 1977, he became Director of the institute. He has been a professor at the Irkutsk State University since 1977. He became editor of the journal Geography and Natural Resources in 1980. In 1981, he was named to head the Scientific Council on the difficulties of the assimilation of the Taiga.

Voronkov, **Mikhail G** ., D. Chem. S. Born in 1921 in Orel. Organic chemist. Corresponding member of the General and Technical Chemistry Department of the Russian Academy of Sciences and of the Siberian Department since 1970, and academician since

1989. He graduated from the University of Sverdlovsk in 1941. From 1944 to 1945 he worked at the Leningrad State University; from 1954 to 1961, at the Institute of Silicate Chemistry of the AN SSSR, and from 1961 to 1970, at the Institute of Organic Synthesis of the Latvian Academy of Sciences. Since 1970, he has been Director of the Organic Chemistry Institute at Irkutsk that was established in the 1950s to study polymer chemistry, synthetic fibers and silicon organic compounds. It is subordinate to the academy's Siberian Department. His work is in the areas of organo-silicate compounds and organic sulfur compounds. From 1973 to 1983, he headed the Eastern Affiliate of the Siberian Department. He is general Director of "Chemistry." He is a professor at the Irkutsk Polytechnical Institute. He has guided the work of 16 doctorate students and 90 aspirants for the candidate degree. He heads the Scientific Council on the problems of "Chemistry and Technology of Organic Compounds." He has written 50 scientific works that included two significant monographs, and has co-authored another 1000 among which there are 20 major monographs. He is credited with some 400 inventions and holds 300 patents. He received an honorary doctorate from the Gdansk Polytechnical Institute in 1975. He received the State Prize in 1981. He was named an honored Scientist in 1983, and holds several medals honoring his scientific accomplishments. (GSE 5, p. 600.)

Vorovich, Iosif I . Born in 1920 in Starodub in Briarisk Oblast. Russian specialist in continuum mechanics and the theory of elasticity. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1970; academician since 1993. Graduate of the N. E. Zhukovskii Air Force Engineering Academy in 1944. His works are in mathematical problems of continuum mechanics, nonlinear theory of shells, problems of stress concentration and thick plates, and problems in the theory of elasticity. (GSE 5, p. 608.)

Yakovlev, Aleksandr N., D. Hist. S. Corresponding member of the Economics Department since 1984. Corresponding member of the World Economics and International Relations Department of the Academy since August 1988; academician in 1993.

Yakovlev, Sergei V., D. Tech. S. Born in 1914. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department since 1981, and academician since December 1987. Since 1974, he has been Director of the Water Supply, Sewage, Hydraulic Structures and Engineering Hydrogeology Scientific Research Institute in Moscow that is under the direct administration of the State Committee for Construction Affairs. The institute does research on water treatment for industrial water supply systems, purification plants, industrial waste water, sewage systems, and hydraulic projects for industry and municipalities.

Yanin, Valentin L . Born in 1929 in Kirov. Russian historian and archaeologist. Corresponding member of the History Department of the Academy since 1966; academician in 1993. His principal works deal with the history of Russian feudalism, numismatics, and sphragistics. He became a professor in 1964 and was named head of the subdepartment of archaeology of the history Department at Moscow State University in 1978. He has served as a leader of the Novgorod Archaeological Expedition. In 1984, he was awarded the Lenin Prize for his work covering 50 years of research on the archaeology of Novgorod. Lomonosov Prize, 1966; Recipient of the State Prize, 1970. (GSE 30, p. 424.)

Yanshin, Aleksandr L., D. GM. S. Born in 1911 in Smolensk. Russian geologist. Since 1958, academician of the Geology, Geophysics, Geochemistry, and Mining Department of the academy. Since 1958, academician of the Siberian Department of the academy. Since 1982, he has served as Vice President of the Academy of Sciences. In 1936, he began work at the Geological Institute of the AN SSSR where he was appointed head of a Department in 1956. Since 1958, he has been Deputy Director of the Geology and Geophysics Institute in Novosibirsk, established in 1958 to study and develop Siberia's mineral resources. Since 1967, he has been President of the Moscow Society of Naturalists. Since 1969, he has been Head of the Geology Division of the Novosibirsk Institute. His major research has been on the tectonic elements of the Tien-Shan and Urals regions. Winner--with others--of the 1978 State Prize for "The History of the Development of the Relief of Siberia and the Far

East" 15 Vols. (1964-76). Since 1984, he has been Director of the Lithosphere Institute in Moscow that was established in 1979 to study the theory of sedimentary and metamorphic rock and ore formations. Recipient of the State Prize in 1969 and 1978. (GSE 30, p. 425.)

Yaremenko, Iurii V. Born in 1935. Corresponding member of the Economics Department of the Academy since December 1987; academician in 1993. He has been the Director of the Economics and Forecasting of Scientific-Technical Progress Institute in Moscow which was established in 1985 and has some 15 laboratories: methods and models of medium and short-term forecasting laboratory; the organization and methodological provision of complex socioeconomic forecasting laboratory; information provision of complex socioeconomic forecasting laboratory; long-term problems of development of the sociocultural sphere laboratory; regional problems of socioeconomic development laboratory; problems of the function of science in the national economy laboratory; organizational and economic problems of controlling scientific-technical development laboratory; problems of analysis and socioeconomic decision-making laboratory; problems of the mechanism of the realization of scientific-technical decisions laboratory; analysis of current economic processes laboratory; software and use of personal computers laboratory; computing technique laboratory; analysis and comparison of trends in international economic and scientific-technical development laboratory; methods of evaluation and choice of economic objects for development; and, laboratory.

Yushkin, **Nikolai P** . Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department and of the Urals Department since December 1987; academician in 1993.

Zakharchenia Boris P ., C. PM. S. Born in 1928 in Orsha, now Vitebsk Oblast. Russian physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1976; academician since 1993. He graduated from Leningrad State University in 1952, and joined the staff of the Physicotechnical Institute of the academy. Since 1967, he has been the Chief of the Magneto-optical and Electro-optical Phenomena in Crystals Laboratory of the A. F. Ioffe Physical Technical Institute in St. Petersburg. In 1972, he became of professor at the Leningrad Electrical Engineering Institute. His works are in the optics of solids. Lenin Prize, 1966; Recipient of the State Prize, 1976. (GSE 30, p. 740.)

Zakharov, Vladimir E. , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984; academician since 1993. Since 1977, he has been Chief of the Plasma Physics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow.

Zalikhanov, Mikhail Ch., C. GM. S. Born in 1939. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the RAN since 1984; academician since 1993. Since 1978, he has been Director of the Alpine Geophysics Institute at Nalchik and directly subordinate to the State Committee for Hydrometeorology and Environmental Control. Established in 1934, the institute researches dangerous atmospheric and hydrologic phenomena and searches for methods of artificially controlling them.

Zalygin, S. P.

Zamaraev, Kirill I., C. PM. S. Born in 1939. Chemist. Specialist in the fields of Catalysis, Chemical Kinetics and Condensation Media, and Chemical Radiospectroscopy. Corresponding member of the General and Technical Chemistry Department of the Academy since 1976, and academician since December 1987. He is also an academician of the Siberian Department. He graduated from the Physico-Technical Institute in Moscow in 1963. From 1966 to 1977, he worked in the Chemical Physics Institute of the national academy as a senior researcher. In 1977, he joined the staff of the Catalysis Institute in Akademgorodok. In 1976, he was named a professor at the Novosibirsk State University in that city. Since 1986, he has been Director of the Catalysis Institute in Novosibirsk. Since 1986, he has headed the government committee on Catalysis in Industrial Production. He

was named to the Presidium of the Russian Academy of Sciences in 1988. He has been a member of GKNT Board since 1988. He is head of the Scientific Council on Catalysis. He is President of the Physical Chemistry Society section on Theoretical and Applied chemistry. The institute was established in 1958 to study catalytic action and catalyst preparation, the mathematical simulation of chemical reactors, commercial and new catalysts. It is one of the largest such institutes in the world. Although established as early as 1971 as the Coordination Center for Development of New Industrial Catalysts and the Improvement of Catalysts uised in Industry, the center has evolved over the years into an International Center for Catalysts Characterization and Testing as an integral part of the Institute itself. As Director of that institute, Dr. Zamarayev will continue to play an important role in its continued development as an international research center.

Zaslavskaia, Tatiana I. Born in 1927 in Kiev. Russian economist. Corresponding member of the Economics Department of the Academy since 1968, and academician since 1981. She graduated from the economics Department of Moscow State University in 1950. From 1950 to 1963, she researched at the Institute of Economics of the AN SSSR. Since 1963, she has worked in the Institute of Economics and Organization of Industrial Production in the Siberian Department of the RAN in Novosibirsk, where, since 1972, she has served as Head of the Economic and Sociological Investigations of Labor Resources Department. Her work is in kolkhoz workers' pay, social and economic problems of labor resources and migration of rural populations. In 1967, she was Deputy Director of the Social Problems Institute, and from 1968 she was the Director of the All Union Center for the scientific study of social-economic development. In 1986 she became President of the Soviet Sociology Association. (GSE 9, p. 593.)

Zatsepin, Georgii T. , D. PM. S. Born in 1917 in Moscow. Russian Physicist. He has been an academician since 1981, and deputy Academician Secretary of the Nuclear Physics Department of the Academy since October 1987. He graduated from Moscow State University in 1941. Since 1944, he has worked at the Physics Institute of the AN SSSR and the Russian Academy of Sciences, and since 1963 he has been a Director of one of its laboratories. He has been a professor at Moscow State University since 1958. Since 1973, he has been Head of the Lepton High Energy and Neutrino Astrophysics Laboratory of the Nuclear Research Institute in Moscow. His works are in the physics of cosmic rays and neutrino astrophysics. In 1947-49, he developed a method for studying large cosmic ray showers. From 1960-1969, his works dealt with the physics of muons and neutrinos as well as the methods and prospects of neutrino astrophysics. State Prize, 1951. (GSE 9, p. 595.)

Zefirov, **Nikolai S.**, D. Chem. S. Born in 1935. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981. Academician since December 1987.

Zharikov, **Vilen A** ., D. GM. S. Born in 1926. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1972, and academician since December 1987. From 1969 to 1981, he was Deputy Director of the Experimental Mineralogy Institute at Chernogolovka. Since 1981, he has been the Director of the Experimental Mineralogy Institute at Chernogolovka that was established in 1969 to study the physical chemical conditions of the formation of minerals, ores, and rocks and the origin and migration of magmas in the earth's crust and mantle.

Zhirmunskii, Aleksei V ., D. Bio. S. Born in 1921 in Leningrad. Russian biologist. Corresponding member of the General Biology Department of the Academy from 1972, and academician since 1981. He is also a member of the Far Eastern Department and on the Presidium of that Department. He graduated from the Leningrad State University in 1950, worked for the Institutes of experimental medicine of the Academy of Medical Sciences from 1954 to 1955; for the institutes of zoology from 1955 to 1957, and the institutes of cytology of the AN SSSR from 1957 to 1966. In 1966, he moved to Vladivostok to become founding Director (in 1970) of the Institute of Marine Biology of the Russian Academy of Sciences Far Eastern Department (then Far Eastern Scientific Center). His works are in

cell physiology, the experimental ecology of Marine animals, cellular ecology, and general and comparative physiology. He was replaced as Director of the Marine Biology Institute in 1988. He holds the Chair in Marine Biology at the Far East State University. He has authored some 270 scientific works. (GSE 30, p. 741.)

Zhukov, **Boris P**. Born in 1912 in Samarkand. Russian industrial chemist. Corresponding member of the General and Technical Chemistry Department of the Academy in 1968, and academician since 1974. He graduated from the D. I. Mendeleev Moscow Chemical Engineering Institute in 1937. Recipient of the State Prize, 1951, 1967. (GSE 9, p. 647.)

Zhukov, Mikhail F . D. PM. S. Born in 1917 in an Orel Oblast village. Russian scientist in aerodynamics and low temperature plasma. Corresponding member of the Physical Technical Problems of Power Engineering of the AN SSSR and the RAN and of the Siberian Department since 1968, and academician since 1992. He has produced 200 scientific works which include five textbooks and eight major monographs among which are "The Applied Dynamics of Thermochemical Plasma" (1975) and "The Thermochemical Cathode" (1985) and "The High Temperature Flow of Firing During the Processes of Machining Powdery Materials" (1990). He graduated from the Department of Mathematics and Mechanics of Moscow State University in 1941. From 1941 to 1946, he worked at the N. E. Zhukovskii Central Aerodynamic and Hydrodynamic Institute and from 1946 to 1959, at the Main Institute of Aviation Engine Construction. In 1959, he became Deputy Director of the Institute of Theoretical and Applied Mechanics of the AN SSSR, and in 1970, he became Deputy Director of the Institute of Thermal Physics of the Siberian Department of the AN SSSR and the RAN located in Novosibirsk and in 1988 he became Director of that institute that had been created in 1959 to study heat transfer, the physics of hydrodynamics and gas dynamics, and thermal physics of ionized gases. From 1976 to 1980, he served as Head scientific secretary for the AN SSSR and was on its Presidium. From 1960 to 1965 he was a professor at the Novosibirsk State University and from 1977 to 1988 he taught at the Novosibirsk Electro-Technical Institute where he guided the work of eight doctoral candidates and 40 aspirants for the candidate degree. He chairs the Scientific Council on New Materials for Technology. He received the State Prize in 1982, and holds several other medals for his scientific engineering contributions. (GSE 9, p. 648.)

Zhuravlev, Iurii I., D. PM. S. He was born in 1935 in Voronezh. Corresponding member of the Information Sciences, Computer Technology, and Automation Department of the Academy in 1984 and an academician of the Russian Academy in 1992. Deputy Director of the Computer Center in Akademgorodok-Novosibirsk Siberian Department. He graduated with a master of science in mathematics from Moscow State University in 1957. He received his candidate degree in 1960 in the Physical and Mathematical Sciences from Moscow State University, and his doctorate in 1965. He became a professor in 1967. From 1960 to 1969, he was a junior researcher, then head of a department, and Deputy Director of the Institute of Mathematics of the Siberian Branch of the academy. From 1969 to the present time, he has headed a Department of the computing center of the academy. Since 1989, he has been a Deputy Director of the Comoputer Center. From 1966 to 1969, he was a professor at the Novosibirsk State University in Akademgorodok, and from 1970 to 1980 he was a professor at the Moscow Physical and Technical Institute. Since 1980, he has been a professor and head of a chair at the Moscow Institute of Electronic Engineering. His research interests have included mathematical logic, the theory of controlling systems, image recognition, operation research, and artificial intelligence.

Zhurkin, Vitalii V., D. Hist. S. Corresponding member of the Economics Department of the Academy since August 1984; and academician of the Problems of World Economics and International Relations Departmentsince since 1993. From 1971 to 1988, he was a Deputy Director of the United States of America and Canada Institute.

Zhurkov, **Serafim N** ., D. PM. S. Born in May 1905 in the village of Trubitkino, Lebedian District, Tambov Province. Russian physicist. He has been a corresponding member of the academy since 1958, and an academician since 1968. He graduated from the University of

Voronezh in 1929, and in 1930, began working at the Leningrad Physicotechnical Institute. He became a professor at Leningrad State University in 1947. His work has dealt primarily with the mechanical properties of solids and polymers. He has studied the nature of the strength of brittle materials and polymers and the general regularities governing the processes of temperature-dependent mechanical breakdown and the duration of the action of mechanical stress. He has studied the vitrification process of polymers and amorphous substances. He has also developed a theory of the plasticization of polymers. (GSE 9, p. 652.)

Zolotov, **Iurii** A., D. Chem. S. Born in 1932 in Vysokovsk, Klinskii Raion, Moscow Oblast. Russian analytical chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1970; academician in 1993. He graduated from Moscow State University in 1955 and began work at the Institute of Geochemistry and Analytical Chemistry of the AN SSSR. Since 1975, he has been Head of the Analytical Chemistry Division, and Head of the Solvent Extraction Laboratory--both of the V. I. Vernadskii Geochemistry and Analytical Chemistry Institute in Moscow. From 1975 to 1989, Zolotov was Deputy Director of this institute. His works have dealt with the extraction of inorganic compounds. In 1989, he was made Director of the N. S. Kurnakov General and Inorganic Chemistry Institute in Moscow. (GSE 9, p. 672.)

Zuev, Vladimir E., D. PM. S. Born in 1927 in Malye Goly, Kachug Raion, Irkutsk Oblast. Russian physicist. Specialist in the fields of the dispersion of electromagnetic and optical wave bands in the atmosphere. He has been a corresponding member, 1970, and an academician since 1989--of the Oceanology, Atmospheric Physics, and Geography Department. He was originally elected to the General Physics and Astronomy Department. He joined the Presidium of the Siberian Department in 1971. Since 1979, he has been chairman of the Presidium of the Tomsk Scientific Center, and he is chairman of the Council for Research Coordination of the Tomsk Oblast Committee. He has authored 69 scientific works of which nine are monographs of importance; co-authored 238 works of which ten are significant monographs and eight are discoveries. He graduated from the University of Tomsk in 1951 and immediately began teaching there. From 1955 to 1969, he worked in the Siberian Physicotechnical Institute, becoming a professor in 1964. Since 1969, he has been director of the Atmospheric Optics Institute in Tomsk and a member of the Siberian Department Presidium. The Atmospheric Optics Institute was established in 1969 to study spectroscopy, the laser probing of the atmosphere, lasers, and other electrooptical devices. His main work is in atmospheric optics and physics. He has guided the academic work of 23 doctoral candidates and 67 aspirants for the candidate degree. He was a deputy to the 8th Convocation of the Supreme Soviet of the U.S.S.R. He received a State Prize for his scientific work in 1985. He is the recipient of a number of other awards and medals. (GSE 9, p. 696.)

Corresponding Members

Abakumov, **G.** A. D. Chem. S. Corresponding member of the General and Technical Chemistry Department of the Academy since 1987.

Abalakin, Viktor K., D. PM. S., Born in 1930. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987. From 1970 to 1984, he was Chief of the Astronomical Yearbook department of the Theoretical Astronomy Institute in Leningrad. Since 1984, he has served as Director of the Main Astronomical Observatory in Leningrad which also studies celestial mechanics and gravimetrics. (LDA 89-11378.)

Abasov, **Mitat Teimor ogly** ., D. Tech. S. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1984.

Since 1975, he has been Director of the Deep Petroleum and Gas Deposits Problems Institute at Baku. Since 1979, academician secretary of the Earth Science department of the Azerbaijan Academy of Sciences.

Abelev, Garri I., D. Bio. S. Born in 1928. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department since December 1987. (LDA 89-11378.)

Abgarian, Karlen A., D. Tech. S. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. Since 1979, he has been Director of the Computer Center in Erevan which is subordinate to the physical and mathematical sciences department of the Armenian Academy of Sciences. It was established in 1957 to do research in computer optical processing and computer technology and development. (LDA 89-11378.) x/

Abov, **Iurii** G ., D. PM. S. Born in 1922. Corresponding member of the Nuclear Physics Department of the Academy since December 1987.

Adiyan, Sergei I., D. PM. S. Corresponding member of the Mathematics Department of the Academy in 1993. Since 1977, he has been head of the Mathematical Logic Department of the V. A. Stklov Mathematics Institute in Moscow.

Afanas'ev, Aleksandr M ., D. PM. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Agadzhanov, **Pavel A** ., D. Tech. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Akulichev, **Viktor** A. D. PM. S. Since 1981, he has been the Deputy Director of the Pacific Ocean Oceanology Institute in Vladivostok. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy in 1993.

Alekin, Oleg A . Born in 1908. Russian hydrochemist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1953. Originally elected to the Chemical Sciences Department. Since 1976, he has been the Director of the Limnology Institute in St. Petersburg that is subordinate to the academy's Oceanology, Atmospheric Physics and Geography Department. He is author of works on natural waters and methods of their chemical analysis, and andrology. He is rector of the Leningrad Hydrometeorology Institute. Recipient of the State Prize, 1951. (GSE 1, p. 221.)

Aleksandrov, G. N. Corresponding member of the Academy in 1993.

Aleksandrov, Maksim L., D. PM. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. Since 1984 he has been Chief of the Scientific Instrument Building Department, an administrative office under the Presidium of the Academy. (LDA 89-11378.)

Alekseev, Sergei S. Corresponding member of the Philosophy and Law Department of the Academy and of the Ural department since December 1987. (LDA 89-11378.)

Alekseev, **Vasilii V.**, D. GM. S, He researches in the Laboratory of Paleoecology of the Marine Biology Institute in Murmansk which is subordinate to the Kola Affiliate of the Academy. Corresponding member of the Academy in 1993. His scientific fields include the study of benthogenous carbonic accumulation in high latitude areas of the Arctic seas in the Holocene period.

Alekseeva, T. I. Corresponding member of the Academy in 1993.

Aleskovskii, Valentin B ., D. Chem. S. Born in 1912 in the city of Mary, Turkmen SSR. Soviet chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1972. He graduated from the Lensovet Leningrad Technological Institute in 1937, and joined the institute staff. From 1965 to 1975, he served as its rector. Since 1975, he has been rector of the A. A. Zhdanov Leningrad State University, established in 1819 on the basis of the Main Pedagogical Institute. His works are in the synthesis of inorganic materials. (GSE 30, p. 10.)

Alfimov, **Mikhail V** ., D. PM. S. Born in 1937. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981. Since 1965, a senior

researcher of unknown affiliation at the Chemistry Physics Institute in Moscow which was established in 1931 to do combustion research and to study chemical kinetics.

Alimov, Aleksandr F. D. Bio. S. Corresponding member of the General Biology Department of the Academy in 1993. Since 1982, he has been a Deputy Director of the Zoology Institute in St. Petersburg in which, since 1979 he has headed the Laboratory of Experimental Hydrobiology.

Altukhov, **Iurii P.** Born in 1936. Corresponding member of the General Biology Department of the Academy in 1993. He has been a Deputy Director of the General Genetics Institute in Moscow since 1975.

Andreev, **Lev.** N ., C. Bio. S. Born in 1931. Corresponding member of the General Biology Department of the Academy since 1984. Since 1981, he has been Director of the Main Botanical Garden in Moscow.

Andriashev, Anatolii P ., D. Bio. S. Born in 1910. Soviet ichthyologist and zoogeographer. Corresponding member of the General Biology Department of the Academy since 1966. He graduated from Leningrad State University in 1933 and worked there until 1939. He later worked at the Sevastapol Biological Station and in 1944, at the Zoological Institute of the AN SSSR. He was a member of the first (1955-56) and the third (1957-58) antarctic expeditions and served as the USSR representative on the International Committee for the Study of the Arctic. Director of the Botanical Garden in Moscow. (GSE 2, p. 93.)

Anfimov, **Nikolai A.**, D. Tech. S. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984.

Anfinogentova, A. A. Corresponding member of the Academy in 1993.

Afrosimov, **Vadim V.**, D. PM. S. Born in 1930. Corresponding member of the General Physics and Astronomy Department of the Academy since 1987. Since 1972, he has headed the Atomic Collision Physics Laboratory of the A. F. Ioffe Physical Technical Institute in St. Petersburg.

Anisimov, Sergei I . He has been a corresponding member of the General Physics and Astronomy Department of the Academy since December 1987. Since 1975, he has served as Chief of the Physical Hydrodynamics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow which was created in 1965 from the Physical Problems Institute. (LDA 89-11378.)

Anshakov, G. P. Corresponding member of the Academy in 1993.

Antsiferov, V. N. Corresponding member of the Academy in 1993.

Aronov, A. G. Corresponding member of the Academy in 1993.

Arskiy, Iurii M. Corresponding member of the Academy in 1993.

Artiushkov, **Evgenii** V. , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1991, he has headed the Theoretical Geophysics Laboratory of the Earth's Bowels and Planets Physics Department of the O. Iurii Shmidt Earth Physics Institute in Moscow.

Arutiunian, Iurii V. Corresponding member of the Academy in 1993.

Arutiunov, **S. A.**, Corresponding member of the Literature and Language Department of the Academy in 1993. Professor Arutiunov works in the N. N. Miklukho-Maklai Ethnography Institute in Moscow, where he heads a task group who are compiling a dictionary of ethnographic concepts and terms of the Caucasus.

Arutiunova, N. D. Corresponding member of the Academy in 1993.

Asimov, Mukhamed S., D. Phil. S. Born in 1920. Soviet philosopher. Since 1965, president of the Tadzhik Academy of Sciences. Since 1965, academician of the Social Science department of the Tadzhik Academy. Corresponding member of the Philosophy and Law Department of the AN SSSR since 1974. He graduated from the Alisher Novoi Uzbek University in 1941. From 1946 to 1952, he was Assistant Director of the Leninabad Pedagogical Institute. He was Rector of the Dushanbe Polytechnic Institute from 1956 to 1962. From 1962 to 1965, he was minister of public education of the Tadzhik SSR, secretary of the Central Committee of the Tadzhikistan communist party, and deputy

chairman of the Council of Ministers of the Tadzhik SSR. He is a member of the Central Committee of the Tadzhik CP. He was a deputy to the 6th convocation of the Supreme Soviet of the Tadzhik SSR and to the 7th Convocation of the Supreme Soviet of the USSR. (GSE 2, p. 403.)

Averintsev, Sergei S ., Corresponding member of the Literature and Language Department of the Academy since December 1987. (LDA-11378.)

Babaev, Agadzhangel G., D. Geog. S. Born in 1929 in Mary. Soviet physical geographer. Corresponding member of ;the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1976. He was an academician and from 1975 to 1986, President of the Turkestan Academy of Sciences. He graduated from the geography department of the Ashkhabad Pedagogical Institute in 1949. From 1950 to 1960, he was associated with the A. M. Gorkiy Turkmen University. He served as Director of the Deserts Institute at Ashkhabad from 1960 to 1975. In 1959, he was named chairman of the Geographical Society of the Turkmen SSR. His works are in the study of nature and on the development of deserts. He has been a Deputy to the Supreme Soviet of the USSR since 1979. (GSE 30, p. 20.)

Babaian, Boris A. Born in 1923. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Babeshko, Vladimir A. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since December !987. In 1986, he was named Rector of the Kuban State University which is located in Krasnodar and which was established in 1970. (LDA 89-11378.)

Babushkin, Mark N . Born in 1924 in Volgograd Oblast. Soviet scientist in control problems. Corresponding member of the Problems of Machine Building Department of the Academy since 1976. Also corresponding member of the Far Eastern Scientific Center. He graduated from the F. E. Dzerzhinskii Higher Naval School in 1947 and from the A. N. Krylov Naval Academy of Naval Architecture and Armaments in 1954. He served on the teaching staff of the academy from 1954 to 1972, becoming a professor there in 1968. In 1973, he was appointed Director of the Khabarovsk Scientific Research Integrated Institute of the Far Eastern Scientific Center (now department) of the AN SSSR. Since 1973, he has been Director of the Complex Scientific Research Institute in Khabarovsk. This institute studies the biogeochemical and geological processes of the earth, methods of mineral prospecting, and geochemical characteristics of ancient regions. It is subordinate to the academy's Far Eastern Scientific Center. His works have been in the theory of multivariable control systems and integrated ship automation, and the theory of analog computers. (GSE 30, p. 20.)

Bagdasarov, **Kh. S.** D. PM. S. Corresponding member General Physics and Astronomy Department of the Academy in 1993. Since 1966, he has been Chief of the High Temperature Growth Laboratory of the A. V. Shubnikov Crystallography Institute in Moscow.

Balakin, V. E. D. PM. S. Corresponding member of the Nuclear Physics Department of the Academy Senior Researcher in Veniamin A. Sidorov's Department of the Nuclear Physics Institute in Akademgorodok-Novosibirsk in 1970.

Balashov, **Iurii S**. D. Bio. S. Corresponding member of the General Biology Department of the Academy in 1993. Since 1967, he has headed the Parasitology Laboratory of the Zoological Institute in St. Petersburg.

Balobaev, V. T. Corresponding member of the Academy in 1993.

Baranov, V. Iurii Corresponding member of the Academy in 1993.

Bartolomey, A. A Corresponding member of the Academy in 1993.

Basistov, **Anatolii G** ., D. Tech S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Batenin, **Viacheslav M.**, D. Tech. S. Born in 1939. Corresponding member of the Physical Technical Problems of Power Engineering of the Academy since December 1987. Listed as a senior researcher in the High Temperatures Institute in Moscow and in 1979 he

was Deputy Chief of the International Programs department of that institute. In 1987, he was named Director of the High Temperature Institute which was established in 1962 for researching the thermophysical and electrophysical properties of matter at high temperatures. (LDA 89-11378.)

Bakhrakh, Lev D ., D. Tech S. Born in 1921 in Rostov-on-Don. Soviet Physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1966. He was originally elected to the General and Applied Physics department. He began working at the Moscow Research Institute of Instrument Making in 1945, joining the Radio Engineering Institute in 1947. His works are in the field of theory and technique of aerials. State Prize, 1951; Lenin Prize, 1961. (GSE 3, p. 15.)

Belianin, **Petr N** . Born in 1926. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984. Since 1973, he has been Director of the Aviation Technology and Organization of Production Scientific Research Institute in Moscow under the administration of the Ministry of the Aviation Industry. The institute follows the scientific and technical progress in the aviation industry.

Bergel'son, Lev D ., D. Chem. S. Born in 1918. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1968. Since 1969, he has been Chief of the Lipid Chemistry Laboratory of the M. M. Shemiakin Bio-organic Chemistry Institute in Moscow.

Berdnikov, Georgii P ., D. Phlg. S. Born in 1915 in Rostov-on-Don. Soviet literary scholar. Corresponding member of the Literature and Language Department of the Academy since 1974. He graduated from the philology department of Leningrad State University iln 1939. From 1977 to February 1988, he served as Director of the A. M. Gorkiy World Literature Institute in Moscow which is subordinate to the academy's Literature and Language department. It serves as the principal body in the Academy of Sciences for research on contemporary Soviet and foreign literature. His principal works are on Chekhov, I. S. Turgenev, and S. Karonin. (GSE 30, p. 24.)

Berezovskiy, B. A. Corresponding member of the Academy in 1993.

Berlin, A. A. Corresponding member of the Academy in 1993.

Besov, O. V. Corresponding member of the Academy in 1993.

Biberman, Leon M ., D. PM. S. Born in 1915. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1979. Since 1972, he has been Chief of the Theoretical Laboratory of the High Temperatures Institute in Moscow.

Bikkenin, N. B. Corresponding member of the Philosophy and Law Department of the Academy in 1993.

Bitsadze, **Andrei V** ., D. PM. S. Born in 1916 in Tskhrukveti, Georgia. Soviet mathematician. Corresponding member of the Mathematics Department of the Academy since 1958. He is also a member of the Siberian department. Since 1969, he has been an academician of the Physical and Mathematical Sciences department of the Georgian Academy of Sciences. He graduated from the University of Tbilisi in 1940 and until 1948 worked in the Tbilisi Mathematical Institute of the Georgian academy of sciences. He then joined the Mathematics Institute of the AN SSSR and from 1950 he was on the staff of the Institute of Mathematics of the Siberian department of the AN SSSR and taught at the Novosibirsk University. His work is in the mathematical theory of elasticity, the theory of functions, the theory of equations of a mixed type, and the theory of boundary-value problems for elliptical systems of equations. (GSE 3, p. 349.)

Bochkarev, **Ellin P** ., D. Tech S. Born in 1926. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1981.

Bogdanov, **Nikita A.**, D. GM. S. Born in 1931. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy in 1993. Since 1982, hke has been the Director of the Lithosphere Institute in Moscow which was

established in 1979 to study the theory of sdimentary and metamorphic rock and ore formation.

Bogdanov, **Sergei V** ., D. PM. S. Born in 1921. Physcist. Specialist in accoustoelectronics and accousto-optics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1979. He graduated from Moscow Engineering Institute in 1947, and began working at the P. N. Lebedev Physics Institute of the national academy. In 1963, headed a laboratory at the Semiconductor Physics Institute of the Siberian Department of the national academy. Since 1967, he has been Chief of the Electro-acoustics Laboratory of the Semiconductor Physics Institute at Novosibirsk. He is also a member of the Siberian Department of the Academy. He has been a professor at Novosibirsk State University since 1973. He served as the coordinator for research in accoutoelectronics and accustooptics for the national academy from 1971 to 1975. He is an honored scientist of the former Soviet Union.

Bogoliubov, **Nikolai** N ..., **Jr**.., D. PM. S. Born in 1940. Corresponding member since 1984. Since 1978, Head of an unidentified laboratory of the Field Quantum Department of the V. A. Steklov Mathematics Institute in Moscow. He is a son of the Russian mathematician and theoretical physicist who, in 1978, headed the Field Quantum Department.

Bokiy, Georgii B . Born in 1909 in Leningrad. Soviet crystallographer and crystal chemist. Corresponding member since 1958. Principal membership in the Physical Chemistry and Technology of Inorganic Materials department. Son of B. I. Bokii. He graduated from the Leningrad Mining Institute in 1930. From 1930 to 1958, he worked in the Institute of General and Inorganic Chemistry of the AN SSSR. He taught at Moscow State University from 1939 to 1963, becoming a professor there in 1944. Since 1963, he has worked at the Institute of Radio Electronics of the AN SSSR. His works are in the crystal chemistry of complex compounds. (GSE 3, p. 408.)

Bolibrukh, A. A. Corresponding member of the Academy in 1993.

Bonch-Bruevich, **Aleksei M** ., D. PM. S. Born in 1916. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. Specialist in the field of quantum electronics and physical optics. Holder of the USSR State Prize for his research in laser physics and development of solid state quantum generators.

Borisov, V. I. Corresponding member of the Academy in 1993. One V. I. Borisova was listed as a Senior Research in the Biology Institute in Kazan in 1970.

Boronin, Aleksandr M. , D. Bio. S. Born in 1937. Corresponding member of the Geochemistry, Geophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. Since 1979, he has headed the Extrachromosomal Heredity of Microorganisms Department and within that he has led research in the Plasmid Biology Laboratory. studies the proliferation, functional significance, the classification, and the structure and evolution of Gram-negative bacterial plasmids, mostly of fluorescent pseudomonads. Scientists under his direction study the genetics of microbial degradation of organic compounds and the genetics of cellulose biodegradation. They also investigate the genetics and physiology of rhizospheric pseudomonads with the result of increasing crop yields. Since 1988, he has been Director of the Biochemistry and Physiology of Microorganisms Institute in Puschino, which was established in 1964 and is subordinate to the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy.

Borukayev, **Chermen B** ., D. Geol. S., Moscow State University graduate in 1958. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining department of the AN SSSR and member of the Far Eastern department since December 1987. Since 1988, he has been the Director of the tectonics and Geophysics Inlsitute in Khabarovsk. which was founded in 1971 and is subordinate to the Far Eastern Department of the Academy. Its scientists study the deep tectonics of the Earth's crust of the continent and Pacific ocean; determine the relationship between the geophysical fields and structures of the Earth's crust; develop estimates of mineral deposits from the study of tectonic and

geophysical relationships, and probe tectonic and geophysical theoretical problems. (LDA 89-11378.)

Boyko, Vladimir I ., D. Econ. S. Born in 1926. Corresponding member of the Philosophy and Law Department of the Academy since 1987. Sociologist. Specialist in research on the sociological processes of the Far North, Siberia and the Far East, and studies of the effectiveness of socialist development in those areas. He graduated from the Novosibrsk Institute Water Transportation Engineering in 1949 and from the Academy of Social Sciences in 1965. He worked at the Ministry of Transportation. From 1953 to 1962, he was a Communist Party Worker. In 1965, he joined the History, Philology and Philosophy Institute of the Siberian Department where he served as a senior researcher, scientific secretary, head of the division, and head of the Department of Philosophy and Sociology. In 1984, he was named head of the entire institute. He has been a professor at the Novosibirsk Party School. He is chairman of the regional interDepartmental commision on the coordination of the social-economic complex--medical-biological and linguistic research--and head of the Council on the Siberian Department's Sociology Association. He is an honored scientist of the former RSFSR. (LDA 89-11378.)

Braginskiy, V. B. Corresponding member of the Academy in 1993.

Bronnikov, **Dmitrii** M . Born in 1913. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Scienes Department of the Academy since 1979. Since 1981, he has been Director of the Complex Utilization of Mineral Resources Institute in Moscow which was established in 1978 to research theories of gas filtration and new methods for exploiting mineral resources. It is subordinate to the academy's Geology, Geophysics, and Geochemistry department.

Brushlinskiy, A. V. Corresponding member of the Academy in 1993.

Bubnov, **Iurii** N. Corresponding member of the General and Technical Chemistry Department of the Academy in 1993. He heads the The Organoboron Compounds Laboratory of the N. D. Zelinskii Organic Chemistry Institute in Moscow.

Bugaev, A. S. Corresponding member of the Academy in 1993.

Bugaev, Sergei P., C. Tech. S. Born in 1936. He has been a corresponding member of the Siberian Department (1987) and of the General Physics and Astronomy Department of the Academy since 1992. Specialist in electronics and electrophysics. He has authored and co-authored some 130 publications of which three monographs on electronics are well known. He is also credited with nine discoveries or inventions. He graduated from the Tomsk Polytechnical Institute imeni S. M. Kirov in 1959. He worked at the Nuclear Physics Institute of the Tomsk Polytechnical University from 1966 to 1973, and headed a laboratory in atmospheric optics of the Physical Electronics Institute from 1973 to 1978. Since 1977, he has been the Head of the Electron Beams Laboratory of the Heavy-Current Electronics Institute in Tomsk and since 1986, he has served as its Director. Institute scientists study the emission and formation of the intense fluxes of charged particles, the generation of heavy-current high voltage pulses and their influence on the condensed media, the study of the gas-discharge plasma, and technologic applications of heavy-current electronics. The institute does research on thermonuclear and accelerator physics and laser technology. The institute was created in 1977 to research thermonuclear and accelerator physics and laser technology. He has been a professor since 1984 holding a chair in the Tomsk Institute on automation of management systems in radioelectronics, where he has guided the work of one doctoral student and six aspirants for the candidate degree. .He is on the Scientific Council on Electronic Physics. He received a State Prize in 1986, and hold other medals for his scientific work.

Buganov, Viktor I., D. Hist. S. Corresponding Member of the History Department of the Academy in 1993. One of the Deputy Directors of the History of the USSR Institute in Moscow since 1975.

Budagov, **Ruben A**. Born in 1910 in Rostov-on-Don. Russian linguist--specialist in general and Roman linguistics and philology. Corresponding member of the Literature and

Language Department of the Academy since 1970. He graduated from the Rostov Pedagogical Institute in 1933. From 1947 to 1952 he was a professor at Leningrad University and since 1952, he has been a professor at Moscow State University. (GSE 4, p. 133.)

Bulanzhe, Iurii D ., D. PM. S. Born in 1911 in Moscow. Russian geophysicist. Corresponding member of the Geology, Geophyusics, Geochemistry, and Mining Sciences Department of the Academy since 1966. Originally elected to the Physics of the Earth department. He graduated from the Moscow Geodetic Institute in 1934 and started work at the Institute of Physics of the Earth of the AN SSSR, becoming a department head in 1956. Since 1956, he has been Chief of the Gravimetry and Geomagnetism Laboratory of the O. Iu. Shmidt Earth Physics Institute in Moscow. His works include experimental studies in gravimetrics and the study of deformations in the earth's crust. He has been vice-president of the Russian Geodetic Society and of the International Association of Geodesy since 1957. (GSE 4, p. 169.)

Bulashevich, **Iurii P**. Born in 1911 in Nizhny Novgorod, now Gorkiy. Russian geophysicist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1970. He is also a member of the Ural Scientific Center. He graduated from the University of Kazan in 1935 and started work at the Ural Department of the Academy. In 1958, he became the Director of that department's Institute of Geophysics which since 1971 has been called the Institute of Geophysics. In 1952, he became a professor at the Sverdlovsk Pedagogical Institute and later professor at the Sverdlovsk Mining Institute. His main works are in geophysical methods of studying the earth's crust and the exploration and analysis of useful mineral deposits. (GSE, 30, p. 29.)

Bunich, Pavel G. Born in 1929 in Moscow. Russian economist. Corresponding member of the Economics Department of the Academy since 1970. He has been a member of Far Eastern Department since 1970. He graduated from the economics department of Moscow State University in 1952. In 1955, he began research and teaching, becoming a professor in 1963. In 1972, he was made chairman of the Scientific Council of the AN SSSR on the Comprehensive Study of the Scientific Foundations of Profit and Loss Accounting. His works are in economic management, the fixed capital stock and production capacities of industry, the circulating capital of industry, and socialist finance. (GSE 30, p. 29.)

Butenko, Raisa G., D. Bio S. Born in 1920 in Belyi, Kalinin Oblast. Russian biologist. Corresponding member Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1974. She graduated from the K. A. Timiriazev Moscow Academy of Agriculture in 1943. Since 1947, she has been working at the K. A. Timiriazev Institute of Plant Physiology of the AN SSSR where she was made head of a laboratory in 1968. Since 1968, she has occupied the post of Chief of the Tissue Culture and Morphogenesis Laboratory of the K. A. Timiriazev Institute of Plant Physiology of the Academy. In 1984, she was awarded the USSR State Prize for her workwith others--on "The Development of the Basic Principles of the Cellular (Genetic-tissue culture) Engineering of Plants," published from 1964-1982. Her works have been in plant cells cultivated in vitro, morphogenesis in isolated cell culture, and plant tissue. (GSE 30, p. 29.)

Buyanov, Roman A., D. Chem. S. Born in 1927. Inorganic Chemist. Specialist in the problems of chemical technology, physical chemistry and catalysis. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1981. He graduated from the Moscow Chemical Technology Institute imeni D. I. Mendeleev in 1960. He began work at the Institute for Nuclear Research in Dubna. In 1961, he joined the Catalysis Institute in Akademgorodok, as the Deputy Director and head of a dehydration laboratory. He became a professor in 1976. He served as Head of the coordination center of the nation-wide council of the U.S.S.R. on problems of the introduction of new industrial calalysts and the study of catalysis--its introduction and development. In 1988 he joined the editorial board of the chemical series

journal "Izvestia of the Siberian Branch of Academy of Sciences of the U.S.S.R." Recipient of the Lenin Prize in 1960. He is an honored scientist of the former Soviet Union.

Buznik, V. M. Corresponding member of the Academy in 1993.

Bykov, **Oleg N.**, D. Hist. S. Born in 1926. Corresponding member of the World Economics and International Relations Department of the Academy since August 1988. Since 1978, he has been Deputy Director of the World Economics and International Relations Institute in Moscow. (LDA 89-11378.)

Byzov, **Aleksei L** ., D. Bio. S. Born in 1926. Corresponding member of the Physiology Department of the Academy since 1981. Since 1975, he has been Chief of the Biological Problems Laboratory of the Information Transmission Problems Institute in Moscow.

Chaylakhian, Levon M., D. Bio. S. Corresponding member of the Physiology Department of the Academy since 1984.

Chekharin, Evgenii M. Born in 1924 in Gubino, Kozelsk Raion, Kaluga Oblast. Russian jurist. Corresponding member of the Philosophy and Law Department of the Academy since 1976. From 1954 to 1959, he taught at Moscow State University. He has held a responsible party position since 1959. From 1972 to 1978, he was Rector of the Higher Party School of the Cemtra Committee CPSU. (GSE 29, p. 88.)

Chekmarev, A. M. Corresponding member of the Academy in 1993.

Chereshnev, V. A. Corresponding member of the Academy in 1993.

Chernov, Aleksandr A., D. PM. S. Born in 1931. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987. Since 1965, he has been Chief of the Growth Theory and Fundamental Studies Laboratory of the A. V. Shubnikov Crystallography Institute in Moscow which was established in 1944 to investigate the structure and physical properties of crystals. (LDA 89-11378.)

Chernov, Iurii I. Corresponding member of the General Biology Department of the Academy since December 1987.

Chernoplekov, N. A. Corresponding member of the Academy in 1993.

Chernyshev, E. A. Corresponding member of the Academy in 1993.

Chernyshov, N. M. Corresponding member of the Academy in 1993.

Chernyavskiy, G. M. Corresponding member of the Academy in 1993.

Chertok, Boris E. Born in 1912 in Loda, Poland. Russian scientist in aircraft and spacecraft control systems. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1968. He graduated from the Moscow Power Engineering Institute in 1940, served thereafter on the staffs of a number of research and design organizations. In 1947, he joined the faculty of the N. E. Bauman Higher Technical School, becoming a professor there in 1966. His works have been in automation, aircraft and spaceflight control systems. Lenin Prize, 1957; State Prize, 1976. (GSE 29, p. 132.)

Chichkanov, Valerii P ., D. Econ. S. Russian economist. Corresponding member of the Economics department and of the Ural department since 1981. From 1980 to 1987, he was Director of the Economics Study Institute at Khabarovsk subject to the Far Eastern Scientific Center which studies the economic development of the Russian Far East. In 1987, he was made Director of the Economics Institite in Sverdlovsk which studies ways to improve procution in the Ural region. (LDA 89-11378.)

Chistov, Kirill V ., D. Hist. S. Born in 1919. Corresponding member of the History Department of the Academy since 1981. He is on the staff of the N. N. Miklukho-Maklai Ethnography Institute in Moscow where he and M. M. Gromyko are leading research on the effect of Russian folk traditions on the the world of today--and their potentiality for application to problems.

Chizmadzhev, Iurii A., D. Chem. S., Born in 1931. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since December 1987. He is head of the Bio-electro Chemistry Department of the A. N Frumkin Electrochemistry Institute in Moscow. He guides studies on excitable media, membrane transport, equilibrium electrochemical properties of lipid

bilayers, double layers and adsorption, mechanics of model and cellular membranes, interaction and fusion of membranes, cells in electric fields and their motion, rotation, electroporation, electro-fusion and electro-transfection, and electro-chemistry of interfaces between immiscible liquids. (LDA 89-11378.)

Chkhikvadze, Viktor M . Born in 1912 in Zestafoni Raion, Georgian SSR. Russian jurist. Corresponding member of the Philosophy and Law Department of the Academy since 1964. He was Director of the Institute of State and Law of the AN SSSR from 1964 to 1973. He was president of the International Association of Legal Science from 1968 to 1972, and vice-president of the International Political Science Association from 1968 to 1970. He has been a foreign member of the Bulgarian Academy of Sciences since 1970. (GSE 29, p. 178.) Chubarian, Aleksandr O. Since 1988, he has been Director of the General History Institute in Moscow which was founded in 1968 as an international studies research center. He was a corresponding member of the History Department of the Academy in 1993.

Chufrin, G. I. Corresponding member of the Academy in 1993.

Churbanov, M. F. Corresponding member of the Academy in 1993.

Chuvashov, B. I. Corresponding member of the Academy in 1993.

Danilevich, **Yanush B** ., Born in 1931. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987. (LDA 89-11378.)

Darevskii, **Ilia S**. D. Bio. S. Corresponding member of the General Biology Department of the Academy since December of 1987. Head of the Herpetology and Ornithology Laboratory of the Zoological Institute in St. Petersburg since 1967. (LDA 89-11378.)

Debabov, **Vladimir** G., Born in 1935. Corresponding member of the Biochemistry, Biophyusiocs, and Chemistry of Physiologically Active Compounds Department of the Academy since 1987. Since 1978, he has been the Director of the Genetics and Selection of Microorganisms Scientific Research Institute in Moscow which was established in 1968 to study E Coli overproducers, insecticide toxin genes, Bacillus sp., and protoplast fusion. Researches industrial interferon production. (LDA 89-11378.)

Deriagin, A. V. Corresponding member of the Academy in 1993.

Didenko, Andrei N , .D. Tech. S. Born in 1932. Specialist in Accelerator and Physics Electronics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. He graduated from the Tomsk State University in 1955 and began working at the Tomsk Polytechnic Institute imeni C. M. Kirov in 1970 where he was designated a professor. He was given the chair in electron physics in 1977. From 1968 to 1987, he was the Director of the Scientific Research Institute of Nuclear Physics, and in 1988 he became chairman of the Scientific Council on Electronics and Automation. He was a member of the Presidium's Commission on Atomic Energy and was designated an honored Scientist of the Soviet Union. He was deputy chairman of a Scientific Council under the purview of the GKNT dealing with the processing of construction materials.

Dikanskii, Nikolai S. D. PM. S. Born in 1941. Physicist. Specialist in accelerator physics. Corresponding member of the Siberian Department and of the General Physics and Astronomy Department of the Academy in 1990. Since 1973, he has been one of the Deputy Directors of the Nuclear Physics Institute in Akademgorodok-Novosibirsk, which was established in 1957 to conduct research on thermonuclear reactions, particularly on magnetic confinement fusion, and accelerator technology. This is the leading nuclear research facility in Siberia. He is author of 80 scientific publications and teaches nuclear physics at the Novosibirsk State University in Akademgorodok.

Dikov, **Nikolai** N . Born in 1925. Corresponding member of the History department and of the Far Eastern department since 1979. Since 1967, Chief of a Department of the (Northeastern) Complex Scientific Research Institute in Magadan. With V. A. Kavinets, he discovered the northernmost Paleolithic remains in the world on the Pechora and Lena Rivers, in the Aldan River basin, and on Kamchatka. (LDA 89-11378.) (GSE 11, p. 642d.)

Dimov, Gennadii I. , D. PM. S. Born in 1927. Physicist. Specialist in experimental physics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1981. He graduated from the Tomsk Polytechnical Institute imeni S. M. Kirov in 1951 and began work at the Nuclear Physics, Electronics, and Automation Institute of the Tomsk Polytechnical Institute (1951-1960.) In 1961, he was made head of a laboratory of the Nuclear Physics Institute of the Siberian Department in Akademgorodok. He has been a professor holding the chair in General Physics at the Novosibirsk State University since 1970. He holds a medal in recognition of his scientific work.

Dmitriev, **Anatolii V.**, D. Phil. S. Corresponding member of the Academy in 1993. In 1976, he was a Deputy Director of the Social Economic Problems Institute in St. Petersburg which was established in 1975.

Dobatkin, Vladimir I. Born in 1915. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1979.

Domashnev, A. I. Corresponding member of the Academy in 1993.

Domrachev, G. A. Corresponding member of the Academy in 1993.

Druzhinina, E. I., D. Hist. S. Born in 1916. Corresponding member of the History Department of the Academy since 1981.

Dubovitskii, **Fedor I**., D. Chem. S. Born in 1907. Corresponding member of the General and Technical Chemistry Department of the Academy since 1979. Since 1962, he has been Deputy Sirector of the Chemical Physics Institute in Moscow which is subordinate to the General and Technical Chemistry department of the academy. The institute does combustion research and studies chemical kinetics in various fields. Since 1975, he has served as Deputy Chairman of the Noginsk Scientific Center. Since 1978, he has been Chief of the Combustion Division of the Chemical Physics Institute in Moscow.

Dulov, **Viktor G** ., D. PM. S. Born in 1929. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1979. From 1978 to 1984, he served as Director of the Computer Center in Krasnoiarsk. Since 1984, he has been Director of the Theoretical and Applied Mechanics Institute in Novosibirsk subordinate to the Siberian department. Established in 1957, the institute studies physical gas dynamics, combustion kinetics, hypersonic aerodynamics, shock wave processes, magnetohydrodynamics, and measurement techniques for gas flows. It also maintains a wind tunnel for aerodynamics research.

D'iakov, A. F. Corresponding member of the Academy in 1993.

Diumaev, **Kirill M.**, D. Chem. S. Born in 1931. Corresponding member of the General and Technical Chemistry Department of the AN SSSR since December 1987. Since December 1980, he has been one of the deputy chairmen of the State Committee for Science and Technology (GKNT). This important committee develops and monitors a unified state policy for science and technology. (LDA 89-11378.)

Dymnikov, **Valentin P.** Corresponding member of the Academy in 1993. In 1972, he was Chief of the Statistical Methods of Weather Forecasting Subdepartment of the Satellite Meteorology Department of the Computer Center in Akademgorodok-Novosibirsk in Siberia.

Dzhelepov, **Boris S.** Born in 1910. Corresponding member of the Nuclear Physics Department of the Academy since 1953. .

Dzhelepov, **Venedikt P** ., D. PM. S. Born in 1913 in Moscow. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1966. He graduated from Leningrad Polytechnic Institute in 1937. From 1941 to 1943, he worked at the Physicotechnical Institute, and from 1943 to 1948, at the Institute of Atomic Physics. From 1948 to 1956, he was Deputy Director of the Institute of Nuclear Problems of the AN SSSR. Since 1956, he has directed the work of a laboratory in the Joint Institute for Nuclear Research in Dubna. His works have been on the atomic nuclei and elementary particles. Since 1965, he has been working on applications of nuclear physics to medicine.

He was the first in the USSR to develop a proton beam for medical uses. State Prizes, 1961 and 1963. (GSE 8, p. 493.)

Dzhemilev, I. M. Corresponding member of the Academy in 1993.

Dzialoshinskii, **Igor** E. , D. PM. S. Born in 1931 in Moscow. Russian Physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1974. He graduated from Moscow State University in 1953. From 1957-65 he was on the staff of the Institute of Physical Problems in Moscow. In 1965 he joined the staff of the Institute of Theoretical Physics of the Academy. Since 1969, he has been Chief of the Magnetism Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow. In 1984, he was awarded the USSR State Prize for his work--with others--on "The Magnetism and Electron Structure of Rare Earth and Uranium Compounds," published from 1959-1982. His main work has been in quantum statistics and the theory of weak ferromagnetism in antiferromagnetic substances. (GSE 30, p. 50.)

Efimenko, **Sergei P.** D. Tech. S. Born in 1930. Corresponding member of the Academy in 1993. In 1981 he was appointed one of the Deputy Chairmen of the GKNT, the State Committee for Science and Technology.

Eliseeva, I. I. Corresponding member of the Academy in 1993.

Eliutin, Aleksandr V. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since December 1987. (LDA 89-11378.)

Eremin, I. I. Corresponding member of the Academy in 1993.

Eremin, N. I. Corresponding member of the Academy in 1993.

Evsikov, Vadim I. Corresponding member of the General Biology Department of the Academy in 1993. Since 1980, he has been the Director of the Biology Institute in Akademgordok-Novosibirsk, which dates back to 1944. In 1958 the institute was transferred to the newly created Siberian department. On the national level scientists at the institute participate in the USSR insect census. They are also concerned with public health and the productivity of crops and animals in the region.

Evstigneeva, Raisa P. , D. Biol. S. Born in 1925 in Moscow Oblast. Russian chemist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1976. She graduated from the M. V. Lomonosov Moscow Institute of Fine Chemical Technology in 1947, and joined its staff in 1950, becoming a professor in 1965. In 1969, she became chairman of the subdepartment of the chemistry and technology of fine organic comopounds. Her works have been in the isolation of naturally occurring physiologically active chemical compounds. (GSE 30, p. 364.)

Evtushenko, Iurii G. , D. PM. S., Born in Krasnador in 1938. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1990. He graduated from the Moscow Physical-Technical Institute with a master of science in aerodynamics in 1962, received his candidate degree in Flight Dynamics in the Physical and Mathematical Sciences from the Moscow Physical-Technical Institute in 1967 and his doctorate in the Physical and Mathematical Sciences from the Computing Center of the Academy in 1981. In 1985, he was designated a professor. From 1966 to 1976 he was a junior and senior research at the computer center and from 1976 to 1981, he was head of the Optimization Software Department of that institute. He served as a Deputy Director of the Computer Center from 1981 to 1989 when he became its Director. In 1988, he became a member of the International Mathematical Programming Society. In 1992, he became editor-in-chief of the international journal *Optimization, Methods and Software*. His research interests include linear and nonlinear programming, decision support systems, optimal control, optimization techniques, numerical methods, and software for solving global multicriterion optimization problems.

Fabelinskii, Immanuel L., D. PM. S. Born in 1911. Corresponding member of the General Physics and Astronomy Department of the Academy since 1979. Since 1967, he has been Chief of the Brillouin Scattering Department of the Spectroscopy Laboratory of

the Nuclear Physics Division of the P. N. Lebedev Physics Institute in Moscow. (LDA 89-11378.)

Fanardzhian, Viktor V ., C. Med. S. Born in 1929. Since 1979, he has served as Vice President of the Armenian Academy of Sciences. Corresponding member of the Physiology Department of the Academy since 1984. Since 1978, he has been Director of the L. A. Orbveli Physiology Institute in Erevan. The institute was founded in 1943 to study problems of physiology, biochemistry, and pharmacology. It is a leading research facility of this kind in the Armenia.

Fedorenko, Nikolai T. , C. Phil S. Born in 1912 in Piatigorsk. Russian philologist and orientalist. State and public figure. Professor (1953) . Corresponding member of the Literature and Language Department of the Academy since 1958. Son of a worker. He graduated from the Moscow Institute of Oriental Studies in 1937. In 1954, he became an ambassador extraordinary and plenipotentiary of the USSR. From 1955 to 1958, he was deputy minister of foreign affairs, from 1958 to 1962, he served as ambassador to Japan. From 1963 to 1968, he was permanent representative of the USSR to the UN and from 1963 to 1968 he was USSR representativ on the UN Security Council. In 1970, he became editorin-Chief of the journal inostrannaia literatura (Foreign Literature). In 1971, he became secretary of the administrative board of the Writers' Union of the USSR. From 1966 to 1971, he was a member of the Central Auditing Commission of the CPSU. He is an honorary member of the China Research Institute in Tokyo (1961) and honorary academician of the Florence Academy of Fine Arts (1975). In 1988, he was appointed advisor to the national academy's Presidium. (GSE 27, pp. 128-9.)

Fedorov, Sviatoslav N., D. Med. S. Born in 1927. Corresponding member of the Physiology Department of the Academy since December 1987. In 1987, he was the recipient of the M. V. Lomonosov Gold Medal for his contributions to Russian Science. (LDA 89-11378.)

Feoktistov, **Lev P** ., D. PM. S. Born in 1928 in Moscow. Russsian physicist. Corresponding member of the Nuclear Physics Deprtment of the Academy since 1966. He graduated from Moscow State University in 1950. Since 1982, he has been Deputy Director of the I. V. Kurchatov Atomic Energy Institute in Moscow, which was created in 1943 to develop atomic weapons. His works have been in physics and engineering. He holds the Lenin Prize. (GSE 27, p. 146.)

Feynberg, Evgenii. L., D. PM. S. Born in 1912 in Baku. Russian theoretical physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1966. He graduated from Moscow University in 1935. In 1938, he joined the staff of the Institute of Physics of the AN SSSR. He was a professor at the University of Gorkiy from 1944 to 1946 and at the Moscow Physical Engineering Institute from 1946 to 1954. Since 1968, he has served as deputy Chief of the Theoretical Laboratory of the P. N. Lebedev Physics Institute in Moscow. His works have been in nuclear physics, radio physics, acoustics, the physics of elementary particles and cosmic rays. In 1939, he conducted a detailed investigation of the ionization of atoms during Beta-decay. He initiated study of inelastic coherent processes (1941) and inelastic diffraction processes (1954). From 1943 to 1955, he developed a statistical theory of the noise immunity of acoustic-signal reception and proposed a correlation technique for the analysis of acoustic signals. (GSE 27, p. 139.)

Filippov, **Gennadii** A. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987. (LDA 89-11378.)

Fomin, Vasilii M., D. PM. S. Born in 1940. Corresponding member of the Academy in 1993. Deputy Director of the Theoretical and Applied Mechanics Institute in Novosibirsk since 1979.

Fridman, A. M. Corresponding member of the Academy in 1993.

Galanin, Mikhail D., D. PM. S. Born in 1915. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. Since 1969, he has been Chief of the S. I. Vavilov luminescence laboratory of the Nuclear Physics Division of the P. N. Lebedev Physics Institute in Moscow.

Gamaley, Iurii V. Corresponding member of the Academy in 1993.

Gamkrelidze, Revaz V ., D. PM. S. Born in 1927. Corresponding member of the Mathematics Department of the Academy since 1981. Since 1969, he has been an academician of the Physical and Mathematical Sciences department of the Georgian Academy of Sciences.

Gamzatov, **Gadzhi G**. , D. Phlg S. Corresponding member of the Literature and Language Department of the Acadmey since 1984. He is the Director of the Tsadasa Institute of History, Language, and Literature of the Daghestani Scientific Center in Makhachkala.

Ganelin, R. Sh. Corresponding member of the Academy in 1993.

Gaponov, S. V. Corresponding member of the Academy in 1993.

Garbuzov, Dmitri Z. , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1979, he has been head of the Luminescence Department of the A. F. Ioffe Physical Technical Institute in St. Petersburg. Gatovskii, Lev M . Born July 1903 in Minsk. Russian economist. He was elected a corresponding member of the Economics department of the academy in 1960. Since 1977, he has served on the board of the GKNT General Assembly. He graduated from the G. V. Plekhanov Institute of the National Economy in 1924. Following graduation he taught in various higher educational institutions, worked in the People's Commissariat of Workers' and Peasants' Inspection, in the State Planning Commission (GOSPLAN), in the Economics Institute of the Communist Academy, and in the Center for the Administration of National Economic Accounting. Since 1939, he has been at the Institute of Economics of the national academy becoming its Director in 1965. His principal works have concentrated on the political economics of socialism. (GSE 27, p. 128.)

Gelovani, Viktor A ., C. PM. S. Born in 1944. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. (LDA 89-11378.)

Generalov, **Nikolai A.** , C. PM. S. Born in 1933. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy in 1987. Since 1986, he has been one of the deputy Directors of the Problems of Mechanics Institute in Moscow, established in 1955 to research gas dynamic processes, including combustion instability, plasma, laser beams, and shock waves.

Geodekian, Artem A. , D. GM. S. Born in 1914. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1979. Since 1975, he has been Deputy Director of the P. P. Shirshov Oceanology Institute in Moscow and since 1979, he has served as Chief of the Geochemistry Division of the Oceanography Institute as well as Chief of the Petroleum in the Sea Laboratory. The Shirshov Oceanology Institute is the largest Russian research institute for the marine sciences. It was created in 1946, and is subordinate to the academy's Oceanology, Atmospheric Physics, and Geography department. It was named after Shirshov in 1967.

Gershteyn, Semen S ., D. PM. S. Born in 1929. Corresponding member of the Nuclear Physics Department of the Academy since 1984. Together with Ia. B. Zeldovich in 1955, on the basis of an analogy between the weak vector current and the electromagnetic current, he predicted the probability of the "second" decay. (GSE 23, p. 732.)

Gidaspov, **Boris V** ., D. Chem. S. Born in 1933. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981.

Gizatullin, Kh. N. Corresponding member of the Academy in 1993.

Glebovitskii, V. A. Corresponding member of the Academy in 1993.

Glushchenko, **Viktor Iu**. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Russian Academy of Sciences since 1987. Deputy chairman of the Far Eastern Department since August 1988. LDA 89-11378.)

Gold'in, Sergei V., D. PM, S. Born in 1936. Physicist, head of a laboratory of the Geology and Geophysics Institute of the Siberian Department. Corresponding member Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since

1991. He is a specialist in theoretical geophysics and in the processing of geophysical data. Since 1975, he has headed the Mathematical Methods Laboratory of the Geophysics Division of the Geology and Geophysics Institute in Novosibirsk which was established in 1958 to discover and develop Siberian mineral resources. He has authored 100--19 from 1986 to 1991--scientific works of which two are important monographs. He introduced the analytical method for developing the algorithm for the extension of polar seismic waves and from this environmental visualization constructed the parameters for high speed modeling. Under his leadership the cinematic interpretation procedures for measuring heterogeneous features of the environment from space was developed. He also led in the development of the theory of the spreading or dissemination of seismic waves. He is a professor at the Novosibirsk State University where he has guided the work of three aspirants for the candidate degree. His work has also produced methods for determining the existence of oil and gas reserves in Siberia.

Gorbunov, Grigorii I . Born in 1918 in the village of Dor, Niuksenitsa Raion, Vologda Oblast. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1972. He graduated from the Moscow Geological Prospecting Institute in 1941. He took part in the explorations of ore deposits in Kirghizia and Murmansk Oblast. In 1971, he was named chairman of the Kola Affiliate of the Siberian department of the AN SSSR. His works deal with regional metallogeny, the problems of prospecting for useful minerals, and the geology and structure of ore deposits. He has established regularities in the distribution of magmatic sulfide copper-nickel deposits. (GSE 30, p. 387.)

Gorlenko, Mikhail V . Born in 1908 in Vladimir. Russian mycologist and phytopathologist. Corresponding member of the General Biology Department since 1976. He graduated from the University of Voronezh in 1930. From 1931 to 1941, he was a researcher at the Voronezh Plant Protection Station. From 1941 to 1955, he headed the laboratory of the Moscow Plant Protection Station at the All-Union Institute of Plant Protection. In 1948, he became Director of that station. He was named head of the subdepartment of lower plants at Moscow State University in 1955. His studies are in immunity of plants to fungus and bacterial diseases and the origin and evolution of parasitism in phytopathogenic micro-organisms. (GSE 30, p. 387.)

Gorovoy, **P. G.** Corresponding member of the Academy in 1993. Since 1969, he has been Chief of the Plant Soils Laboratory of the Bioorganic Chemistry Institute in Vladivostok which was founded in the mid-1960s to study and exploit marine and terrestrial plant and animal life as souces of natural drugs.

Goriushkin, Leonid M. , D. Hist. S. Born in 1927. Historian. Specialist in the Regional History of Russia and of the Soviet Period. He has been a corresponding member of the History Department of the Russian Academy of Sciences since 1990. He has written or coauthored 300 pieces of which 14 are book-length monographs. He is a professor at the Novosibirsk State University where he has guided the work of two doctoral students and supervised the work of 28 aspirants for the candidate degree. In 1986, he became head of a Department of the Institute of History, Philology and Philosophy of the Siberian Department. He is on the editorial board of the historical series of the journal "Sibirsk" published in the USA. He serves as head of the historical commission to celebrate the 100th year of the founding of Novosibirsk and is deputy chairman of the House of Scientists in Akademgorodok.

Grachev, **Mikhail A.**, D. Biochem. S. Born in 1939. Corresponding member of the Bichemistry, Biophysics, and Chemistry of Physiologically Active Compounds of the Academy since 1987. Biochemist. Specialist in bioorganic chemical fermentation and analytical chemistry. He graduated from the Moscow State University in 1961 and began working at the Natural Compounds Institute of the AN SSSR. From 1965 to 1984, he headed a laboratory of the Novosibirsk Institute of Organic Chemistry, heading also a Laboratory in Ultra-microbiochemistry at the Novosibirsk Institute of Bioorganic Chemistry from 1984 to 1987. In 1987, he became Director of the Limnological Institute of the Russian

Academy of Sciences located in Irkutsk. He has authored and co-authored some 111 scientific works of which three are major monographs. He has supervised the work of ten aspirants for the candidate degree. He is on the Scientific Council on Analytical Chemistry. He received a State Prize in 1985. In December 1990, the Baikal International Center for Ecological Research was established under Grachev's direction at ceremonies attended by representatives from nine countries. He was made the Executive Director of BICER that is located at the Limnological Institute in Irkutsk, Russia. (LDA 89-11378.)

Grashchenkov, **Viktor N** . Corresponding member of the History Department of the Academy since December 1987. (LDA 89-11378.)

Grachev, V. A. Corresponding member of the Academy in 1993.

Grekhov, **Igor** V. Corresponding mermber of the General Physics and Astronomy Department of the Academy in 1993. In the 1970s, he was Chief of the Power Semiconductor Devices Laboratory of the Very High Pressure Effects Department of the A. F. Ioffe Physical Technical Institute in St. Petersburg.

Gren, Elmar Ia . D. Chem. S., Born in 1935. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the AN SSSR since December 1987. Academician of the Chemical and Biological Sciences Department of the Latvian academy since 1987. Since 1976, he has been Deputy Director of the Organic Synthesis Institute in Riga which was established in 1957 and which combines fundamental theoretical research on organic synthesis with the production of new organic compounds such as pharmaceuticals. (LDA 87-11012.)

Gribov, **Boris G.**, D. Chem S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Gribov, **Vladimir** N. , D. PM. S. Born in 1930 in Leningrad. Russian physicist and theorist. He is a specialist in particle physics. Corresponding member of the Nuclear Physics Department of the Academy since 1972. He graduated from Leningrad State University in 1952 and served as a staff member of the Physicotechnical Institute of the AN SSSR from 1954 to 1971 when he joined the Leningrad Institute of Nuclear Physics of the AN SSSR. Professor at Leningrad University since 1968. Since 1971, he has been Chief of the Theory Laboratory of the B. P. Konstantinov Nuclear Physics Institute in St. Petersburg which was established in 1971. (GSE 30, p. 389.)

Grigoliuk, Eduard I . Born in 1923 in Moscow. Russian scientist in mechanics. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1958. He is also a member of the Siberian department. In 1944, he graduated from the Moscow Institute of Aviation and taught there. From 1946 top 1950, he lectured at the N. E. Bauman Higher Technical School. From 1953, he taught at the Institute of Mechanics of the AN SSSR. He has been a professor at the Moscow Institute of Aviation since 1965. His work has been in the mechanics of deformable bodies. (GSE 7, p. 425.)

Grigor'ev, **Anatolii I.** , D. Med. S. Born in 1943. Corresponding member of the Academy in 1993. Since 1988, he has been Director of the Biomedical Problems Institute in Moscow which was established in 1962 to research space biology and medicine. It is responsible for all aspects of the cosmonauts' safety.

Grigor'ev, Valentin A. , D. Tech. S. Born in 1929. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981. Grigorian, Samuel S., Corresponding member the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Gritsenko, **Aleksandr I.** , D. Tech. S. Corresponding member of the Academy in 1993. Since 1979, he has been Director of the Natural Gas Scientific Research Institute in Moscow which researches gas exploration techniques, gas condensation and gas transport systems. It is subordinate to the Ministry of the Gas Industry.

Gritsko, Gennadii M., D. Tech. S. Born in 1930. Engineer. Specialist in research into pressures of pits in coal mines. Corresponding member since 1990. He is Director of the

Coal Institute in Kemerovo. He is author of 20 scientific works and co-author of 121, of which eight were important monographs. He introduced the method for predicting pressures in coal mine pits and developed the technology to implement the method. He teaches at the Kuzbass Polytechnic Institute where he has guided the work of two doctoral and 42 aspirants for the candidate degree. He was on the Scientific Council on physical technical problems in the exploitation of useful minerals of the Geology, Geochemistry and Mining Sciences Department of the AN SSSR; on the Scientific-Technical Council a government ministry; on the Council on the mechanical and mathematical, energetics and earth sciences of the Siberian Department of the academy. He is on the specialists' supervisory panel for dissertation defense and chairman of the doctorate granting body of the Institute of Coal. He is editor of a scientific journal and Director of the Kemerovo Scientific Center of the Siberian Department. Under Dr. Gritsko's leadership, an International Center for Coal Research is being organized in Kemerovo under the Kemerovo Scientific Center.

Gromov, B. V. Corresponding member of the Academy in 1993.

Gromyko, Anatolii A., D. Hist. S. Born in 1932. Corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988. Since 1976, he has been Director of the Africa Institute in Moscow. Established in 1959, this institute researches economic, socio-political, international, historical, and cultural-ethnological problems of African states. Corresponding member of the History department since 1981. (LDA 89-11378.)

Gubin, Igor E. Born in 1906 in St. Petersburg. Russian geologist and seismologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1976. He graduated from the Leningrad Institute of Mines in 1934. From 1932 to 1938, he was a staff member of the All-Union Geological Institute and a staff member of the Tadzhik Branch of the AN SSSR from 1938 to 1945. In 1945, he began working at the Institute of Lithosphere Physics of the AN SSSR. His work deals mainly with seismic zoning and seismotectonics of Middle Asia. (GSE 30, p. 390.)

Gurevich, Aleksandr V. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. In 1976, he was a junior researcher in the Theoretical Physics Department of the Nuclear Physics Division of the P. N. Lebedev Physics Institute.

Gusenkov, A. P. Corresponding member of the Academy in 1993.

Gusev, B. V. Corresponding member of the Academy in 1993.

Gus'kov, **Gennadii Ia.** , D. Tech. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Ibragimov, I. A. Corresponding member of the Academy in 1993.

Il'gamov, **M. A.**, D. PM. S. Born in 1934. Deputy Chairman of the Kazan Affiliate of the Russian Academy of Sciences since 1988. Corresponding member of the Academy in 1993.

Il'in, A. M. Corresponding member of the Academy in 1993.

Il'iushin, Aleksei A ., D. PM. S. Born in 1911 in Kazan. Russian scholar in continuum mechanics. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1943. Originally elected to the Technical Sciences department. He graduated from Moscow University in 1934, becoming a professor there in 1938. From 1936 to 1960, he worked at the Institute of Mechanics of the AN SSSR, becoming its Director in 1953. He served as Rector of Leningrad University from 1950 to 1952. His works have been in the theory of elasticity and plasticity. State Prize, 1948. (GSE 10, p. 139.)

Imanaliev, Murzabek I. , D. PM. S. Born in 1931. Since 1979, academician of Physical and Mathematical Sciences Department of the Georgiian Academy of Sciences and of the Physical, Technical, and Mathematical Department of the Khirgiz Academy of Sciences, and since 1981, a corresponding member of the Mathematics Department of the AN SSSR and the RAN. From 1979 to 1986, he served as President of the Kirghizstan Academy of Sciences.

Inge-Vechtomov, **Sergei G.** Corresponding member of the General Biology Department of the Academy since December 1987. (LDA 89-11378.)

Inozemtsev, **Vladimir G** . Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Ioffe, B. L. Corresponding member of the Academy in 1993.

Ippolitov, E. G., D. Chem S. Born in 1930. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1979. Also a member of the Siberian department. Since 1977, he has been Director of the Chemistry Institute in Vladivostok, which was founded in 1970 and does research on the composition of marine foam, methods of extracting minerals from sea water, and researches the crystal structures of rare metal fluorides.

Iskenderov, **Akhmed A** ., D. Hist. S. Born in 1927. Corresponding member of the History Department of the Academy since 1979. Since 1975, he has been Deputy Director of the General History Institute in Moscow which was established in 1968 when it was split off from the History of the USSR Institute. It is a major center for international studies research.

Ivanitskii, Genrikh R ., D. PM. S. Born in 1936 in Moscow. Russian biophysicist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1976. He graduated from the S. Ordzhonikidze Moscow Aviation Institute in 1960. In 1954, he began working at the Institute of Biophysics of the AN SSSR. From 1976 to August 1988, he was Director of the Pushchino Biological Physics Institute which does research on the physical and chemical properties of nucleic acids, radiobiology, and the automation of bioprocesses. He is a recipient--with others--of the Lenin Prize in 1980 for discovery of a new category of autowave processes and research of their role in disturbing the stability of vulnerable distribution systems. His works have included the development of biophysical methods of research using computer technology and coherent optics and applying them to cytology. He helped to perfect a scanning optical microscope. In 1970, he organized a center for machine analysis of cell structures. (GSE 30, p. 463.)

Ivannikov, **Viktor P** ., D. PM. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Ivanov, I. D. Corresponding member of the Academy in 1993.

Ivanov, Sviatoslav N . Born in 1911 in Nizhny Novgorod (Gorkiy). Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1970. He is also a member of the Ural Scientific Center. He graduated from the Sverdlovsk Institute of Geological Prospecting in 1932 and began working on the exploration and prospecting of copper deposits in the Ural. From 1940, he directed the laboratory of physical geochemistry at the A. N. Zavaritskii Institute of Geology and Geochemistry of the Ural Department of the Academy. Since 1966, he has been Director of that institute and Deputy Chairman of the Ural Scientific Department of the AN SSSR. His works deal with the regularities of the location of pyrite-type cupreous deposits. He established the concept of the period and reasons for greenstone metamorphism, which he believes occurred before the uplifting of the sea floor and before the formation, in the volcanic region, of mountain structures connected with the intrusion of granite botholiths. State Prize, 1949. (GSE 10, p. 504.)

Ivanova, Ludmila N. , D. Med. S. Born in 1929. Endocrinologist. Corresponding member of the Siberian Department and of the Academy since 1991. Head of the Laboratory of Physiological Genetics of the Institute of Cytology and Genetics of the Siberian Department. She graduated from the Novosibirsk State Medical Institute in 1953. She began work at the institute in 1971, received her medical degree in 1973 and was named a professor in 1976. She has written some 136 scientific works and has supervised the dissertations of 12 aspirants for the candidate degree. She is on several important scientific councils.

Ivanter, **V**. **V**. Corresponding member of the Economics Department of the Academy in 1993. He is a lead scientist in the Economics and Forecasting of Scientific-Technical Progress Institute which was established in 1985.

Ivanter, E. V. Corresponding member of the Academy in 1993.

Iyevlev, **Vitalii** M . Born in 1926. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1964.

Iziumov, **Iurii** A., D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1976, he has been Chief of the Solid State Laboratory: of the Metal Physics Institute in Sverdlovsk, which is subordinate to the Ural Department of the Academy. Established in 1932, it does work in magnetism and metal physics. (LDA 89-11378.)

Kabanov, Mikhail V ., D. PM. S. Born in 1937. Physicist. Specialist in the field of atmospheric physics. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy and of the Siberian Department since 1987. He graduated from the Tomsk State University in 1959, and began work as a researcher, was head of a laboratory of the Siberian Physico-Technical Institute from 1961 to 1975, and head of a laboratory and Deputy Director of the Atmospheric Optics Institute in Tomsk from 1975 to 1984. In 1984, he was made Director of the Siberian Physico-Technical Institute. He has been a professor at the Tomsk State University since 1981. Chairman of the InterDepartmental Commission on Radiation of the Geophysical Committe of the Presidium of the Russian Academy of Sciences. (Also see: LDA 89-11378.)

Kadyshevskii, V. G. Corresponding member of the Academy in 1993.

Kalakutskii, Lev V., D. Bio. S. Born in 1932. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since December 1987. Since 1977, Chief of the Microbial Ontogenesis Department of the Biochemistry and Physiology of Microorganisms Institute in Puschino--now the "All-Union Collection of Microorganisms" (VKM) Department of the Biochemistry and Physiology of Microorganisms Institute in Pushchino. The department collects, studies, maintains and supplies non-pathogenic and non-quarantine microorganisms for various institutions and scientists. Its research program provides original descriptions of a number of microbial genera and species. It was the first institute in Russia to work with nitrogen-fixing symbiants of non-pulse plants. The staff of the department numbers about 40 scientists.

Kaliaev, **Anatolii** V., D. Tech S. Born in 1922. Since 1971, Rector of the V. D. Kalmikov Radio Engineering Institute at Taganrog. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Kalinnikov, **Vladimir** T ., D. Chem. S. Born in 1935. Chairman of the Kola Affiliate since 1985. Corresponding member since of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since December 1987. (LDA 89-11378.)

Kalitkin, N. N. Corresponding member of the Academy in 1993.

Kamelin, R. V. Corresponding member of the Academy in 1993.

Kanygin, Aleksandr V., C. GM. S. Born in 1936. Micropaleontologist. Head of the Laboratory of Micropaleontology of the Institute of Geology and Geophysics of the Siberian Branch of the RAN. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy and of the Siberian Department since 1991. He graduated from Moscow State University in 1960 and went to work at the Geology and Geophysics Institute in 1962, where he was awarded the candidate degree in the geological sciences in 1965. In 1972, he became a senior researcher at that institute. His research included the biostratigraphy and paleobiogeography of the Asiatic portions of Russia. He is author and co-author of 60 scientific works including some statistical series--five of them with collectives--and he has edited about 12 monographs. He was on the Micropaleontology Commission of the Soviet Union, and deputy chairman of the Siberian Micropaleontology Commission of Siberia. He sat on the Scientific Council on doctoral dissertations, was on the Problems Council for the Department of General Biology for the

AN SSSR. He was on the Coordination Council for the Sibir Program. He has been on the Presidium of both the Siberian Department and of the Russian Academy of Sciences.

Kapitsa, Andrei P., D. Geog. S. Born in 1931 in Cambridge, England. Russian geographer and geomorphologist. Corresponding member of the OCeanology, Atmospheric Physics, and Geography Department of the Academy since 1970. From 1953 until 1970, he worked at the department of geography of Moscow State University, becoming a professor in 1966, and serving as dean from 1966 to 1970. He participated in four Antarctic expeditions and in the trans-antarctic crossings from Mirnyi Station to Pionerskaia (1956), Mirnyi to the south pole (1959-60), and from Vostok Station through the Pole of Inaccessibility to Molodezhaia Station (1963-64). In 1967-69, he led the Soviet Complex Geophysical Expedition of the AN SSSR to East Africa. He is also member of the Far Eastern Scientific Center. He has been chairman of the Presidium of the Far Eastern Science Center (now Department) of the AN SSSR since 1970. Son of P. L. Kapitsa. He has been a member of the Presidium of the AN SSSR since 1971. He is Director of the Pacific Institute of Geography of the Far Eastern Scientific Center. His major works are on the dynamics and morphology of the Eastern Antarctic ice cap. State Prize, 1971. (GSE 11, p. 405.)

Kapitsa, **Mikhail S**. Born in 1921. Corresponding member of the History Department of the Academy since December 1987. Since 1987, he has been Director of the Oriental Studies Institute in Moscow which traces its origin back to the founding of the Imperial Academy of Sciences itself in 1725. (LDA 89-11378.)

Kaplianskii, **Aleksandr** A., D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987. Since 1972, he has headed the Solid State Optics Laboratory of the A. F. Ioffe Physical Technical Institute in St. Petersburg. (LDA 89-11378.)

Kapustin, E. I . Born in 1921 in the village of Okorokovo, Kalinin Oblast. Russian economist. Corresponding member of the Economics Department of the Academy since 1976. He was a veteran of WW II (the Great Patriotic War). He graduated from the economics department of Moscow State University in 1949. He became Director of the Labor SRI in 1965. In 1967, he was made chairman of the subdepartment of labor economics at Moscow State University. From 1971 to 1986, he was Director of the Economics Institute in Moscow and during this period, received his professorship at Moscow University. His works have dealt with the political economy of socialism and problems of mode of life, standards of living, distribution, the organization of wages and material incentives and the scientific organization of labor. (GSE 30, p. 532.)

Karakeev, Kurman-Galii K . Born in 1913 in Kurmenty, Kirghiz Oblast. Russian historian. Corresponding member of the History Department since 1968. Originally elected to the Historical Sciences department. Academician and president of the Academy of Sciences of the Kirghiz SSR since 1960. Son of peasants. He graduated from the Higher Party School in 1946 and from the Academy of Social Science in 1959. From 1939 to 1959, he was secretary of the Tien-Shan and Issyk-Kul' Oblast Committee of the party, an editor of the republic newspaper, the head of the propaganda and agitation section of the CC of the Communist party of Kirghiz, and from 1947, he was secretary of the party's Central Committee. His fields of research are in cultural construction, history of the CPSU, and history of the USSR. He translated Marxist-Leninist works into Kirghiz. He was a deputy to the 6th, 7th, and 8th convocations of the Supreme Soviet and he was a delegate to the 22nd (1961) and 23rd (1966) Congresses of the CPSU. (GSE 11, p. 426.)

Karaulov, **Iurii** N. , D. Phlg S. Born in 1935. Corresponding member of the Literature and Language Department of the Academy since 1981. Since 1981, he has been the Director of the Russian Language Institute in Moscow.

Karavayko, G. I. D. Bio. S., Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. He graduated from Moscow State University in 1959 from the biological-soil faculty with specialties in plant physiology and microbiology. He finished his postgraduate course at INMI of the AN SSSR in 1962 and immediately became a member of the Institute staff. He

now heads the Microbial Transformation of Minerals Laboratory of the Microbiology Institute. Scientists in this laboratory search for, isolate and study the microorganisms active in the destruction of sulfide and non-sulfide minerals, study the mechanism, conditions and kinetics of the microbial destruction of minerals, and develop the microbiological bases for the bio-technological leaching of metals from ores and concentrates and for the biosorption of ions of metals from solutions.

Karlov, Iurii N. Corresponding member of the Academy in 1993.

Karlov, Nikolai V ., D. PM. S. Born in 1929. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. Since 1976, he has been Chief of the Application of Molecular Lasers department of the P. N. Lebedev Physics Institute in Moscow.

Karus, **Evgenii** V., D. PM. S. Born in 1918. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1984.

Kas'ianenko, Vasilii I., D. Hist. S. Corresponding member of the History Department of the Academy since 1987. At the History of the USSR Institute in Moscow, Professor Kas'ianenko heads up the history of the construction of socialism field of study. (LDA 89-11378.)

Kas'ianov, **Vladimir L**. Born in 1940. Corresponding member of the Academy in 1993. Since 1979 he has been the Deputy Director of the Marine Biology Institute in Vladivostok which was created in 1970 to study the distribution, composition of marine life and the biology of the Far Eastern seas.

Kazakov, V. P. Corresponding member of the Academy in 1993.

Kazarinov, **Vladimir** E., D. Chem S. Born in 1933. Corresponding member of the General and Technical Chemistry Department of the Academy in 1993. Since 1977, he has been Director of the Electrochemistry Institute in Moscow which was established in 1958. He also heads the double layer and electro-catalysis department of the institute where studies are conducted on ion metal/gas and metal/solution interfaces with the combined use of electrochemical, radio tracer and optical methods and surface spectroscopy; methods for investigating surface micro inhomogeneities in electrochemical systems are devised. Photoelectron emissions at the metal/solution interface are observed. Work is conducted on the direct conversion of the ionizing radiation energy in the semiconductor/solution system into chemical and electrical energies.

Kerimov, Dzhangir Ali Abbas ogly., D. Jur. S. Born in 1923 in Baku. Russian jurist. Corresponding member of the Philosophy and Law Department of the AN SSSR since 1966. Since 1967, academician of the Azerbaijan Academy of Sciences History, Economics Philosophy and Law department. From 1951 to 1957, he headed the subdepartment of the theory and history of state and law at the M. I. Kalinin Institute of Law in Leningrad and at the Leningrad State University. From 1957 to 1959, he was a professor at the Ulbricht German Academy of State and Law and at the University of Berlin in East Germany. From 1959 to 1965, he headed the subdepartment of state and law at Leningrad State University and since 1968, he has served as a prorector of that University. Between 1969 and 1971, he was a senior researcher at the Institute of Marxism-Leninism of the CC of the CPSU. Since 1971, he has headed the subdepartment of the theory of state and law at the Academy of Social Sciences of the CC CPSU. His works deal with the philosophical problems of jurisprudence, with the theory of state and law, and with the problems of applying cybernetics to social research and of social management and planning. (GSE 12, p. 421.) (LDA 89-11378.)

Khabibullaev, **Pulat K** ., D. PM. S. Academician of the Uzbek Academy's Physical and Mathematical Sciences department since 1984. President of the Uzbek Academy since 1984. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1984. Since 1979, he has been Director of the Nuclear Physics Institute in Tashkent which was established in 1956 and which conducts fundamental research in the areas of nuclear physics and the utilization of atomic energy

in science and in the national economy. Its facilities include a cyclotron and a nuclear reactor.

Khadzhiev, S. N. Corresponding member of the Academy in 1993.

Khasbulatov, R. I. Corresponding member of the Academy in 1993.

Khaybullin, I. B. Corresponding member of the Academy in 1993.

Khimich, Georgii L . Born in 1908 in Ulanovo. Russian specialist in heavy machine building. Corresponding member of the Problems of Machine Building and Control Processes since 1968. Also member of the Ural Scientific Center. He graduated from the S. M. Kirov Ural Industrial Institute in 1936 and began working at the S. Ordzhonikidze Ural Heavy Machine Building Plant. In 1956, he became Chief designer of the plant's rolling equipment. State Prize Laureate, Chief of the department for Comprehensive Problems of Machine Building of the Ural Scientific Center. His work has been in the design and construction of a number of unique rolling mills and continuous steel-casting installations. State Prize, 1950. (LDA 89-11378.) (GSE 28, p. 586.)

Khokhlov, A. R. Corresponding member of the Academy in 1993.

Khol'kin, Anatolii I., D. Chem. S. Born in 1937. Inorganic chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department and of the Siberian Department of the Academy since December 1987. He graduated from the Leningrad Polytechnic Institute in 1960. From 1962 to 1980, he researched in the Inorganic Chemistry Institute of the Siberian Department of the academy, moving from an aspirant, a junior and senior researcher. In 1980, he joined the Chemistry and Chemical Technology Institue of the Siberian Department, as its Deputy Director and in 1981, he became Director of that institute. Since 1982, he has been a professor at the Krasnoiarsk State University, holding the chair of inorganic and organic chemistry. He is a leading member of the of the Scientific Coordinating Council. He received the State Laureate Prize in 1986. (LDA 89-11378.)

Khomutov, Radii M ., D. Chem S. Born in 1929. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981, and Deputy Director of the Institute of Molecular Biology of the Academy. He heads the Chemistry of Enzymatic Regulation Laboratory of the institute. Professor Khomutov graduated from the Moscow State University Chemistry Department in 1952, joined the institute as a senior research scientist in 1959. In 1955, he defended his thesis on the interaction of salts and oxide of mercury with vinil esters and ethers, and in 1966, he defended his dissertation on the chemistry and mechanism of biological activity of antibiotic cycloserine. His current interests are in the chemistry of physiologically active compounds and enzymology. He received the State Prize in 1984-for his work--with others--on "The Chemical Principles of Biological Catalysis." (1964-1982.)

Khristiansen, G. B. Corresponding member of the Academy in 1993.

Khudiakov, **Gleb I** ., D. GM. S. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since December 1987. Also member of the Far Eastern Department. From 1978 to 1980, he was Chief of a laboratory of the (Far Eastern) Geology Institute in Vladivostok. Since 1980, he has been Director of the Pacific Ocean Geography Institute in Vladivostok which was established in 1971 to do physical, economic geographical research and to forecast environmental changes caused by economic development. (LDA 89-11378.)

Kirpichnikov, M. P. Corresponding member of the Academy in 1993.

Kirpichnikov, **Petr A** . Born in 1913 in Sanchursk Raion, Kirov Oblast. Russian organic chemist. Corresponding member of ;the General and Technical Chemistry Department of the Academy since 1976. He graduated from the S. M. Kirov Kazan Chemical Techology Institute in 1936 and joined its staff at once. In1960, he became head of its subdepartment of synthetic rubber technology, and in 1964, he became rector of the institute itself. Since 1982, chairman of the Kazan Affiliate of the Siberian department of the National Academy

of Sciences. His works are in the stabilization of polymers and the synthesis and modification of oligomers and elastomers. (GSE 30, p. 534.)

Kirzhnits, David A ., D. PM. S. Corresponding member of the Nuclear Physics Department of the Academy since December 1987. Since 1979, Chief of Theory of Superconductivity department of the P. N. Lebedev Physics Institute in Moscow.

Kiselev, **Lev L.**, D. Biochem. S., Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. He is head of the Molecular Bases of Ontogenesis Laboratory of the Molecular Biology Institute in Moscow. He graduated from Moscow State University in 1959 and defended his thesis on the secondary structure of soluble ribonucleic acids in 1964, and in 1972, he defended his dissertation on regulation problems on the specific interaction between transfer RNA and aminacyl-tRNA sythetase. He became a laboratory assistant in the institute in 1959. His current research interests center on protein biosynthesis, the human genome, nucleic acid-protein interactions, oncogenes and anti-oncogenes.

Kiselev, **Nikolai A** ., D. Bio. S. Born in 1928. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1979.

Kisun'ko, **Grigorii** V . Born in 1918 in Kuibyshev Raion, Zaporozhe Oblast. Russian scientist in radio electronics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1958. He graduated from the Voroshilovgrad Pedagogical Institute in 1938. Originally elected to the Technical Sciences department. His principal works are in radio engineering and electronics. Deputy to the 7th and 8th convocations of the Supreme Soviet. (GSE 12, p. 526.)

Kliachkin, Iurii S. Corresponding member of the Academy in 1993.

Klyuyev, Vladimir V . Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department since December 1987. Since 1975, he has been the Director of the Introscopy Scientific Research Institute, located in Moscow, which was established in 1964 to researcho nondestructive testing of all types of physical fields and radiation. The institute is directly subordinate to the Ministry of Instrument Making, Automation Equipment, and Control Systems. (LDA 89-11378.)

Kogarko, L. N., D. GM. S. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy in 1993. He heads the Geochemistry of Alkaline Rocks Laboratory, set up in 1980 in the V. I. Vernadskii Geochemistry and Analytical Chemistry Institute in Moscow. Its scientists research the origin, evolution and differentiation of alkaline magmas, the behavior of such volatile components as water, carbon dioxide, sulfur, fluorine and chlorine in mantle and alkaline magmas.

Kokoshin, **Andrei A** ., C. Hist. S. and D. Phil. S. Born in 1945. Since 1984, he has been Deputy Director of the United States and Canada Institute in Moscow, which was established in 1967. Corresponding member of the Problems of World Economics and International Relations Department of the Academy department since August 1988. (LDA 89-11378.)

Kolbasov, O. S. Corresponding member of the Academy in 1993.

Kolesnikov, **Vladislav G** ., C. Tech S. Born in 1925. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Kolesnikov, V. I. Corresponding member of the Academy in 1993.

Kolmogorov, V. A. Corresponding member of the Academy in 1993.

Kondrat'ev, V. V. Corresponding member of the Academy in 1993.

Konovalov, Anatolii N. , D. PM. S. Born in 1936. Mathematician. He is a specialist in mathematical modeling and computer experimentation. Corresponding member of the Mathematics Department of the Academy and of the Siberian Department in 1993. He heads the Laboratory of Numerical Decision-Making in Problems of the Theory of Elasticity, a laboratory of the computer center of the Siberian Department of the RAN. He has written

41 scientific works of which five are monographs. He is also credited with 34 inventions. He is a professor at the Novosibirsk State University in Akademgorodok where he has guided the academic work of 18 aspirants for the candidate degree. He was on the Scientific Council on the complex problems of mathematical modeling of the AN SSSR. He is also a member of the Siberian Department's Scientific Council on mathematics and informatics and he is an honored consultant-specialist of the council. He received the State Prize in 1988.

Kontrimavichus, Vitautas L ., D. Bio. S. Born in 1930 in Kaunas. Russian helminthologist. Corresponding member of the General Biology department and of the Far Eastern department since 1970. Academican of the Chemical, Technological, and Biological Sciences Department of the Lithuanian academy since 1980. Academician secretary since 1984. He graduated from the Leningrad Veterinary Institute in 1952. From 1952 to 1968, he was a graduate student and researcher at the Helminthology Laboratory of the AN SSSR in Moscow. In 1968, he became head of the department of the Biological Problems of the North of the Northeast Complex SRI of the Siberian department of the AN SSSR. Since 1970, he has been the Director of the Biological Problems of the North Institute at Magadan which researches the structure, function and productivity of ecosystems of the northern latitudes and methods of their preservation and adaptation to the northern environments. His work is in classification, ecology, and zoogeography of the parasitic helminths of mammals. In 1987, he was given the E. N. Pavlovskii Gold Medal for his work in parasitology and zoology. (GSE 13, p. 372.)

Kopaev, Iurii V. Corresponding member of the Academy in 1993.

Korobeynikov, Viktor P ., D. PM. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. He is also a member of the Far Eastern Department of the Academy. (LDA 89-11378.)

Korochkin, L. I. Corresponding member of the Academy in 1993.

Korolev, I. S. Corresponding member of the Academy in 1993.

Korovich, S. K. Corresponding member of the Academy in 1993.

Kort, Vladimir G., D. Geog. S. Born in 1914. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1979. He was the Director of the Institute of Oceanology of the USSR Academy of Sciences in Moscow until 1965. He supervised a program which had a staff of 20 doctors, 90 candidates and 300 junior-level scientists at that time. In 1966, Kort was Chief of the Hydrological Processes Laboratory of the P. P. Shirshov Oceanology Institute. In 1982, he was the recipient of the S. O. Makarov Gold Medal for his scientific accomplishments in oceanographic research.

Kostenko, Mikhail V. Born in 1912 in Nikolaev. Russian scientist in power engineering. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1962. Originally elected to the Technical Sciences department. He graduated from the Leningrad Polytechnic Institute in 1938. He became a professor there and head of the subdepartment of high-voltage engineering in 1955. His work is in calculations of oscillations and waves in electric circuits. In 1979, he was awarded the P. N. Iablockskii Prize. (GSE 13, p. 437.)

Kostiuk, V. V. Corresponding member of the Academy in 1993.

Kostomarov, D. P. Corresponding member of the Academy in 1993.

Kostrikin, **Aleksei I** ., D. PM. S. Born in 1929 in Volgograd Oblast. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1976. He graduated from Moscow University in 1952 and was appointed professor there in 1976. In 1956, he joined the staff of the V. A. Steklov Institute of Mathematics of the academy. His works include Lie algebras and their applications to finite groups. State Prize, 1968. (GSE 30, p. 535.)

Koton, Mikhail M., D. Chem. S. Born in 1908 in Petrodvorets, Leningrad Oblast. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1960. Originally elected to the Chemical Sciences department. He graduated from Leningrad State University in 1935. In 1952, he became

head of a laboratory at the Leningrad Institute of Macromolecular Compounds of the AN SSSR, and in 1960, he was made Director of the High Molecular Compounds Institute in St. Petersburg which was established in 1948 to conduct research on synthetic fibers and macromolecular biology. Since 1972, he has also been Chief of the Polymer Synthesis Laboratory of that Institute. His works are in organic and organometallic chemistry and in macromolecular compounds. He presently heads the area of the synthesis and investigation of thermally stable polymers consisting of three laboratories working on films and fibers of high tensile strength, high temperature glues, and gas separating membranes. (GSE 13, p. 450.)

Kotov, Iurii A. Corresponding member of the Academy in 1993.

Kotov, Vadim E., D. PM. S. Born in 1938. Mathematician/physicist. Specialist in Informatics and Computer Technology. Corresponding member of the Information Science, Computer Technology and Automation Department of the Academy and of the Siberian Department since 1990. He is the Director of the Institute for Informatics Systems of the Siberian Department in Novosibirsk. He is the author of 39 scientific works, and co-author of 67 of which two were monographs. Among his own books three are important: "Vvedenie v teoriiu skhem programm" (1978)--"Introduction to Programming", "Seti Petri" (1984), and "Teoriia skhem programm" --"The Theory of Programming." (1984). He is a professor at Novosibirsk State University where he has guided the academic work of one doctoral and 20 aspirants for the candidate degree. He headed a working group on the theory of programming of the Department of Information Computer Technology, and Automation of the Academy.

Kovalenko, V. I. Corresponding member of the Academy in 1993.

Kovalev, Nikolai N. Born in 1908 in Poltava. Russian scientist in mechanics and hydroturbine building. Corresponding member of the Physical Techical Problems of Power Engineering Department of the Academy since 1953. Originally elected to the Technical Sciences department. Also corresponding member of the Mechanics and Control Processes Department of the Academy since 1953. He graduated from the Leningrad Engineering Institute in 1930 and began work at the Leningrad Metals Plant. In 1945, he became Chief designer of hydroturbines. Since 1959, he has been at the Central Boiler and Turbine Institute in St. Petersburg. From 1939 to 1967, he taught at the Leningrad Polytechnic Institute. He has been chairman of the Scientific and Technical Society for Power Engineering and the Electrical Power Industry since 1958. His work has been in the design of hydroturbines. State Prizes, 1946, 1950; Lenin Prize, 1959. (GSE 12, P. 619.)

Kovtunenko, Viacheslav M $\,$., D. Tech S. Born in 1921. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. Also a corresponding member of the Mathematics, Mechanics and Cybernetics department of the Ukrainian Academy of Sciences.

Kozlov, **Dmitrii** I . Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984. Since 1984, third secretary of the Permanent Russian Mission of the International Atomic Energy Agency in Vienna.

Kozlov, **Leonid N**. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy and of the Ural Department of the Academy since December 1987. (LDA 89-11378.)

Kozlov, **Vladimir Ia.** Born in 1914 in Moscow. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1966. He graduated from Moscow University in 1937 and has been a professor there since 1952. His works have been principally in the theory of functions of a real variable. (GSE 12, p. 632.)

Krasnii, **Lev I** ., D. GM. S. Born in 1911. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy and of the Far Eastern Department since 1970. (LDA 89-11378.)

Krasnoshchekov, **Iurii** I ., D. Tech S. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1984.

Krestov, **Gennadii A**. D. Tech. S. Born in 1931. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1981. Since 1981, he has been Director of the Chemistry of Nonaqueous Solutions Institute at Ivanovo, which is subordinate to the Physical Chemistry and Technology of Inorganic Materials department of the Academy. It was established in 1981 and studies the chemical and dyeing processes of nonaqueous solutions. He also heads all work in the Chemistry of Solutions in Liquid Materials research.

Krivolutskii, D. A. Corresponding member of the Academy in 1993.

Krivosheev, **Nikolai** A . Born in 1930. Corresponding member of the General and Technical Chemistry Department of the Academy since 1979.

Krokhin, O. N. Corresponding member of the Academy in 1993.

Krugliakov, Eduard P ., D. PM. S. Born in 1934. Russian physicist. Specialist in Plasma Physics and in the research problems associated with Thermonuclear Synthesis. Corresponding member of the General Physics and Astronomy Department of the Russian Academy of Sciences and of the Siberian Department since December 1987. He graduated from the Moscow Physico-Technical Institute in 1958. He began work in 1958 at the Nuclear Physics Institute of the Siberian Department, and in 1976 he has headed the Plasma Physics Laboratory of the Nuclear Physics Institute in Novosibirsk and has been head of "Krugliakov's Department." The institute is the leading nuclear research facility in Siberia. He was one of the principal organizers of the physics and mathematics "school" at the University of Novosibirsk--for which students are carefully screened, tested, and selected from across all of the former Soviet Union for entrance. He is on the Scientific Council on Plasma Physics of the national academy, and a permanent member of the national standing commission on atomic energy of the national government. He received the State Prize in 1986. (LDA 89-11378.)

Kruzhilin, Georgii N . Born in 1911 in a village in Rostov Oblast. Russian scientist in heat engineering and atomic power engineering. Corresponding member of the Physical Tecvhnial Problems of Power Engineering Department of the Academy since 1953. Originally elected to the Technical Sciences department. He graduated from the Leningrad Institute of Physics and Mechanics in 1934 and worked at the Central Boiler and Turbine Institute from 1933 to 1946. He was on the staff of the Atomic Energy Institute from 1946 to 1955. He became head of a laboratory at the G. M. Krzhizhanovskii Institute of Power Engineering in 1955. His works have been in the development and construction of atomic experimental and power installations. (GSE 13, p. 528.)

Krylov, Sergei V ., D. Geog. S. Born in 1931. Russian geographer. Specialist in geophysics, and in seismic methods of research on the earth's crust and the earth's mantle. Corresponding member of the Geology, Geophysics, Geochemistry and Mining Department and of the Siberian Department since December 1987. He graduated from the Leningrad Mining Institute in 1955 and began working at a geological prospecting organization. He joined the Geology and Geophysics Institute of the Siberian Department in 1961 and served in turn as a junior and senior researcher, and head of the Laboratory of Deep Seismic Research. In 1987 he was named head of the Department of Geophysics and shortly thereafter, Director of the institute itself. He has been a professor at the Novosibirsk University since 1979. (LDA 89-11378.)

Krymskii, Germogen F., D. PM. S. Born in 1937. Physicist. Specialist in nuclear physics and the physics of cosmic rays. Corresponding member of the General Physics and Astronomy Department of the RAN since 1992. He has authored or co-authored 207 scientific works of which three are major monographs. He graduated from the Yakutsk State University in 1959. From 1959, he worked at the Laboratory for Cosmic Rays, of the Space Physics Research and Aeronomy Institute in Yakutsk as a laboratory assistant, a laboratory technician, a junior and senior researacher, and head of a sector of the theoretical Department, and in May of 1988, he was named Director of the Space Physics Research and Aeronomy Institute in Irkutsk that had been established in 1962 and is a center for the study of cosmic rays. He became a member of the Siberian Department's

Presidium in 1988. He is an honored Scientist of the Soviet Union. He was named chairman of the Yakutsk Scientific Center in April 1989. In 1990, the Siberian Department of the Russian Academy of Sciences established the Siberian Center of Solar-Terrestrial Physics in Siberia--a new international research center that combined the work of scientists in two major institutes: the Terrestrial Magnetism, Ionosphere and Radio Wave Propagation Institute in Irkutsk and the Institute of Cosmophysical Reseach and Aeronomy in Yakutsk in the establishement of this new international thrust. As Director of the Siberian Institute of Cosmophysical Research and Aeronomy located in Yakutsk, Dr. Krimskii will play a major role in the development of this new scientific international research effort.

Kryshtal', **Oleg A** ., D. Bio. S. Born in 1945. Corresponding member of the Physiology Department of the Academy since December 1987. (LDA 89-11378.)

Kudriavtsev, **Lev D** ., D. PM. S. Born in 1923. Corresponding member of the Mathematics Department of the Academy since 1984. Since 1968, he has been Deputy Director of the V. A. Steklov Mathematics Institute in Moscow which was established in 1921. It carries out research in all branches of pure mathematics as well as mathematical physics.

Kulaev, **Igor S.**, D. Bio. S., Born in 1930. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since December 1987. In 1990, he was head of Regulation of Biochemical Processes Laboratory of the Biochemistry and Physiology of Microorganisms Institute of the Russian Academy of Sciences in Pushchino, which studies the molecular bases of biogenesis and the mechanisms of translocation of proteins, enzymes, polyenzyme complexes and other biopolymers via the microbial cell envelope. Its scientists have discovered new reactions of biosynthesis of the yeast envelope components (mannoproteins, polyphosphates) and the regulatory function of ATP in coordination of these reactions. It has cooperated with the Institute of Organic Synthesis of the Latvian Academy of Sciences in developing the technology for the production of a lysoamidase drug used to treat wounds, burns and other skin defects, infected by Gram-positive cocci, first of all by staphylococci. (LDA 89-11378.)

Kulakov, **Anatolii V** ., D. PM. S. Corresponding member of the Physiocal Technical Problems of Power Engineering Department of the Academy since 1984.

Kuleshov, Valerii V . D. Econ. S. Born in 1942. Economist. Specialist in forecast planning for multibranch complexes, the methodology and methods of economic-mathematical modeling for industrial development in the national economy and of the problems of the utilization of natural resources in Siberia. Corresponding member of the Economics Department and of the Siberian Department since 1987. He graduated from the Moscow Institute of the National Economy in 1965. From 1965 to 1966, he worked in the laboratory of economic and mathmatical research of the Novosibirsk State University. In 1966, he joined the staff of the Economics and Organization of Industrial Production Institute of the Siberian Department. He was an aspirant, a junior and senior researcher, and head of a sector, and of a Department on planning multibranch complexes. In 1986, he was named Director of that Institute. He has been a professor at Novosibirsk State University since 1985, holding the chair in planning and forecasting of the national economy. He edited the journal "Izvestia of the Siberian Department of the AN SSSR.--the series on economic and applied sociology." (LDA 11378.)

Kulikovskii, A. G. Corresponding member of the Academy in 1993.

Kulish, E. A . Born in 1931. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Department since 1970. Also member of the Far Eastern Department.

Kumanev, Viktor A $\,$. Corresponding member of the History Department of the Academy since December 1987. (LDA 89-11378.)

Kurbatkin, Gennadii P., C. PM. S. Born in 1930 in Tashkent. Russian meteorologist. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Acadmey since 1976. He graduated from the Middle Asian University (University of Tashkent) in 1953. He was a staff member of the Institute of Atmospheric

Physics of the AN SSSR from 1955 to 1957, the Institute of Applied Geophysicis from 1957 to 1961, and the Hydrometeorological Service of the USSR from 1961 to 1963. In 1963, he became affiliated with the Computer Center of the Siberian division (now Department) of the AN SSSR. In 1969, he became Chief of the Long-Range Weather Prediction Department of the Novosibirsk Computer Center, and in 1978 he also became Chief of the Physics of Atmospheres and Oceans Laboratory of the Computer Center in Novosibirsk. His works deal with numerical modeling of the dynamics of atmospheric processes, the theory of planetary and atmospheric circulation, and hydrodynamic long-range weather forecasting. (GSE 30, p. 537.)

Kurbatov, Leonid N . Born in 1913 in Fergana. Russian Physicist. Corresponding member of the General Physics and Astronomy Department of the Academy since 1972. He graduated from the Leningrad Polytechnical Institute in 1936 and from 1936 to 1940 and from 1956 to 1960 he worked at the Leningrad University. In the 1940s and 1950s he also worked at the Naval Medical Academy and at the S. I. Vavilov State Optical Institute while acting as Director of an SRI. He has been a professor at the Moscow Physicotechnical Institute in Moscow since 1961. Member of a team of scientists in the Lebedev Physics Institute whose work on tunable semiconductor lasers and high-resolution molecular spectroscopy was nominated in 1985 for a Lenin or USSR State Prize for Science and Technology. His works deal with the phenomena of absorption and photoconductivity and the recombination radiation of semi-conductors. He has developed a number of photoelectric instruments and optical semiconductor quantum generators. State Prize, 1970. (GSE 14, p. 120-121.)

Kurdiumov, **Sergei P** ., D. PM. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Kuzeev, **Rail' G.** D. Hist. S. Since 1979, he has been the Deputy Chairman of the Bashkir Scientific Center.

Kuzin, Aleksandr M. Born in 1906 in Moscow. Russian biochemist and radiobiologist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1960. He graduated from the First Medical School Institute in 1929. He was with the First Medical Institute from 1930 to 1938 and a professor and a subdepartment chairman at the Third Moscow Medical Institute from 1938 to 1951. Since 1957, he has been Chief of the Biological Radiation Division of the Pushchino Biological Physics Institute. He was editor-in-Chief of the journal, Biofizikia until 1961, and since 1961, he has been editor-in-Chief of Radiobiologiia. His works have been in the biochemical and molecular bases for the effect of ionizing radiation on living organisms. (GSE 13, p. 570.)

Kuznetsov, **Feliks F**. D. Phlg. S. Born in 1931. Corresponding member since December 1987. In 1988, he was named Director of the A. M. Gorkiy World Literature Institute in Moscow that dates back to the mid-1930s and that serves as the principal place for research on contemporary Russian and foreign literature in Russia.

Kuznetsov, Nikolai $\,V\,$. Corresponding member of the Mathematics Department of the Academy and of the Far Eastern Department since December 1987. (LDA 89-11378.)

Kuz'min, Mikhail I., D. GM. S. Born in 1938. Geochemist. Director of the Geochemistry Institute imen A. V. Vinogradov. Corresponding member of the Geology, Geophysic, Geochemistry, and Mining Sciences Department of the Academy and of the Siberian Department since 1990. He is the author of 11 scientific works of which one is a monograph of importance. He has co-authored 140 pieces of which eight are lengthy monographs of which two bear mentioning: "New Global Tectonics, Magmatism and Metallogeny" (1976) and "The Techtonics of the Lithosphere's Plate in the Territory of the Soviet Union" (1990.) In his research he has conducted comparative studies of the geochemistry of magmatic ocean rocks. He has headed expeditions for collecting samples for study from the Atlantic, Indian, and Pacific Oceans. He is a member of a working group on "Paleoreconstruction." He is also on the Russian Committee on the "Lithosphere" program and the program on "Geodynamics," and others. (LDA 89-11378.)

Lapin, **Nikolai I.**, D. Phil S. Corresponding member of the Philosophy and Law Department of the Academy since December 1987. From 1987 to May of 1988, he acted as Director of the Philosophy Institute in Moscow. He was replaced by Viacheslav S. Stepin. (LDA 89-11378.)

Larichev, O. I. Corresponding member of the Academy in 1993.

Larionov, Vladimir P., D. Tech. S. Born in 1938. Engineer. Specialist in machine building and construction. Corresponding Member of the Academy and of the Siberian Department in 1993. Since 1962, he has directed the work of the Physical Technical Problems of the North Institute in Yakutsk. He is a professor, recipient of the Prize of the Council of Ministers of the Soviet Union, deputy head for science of the Yakutsk ASSR, and was a Peoples' Deputy of the Soviet Union. He is author of 12 scientific works of which the monograph "Electrospark Welding Construction" stands out. He has co-authored another 169 publications. He is deputy chairman of a Scientific Council of the GKNT on machines and materials and the exploitation and introduction of foreign practices into production as well as on the Russian Academy of Sciences national committee on welding, a member of the Supreme Soviet for science. In 1991, a new International Research Center for Northern Territories Development in Siberia was established that links together the work of scientists of three Siberian Department Institutes: the Institute of Cryosphere of Earth in Tiumen, the Institute of Physico-Engineering Problems of the North in Yakutsk, and the Institute of Philology in Akademgorodok-Novosibirsk. As Director of the Institute of Physico-Engineering Problems of the North in Yakutsk, Dr. Larionov will play a major role in the development of this new international research institute. (LDA 89-11378.)

Lavrov, **Lev** N . Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987. (LDA 89-11378.)

Lavrov, **Svyatoslav S.**, D. Tech. S. Born in 1923. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1966. Since 1978, he has been the Director of the Theoretical Astronomy Institute in St. Petersburg whose work includes celestial mechanics, astrophysics, and gravimetry. (LDA 89-11378.)

Leonov, Iurii G. Corresponding member of the Academy in 1993.

Leonov, Sergei B. , D. Tech. S. Born in 1931. Mining Engineer. Corresponding member of the Academy and of the Siberian Department in 1993. He joined the Irkutsk Mining-Metallurgical Institute in 1955, obtaining his candidate degree in 1959 and his doctorate in 1979. Corresponding member since 1991. He is Rector of the Irkutsk Polytechnical Institute. He has published 552 scientific works of which eight were monographs. His fundamental research has dealt with the theoretical aspects of the synthesis and utilization of new effective reagents for changing the superficial qualities of minerals using the flotation of sulphides and other ore oxides under the application of high energy. He is one of the Head designers of a floation pneumechanical high pressure water or geyser machine for achieving these purposes safely and in an ecologically sound technological manner. As a professor he has guided the research of four doctoral students and the work of 50 aspirants for the candidate degree.

Leont'ev, L. I. Corresponding member of the Academy in 1993.

Ler, **Pavel A**. Corresponding member of the General Biology department and of the Far Eastern department since December 1987. (LDA 89-11378.)

Levin, V. A. Corresponding member of the Academy in 1993.

Levin, Vladimir K. Corresponding member of the Information Science, Computer Technology, and Astronomy Department of the Academy of the Academy since December 1987. (LDA 89-11378.)

Lidorenko, **Nikolai S** ., D. Tech. S. Born in 1916 in Kursk. Russian scientist in electrical and power engineering. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1966. He also holds membership in the General Physics and Astronomy Department and in the Physical Chemistry and Technology of Inorganic Materials Department of the Academy. He

graduated from the Novocherkassk Polytechnic Institute in 1940. Since 1950, He has been of the Current Sources Scientific Research Institute in Moscow which is subordinate to the Ministry of Instrument Building, Automation Equipment and Control Systems. It is in this institute that the solar and electrochemical power sources for the Russian Space program are developed. In 1963 he gained professorial status and became a head of a subdepartment of the Moscow Polytechnical Institute in 1965. His main work is in the conversions of energy and the design of physical models of information. Lenin Prize, 1960. (GSE 14, pp. 482-83.)

Lipanov, **Aleksei M**. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. He also holds membership in the Urals Department of the Academy. (LDA 89-11378.)

Litvinov, B. V. Corresponding member of the Academy in 1993.

Lobashev, **Vladimir M** ., D. PM. S. Born in 1934 in Leningrad. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1970. He graduated from Leningrad State University in 1957. From 1957 to 1972 he worked at the Physicotechnical Institute of the AN SSSR. Since 1972, he has been at the Institute of Nuclear Research of the AN SSSR. His works are in nuclear physics. (GSE 14, p. 620.)

Lomidze, Georgii I ., D. Phil. S. Born in 1914 in Tbilisi. Russian literary scholar. Corresponding member of the Literature and Language Department of the Academy since 1972. He graduated from the M. Gorkiy Institute of Literature in 1947. Since 1955, he has chaired the division of the history of Russian literature of the Gorkiy Institute of World Literature. He began publishing in 1935. Doctor of Philosophical Sciences (1960). He was a professor at the Academy of Social Sciences under the CC CPSU from 1965. In 1980, he received the N. A. Dobroliubov Prize for his contributions to the philosophical sciences. (GSE 15, pp. 123-4.)

Lopato, Georgii P., D. Tech. S. Born in 1924. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since 1979. Since 1972, he has been Director of the Electronic Computers Scientific Research Institute in Minsk, which designs and produces computer systems. The institute is directly subordinate to the Ministry of the Radio Industry in Moscow.

Lukanin, V. N. Corresponding member of the Academy in 1993.

Lunin, V. V. Corresponding member of the Academy in 1993.

Lupanov, **Oleg B.**, D. PM. S. Born in 1932 in Leningrad. Russian Mathematician. Corresponding member of the Mathematics Department of the Academy since 1972. He graduated from Moscow State University in 1955 and became a professor there in 1964. He had begun work at the Institute of Applied Mathematics of the AN SSSR in 1954, and had been promoted to senior research worker in 1960. His works have included mathematics problems in cybernetics and mathematical logic. He has investigated the asymptotic laws of complexity of control systems. Lenin Prize, 1966. (GSE 15, p. 188.)

Makarov, Aleksei A., D. Econ. S. Born in 1937. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1984. Corresponding member of the Economics department of the academy since 1979. Also member of the Siberian department. Since 1974, he has been Deputy Director of the Power Engineering Institute in Irkutsk, subordinate to the Siberian department, and which is involved in the research and development of the electrification of Siberia, including power generation and transmission. Since 1984, he has been Director of the Organization and Management Problems Scientific Research Institute in Moscow, which was subordinate to the GKNT.

Makhutov, N. A. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy of the Academy since 1987.

Malmeister, Aleksandr K ., D. Tech. S. Born in 1911. Since 1958, academician of the Physical and Technical Sciences department of the Latvian Academy of Sciences. Corresponding member of the Problems of Machine Building, Mechanics and Control

Processes Department of the Academy since 1970. President of the Latvian Academy of Sciences from 1970 to 1984.

Maliusov, Vladimir A . Born in 1913 in Moscow. Russian chemical engineer. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1968. He graduated from the D. I. Mendeleev Moscow Institute of Chemical Engineering in 1940. From 1946 to 1963, he worked at the L. Ia. Karpov Physical Chemical Institute. In 1963, he became laboratory Director at the N. S. Kurnakov Institute of General and Inorganic Chemistry of the AN SSSR. His main work is in the hydrodynamics and mass transfer in two-phase liquid gas flows and with new methods of separating mixtures. State Prize, 1953. (GSE 15, p. 381.)

Malyshev, Iurii N. Corresponding member of the Academy in 1993.

Malyshev, **Nikolai** A . Born in 1911. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1976.

Mamaev, S. A. Corresponding member of the Academy in 1993.

Mamyrin, Boris A., D. PM. S. Corresponding member General Physics and Astronomy Department of the Academy in 1993. He has been head of the Mass Spectrometry Department of the A. F. Ioffe Physical Technical Institute in St. Petersburg since 1972.

Manin, Iurii I. Corresponding member of the Academy in 1993.

Marfunin, Arnold S., Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987. (LDA 89-11378.)

Marov, M. Ia. Corresponding member of the Academy in 1993.

Martynov, Ivan V ., D. Chem S. Born in 1900. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981.

Mastriukova, **Tatiana A.** , D. Chem. S. Born in 1925. Corresponding member of the General and Technical Chemistry Department of the Academy since December 1987. (LDA 89-11378.)

Matishov, G. G., D. Geog. S. Corresponding member of the Academy in 1993. Since 1982, he has been the Director of the Marine Biology Institute in Murmansk which is subordinate to the Kola Affiliate of the Academy. It was founded in 1958 to research the flora and fauna of the northern sea and the ecological and physiological adaptation of marine organisms. (LDA 89-11378.)

Matulis, Iuozavich Iuozovich, D. Chem S. Born in 1899 in Tatkonys, Lithuania. Physical chermist. Corresponding member of the General and Technical Chemistry Department of the Russian Academy since 1946; academician of the Lithuanian academy since 1941. He graduated from the University of Kaunas in 1929. Since 1946, president of the Lithuanian SSR Academy of Sciences. Since 1956, he has been Director of the Chemistry and Chemical Technology Institute in Vilnius. Originally elected to the Chemical Sciences department. His works are in photochemistry, electrochemistry, the theory of electroplating, and the formulation of scientific principles involved in the manufacture of coating with predetermined properties. (GSE 15, p. 599.)

Matveev, A. K. Corresponding member of the Academy in 1993.

Mavliutov, R. R. Corresponding member Problems of Macvhine Building, Mechanics, and Control Processes Department of the Academy in 1993. Since 1969, he has been the Rector of the Sergo Ordzhonikidze Aviation Institute in Ufa that specializes in the training of engineers in all fields of aeronautics, particularly in aircraft manufacture and production. (LDA 89-11378.)

Malyshev, N. G. Corresponding member of the Academy in 1993.

Mazets, E. P. Corresponding member of the Academy in 1993.

Medvedev Vadim A., D. Econ. S. Corresponding member of the Economics Department of the Academy since 1984. Since 1966, Chief of the Reaction Calorimetry department of the High Temperatures Institute in Moscow. In 1984, he was listed as Head of the Science and Educational Institutions Department of the Central Committee of the CPSU.

Medvedev, Vladimir I. Since December of 1987, corresponding member of the Physiology Department of the Academy, and Academician Secretary of the Department. (LDA 89-11378.)

Meliukhin, **Serafim** T ., D. Phil. S. Born in 1927. Corresponding member of the Philosophy and Law Department of the Academy since 1981.

Mel'nichuk, Aleksandr S ., D. Phil. S. Born in 1921. Corresponding member of the Literature and Language Department of the Russian Academy since 1981. Since 1985, academician of the Literature, Linguistics, and Art department of the Ukrainian Academy of Sciences.

Mel'nikov, **Nikolai** N., D. Chem S. Born in 1908. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1979.

Mel'nikov, **Nikolai** N. , D. Tech. S. Born in 1938. Since 1981, he has been Director of the Mining Institute in Apatity which is subordinate to the academy's Kola Affiliate. It conducts research on rock strata at mining sites.

Mel'nikov, Vladimir P ., D GM. S. Born in 1940. Geologist. Specialist in geocriology, geophysical methods of researching the earth's crust. Corresponding member of the Oceanography, Atmospheric Physics and Geography Department and of the Siberian Department since December 1987. He graduated from Moscow Geological Prospecting Institute imeni Sergei Ordzhonikidze in 1962. He worked at there as an engineering student, a participant in geological expeditions, a junior and senior researcher. From 1970 to 1984, he worked at the Permafrost Institute in Yakutsk where he was a senior researcher and headed (from 1984 to 1985) the Department of engineering, geocriology and Deputy Director of the Geology and Geophysics Institute of the Siberian Department. In 1985 he was named Director of Problems of the North Institute in Tiumen--now called the Cryosphere of Earth Institute. He heads the national committee on permafrost, and is a leading member of the Science Coordination Council of the Soviet Union. In 1991, a new International Research Center for Northern Territories Development in Siberia was established that links together the work of scientists of three Siberian Department Institutes: the Institute of Cryoshpere of Earth in Tiumen, the Institute of Physico-Engineering Problems of the North in Yakutsk, and the Institute of Philology in Akademgorodok-Novosibirsk. As director of the Institute of Cryosphere Earth, Mel'nikov will collaborate with the Directors of the other two institutes in the development of this new international research center. (LDA 89-11378.)

Merenkov, Anatolii P., D. PM. S. Born in 1936. Mathematician. Specialist in mathematical modeling, optimization and systems research in energetics. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy and of the Siberian Department since 1990. He is the Director of the Siberian Energetics Institute of the Siberian Department of the RAN located in Irkutsk. He is the author of 10 scientific works of which one is a major monograph on linear programming methodology. He has co-authored another 80 works of which six were monographic in nature. He has advanced the theory and method for estimating and optimizing the synthesis of the hydraulic chain. His work is in the direction of the decisive development or evolution of a synthesis of scientific-technical disciplines of a universal mathematical and automated system of research, planning, and remote control, for the functioning of heat, water, oil and gas supplies and other hydraulic systems. He is a leader in the development of mathematical modeling that has had practical applications in the economy. As a professor at the Irkutsk State University he has guided the work of 112 aspirants for the candidate degree. He is on the scientific council of the RAN on complex problems of energetics, on the scientific councils for mathematics, informatics, and for the mechanics, energetics and mining sciences of the Siberian Department of the RAN. He is on the review board for the doctorate of science degree for the Siberian Energetics Institute and for the Irkutsk Computer Center and is on the Presidium of the Irkutsk Scientific Center.

Mergelian, Sergei N., D. PM. S. Born in 1928 in Simferopol. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1953. Originally elected to the Physical Mathematical Sciences Department. He is an academician of the Physics and Mathematics Department of the Armenian Academy of Sciences. Since 1971, he has been Vice President of the Armenian Academy of Sciences. He graduated from Erevan University in 1947, and worked there from 1945 to 1957. From 1954 to 1958 and from 1964 to 1968, he worked at Moscow State University. From 1950 to 1960, he was Director of the SRI of Mathematical Machines and of the Computing Center of the Armenian Academy of Sciences. From 1961 to 1971, he worked at the Institute of Mathematics of the AN SSSR. His works include the theory of functions of a complex variable, the theory of approximation, and the theory of potential and harmonic functions. He served as a deputy to the 5th, 6th, 7th, and 8th convocations of the Supreme Soviet. State Prize, 1952. (GSE 16, p. 136.)

Merzhanov, A. G. Corresponding member of the Academy in 1993.

Meshcheriakov, Mikhail G ., D. PM. S. Born in 1910 in Rostov Oblast. Nuclear physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1953. Originally elected to the Physical Mathematical Sciences department. He graduated from Leningrad University in 1936. From 1936 to 1947, he worked at the Radium Institute of the AN SSSR, and from 1947 to 1948, he was Deputy Director of the Institute of Atomic Energy. From 1948 to 1956, he was Director of the Institute of Nuclear Problems. In 1956, he began working at the Joint Institute for Nuclear Research in Dubna. His work has been in accelerators and the physics of the atomic nucleus and of elementary particles. Together with D. V. Efremov and A. L. Mints, he directed construction of the first synchrocylotron in the USSR operative at a level up to 680 MeV. (GSE 16, p. 146.)

Meshkov, Igor' N., D. PM. S. Born in 1936. Distinguished research fellow of the Nuclear Physics Institute in Akademgorodok-Novossibirsk. Physicist. Specialist in the field of the physics of charged particles and accelerator techniques. Corresponding member the General Physics and Astroanomy Department and the Siberian Department of the Academy since 1991. He has authored more than 60 scientific works and collaborated in the production of ten others. He has been very active in scientific conferences. He has written one major monograph. His research has concentrated on the physical processes of electron acceleration and the development of methods of cooling heavy particles of electrons. He has studied electron optics. He has pioneered in nuclear atomic physics and in a better understanding of elementary particles. He is on the dissertation committee of the Institute of Nuclear Physics. As a professor he has supervised the dissertaions of three candidate-degree students. He holds the chair of general physics at the Novosibirsk State University in Akademgorodok-Novosibirsk.

Miasnikov, **Veniamin S**. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes of the AN SSSR since December 1987. Also member of the Far Eastern department and deputy chairman of the Far Eastern department since August 1988. (LDA 89-11378.)

Mikhaylov, A. D. Corresponding member of the Academy in 1993.

Mikhailov, Gennadii A., D. PM. S. Born in 1934. Mathematician. Specialist in methods of statistical modeling, computer mathematics and mathematical systems. Corresponding member of the Academy and of Siberian Department (1984) and the Mathematics Department of the Academy and of the Siberian Department since 1990. He graduated from the Leningrad State University in 1956. He worked on business development. In 1965 he joined the Computer Center of the Siberian Department in Akademgorodok where he successively worked as a a senior researcher, head of the Monte Carlo Laboratory (1966), and head of the Department of statistical modeling in physics in 1986. He has been a professor since 1974, holding the chair in computer mathematics at the Novosibirsk State University. He has guided the work of four doctoral students and 21 aspirants for the candidate degree. He received the Lenin Prize in 1962, and the State Prize in 1979. In 1979, he was winner--with others--of the State Prize in Science and Technology for a cycle

of works on the development and application of statistical modeling methods for the solution of multidimensional tasks of radiation transfer. In 1981, he was awarded the S. A. Lebedev Ukrainian SSR Academy of Sciences Prize for the development of computer storage elements and devices--among a group of authors.

Mikul'skii, Konstantin I ., D. Econ. S., Corresponding member of the Economics Department of the Academy since December 1987. Since 1979, he has been one of the Deputy Directors of the Economics of the World Socialist System Institute in Moscow that was established in 1961 to act as a model for other Socialists States to follow in their economic planning. He headed the Growth subdepartment of that institute from 1978. In 1985, he was the recipient of the N. G. Chernishev Prize for his work. (LDA 89-11378.)

Milov, L. V. Corresponding member of the Academy in 1993.

Mironenko, V. A. Corresponding member of the Academy in 1993.

Mironov, Valerii L. , D. Pm. S. Born in 1938. Atmospheric physicist. He is a specialist in the field of widespread electromagnetic waves in a heterogeneous environment. Corresponding member of the Academy and of the Siberian Department since 1991. He is author and co-author of 126 scioentific works of which 9 were discoveries and six were extensivbe monographs--including major works on the characteristics of radio waves. He graduated from the Tomsk State Univerity in 1961 and from 1961 to 1970, he was an aspirant and a senior researcher at that university. From 1970 to 1980 and from 1982 to 1986 he was a senior researchers, heade of a laboratory, and Deputy Director of the Instituite of Atmospheric Optics of the Siberian Department of the AN SSSR. He was named a professor in 1981 at the Tomsk State University, and from 1986 to 1990, he was a professor, and held a chair while serving as rector of the Altai State University. During this period he also collaborated with the Institute of Water and Ecological Problems of the Siberian Department. He has been a member of the Scientific Council on the problems on environmental surroundings of the Russian Academy of Sciences Presidium. From 1986 to 1990, he organized research on monitoring the environment and developed the collaborative effort between the Institute of Water and Ecological Problems and the Altai University scientists. As a professor, he has guided the work of one doctoral candidate and supervised the work of 12 aspirants for the candidate degree. He has lectured in electrodynamics, molecular physics, statistical methods in radiophysics, and similar fields.

Miroshnikov, A. I. Corresponding member of the Academy in 1993.

Miroshnikov, Mikhail M., D. Tech S. Born in 1926. Corresponding member of the Information Science, Computer Technology, and Automation Department of the AN SSSR since 1984. Since 1970, he has been Director of the S. I. Vavilov Optics Institute located in Leningrad and directly subordinate to the Ministry of Defense Industry. In 1984, the CPSU Central Committee and the USSR Council of Ministers awarded the USSR State Prize in Science and Technology to scientists at Gomel State University in Byelorussia; to researchers at the S. I. Vavilov State Optics Institute; to researchers at the Institute of General Physics of the AN SSSR; to scientists at the Vilnius State University; to scientific workers at the laboratory of the U. A. Arifov Electronics Institute of the Uzbek Academy of Sciences; and to scientists at the laboratory of the Institute of Applied Physics of the AN SSSR for the series of works "Higher Efficient Nonlinear Frequency Conversion in Crystals and the Development of Adjustable Sources of Coherent Optical Radiation," which were published during the period 1961-1982. The S. S. Vavilov Optics Institute develops and tests lenses, lasers and other optical instruments. Miroshnikov is author of more than 200 scientific works, and has been instrumental in the development of infrared imaging instruments for medicine, in machine building and in microelectronics. (LDA 89-11378.) Mitropol'skii, Iurii A ., D. Tech. S. Born in 1917. Academician of the Ukrainian academy since 1961. Since 1966, academician secretary of the Mathematics and Cybernetics department of the Ukrainian Academy of Sciences. Academician of the Mathematics Department of the Academy since 1984. Since 1958, he has been Director of the Mathematics Institute in Kiev subordinate to the Mathematics and Cybernetics department of the Ukrainian Academy of Sciences.

Mitrokhin, L. N. Corresponding member of the Academy in 1993.

Mizin, **Igor** A., D. Tech S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Moiseenko, Valentin G., D. GM. S. Born in 1930. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences department and of the Far Eastern department since December 1987. He heads up the Amur Interdisciplinary Scientific research Institute in Blagoveshchensk. Established in 1980, from units of the Far Eastern Geological Institute and the Economic Research Division of the Institute of Economics, the institute has a subdivision on humanitarian problems and a laboratory on sociology that is headed by V. N. D'ianchenko. The laboratory works on the manpower problems in the Baikal-Amur region and on labor resources for the agroindustrial complex of the region. It maintains relations with the branch of the Chinese Academy of Sciences in Hilongjiang province. (LDA 89-11378.)

Mokerov, V. G. Corresponding member of the Academy in 1993.

Molodin, Viacheslav I. D. Hist. S. Born in 1948. Historian and Archaeologist. Specialist in the archeology and in the prehistoric and ancient history of Siberia. Corresponding member of the History Department and of the Siberian Department since December 1987. He graduated for the Novosibirsk State University in 1971 and was Deputy Director of its middle school. In 1973, he hoined the History, Philology and Philosophy Institute of the Siberian Department, and in 1983, he was head of the sector of that institute studying the archaeology of the bronze and ages. He has been a professor, holding the chair of history at the Novosibirsk State University since 1985. (LDA-11378.) Monakhov, Valentin I., D. PM. S. Born in 1932. Mathematician. Specialist in differential equations and in their application to the mechanics of continuous media. Corresponding member of the Mathematics Department of the Academy and of the Siberian Department since 1991. As a result of his fundamental research, he has produced 70 scientific works of which five are extensive monographs. He is head of a laboratory in the Institute of Hydrodynamics of the Siberian Department in Akademgorodok. developed mathematical algorithms for application in studies in mechanics. He has done work on finite numbers, on approximation theory, on methods of developing linear graphics, and on mathematical modeling applications to hydrodynamics. He holds the chair in theoretical mechanics at the Novosibirsk State University where he has guided the work of 20 aspirants for the candidate degree and three doctoral students.

Monin, Andrei S. , D. PM. S. Born in 1921 in Moscow. Russian oceanographer. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1972. He graduated from Moscow State University in 1942 and worked at the Central Forecasting Institute from 1946 to 1951 and at the Institute of Atmospheric Physics of the AN SSSR from 1951 to 1965. In 1963, he began teaching at Moscow University as a professor. From 1965 to April 1988, he served as Director of the P. P. Shirshov Oceanology Institute in Moscow which is the largest Russian research institute for the marine sciences. Since 1977, he has been Chief of the Physics Division of the Institute, which is subordinate to the academy's Oceanology, Atmospheric Physics, and Geography department and was created in 1946. The institute was named for Shirshov in 1967. While researching the development of oceanographic methods and equipment, the institute is also active in the use of manned and unmanned submersibles. Since 1979, Monin has been Chief of the Hydrophysics Laboratory of the as well as Chief of the Physics Division. His research is in atmospheric physics, general turbulence, and dynamic processes in the ocean and atmosphere. (GSE 16, p. 516.)

Morozov, N. F. Corresponding member of the Academy in 1993.

Mostovoy, Vladimir I., D. PM. S. Born in 1919. Corresponding member of the Nuclear Physics Department of the Academy since 1984. In 1983, he received the coveted I. V. Kurchatov Gold Medal in physics for his scientific research.

Mozhaeva, G. N. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. He is head of the Ionic Channels in Cell Membranes Laboratory of the Cytology Institute in St. Petersburg. He leads studies of the signal transfer from receptors to intracellular structures.

Nalivkin, V. D. Corresponding member of the Academy in 1993.

Napalkov, V. V. Corresponding member of the Academy in 1993.

Nefedov, V. I. Corresponding member of the Academy in 1993.

Neizvestnii, I. G., D. PM. S. Born in 1931. Physicist. Specialist in semiconductor physics. Corresponding member of the General Physics and Astronomy Department of the Academy and of the Siberian Department since 1990. Deputy Director of the Semiconductor Physics Institute in Novosibirsk. Co-author of some 92 scientific works, of which "The Characteristic Structure of Metal-dielectric Semiconductors (transistors)" published in 1976 was most significant. He has taught in the Novosibirsk Electrotechnical Institute guiding the work of three doctoral candidates and 10 aspirants for the candidate degree. He is on the Scientific Council on the physics, chemistry and mechanics of Surface Tension and for problems of the physics and chemistry of semiconductors. (LDA 89-11378.)

Nekrasov, **Igor Ia.** Since 1988, he has been the Director of the Far Eastern Geology Institute in Vladivostok subordinate to the Far Eastern Department of the Academy. It was founded in 1959 to study the distribution of useful minerals in the region. He was a corresponding member of the Academy in 1993.

Nepobedimyy, **Sergei P** . Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984.

Neporozhnyy, Petr S. D. Tech S. Born in 1910 in Kiev Oblast. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1979. Soviet state and party leader. He was elected a member of the Central Committee of the Communist Party in 1971 and 1976. From 1977, he was a board member of the general assembly of the GKNT. He graduated from the Leningrad Institute of Water Transportation in 1933. From 1933 to 1935, he served in the Soviet Navy. Designated a professor in 1952. From 1935 to 1937, he worked at a design institute in Leningrad and on the construction of the Chirchik Hydroelectric power plant. From 1937 to 1940, he was in the Peoples' Commissariat for Heavy Industry, and from 1940 to 1954, he was Chief engineer and head of a design institute in Tashkent and also Chief engineer for construction of hydroelectric power plants in the Leningrad Oblast and in the Ukraine. From 1954 to 1959, he was deputy Chief of the Council of Ministers of the Uk SSR and chairman of the State Committee on Construction of the Uk SSR. From 1959 to 1962, he was the 1st deputy minister of the USSR for Construction of Electric Power Plants and in 1962-63, he was Minister of Electric Power Development and Electrification of the USSR. From 1963 to 1965, he served on, and after 1965 he was chairman of the State Production Committee on Power Engineering and Electricity of the USSR--a ministerial position. He was a deputy to the 7th, 8th and 9th convocations of the Supreme Soviet. Lenin Prize, 1968. (GSE 17, p. 460.)

Nersesiants, V. S. Corresponding member of the Academy in 1993.

Nesterov, Ivan I., D. GM. S. Born in 1932 in Paratkul, Dalmatovo Raion, Kurgan Oblast. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department and of the Siberian Department since 1976--reconfirmed in 1992. He joined the Presidium of the Siberian Department in 1980. He has authored and co-authored some 400 scientific works, of which 30 are monographs. He graduated from the Sverdlovsk Mining Institute in 1954. From 1957 to 1961, he worked at the Siberian Scientific Research Institute Geology, Geophysics and Mineralogy as a senior geologist, a senior researcher, and leader of a sector of the Tiumen branch of the Siberian Department. In 1964, he joined the Western Siberian Geological Oil Exploration Scientific Research Institute of the Ministry of Geology of the Ministry of Geology of the RSFSR located in Tiumen. In 1971, he became Director that institute. His studies of the geology of western

Siberian are of scientific significance. He has developed theoretical principles for predicting the presence of oil and gas in large regions and local areas. He is a professor, holding the chairs at the Tiumen State University and at the Tiumen Industrial Institute. He was named to the Presidium of the Siberian Department in 1980. He heads the Scientific Council on the problems of Oil and Gas in Western Siberia. He received the Lenin Prize, 1970, and the I. M. Gubkin Prize in 1980. (GSE 30, p. 566.)

Neunylov, Boris A . Born in 1908 in Dankov, Lipetsk Oblast. Russian soil scientist, agricultural chemist, and rice-growing specialist. Corresponding member of the General Biology Department of the Academy since 1970. Academician of the Academy of Agricultural Sciences since 1966. Also a member of the Far Eastern Scientific Center. He graduated from the Far Eastern Agricultural Institute in 1935. He worked at the Far Eastern Rice Experiment Station and on a rice-growing sovkhoz from 1935 to 1963. In 1964, he became acting chairman and from 1966 to 1970 served as chairman of the Presidium of the Far Eastern Branch (now department) of the AN SSSR. In 1973, he was made Deputy Director for science of the All-Union SRI of Rice of the All-Union Academy of Agricultural Sciences located in Belogernoe, Krasnodor Krai. His works are in the physical chemistry of soils, regulation of oxidation reduction conditions and acidity of rice paddy soils, and the increase of fertility of rice paddy soils. (GSE 17, p. 505.)

Neyland, Vladimir Ia. Corresponding member of the Problems of Machine Building and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Neyman, V. G. Deputy Academician secretary of the Oceanology, Atmospheric Physics, and Geography Department since October 1987. Since 1974, he has been a senior researcher in the Hydrological Processes Laboratory of the P. P. Shirshov Oceanology Institute in Moscow, the largest marine sciences research unit in the Soviet Union. Corresponding Member of the Department in 1993. (LDA 89-11378.)

Nichiporovich, Anatolii A ., D. Bio S. Born in 1899 in Saratov. Russian plant physiologist and professor (1946). Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1970. He graduated from Saratov Agricultural Institute in 1922. He has worked at agricultural experiment stations and at the All-Union Institute of Caoutchouc and Gutta-percha. He headed a subdepartment at the Briansk Wood Technology Institute. From 1940, he headed the photosynthesis laboratory of the Institute of Plant Physiology of the AN SSSR. His works have been in the physiology of photosynthesis. Since 1963, he has been editor-in-Chief of Biologiia. (GSE 18, p. 197.)

Nikishin, G. I. Corresponding member of the Academy in 1993.

Nikolaev, Aleksei V., D. PM. S. Corresponding member of the Geology, Geochemistry, Geophysic, and Mining Sciences Department of the Academy since 1991. He has headed the Turbid Media Subdepartment of the O. Iu. Shmidt Earth Physics Institute since 1975. In 1991, he was made head of the Experimental Geophysics Department of the Institute, and he also headed the Experiment Geophysics Laboratory of that department.

Nikolaev, Petr A $\,$., D. Phlg S. Corresponding member of the Literature and Language Department of the Academy since 1984.

Nikolskii, $Boris\ A$. Corresponding member of the Nuclear Physics Department since December 1987. In 1980, he was given the I. V. Kurchatov Gold Medal for his research in physics.

Nikolskii, Sergei I ., D. PM. S. Born in 1923. Corresponding member of the Nuclear Physics Department since 1984. Since 1973, Chief of the Nuclear Physics Division of the P. N. Lebedev Physics Institute in Moscow. This is the largest and oldest research institute in Russia having been established in St. Petersburg in 1725. It was moved to Moscow in 1934. Since 1976, Chief of Nikolskii's department and since 1977, he has been Chief of the Cosmic Ray Laboratory of the Lebedev Institute. Since 1986, Nikolskii has served as a Deputy Director of that institute.

Novikov, Vasilii V $\,$., D. Phlg. S. Corresponding member of the Literature and Language Department since 1984.

Novosel'tsev, **Anatolii P** .., D. Hist. S. Corresponding member of the History Department of the Academy since 1984. Since April 1988, he has served as Director of the History of the USSR Institute in Moscow that was created in 1968. It is a major source of historical and demographic research in Russia.

Nozdrachev, A. D. Corresponding member of the Academy in 1993.

Obminskii, Z. E. Corresponding member of the Academy in 1993.

Oganesian, Iurii Ts. Corresponding member of the Academy in 1993.

Ovchinnikov, **Aleksandr** A ., D. PM. S. Born in 1938. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981.

Ovchinnikov, Lev N . Born in 1913 in Perm. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1964. Originally elected to the Earth Sciences department. He graduated from the Ural University in 1937. From 1945 through 1965, he headed the mineralogy and geochemistry laboratory of the Mining and Geological Institute of the Ural Scientific Center (now Department) of the AN SSR. In 1962, he became Director of the Ural Department's Institute of Geology. In 1966, he became the Director Director of the Mineralogy, Geochemistry, and Crystal Chemistry of Rare Elements Institute in Moscow which was established in 1956, and which assists in the development of raw material bases for the rare metals industry. That institute is jointly subordinate to the academy and to the Ministry of Geology of the USSR. His principal works are on the geology of the Ural, the theory of ore formation, geochemical methods of prospecting for concealed mineralization, and the determination of the absolute age of geological formations. (GSE 18, p. 610.)

Ovchinnikov, **Lev P.**, C. Bio. S., Born in 1943. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since December 1987. Since 1974, he has been a senior researcher in the Protein Biosynthesis Laboratory of the Protein Institute in Pushchino. In 1991, he was a Deputy Director of the Protein Research Institute and head of the Regulation of Protein Biosynthesis Laboratory of the institute whose main area of research includes the organization and functioning of the translation apparatus of eukaryotes with special attention being paid to mRNP particles (informosomes), to elongation factors EF-1 and EF-2 and to ribosomes.

Ozmidov, **Rostislav** V. , D. PM. S. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy in 1993. Since 1970, he has headed the Marine Turbulence Department of the P. P. Shirshov Oceanology Institute in Moscow.

Pavlenko, Vladimir A ., D. Tech. S. Born in 1917. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1979. Since 1952, he has been Director of Analytical Instrument Building in Leningrad. Since 1978, Chief of the Scientific Instrument Building department of the national academy.

Panarin, E. F., D. Chem S. Corresponding member of the General Technical Chemistry Department of the Academy since 1989. He has been Director of the Macromolecular Compounds Institute in St. Petersburg which was established in 1948 to study the formation, structure and properties of polymers.

Pariyskiy, Iurii N ., D. PM. S. Born in 1932. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Acadmy since 1979. Since 1975, he has been Deputy Director of the Main Astronomical Observatory in Leningrad, which was founded in 1839 and investigates problems of celestial mechanics and gravimetrics and conducts classical astronomical research.

Parin, **Nikolai** V. , D. Bio. S. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy in 1993. Since 1958, he has headed the Oceanic Ichthyofauna Department of the institute.

Parkhomenko, Pavel P ., D. Tech S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984.

Parmon, Valentin N., D. Chem. S. Born in 1948. Chemist. Specialist in general chemistry kinetics and catalysis photo- and radiation chemistry and chemistry radiospectroscopy. He has been a corresponding member of the Academy and of the Siberian Department since 1990. He is the author of seven scientific works, co-author of 175 publications of which nine are inventions or discoveries and three are monographs. He is Deputy Director of the Catalysis Institute of the Siberian Department in Akademgorodok-Vlasivostok. As a professor he has guided the work of ten aspirants for the candidate degree.

Parshin, A. Ia. Corresponding member of the Academy in 1993.

Pastukhov, E. A. Corresponding member of the Academy in 1993.

Pashin, V. M. Corresponding member of the Academy in 1993.

Pashinin, P. P., D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1970, he has headed the Fusion Experiment Department of the P. N. Lebedev Physics Institute in Moscow. In 1976, he headed his own subdepartment in the institute which had several researchers.

Pavlovskiy, Iurii N. Corresponding member of the Academy in 1993.

Perel', **Vladimir I** ., D. PM. S. Born in 1928. Corresponding member of the General Physics and Astronomy Department since 1981.In 1978, he was a junior researcher in a laboratory of the Theoretical Division of the A. F. Ioffe Physical Technical Institute in Leningrad.

Peshekhonov, **Vladimir G**. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Petrov, **Anatolii A** . Born in 1913 in Livny, Orlov Oblast. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1966. Honored worker in Science and Technology of the RSFSR (1964). He graduated from the University of Voronezh in 1934 and stayed on as a staff member. From 1941 to 1945, he was a professor at the Voronezh Aviation Institute and at the Leningrad Institute for Aviation Instrument-making. Since 1951, he has been a professor and head of a subdepartment at the Lensovet Leningrad Institute of Technology. His work is concentrated on the structure, physical properties, and reactivity or diene, enine, and diine compounds, and on telomerization reactions of unsaturated compounds and the chemistry of exoxides. (GSE 19, p. 506.)

Petrov, Viacheslav V ., D. Tech S. Born in 1912. Corresponding member of the Problems of Machine Building, Mechanics, and Control Processes Department of the Academy since 1972.

Petrovskii, Gurii T . Born in 1931 in Leningrad. Russian physical chemist and production engineer. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1976. He graduated from the Lensovet Leningrad Technological Institute in 1955. In 1959, he began work at the S. I. Vavilov State Optical Institute of which he became Deputy Director in 1969. Since 1986, he has been Director of the Sosnovii Bor Branch of the S. I. Vavilov Optics Institute in Leningrad. The branch develops and tests lenses, lasers, and other optical instruments. His works deal with the properties and production technology of such optical materials as beryllium fluoride glasses. He discovered the anionic conductivity of fluoride glass dielectrics. Holder of the State Prize. (GSE 30, p. 604.)

Pikaev, A. K. Corresponding member of the Academy in 1993.

Pinneker, Evgenii V., D. GM. S. Born in 1926. Geologist. Specialist in the fields of geochemistry, metamorphism, hydrogeochemistry and hydrogeology. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy and of the Siberian Department since 1990--reconfirmed in 1992. Author of 105 scientific works of which six were major monographs; co-author of another 160

publications of which 14 were monographs. He is Deputy Director of the Earth's Crust Institute in Irkutsk and a recipient of the State Prize. He is a professor at the Irkutsk State University where he has guided the research of three doctoral students and 18 aspirants for the candidate degree. He was on the Scientific Council for engineering geology and hyrdrogeology of the AN SSSR. He is on the Siberian Department's commission for research into subterranean waters in Siberia and in the Far East, and a member of the Hydrogeology Association.

Piruzian, **Lev A** ., D. Med. S. Born in 1936 in Alaverdi, Armenian SSR. Medical biophysicist. Corresponding member of the Physiology Department of the Academy since 1974. He graduated from the Erevan Medical Institute in 1961. Since 1964 he has worked at the Institute of Chemical Physics of the AN SSSR. Since 1971, he has been Director of the Biological Testing of Chemical Compounds Scientific Research Institute in Kupavna which was established in 1973 to screen all new synthetic chemical compounds beneficial to man and to the environment. The institute is directly subordinate to the Ministry of the Medical and Microbiological Industy. His works have dealt with the effect of physical and chemical environmental changes on various forms of life. (GSE 30, p. 605.) (LDA 89-11378.)

Pistol'kors, **Aleksandr** A . Born in 1896 in Moscow. Russian Radio Engineer. Corresponding member of the General Physics and Astronomy Department of the Academy since 1946. He graduated from the Moscow Higher Technical School in 1927. From 1926-28 he worked at Nizhny Novgorod Radio Laboratory. In 1929, at the Central Radio Laboratory and in other SRIs in the Leningrad area. Originally elected to the Technical Sciences department. He developed a theory of antennas and the method of phase telegraphy. He is the recipient of many honors. (GSE 19, p. 563.)

Pis'mennii, **Viacheslav D** ., D. PM. S. Born in 1932. Corresponding member of the General Physics and Astronomy Department of the Academy since 1984. Winner--with others--of the 1978 State Prize for the development of physical principles, establishment and research in a gaseous laser, generated with the use of ionized radiation. Since 1979, He has been of Troitsk Branch of the I. V. Kurchatov Atomic Energy Institute of Moscow.

Pitaevskii, **Lev. P** ., C. PM. S. Born in 1933 in Saratov. Corresponding member since 1976. He graduated from the University of Saratov in 1955. In 1958, he joined the staff of the Institute of Physical Problems of the national academy. Since 1969, senior researcher in the Superconductors Laboratory of the S. I. Vasvilov Physical Problems Institute in Moscow. In 1971, he became a professor at the Moscow Polytechnical Institute. His works have dealt largely with low-temperature physics, plasma physics, quantum mechanics, electrodynamics, and the theory of metals. (GSE 30, p. 605.)

Pliss, V. A. Corresponding member of the Academy in 1993.

Plotnikov, **Pavel I.**, D. PM. S. Born in 1947. Mathematician. Specialist in differential equations and their application of the study of wave motion in liquids. Corresponding member of the Mathematics Department of the Academy and of the Siberian Department since 1990. Outstanding scientific researcher of the Institute of Hydrodynamics of the Siberian Department of the RAN. His reputation rests primarily upon his work on the motion of liquids in various states.

Pokhozhaev, Stanislav I ., D. PM. S. Corresponding member of the Mathematics Department of the Academy since 1984.

Pokrovskii, **Yarolslav Ie.**, D. PM. S. Born in 1928. Corresponding member of the General Physics and Astronomy Department of the Academy since 1987.

Poglazov, **Boris F.**, D. Bio. S. Born in 1930. Corresponding member of Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy in 1993. Since 1988, he has been Director of the A. N. Bakh Biochemistry Institute in Moscow which dates back to 1935 to study living organisms, enzymes, proteins, vitamins, and antibiotics. In 1978, he received the A. N. Bakh Prize in biochemistry.

Pogrebitskii, Iurii E. Corresponding member of the Academy in 1993.

Polenov, A. L. Corresponding member of the Academy in 1993.

Poliakov, **Aleksandr M** ., D. PM. S. Born in 1945. Corresponding member of the Nuclear Physics Department of the Academy since 1984. Since 1970, senior researcher in the Particle Physics Laboratory of the L. D. Landau Theoretical Physics Institute in Moscow.

D. GM. S. Born in 1931. Geologist. Specialist in petrography and Poliakov, Glev V., petrology, and in the magmatic formations of Siberia. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy and of the Siberian Department since 1981--reconfirmed in 1992. He graduated from the Tomsk Polytechnical Institute imeni S. M. Kirov in 1953 and upon graduation continued to work there. He is the author of 163 scientific publications of which five are monographs. In 1960, he joined the Institute of Geology and Geophysics of the Siberian Department, serving as a scientific researcher, both junior and senior, and head of the laboratory studying magmatic formation (1976), becoming Deputy Director of the institute in 1978, and head of the Department of metallurgy, petrography, geochemistry and mining deposits of that institute in 1985. In 1982, he was made head of the council on doctoral dissertations for the Department of Geology, Geophysics, Geochemistry and Mining Sciences of the Siberian Department. As a professor, he has guided the work of ten aspirants for the candidate degree. In 1984, he was deputy chairman of the Siberian Petrographyic Scientific Council. He is Head editor of the journal Geology and Geophysics. He received the State Prize in 1983.

Poliakov, **Iurii** A ., D. Hist. S. Born in 1921 in Tashkent. Russian historian. Corresponding member of the History Department of the Academy since 1966. He graduated from the history department at Moscow State University in 1945. He has taught at Moscow University and at the Academy of Social Sciences where he has been a professor since 1970. Since 1949, he has worked at the Institute of History of the USSR of the AN SSSR. From 1966 to 1969, he was editor-in-Chief of the journal Istoriia SSSR (History of the USSR). His works deal with the history of the October Revolution and the Civil War in the USSR, the reconstruction period, and the history of the Russian peasantry. (GSE 20, P. 323.)

Polukarov, **Iurii M.**, D. Chem. S. Corresponding member of the General and Technical Chemistry Department of the Academy in 1993. Since 1988, he has been Director of the Physical Chemistry Institute in Moscow which was founded in 1945 to study corrosion, radiochemistry, electrochemistry, and ion exchange.

Ponomarev, L. I. Corresponding member of the Academy in 1993.

Popov, G. A. Corresponding member of the Academy in 1993.

Presnukhin, Leonid N ., D. Tech S. Born in 1918. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984. Since 1970, he has served as Rector of the Electronic Engineering Institute at Zelenograd subordinate of the Ministry of Higher and Secondary Specialized Education. The institute trains specialists on new trends in the field of electronics technology.

Privalov, **Petr L** ., D. PM. S. Born in 1935. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1984. Since 1974, Chief of the Protein Institute's (Puschino) Protein Thermodynamics Laboratory whose work involves the elucidation of the physical principles of folding and stabilizing of unique three-dimensional structures of biological macromolecules, proteins and nucleic acids. The ultimate goal is the creation of artificially stable protein structures.

Prokofiev, **Mikhail A** ., D. Chem S. Born in 1910. Soviet statesman and party figure. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1966. He graduated from Moscow University in 1935. Served in the Soviet army from 1935-37 and from 1941-46. From 1937 to 1941, he was a graduate student, and from 1946 to 1951, he engaged in scientific and party work at Moscow University. From 1951 to 1959, he served in the Ministry of Higher Education and the Ministry of Culture, and from 1959 to 1966, he was first deputy

minister of higher and special secondary education of the USSR. In May 1966, he became Minister of Education of both the RSFSR and of the USSR. In 1971, he was elected a member of the Central Committee of the CPSU. His work has been in the chemistry of biological polymers and other natural compounds. (GSE 21, p. 258.)

Proskuriakov, **Nikolai M**. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since December 1987. (LDA 89-11378.)

Protasov, Viktor D. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Pudovik, Arkadii N ., D. Chem S. Born in 1916 in Tsivilsk, Chuvash ASSR. Russian chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1964. He graduated from the University of Kazan in 1938 and finished his graduate study there in 1941. He worked at a plant in Kazan from 1941 to 1945, when he began work on the university staff. In 1946, he also began working at the A. E. Arbuzov Institute of Organic and Physical Chemistry of the Kazan branch of the AN SSSR, and in1971, he became Director of the institute in Kazan which was established in 1965, and whose research concentrates on the composition and reaction potential of organic compounds, electrochemistry, and petroleum and gas chemistry. His works have been mainly in the chemistry of organophosphates. (GSE 21, p. 336.)

Pustovoyt, V. I. Corresponding member of the Academy in 1993.

Puchkov, L. A. Corresponding member of the Academy in 1993.

Rabinovich, M. I. Corresponding member of the Academy in 1993.

Radovskii, **Vitalii P.** Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Ragul'skis, K. M., D. Tech. S. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Rautian, Sergei G., D. PM. S. Born in 1928. Physicist. Specialist in laser physics, quantum electronics, and spectroscopy. Corresponding member of the Siberian Department and of the General Physics and Astronomy Department of the Russian Academy of Sciences and of the Siberian Department since 1979--reconfirmed in 1992. He has authored and coauthored 216 scientific works of which three are significant monographs on nonlinear spectroscopy resonance etc. He graduated from the Moscow State University in 1952 and began work at the P. N. Lebedev Physics Institute. From 1965 to 1977, he headed a laboratory at the Semiconductor Physics Institute of the Siberian Department. In 1977, he became Deputy Director of the Institute of Automation and Electrometry of the Siberian Department --founded in 1971 to develop automated control systems theory and to apply it to solving problems for regional industry and agriculture. He has been a professor at the Novosibirsk State University since 1978, holding a chair in quantum optics. As a professor, he has overseen the doctoral work of ten persons and the research of 24 aspirants for the candidate degree. He is on the Scientific Council on the problems of the spectroscopy of atoms and molecules and of the council on laser physics. He received the Laureate Prize imeni D. S. Pozhdestvensk in 1986.

Rebrov, **Aleksei K**, D. PM. S. Born in 1933. Physicist. Specialist in thermal physics and gas dynamics. Corresponding member of the General Physics and Astronomy and Siberian Departments since 1990. He is author of 17 and co-author of 191 scientific works. He is head of a laboratory at the Institute of Themal Physics in Novosibirsk. He has taught at the Novosibirsk State University for 16 years directing the work of six doctoral students and 29 candidate degree aspirants. He is Deputy Director of the Siberian Scientific Council on thermal physics and thermal energy; chairman of the Novosibirsk section of the Scientific Technical Organization "Priborproi" and a member of the

Scientists Consulting Panel, and Head editor of the journal "Applied Mechanics and Technical Physics" and the "Russian Journal of Engineering Thermophysics."

Reutov, **Aleksandr P**. Born in 1926. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. (LDA 89-11378.)

Reverdatto, V. V. Corresponding member of the Academy in 1993.

Riftin, Boris L. Corresponding member of the Literature and Language Department of the Academy since December 1987. LDA 89-11378.)

Ritus, V. I. Corresponding member of the Academy in 1993.

Romanov, Vladimir G., D. PM. S. Born in 1938. Mathematician. Specialist in mathematical physics and differential equations. Corresponding member of the Mathematics Department of the Academy and of the Siberian Department since December 1987. He graduated from the Moscow State University in 1961 and worked from 1961 to 1965 at the Mathematics Institute of the Siberian Department. From 1965 to 1987, he worked at the Computer Center of the Siberian Department, as a junior and snior researcher and as head of a laboratory. In 1987, he was head of a laboratory and Deputy Director of the Mathematics Institute. He has been a professor at the Novosibirsk State University since 1974, holding the chair in mathematical methods in geophysics. He is an honored scientist of the former Soviet Union. He received the Laureate State Prize in 1987. (LDA 89-11378.)

Romodanovskiaia, Elena K. , D. Philological S. Born in 1937, she graduated from the Leningrad State University in 1959. She has been a corresponding member of the Language and Literature Department of the Academy and of the Siberian Department since 1991. From 1962 to 1967, she was an aspirant at the Institute of Russian Literature located at Pushkin House. In 1968 she completed her candidate dissertation, and in 1975 she became a leading senior scientific researcher there. In 1988, she completed her doctoral degree. She is a specialist in the literature of the 17th-century Siberian Territory. She has participated in a number of scientific conferences, and is an editor of a number of publications.

Rubakov, V. A. Corresponding member of the Academy in 1993.

Rubin, A. B. Corresponding member of the Academy in 1993.

Rusanov, Viktor V ., D. PM. S. Born in 1919 in Kirov. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1976. He graduated from the A. F. Mozhaiskii Air Force Academy in Leningrad. In 1954, he joined the staff of the Institute of Applied Mathematics of the AN SSSR. Since 1967, he has been Deputy Director of the M. V. Keldysh Applied Mathematics Institute in Moscow, which is subordinate to the Information Science, Computer Technology and Automation department of the academy. His works have been in computer mathematics, applied mathematics, and mathematical physics. State Prize, 1967. (GSE 30, p. 621.)

Rutberg, F. G. Corresponding member of the Academy in 1993.

Rutkevich, **Mikhail N** . Born in 1917. Corresponding member of the Philosophy and Law Department of the Academy since 1970.

Ryabin, V. A. Corresponding member of the Academy in 1993.

Ryabov, **Gennadii G** ., D. Tech. S. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since 1984. Since July 1987, he has served as Director of the S. A. Lebedev Precision Mechanics and Computation Techniques Institute in Moscow, replacing Vsevolod S. Burtsev.

Rykunov, **Lev.** N., D. PM. S. Born in 1928. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Scviences Department of the Academy since 1984.

Rysin, L. P. Corresponding member of the Academy in 1993.

Ryskov, A. P. Corresponding member of the Academy in 1993.

Rytov, $Sergei\ M$. Born in 1908. Corresponding member of the General Physics and Astronomy Department of the Academy since 1968. Since 1958, he has been Chief of the Radio Physics Laboratory of the Radio Engineering Institute in Moscow which was

established in 1946 as the Radiotechnical Laboratory and took its present name in 1957. He was deeply involved in the development of linear accelerators.

Ryzhiy, **Viktor I** ., Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. (LDA 89-11378.)

Sadovnichiy, **Viktor A.** Since 1982, he has been one of the Prorectors of the M. V. Lomonosov Moscow State University in Moscow. In 1993, he was a corresponding member of the Russian Academy of Sciences.

Sadovskiy, Mikhail A ., D. Tech. S. Born in 1904 in St. Petersburg. Russian physicist. Corresponding member, of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1953. He graduated from the Leningrad Polytechnic Institute in 1930. From 1932 to 1941, he worked at the Institute of Seismology of the AN SSSR and from 1941 to 1944, in the special projects section of the Presidium of the AN SSSR. He was Deputy Director of the Institute of Chemical Physics from 1946 to 1963. From 1963 to August 1988, he was Director of the O. Iu. Shmidt Earth Physics Institute which was established in 1956 and which is the leading center for the study of earthquakes and other seismic phenomena. It is subordinate to the academy's Geology, Geophysics, and Geochemistry department. He was originally elected to the Earth Sciences department. In 1985, he was awarded the Lomonosov Medal for his work in geophysics and geology. His works are in the problems of the theory of explosions, the study of the destructive action of explosions, and the seismic effects of large-scale explosions. He substantiated the law of similarity for explosions. He participated in large-scale, directional blasting in the USSR and is one of the founders of the science of the physics of explosions. State Prizes in 1948, 1949, 1951, and 1953. Lenin Prize, 1962. (GSE 22, p. 544.)

Safonov, Iurii G. Corresponding member of the Academy in 1993.

Sagdeev, Renad Z . D. Chem. S. Born in 1941. Physical Chemist. One of the developers of new ideas in physical kinetics. Corresponding member of the General and Technical Chemistry Department of the Academy and of the Siberian Department since December 1987--reconfirmed in 1992. He has authored and co-authored 250 scientific works of which two were discoveries and two were extensive monographs: "The Magnetic and Spin Effect of Chemical Reactions" (1978) and "Spin Polarization and Magnetic Effect in Radical Reactions" (1984.) He graduated from the Novosibirsk State University in 1965, and began working at the Chemical Kinetics and Combustion Institute of the Siberian Department as a scientific researcher, both junior and senior, and scientific secretrary, and head of a Laboratory of Magnetic Phenomena, and in 1983, he was named Deputy Director of that institute. In 1979 he was elected a member of the Natural Sciences Photochemical Society. He received the Lenin Prize in 1986. In 1989, the Presidium of the Siberian Department established the Siberian Tomography Center that is under the direction of Dr. Sagdeev who is also Director of the Institute of Chemical Kinetics and Combustion.

Sakharov, A. N. Corresponding member of the Academy in 1993.

Saliaev, Rurik, K., D. Bio. S. Born in 1931. Biologist and physiologist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy and of the Siberian Department since 1984. He graduated from the Leningrad Forest Technical Academy imeni S. M. Kirov in 1966. From 1956 to 1958, he as an aspirant of the chair of plant physiology of that academy. From 1958 to 1963, he worked as a junior researcher a Laboratory of Plant Physiology of the Forestry Institute of the Karelian branch of the AN SSSR. From 1963 to 1971, he was Deputy Director of the Siberian Institute of Plant Physiology and Biochemistry of the Siberian Department in Irkutsk. From 1971 to 1974 and in 1983, he was deputy chairman of the Eastern Siberian Branch--now the Irkutsk Scientific Center. From 1974 to 1976, he was the Director of the Soil Biology Institute of the Far Eastern Scientific Center.and deputy chairman of that center. In 1977, he became Director of the Siberian Department's Institute of Plant Physiology and Biochemistry. He is on the staff of the Irkutsk Science

Center which, in 1987, had some 1300 research workers of whom 70 held doctorates and 670 held candidate degrees.

Salmanov, F. K. Corresponding member of the Academy in 1993.

Salyga, V. I. Corresponding member of the Academy in 1993.

Samoylov, Andrei G., D. Tech S. Born in 1907 in Ishim, Tomsk Oblast. Russian specialist in metallurgy. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1976. He graduated from the M. I. Kalinin Moscow Institute of Nonferrous Metals and Gold in 1935. He is associated with the All-Union SRI of Inorganic Materials. His works deal with hard alloys based on tungsten carbide and titanium carbide and with materials for nuclear reactors. Holder of four State Prizes and the Lenin Prize. (GSE 30, p. 622.)

Sarkisov, L. D. Corresponding member of the Academy in 1993.

Savin, G. I. Corresponding member of the Academy in 1993.

Sazonov, A. E. Corresponding member of the Academy in 1993.

Schastlivtsev, V. M. Corresponding member of the Academy in 1993.

Sedov, **Viacheslav M** ., D. Tech S. Born in 1929. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1981.

Semenov, Iurii P. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since December 1987. (LDA 89-11378.)

Sergeev, Konstantin F., D. GM. S. Born in 1931. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department and of the Far Eastern Department since 1979. Since 1977, he has been Director of the Marine Geology and Geophysics Institute (formerly the Complex Scientific Research Institute--Sakhalin) in Novo Aleksandrovsk that is subordinate to the Far Eastern Department and that does research in the fields of oceanography and geophysics, including seismology, hydroacoustics, and the study of tidal waves.

Sevast'ianov, **Boris A** ., D. PM. S. Corresponding member of the Mathematics Department of the Academy since 1984.

Severin, Evgenii S. D. Chem. S., born in 1934 in Moscow, son of Sergei E. Severin academician of AN SSSR. Evgenii graduated from Moscow State University in 1957 from the Chemical Faculty, studied at the Institute of Pharmacology and Chemical Therapy of the Soviet Academy of Medical Sciences receiving a Ph.D. in Chemistry in 1963. From 1959 to 1966, he was a junior research associate in Chemistry at the Institute of Molecular Biology in Moscow. He did postgraduate work at the Institute of Biological and Organic Chemistry of the Czechoslovak Academy of Sciences in Prague from 1964-65 in Peptide and Protein Chemistry. In 1967-68, he held a one-year fellowship in the Department of Biochemistry of Cambridge University in England, joining the staff and serving as a Senior Research Associate in Enzymology at the Institute of Molecular Biology of the AN SSSR in Moscow from 1968 to 1973 where he worked with Academician A. E. Braunstein. He received his D. Chem. S. degree in 1972 defending his work on the Mechanism of Action of Pyridoxal Enzymes. From 1974 to 1986, he headed a research unit which became the Laboratory on Enzyme Regulation of Cell Activity at the institute, and from 1971 to 1982 he served as Deputy Director of the Molecular Biology Institute. He has served on the faculty of Moscow State University since 1974 and in 1978 was made a full professor at that institution. From 1986 to 1988, he served as Director of the Institute of Applied Molecular Biology which was set up in the Ministry of Health. From 1988 to 1990, he served as Director of the Research Center of Molecular Diagnostics of the U.S.S.R. Ministry of Health. From 1990 to 1991, he was Director General of the All-Union Research Center of Molecular Diagnostics and Therapy. In 1991, the name of that center was changed to the Russian Research Center of Molecular Diagnostics and Therapy, a name that it carries today. Professor Severin is the Director General of that center. He is a corresponding member of the Russian Academy of Sciences, an academician of the Russian Academy of Natural Sciences, and academician of the Royal Academy of Pharmacy of Spain, and a member of the Central Council of the Biochemical Society, and of the Committee on State Rewards of Russia, on the Board of the Public Expertise Committee--all of Russia--and on the scientific boards of the Institute of Bioorganic Chemistry of the Russian Academy of Sciences, and of the Russian Research Center of Molecular Diagnostics and Therapy. He serves on the editorial boards of four major scientific journals. He has directed over 40 Ph.D. theses and eight of his students have received D. Chem. S. degrees. He has written three books and has authored some 300 articles and he holds eight patents. He has received numerous awards among which are the U.S.S.R. State Reward in 1984, and the Lenin prize in 1991.

Severin, G. I. Corresponding member of the Academy in 1993.

Shabanov, Vasilii F. , D. PM. S. Born in 1940. Physicist. Specialist in the fields of optico-electronics and molecular spectroscopy. Corresponding member General Physics and Astronomy Department of the Academy and of the Siberian Department since 1990. In 1988, he was named a member of the Presidium of the Krasnoiarsk Scientific Center of the Siberian Department of the RAN. He is head of a laboratory of the Kirenskii Physics Institute in Krasnoiarsk. He has co-authored 165 scientific works of which three are monographs. His work has contributed greatly to an expansion of knowledge of the physical characteristics of molecular microelectronics. He is a professor at the Irkutsk State University where he has overseen the work of ten aspirants for the candidate degree. He is a consulting specialist to the Techical Constrution Bureau "Nauka" of the Siberian Department, headsl the council on automation of scientific research in the Krasnoiarsk Scientific Center, and is on the Scientific Council of the RAN on problems of the Spectroscopy of Atoms and Molecules.

Shafranov, **Vitalii D** ., D. PM. S. Born in 1929. Corresponding member of the General Physics and Astronomy Department of the Academy since 1981. In 1984, he was awarded-with others--the Lenin Prize for his work in the development of a new branch of physics, high temperature plasma physics which served as basis for the creation of a prototype for an experimental industrial thermonuclear reactor. In 1974, he headed the Low Temperature Physics laboratory of the Chemical Physics Institute in Moscow.

Shakhnazarov, **Georgii Kh** . Born in 1924. Corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988. (LDA 89-11378.)

Shalagin, Anatolii F. , D. PM. S. Born in 1943. Experimental Physicist. Specialist in nonlinear spectroscopy. Corresponding member of the General Physics and Mathematics Department of the Academy and of the Siberian Department since 1990. He has written eight major scientific works and co-authored another 108, of which two are monographs. He is head of a laboratory of the Automatic and Electrometry Institute of the Siberian Department in Novosibirsk. He has assisted in the development of the kinetic theory of nonlinear resonance, and in his research has experimentally found a method for polarizing nonlinear resonance with spectroscopy . He has discovered and researched a new class of incandescent phenomena in a laser radiation field. He is a professor at the Novosibirsk State University where he has overseen the doctoral research of two persons and the research of four aspirants for the candidate degree. He was on the Scientific Council on Spectroscopy, and a consultant to the Institute of Automation and Electrometry of the Siberian Department. He is an editor of the journal, "Autometry."

Shalin, **Radii** E. Born in 1933. Since 1977, he has headed the Aviation Materials Institute in Moscow, established in 1932 for research and development of materials for aircraft construction. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy.

Shamshev, **Kirill N**. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Shapiro, **Iosif S** ., D. PM. S. Born in 1918. Corresponding of the Nuclear Physics Department of the Academy member since 1979.

Shchapov, Yaroslavl N. Corresponding member of the History Department of the Academy since December 1987. At the World History Institute, Professor Shchapov, with others, is researching the "The Role of Religions in History" with emphasis on the role of religions in the historical development of Europe. (LDA 89-11378.)

Shcherbakov, **Ivan A.**, D. Tech. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1969, he has headed the Energy Transfer subdepartment of the P. N. Lebedev Physics Institute in Moscow.

Shcherbinin, V. A. Corresponding member of the Academy in 1993.

Shepilov, D. T. Corresponding member of the Academy in 1993.

Shestakov, **Sergei V**. Corresponding member of the General Biology Department of the Academy since December 1987. In August 1988, he was selected as Director of the General Genetics Institute in Moscow which was founded in 1966 to study the selection and evolutionary genetics of plants, animals and microorganisms. (LDA 89-11378.)

Shevchenko, V. Ia. Corresponding member of the Academy in 1993.

Shinkaruk, Vladimir I ., D. Phil. S. Born in 1928. Corresponding member of the Philosophy and Law Department of the Academy since 1981. Since 1968, he has been Director of the Philosophy Institute in Kiev. Since 1978, he has been an academician of the Literature, Linguistics and Art department of the Ukrainian Academy of Sciences.

Shishkin, Valerii A. Corresponding member of the History Department of the Academy since December 1987. (LDA 89-11378.)

Shmelev, G. I. Corresponding member of the Academy in 1993.

Shmelev, N. P. Corresponding member of the Academy in 1993.

Shorygin, Petr P., D. Chem S. Born in 1911. Winner--with others--of the 1979 State Prize in Science and Technology for works on the spectroscopic resonance combined diffusion of light and its application in chemistry. Corresponding member of the General and Technical Chemistry Department of the Academy since 1981.

Shuvalov, V. A Corresponding member of the Academy in 1993.

Shteynshleyger, V. B. Corresponding member of the Academy in 1993.

Shvedova, **Natalia Iu.**, D. Phlg. S. Corresponding member of the Literature and Language Department of the Academy since 1984.

Sidorenko, Viktor A ., D. Tech.S. Born in 1929. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981. Since 1975, he has served as Chairman of the Nuclear Reactor Division of the I. V. Kurchatov Atomic Energy Institute in Moscow.

Sidorov, A. A. Corresponding member of the Academy in 1993.

Sidorov, Veniamin A., D. PM. S. Born in 1930 in Vladimir Oblast. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy and of the Siberian Department since 1968. He graduated from Moscow State University in 1953 and joined the staff of the Institute of Atomic Energy. In 1962, he affiliated with the Institute of Nuclear Physics of the Siberian Department of the AN SSSR. Since 1970, he has been Head of the Particle Physics Laboratory and of "Sidorov's Department" and since 1977, he has been Deputy Director of the Nuclear Physics Institute in Novosibirsk established in 1957. He helped to develop the colliding beam technique. He has investigated quantum electrodynamics, fast-neutron spectrometry, vector mesons, multihadron annihilation, and colliding beams of electrons and positrons. He is an honored scientist of the former Soviet Union, and member of an editorial board of a scientific journal. Lenin Prize, 1967. (GSE 23, p. 437.)

Silin, **Viktor P.** , D. PM. S. Corresponding member of the General Physics and Astronomy Department of the Academy in 1993. Since 1967, he has headed the Theoretical Plasma Department

of the Lebedev Physics Institue in Moscow.

Simakov, K. V. Corresponding member of the Academy in 1993.

Simoniya, N. A. Corresponding member of the Academy in 1993.

Skladnev, **Nikolai** N . Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Slavnov, Andrei A $\,$. Corresponding member of the Nuclear Physics Department of the Academy since December 1987.

Slin'ko, Mikhail G., D. Tech. S. Born in 1914 in Moscow. Russian chemist. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy since 1966. Also member of the Siberian department. In 1932, he began working at the State Institute for the Design of Enterprises of the Heavy Chemical Industry. He graduated from Moscow State University in 1941 and fought in WW II. From 1946 to 1956, he worked at the L. Ia. Karpov Institute of Physical Chemistry in Moscow. From 1956 to 1959, he worked on the staff of the CC CPSU; from 1959 to 1976, he was Deputy Director of the Institute of Catalysis of the Siberian Division (now Department) of the AN SSSR. In 1976, he became Deputy Director of the L. Ia. Karpov Institute of Physical Chemistry. His research has dealt with the creation of mathematical models of catalytic processes and chemical reactors. State Prize, 1946; Lenin Prize, 1960. (GSE 23, p. 536.)

Smirnov, L. A. Corresponding member of the Academy in 1993.

Smirnov, **Vladimir** N ., D. Bio S. Born in 1937. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1981. Since 1979, Chief of the Experimental Cardiology Division of the Academy of Medical Sciences.

Sobel'man, I. I. Corresponding member of the Academy in 1993.

Sobolev, Gennadii A., D. PM. S. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy in 1991. Since 1974, he has headed the Fracture Mechanics Department of the O. Iu. Shmidt Earth Physics Institute in Moscow. Since 1991 he has headed the Modeling and Processes Analysis in Earthquake Focus Laboratory.

Soktoyev, Aleksandr B., D. Philological S. Born in 1931. Specialist in literature and folklore. Corresponding member of the Philosophy and Law Department of the Academy and of the Siberian Department since 1990. Head of a sector of the History, Philology and Philosophy Institute of the Siberian Department in Novosibirsk-Akademgorodok. He has authored 119 scientific works, of which two monographs have particular significance, and he is the co-author of 10 publications of which two are monographs, of which "The History of Buriat Soviet Literature" is one (1967). He teaches at the Buriat State Pedagogical Institute imeni Dorzhi Banzarova where he has guided the work of three aspirants for the candidate degree. He was on the Scientific Council on folklore of the AN SSSR and a member of the coordination council for the comparative study of the Russian and American cultures. In 1991, a new International Research Center for Northern Territories Development in Siberia was established that links together the work of scientists of three Siberian Department Institutes: the Institute of Cryoshpere of Earth in Tiumen, the Institute of Physico-Engineering Problems of the North in Yakutsk, and the Institute of Philology in Akademgorodok-Novosibirsk. As Director of the Institute of Philology in Akademgorodok-Novosibirsk, Dr. Soktoyev will play a major role in the development of this new international research center.

Solntsev, **Vadim M.**, D. Phlg. S. Born in 1928. Corresponding member of the Literature and Language Department of the Academy since 1984. Since 1965, he has been Deputy Director of the Oriental Studies Institute in Moscow which was founded in 1930. In February 1988, he was made Director of the Linguistics Institute in Moscow.

Solodovnikov, Vasilii G., D. Econ. S. Born in 1918. Russian economist. Corresponding member of the Economics department since 1966. Corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988. He graduated from the V. V. Kuibyshev Industrial Institute in Kuibyshev in 1942 and from the All-Union Academy of Foreign Trade in 1946. From 1949 to 1961, he did scholarly research at various AN SSSR institutes. From 1961 to 1964, he served as a

diplomat with rank of envoy extraordinary and plenipotentiary of the first class. In 1964, he became Director of the Africa Institute of the AN SSSR and from 1965 to 1973, he was vice president of the International Congress of Africanists. His works are primarily devoted to socioeconomic and political problems of developing countries. (LDA 89-11378.) (GSE 24, p. 300.)

Solomentsev, **Iurii M** ., D. Tech. S. Born in 1939. Corresponding member of the Information Science, Computer Technology, and Automation Department of the Academy since December 1987. (LDA 89-11378.)

Solomonov, Nikita G., D. Bio. S. Born in 1929. Biologist. Specialist in ecology and ecological plant physiology. Corresponding member of the General Biology Department of the Academy and of the Siberian Department since 1990--and reconfirmed in 1992. He has authored 64 scientific works of which four monographs published from 1973 to 1980 are considered to be scientifically significant. He is the Director of the Yakutsk Biology Institute. He has studied pollution ecology and the ecology of plants and has established an original school for research and study in these fields. For 18 years he has held the chair of zoology at the Yakutsk State University where he has directed the work of 12 aspirants for the candidate degree. He was a member of the ecological section of the Scientific Council of the AN SSSR on problems of the fundamental control of the environment and the reconstruction of animal world; a member of the Research Committee on the biological sciences of the Siberian Department; head of the Yakutsk Department for All-Union territorial society, and on the editorial boards of "Ecology", "Cryobiology", and "Izvestia" of the Siberian Department of the AN. SSSR. He was also on the Presidium of the Yakutsk Scientific Center of the Siberian Department of the RAN.

Solomonsov, N. G. Corresponding member of the Academy in 1993.

Solov'ev, **Pavel A** ., D. Tech. S. Born in 1917. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1981.

Solov'ev, V. N. Corresponding member of the Academy in 1993.

Sorokin, **Aleksandr I** . Born in 1924. Corresponding member of the Oceanology, Atmospheric Physics, and Geography Department of the Academy since 1979.

Spirkin, Aleksandr G . Born in 1918 in Chiganak, Saratov Oblast. Russian philosopher and psychologist. Corresponding member of the Philosophy and Law Department of the Academy since 1974. He graduated from the V. I. Lenin Moscow Pedagogical Institute in 1941, and has taught since 1946. From 1960 to 1970, he headed the philosophy department of the Sovetskaia Entsiklopediia Publishing House and was an assistant editor-in-Chief of the Enclopedia of Philosophy. He has been a senior researcher at the Institute of Philosophy of th AN SSSR since 1962, and vice-president of the Philosophy Society of the USSR since 1974. (GSE 24, p.427.)

Starushenko, Gleb B ., D. Jur. S. Born in 1922. Corresponding member since 1984. Since 1966, he has been Deputy Director of the Africa Institute in Moscow. The institute was created in 1959 to research the economic, socio-political, international, historical, and cultural-ethnological problems of the African states. It coordinates its work with the scientists in the Oriental Institute. It also maintains a branch in St. Petersburg.

Stepanian, Tsolak A., D. Phil. S. Born in 1911 in Satkhe, Georgian SSR. Russian philosopher. Corresponding member of the Philosophy and Law Department of the Academy since 1964. He graduated from the K. Liebnecht Moscow Pedagogical Institute. He has taught philosophy in higher educational institutions in Moscow since 1933. In 1946, he joined the Institute of Philosophy of the AN SSSR and in 1965, he became head of the sector (since 1972, the department) of scientific communism. His works are in historical materialism and scientific communism. (GSE 24, p. 530.)

Steshenko, **Nikolai V.**, D. PM. S. Born in 1927. Since 1979, he has been a Deputy Director of the Crimean Astrophysical Observatory which is subordinate to the General Physics and Astronomy Department of the Academy. He was a corresponding member of that Department of the Academy in 1993.

Stishov, S. M. Corresponding member of the Academy in 1993.

Stogniy, Anatolii A ., D. PM. S. Born in 1932. Since 1976, he has been a corresponding member of the Mathematics, Mechanics, and Cybernetics department of the Ukrainian Academy of Sciences. He has been a corresponding member of the Information Sciences, Computer Technology, and Automation department since 1984. Since 1964, he has been Deputy Director of the V. M. Glushkov Cybernetics Institute at Kiev. In 1967, he was awarded the N. Ostrovskii Ukrainian Lenin Komsomol Central Committee prize for his work on digital computer software. In 1968, he received the USSR State prize for software incorporated into the Mir computer. (LDA 87-111012.)

Stroganov, G. B. Corresponding member of the Academy in 1993.

Struchkov, Iurii T. Corresponding member of the Academy in 1993.

Subbotin, A. I. Corresponding member of the Academy in 1993.

Sumarokov, Leonid N., D. Tech. S. Born in 1938. Corresponding member of the Information Science, Computer Technology, and Automation Department of the AN SSSR since 1984. Since September 1987, he has been one of the deputy chairmen of the GKNT. Since 1977, he has been Director of the Scientific and Technical Information International Center in Moscow which was established in 1969. Subordinate to CEMA, it was to set up as a shared data base for scientific and technical cooperation between the Soviet Bloc Countries. (LDA 89-11378.)

Sumbaev, Oleg I ., D. PM. S. Born in 1930. Corresponding member of the Nuclear Physics Department of the Academy since 1979. Since 1971, he has been Director of the B. P. Konstantinov Nuclear Physics Institute in St. Petersburg that was established in 1971 and that researches nuclear physics, both theoretical and experimental, and radio biology. The institute has a cyclotron and a nuclear reactor. It is subordinate to the Nuclear Physics Department of the academy. Since 1977, he has also been Head of the Neutron Investigations and Reactor Laboratory and of the Gamma Ray Spectroscopy Department of the Institute. In 1985, he received the B. P. Konstantinov Prize in physics for his scientific achievements.

Svanidze, **Givi G**. Born in 1921. Since 1979, corresponding member of the Earth Sciences department of the Georgian Academy of Sciences. Since 1981, he has been a corresponding member of the Oceranology, Atmospheric Physics, and Geography Department of the Academy. Since 1979, he has served as Director of the Hydrometeorology Scientific Research Institute in Tbilisi, subordinate to the State Committee for Hydrometeorology and Environment Control.

Sverdlov, **Evgenii D** ., D. Chem S. Born in 1938. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1984. He is head of the Human Gene Structure and Function Laboratory of the M. M Shemiakin Biochemistry Institute in Moscow. In 1988, he was made Director of the V. L. Komarov Botany Insitute in St. Petersburg which was founded in 1714.

Svitashev, Konstantin K ., D. PM. S. Born in 1936. Physicist. Specialist in the elements of the bases in information systems, and diagnostics of semiconductor structures. Corresponding member of the Information Science, Computer Technology, and Automation Department and of the Siberian Department since December 1987 and reconfirmed in 1992. He has authored and co-authored 104 scientific works of which two are major monographs. He graduated from the Leningrad State University in 1959. He worked as an engineer at the State Optics Institute imen S. I. Vavilov from 1959 to 1962. In 1962, he began working at the Semiconductor Physics Institute of the Siberian Department, in 1975 becoming its Deputy Director. In 1980, he was made Head of SKTB as a specialist in the electronics and the analytics of instrument making. He has been a professor at the Novosibrisk State University since 1985 and, as a professor has supervised the research of two doctoral students and of 11 aspirants for the candidate degree. He is editor of the journal Microelectronics. He received the Laureate Prize of the Soviet Ministers of the SSSR in 1984.

Sychev, **Vladimir** V ., D. PM. S. Born in 1924. Since 1966, he has been Deputy Director of the Zhukovskii Aerohydrodynamics Institute in Moscow which coordinates research on aviation technology. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1979.

Tal'roze, Viktor L ., D. Chem. S. Born in 1922 in Tula. Russian physical chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1968. He graduated from Moscow State University in 1947 and began work at the Institute of Chemical Physics of the AN SSSSR immediately. Since 1954, he also worked at the Moscow Physicotechnical Institute where, since 1961, he has headed the subdepartment of chemical physics. Since 1969, he has been Deputy Director of the Chemical Physics Institute in Moscow, and since 1978, Chief of the Physical Methods Division of the Chemical Physics Institute in Moscow. Since 1977, he has occupied the post of dean of the Molecular and Chemical Physics Faculty at the Physical Technical Institute in Moscow. In 1984, he was awarded--with others-- the Lenin Prize for his work on using lasers in chemical chain reactions. His works deal with the kinetics of chemical reactions occurring under irradiation and with the application of physical methods to chemistry, especially in the spectroscopic study of the reactions of many free radicals and ions. (GSE 25, p. 344.)

Tatarskii, **Valerian Ilich** . Born in 1929 in Kharkov. Russian specialist in radio physics. Corresponding member of the General Physics and Astronomy Department of the Academy since 1976. He graduated from Moscow State University in 1952. In 1954, he joined the staff of the Institute of Atmospheric Physics of the national academy. He developed a theory of the propagation of waves of differing physical nature in a randomly homogeneous medium, particularly in a turbulent medium. (GSE 30, p. 667.)

Tembotov, A. Kh. Corresponding member of the Academy in 1993.

Tenishev, **Edkhiam R.** , D. Phlg. S. Corresponding member of the Literature and Language Department since 1984.

Teriaev, Evgenii D. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. Deputy Academician Secretary of the Department since March 1988. (LDA 89-11378.)

Tikhomirov, **Vadim N** . Corresponding member of the General Biology Department of the Academy since December 1987. (LDA 89-11378.)x/

Timofeev, **Petr P** ., D. GM. S. Born in 1918 in Viazma, Smolensk Oblast. Russian geologist. Corresponding member of the Geology, Geophysics, Geochemistry, and Mining Sciences Department of the Academy since 1976. He graduated from Moscow State University in 1943. In 1950, he joined the staff of the Geology Institute of the AN SSSR. From 1960 to June 1988, he served as Deputy Director of the Geology Institute in Moscow. In June 1988, until replaced by Knipper in 1989, he was Director of the Geology Institute which was established in 1937 to coordinate geological research with other branches of the academy and with the other republic academies. His works are in the study of the geological formations of coal. State Prize, 1972. (LDA 89-11378.) (GSE 30, p. 668.)

Timofeev, Timur T ., D. Hist S. Born in 1928 in Ivanovo. Russian historian and economist. Corresponding member of the Economics department since 1966; corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988. From 1961 to 1966, he was Deputy Director of the Institute of World Economics and International Relations. Since 1966, he has been Director of the International Workers' Movement Institute in Moscow which is subordinate to the academy's Philosophy and Law department and which examines problems of the international workers' movement and of the social composition of the working class both in the USSR and abroad. His works deal with labor issues, the democratic movement and the theory of scientific communism. The institute's name was changed in 1991 to the Problems of the Workers' Movement and Comparative Politology Institute. He continues to be its director. (LDA 89-11378.) (GSE 25, p. 658.)

Timofeev, V. B. Corresponding member of the Academy in 1993.

Tomson, I. N. Corresponding member of the Academy in 1993.

Torgov, Igor V., D. Chem S. Born in 1912 in Kazan. Russian chemist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1972. He graduated from the Kazan Institute of Chemical Engineering in 1937, and worked in a factory laboratory until 1939. From 1939 to 1959, he was at the Institute of Organic Chemistry of the AN SSSR, becoming a senior scientific worker there in 1948. Since 1959, Chief of the Steroid Chemistry Laboratory of the M. M. Shemiakin Bio-organic Chemistry Institute in Moscow. His works have been in the chemistry of natural compounds, mainly steroids. (GSE 26, p. 246.)

Troitskii, Vsevolod S ., D. PM. S. Born in 1913 in Tula Oblast. Astronomer. Corresponding member of the General Physics and Astronomy Department of the Academy since 1974. He graduated from the University of Gorkiy in 1941 and joined the staff of the Gorkiy Radiophysical Institute in 1948. Since 1956, he has been Deputy Director of the Radiophysics SRI in Gorkiy. Since 1973, he has acted as Chief of the Radio Astronomy Observatory of the Radio Physics Scientific Research Institute at Gorkiy which was established in the 1950s. The institute is located at Gorkiy State University and has done research in plasma physics, spectroscopic systems, and high powered microwave devices-and is also involved in the search for life in outer space. His works are in radio astronomy. Holder of the A. S. Popov Prize, 1974. (GSE 26, p. 373.)

Trofimov, Boris A., D. Chem. S. Born in 1938. Chemist. Specialist in general chemistry and in hetero-atomic substances--such as acetylene. Corresponding member of the Academy and of the Siberian Department since 1990. Deputy Director of the Organic Chemistry Institute in Irkutsk. He has authored and co-authored some 397 scientific works. Four of his six monographs are considered to be important contributions. He has directed the postgraduate work of four doctoral students and of 45 aspirants for the candidate degree. He was on the Scientific Council on chemistry and technology of organic substances for the GKNT; on the coordinating committee of the Radio Industry Ministry of the SSSR; on the Scientific Council on the chemical sciences for the Siberian Department; an inspector on the Committee for Dissertations for the candidate of science degree for the Irkutsk Institute of Organic Chemistry, and on the editorial boards of several major journals: "Sulphur Reports," "Sulphur Letters," and the Organic Chemistry Journal of the Russian Academy of Sciences.

Trubetskov, D. I. Corresponding member of the Academy in 1993.

Tsvetkov, Iurii D., D. Chem. S. Born in 1933. Chemical physicist. Corresponding member of the General and Technical Chemistry Department of the Academy and of the Siberian Department since 1984--and reconfirmed in 1992. He graduated from the Moscow Physico-Technical Institute in 1957 and worked at the Institute of Chemical Physics from 1957 to 1959. In 1959, he joined the Institute of Chemical Kinetics and Combustion Institute of the Siberian Department, as a junior researcher, a scientific secretary, a senior researcher, and head of a laboratory studying the chemistry and physics of free radicals (1968), and Deputy Director of that institute from 1968 to 1971. In 1983 he was Head scientific secretary of the Siberian Department of the AN SSSR, and in 1992 he was reconfirmed as the Head scientific secretary of the Siberian Department of the Russian Academy of Sciences. He has been on the Presidium of the Siberian Department since 1985. Since 1973, he has been a professor at the Novosibirsk State University holding a chair in physical chemistry, and as a professor has guided the research of three doctoral and of 15 aspirants for the candidate degree. He received the State Prize in 1988. Since 1974, he has been Chief of the Electron Spin Echo Decay Curves department (Chemical Kinetics of Combustion Institute), and since 1975, he has been Deputy Director of the Chemical Kinetics of Combustion Institute in Novosibirsk.

Tsvetkov, **Iurii V.**, D. Chem. S. Corresponding member of the General and Technical Chemistry Department of the Academy in 1993. At the Macromolecular Compounds Institute in St. Petersburg the Physics of Macromolecules and Intermolecular Interactions area is under Professor Tsvetkov and includes four laboratories whose research interests

are: the molecular dynamics and optics of polymers, polymer spectroscopy, luminescent polymers, and the theory and computer simulation of polymer systems. This research area has developed analytical procedures involving IR, NMR, X-ray, and luminescent spectroscopy, thermo-gravimetry, sedimentation, diffusion, and birefringence. Methods of synthesis of polymers with different chemical and topological structures have been developed in these laboratories.

Tulepbaev, **Baidabek A.** Born in 1921. Since 1975, academician of the Social Science department of the Kazakh Academy of Sciences. Corresponding member of the History Department of the Academy since 1981.

Turov, E. A. Corresponding member of the Academy in 1993.

Tvorogov, S. D. Corresponding member of the Academy in 1993.

Udintsev, G. B. Corresponding member of the Academy in 1993.

Ulianov, Petr L., D. PM. S. Born in 1928. Corresponding member of the Mathematics Department of the Academy since 1981.

Urzhumtsev, Iurii S., D. Tech. S. Born in 1929. Since 1973, corresponding member of the Physical and Technical Sciences department of the Latvian Academy of Sciences. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy and of the Siberian Department since 1981. From 1979 to 1986, he was the Director of the Institute of Physical-Terchnical Problems of the Northern Yakutsk Branch of the Siberian Department. In 1986, he began working in the Latvian SSR. He is among the top ranks of scientists from the Siberian Department of the national academy.

Vaganov, Evgenii A. D. Bio. S. Born in 1948. Biophysicist. Specialist in ecological biology, forest ecology and dendrochronolgy. Corresponding member of the General Biology Department of the Academy and of the Siberian Department since 1990. He has written or co-authored 52 scientific works of which three are major monographs. He graduated from the Krasnoiarsk State University and went to work at the Physics Institute imeni Kirenskii in 1971 as an engineer and a senior engineer. In 1974, he became a scientific collaborator and in 1979 a senior scientific collaborator. In 1981, he joined the Biophysics Institute of the Siberian Department, organizing the base for the Department of biophysics of the Institute of Physics of the Siberian Department --as a senior scientific worker. In 1986 he headed a sector and in 1987 he headed one of its laboratories. In 1988, he was named to the post as head of a Laboratory on the Physics of Woodpulp. In 1990, he became head of a Laboratory for Dendrochronology of the Forestry and Timber Institute imeni V. N. Sukachev.

Varshalovich, D. A. Corresponding member of the Academy in 1993.

Vasil'ev, **Valerii V**. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1984.

Vasil'ev, Iurii M. Corresponding member of the Academy in 1993.

Vasil'ev, Iurii S. Corresponding member of the Physical Problems of Power Engineering Department of the Academy since December 1987. (LDA 89-11378.)

Vasin, V. V. Corresponding member of the Academy in 1993.

Vas'kov, Semen T., D. Tech. S. Born in 1934. Engineer. Specialist in the automation of scientific research. Corresponding member of the RAN and of the Siberian Department since 1992. He has authored and co-authored 72 scientific works of which one was of monograph length and consequence. In 1990, he was named Deputy Director and in 1992, he became general Director of the "Informatika"—the special scientific construction bureau of the Siberian Department of the ANR. He is on the Scientific Council of the academy for the automation of scientific research. He is a professor at both the Novosibirsk State University and the Kishenev Polytechnical Institute. His major work is in developing a system of digital cartography. As a professor, he has directed the work of seven aspirants for the candidate degree. He is a member of the Scientific Council on the "Sibir" program. He also serves on the UNESCO program on regional statistics. He has been a consulting specialist on the telecommunications project for the Siberian region.

Vedornov, G. I. Corresponding member of the Academy in 1993.

Vershinin, Iurii N., D. Tech. S. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy and of the Ural Department since December 1987. (LDA 89-11378.)

Vladimirskii, Vasilii V ., D. PM. S. Born in 1915 in Zheleznovodsk. Russian physicist. Corresponding member of the Nuclear Physics Department of the Academy since 1962. Originally elected to the Physical Mathematical Sciences department. He graduated from Moscow University in 1938. Since 1946, he has been deputy director of the Theoretical and Experimental Physics Institute in Moscow. His works have been in optics, propagation of ultrasound and electromagnetic waves as well as in the theory of linear accelerators and neutron spectroscopy. He participated in the creation of the Serpukhov accelerator whose energy level is 70 giga-electron-volts. State Prize, 1953; Lenin Prize, 1970. (GSE 5, p. 536.)

Vlasov, Valentin V., D. Chem. S. Born in 1947. Bioorganic chemist. Corresponding member of the Academy and of the Siberian Department since 1990. Deputy Director of the Novosibirsk Institute of Bioorganic Chemistry. He has authored three and co-authored 103 scientific works. Of his own books, this "Affinity Modification of Biopolymers" published in 1988 is the most significant. He is a professor at Novosibirsk State University where he has guided the work of seven aspirants for the candidate degree. He is on the Scientific Council on physiologically active substances. He is on the editorial board of the American journal "Antisense Research and Development."

Volkogonov, D. A. Corresponding member of the Academy in 1993.

Volkov, L. I. Corresponding member of the Academy in 1993.

Vol'skii, Viktor V. , D. Econ. S. Corresponding member of the Economics Department of the Academy since 1984. Corresponding member of the Problems of World Economics and International Relations Department of the Academy since August 1988. Since 1966, he has been director of the Latin American Institute in Moscow which was founded in 1961 to research the economic, agrarian and political problems of Latin American states, including Cuba. (LDA 89-11378.)

Vomperskii, S. E. Corresponding member of the Academy in 1993.

Vorob'ev, **Aleksei A.** Corresponding member of the Nuclear Physics Department of the Academy in 1993. Since 1971 he has headed the High Energy Physics and Accelerator Laboratory of the B. P. Konstantinov Nuclear Physics Institute in St. Petersburg.

Vorob'eva, E. N. Corresponding member of the Academy in 1993.

Voropaev, Grigorii V. Born in 1932. Corresponding member of the Oceanology, Atmosperic Physics, and Geography Department of the Academy since 1976. Since 1977, he has been director of the Water Problems Institute in Moscow which is subordinate to the academy's Oceanology, Atmospheric Physics, and Geography department and which does research on terminal lakes and river diversion projects.

Vorozhtsov, G. N. Corresponding member of the Academy in 1993.

Voyevodin, Valentin V., D. PM. S. Born in 1934. Corresponding member of the Mathematics Department of the Academy since 1987.

 $\mbox{\sc Vyatkin},$ $\mbox{\sc German P}$. Corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department and of the Ural department of the Academy since December 1987. (LDA 89-11378.)

Yablokov, Aleksei V., D. Bio. S. Born in 1933. Corresponding member of the General Biology Department of the Academy since 1984. Selected as Director of the N. K. Koltsov Developmental Biology Institute in Moscow in January 1988. Professor Yablokov in November 1991 was deputy chairman of the Committee of Ecology of the U.S.S.R. Supreme Soviet with offices in the Kremlin in Moscow. In 1978, he received the A. N. Severtsov Prize for biology and animal morphology.

Yablonskii, Sergei $\,V\,$., D. PM. S. Born in 1924 in Moscow. Russian mathematician. Corresponding member of the Mathematics Department of the Academy since 1968. He graduated from Moscow State University in 1950 and became a professor there in 1963. In

1953, he joined the staff of the Institute of Applied Mathematics of the AN SSSR. His specialties include general problems of the theory of control systems, functional systems and operations, the monitoring and reliability of control systems, and algorithmic difficulties in designing control systems. Lenin Prize, 1966. (GSE 30, p. 406.)

Yagodin, Gennadii A . D. Chem. S. Born June 1927 in Penza Oblast. Russian chemist. Since 1976, he has been a corresponding member of the Physical Chemistry and Technology of Inorganic Materials Department of the Academy. He graduated from the D. I. Mendeleev Moscow Institute of Chemical Engineering in 1950 after which he joined that university's staff and in 1973 he was appointed its rector. In 1983, he was named rector of the D. I. Mendeleev Chemical Technology Institute in Moscow. Since 1985, he has served as Minister of the Ministry of Higher and Secondary Education, which was established in 1959, and which administers over 890 institutes of higher and secondary specialized education. Since 1985, he has been a board member of the GKNT General Assembly. Since 1985, he has been first deputy chairman of the Committee for Lenin Prizes and State Prizes in Science and Technology. In March 1988, he assumed the chairmanship of the newly created State Committee for Public Education which has taken over the function of the Ministry of Education, the Ministry of Higher and Secondary Specialized Education, and the State Committee for Vocational and Technical Education. This is obviously an important move toward consolidation of offices. His studies include the kinetics of fast reactions in liquid media. In 1981, he was awarded the D. I. Mendeleev Prize in chemistry for his contributions to Russian science. (GSE 30, p. 407.) (LDA 89-11378.)

Yakovlev, Viktor L. , D. Tech. S. Born in 1934. Mining Engineer. Specialist in mining. Corresponding member of the Academy and of the Siberian Department since 1990. From 1982 to 1984 he taught at the Sverdlovsk Mining Institute imeni V. V. Vazhrushev, and since 1987 he has taught at the Yakutsk State University where he has guided the research of nine aspirants for the candidate degree. He has written 27 studies of which one is a significant monograph and he has co-authored 79 publications of which four are major monographs. He is chairman of the Russian Group on International Mining in the Arctic of the USA Committee, on the Scientific Council of the Siberian Department for the Mechanics, Energetics, and Mining Sciences, and he is chairman of the Yakutsk Scientific Center of the Siberian Department of the Russian National Academy.

Yakubovich, V. A. Corresponding member of the Academy in 1993.

Yanovskii, Rudolf G., D. Phil. S. Born in 1929. Corresponding member of the Philosophy and Law Department since December 1987. (LDA 89-11378.)

Yaroshevskii, V. A. Corresponding member of the Academy in 1993.

Yartseva, Viktoria N ., D. Phlg. S. Born in 1906 in St. Petersburg. Russian linguist. Corresponding member of the Literature and Language Department of the Academy since 1968. She graduated from the A. I. Herzen Leningrad Pedagogical Institute in 1933 and became a professor in 1963. She served as Director of the Institute of Linguistics of the AN SSSR from 1971 to 1977. Her works are devoted to several areas of historical and general linguistics. She has authored a number of studies of the English language, the Celtic languages, and Shakespeare. (LDA 89-11378.) (GSE 30, p. 430.)

Yunusov, Makhamadzhan S., D. PM. S. Corresponding member of the Nuclear Physics Department of the Academy in 1993. Since 1989 he has been the Director of the Nuclear Physics Institute in Taskent which was established in 1956 to research the use of nuclear physics in scientific research and the utilization of atomic energy in science and the national economy.

Yunusov, Sabir Iu., D. Chem S. Born in 1909 in Tashkent. Russian organic chemist. Corresponding member of the General and Technical Chemistry Department of the Academy since 1958. He graduated from the Middle Asian University in Tashkent in 1935, and from 1935 to 1941, he was on the staff of the All-Union SRI of Pharmaceutical Chemistry of the Uzbeck Academy of Sciences, and in 1956 he became that institute's Director. From 1952 to 1962, he was vice president of the Uzbeck academy. Since 1976, he has been Director of the Botanical Chemistry Institute in Tashkent under the Uzbek

Academy of Sciences. Originally elected to the Chemical Sciences department. His works are in the chemistry of alkoloids. (GSE 30, p. 449.)

Yusupov, Erkin Iu. , D. Phil. S. Born in 1929. Academician of the Philosophy, Economics and Law Department of the Uzbek Academy of Sciences since 1984. Vice President of the Uzbek Academy since 1979. Corresponding member of the Philosophy and Law Department of the Russian Academy of Sciences since December 1987.

Zakharov, Iurii A., D. Chem. S. Born in 1938. Chemist. Specialist in the chemistry of solid bodies, and research into the physical and physico-chemical structure of inorganic crystals. Corresponding member of the Academy and of the Siberian Department since 1982. For 30 years he has worked with a large group (about 200 workers of whom five hold the doctorate and 40 the candidate degree) studying bipolymers and the fundamentals of the chemistry of solid bodies. Corresponding member since 1992. He has been Rector of the Kemerovsk State University since 1978. He has directed the work of some 26 aspirants for the candidate degree and supervised the writing of three doctoral dissertations. He is on three major scientific councils of the Russian Academy of Sciences and of the Siberian Department. He supervises the scientific work of the Solid Bodies Spectroscopy Laboratory of the Kemerovsk State University.

Zalizniak, **Andre A** . Corresponding member of the Literature and Language Department of the Academy since December 1987. (LDA 89-11378.)

Zamyshliaev, **Barrikad V**. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since December 1987. (LDA 89-11378.)

Zavarzin, Georgii A . Born in 1933 in Leningrad. Russian microbiologist. Corresponding member of the Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds Department of the Academy since 1976. He graduated in 1955 from the biological-soil faculty of the Moscow State University with a specialty in microbiology. In 1958, he finished his postgraduate work at the INMI and became a staff member of the institute. He has headed the Microabial Communities laboratory since 1960. Laboratory scientists concentrate on the relic microbial communities, such as cyanobacterial mats of hyper saline reservoirs and hyper thermophilic communities of hydrotherms. The major thrust of work is on the clarification of the trophic bacterial interaction in microbial communities of amphibial ecosystems--lagoons, swamps, hydrotherms, especially in the production and consumption of hotbed gases. In 1961, he became a department head at the Institute of Microbiology of the Academy. Since 1985, he has been vice president of the Scientific Committee on Problems of the Environment. His works have been in physiology and systematics of bacteria. (GSE 30, p. 740.)

Zeldovich, Boris Ia., D. PM. S. Corresponding member of the General Physics and Astronomy Department and of the Ural Department since December 1987. In 1978, he was a senior researcher in the Phase Conjugation department of the Quantum Radiophysics Laboratory of the Radiophysics Division of the P. N. Lebedev Physics SRI in Moscow. Since 1979, he has been a senior researcher in the Mechanical Action of Laser Beams Laboratory of the Problems of Mechanics Institute in Moscow which was established in 1955 to conduct research on gas dynamic processes, combustion instabilities, plasma, laser beams and shock waves. (LDA 89-11378.)

Zhamoyda, **Aleksandr I** ., D. GM. S. Born in 1921. Corresponding member of the Geology, Geochemistry, Geophysics, and Mining Sciences Department since December 1987. Since 1970, he has been the Director of the Geology Scientific Research Institute located in Leningrad. It was established in 1932 and specializes in regional geology and in prospecting methods. It is directly subordinate to the Ministry of Geology. (LDA 89-11378.)

Zhdanov, **Iurii** A., D. Chem S. Born in 1919 in Tver (Kalinin). Russian chemist. Corresponding member of the General and Technical Chemistry Department of the AN SSSR since 1970. He graduated from Moscow State University in 1941. In 1957, he became Rector of the M. A. Suslov Rostov State University which was established in 1917. In 1970,

he was named chairman of the North Caucasus Scientific Center of the AN SSSR. His works deal with naturally occurring compounds, theoretical organic chemistry, and the philosophical problems of the natural sciences. (GSE 9, p. 630.) (LDA 89-11378.)

Zhelezniakov, **Vladimir** V . Corresponding member of the General Physics and Astronomy Department of the Academy since December 1987. In 1977, he was listed as a junior researcher at the Radio Astronomy Observatory of the Radio Physics Scientific Research Institute in Gorkiy. (LDA 89-11378.)

D. PM. S. Born in 1938. Atmospheric Physicist. Specialist in Zherebtsov, Gelii A., atmospheric physics, solar-terrestrial radiation physics. Corresponding member of the Oceanology, Atmosperic Physics, and Geography Department of the Academy and of the Siberian Department since 1990. Author of eight scientific works and co-author of 130. Director of the Terrestrial Magnetism, Ionosphere, and Radio Wave Propagation Institute in Irkutsk. He was on the Scientific Council on widespread radiation and "Sun--Earth" of the AN SSSR; head of the Scientific Council on Cosmic-physical Research of the Siberian Department of the academy, and on the Coordinating Committee of the Ministry of the Radio Industry of the Soviet Union. In 1990, the Siberian Department of the Russian Academy of Sciences established the Siberian Center of Solar-Terrestrial Physics in Siberia--a new international research center that combined the work of scientists in two major institutes: the Terrestrial Magnetism, Ionosphere and Radio Wave Propagation Institute in Irkutsk and the Institute of Cosmophysical Research and Aeronomy in Yakutsk in the establishment of this new international thrust. As Director of the Siberian Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, Dr. Zherebetsov will play a large role in the development of this new international research center.

Zhimerin, Dmitrii G., D. Tech. S. Born in 1906 in Dubki in Tula Oblast. Soviet government figure and scientist in the field of energy. From 1952 to 1961, he was a candidate member of the Central Committee of the CPSU. Corresponding member of the Physical Technical Problems of Power Engineering Department of the Academy since 1970. In 1971, he became 1st vice chairman of the GKNT. He graduated from Moscow Institute of Energy in 1931. He worked as an engineer becoming head of the Administration of the Southern Electric Power Plants. In 1940, he became deputy peoples' commissar of electric power plants of the USSR and in 1942, the peoples' commissar. From 1946 to 1953, he was minister of electric power plants of the USSR; from 1957 to 1958, he was vice chairman of GOSPLAN of the USSR and from 1957 to 1958, he served as vice chairman of the GOSPLAN of the RSFSR. His work led to the creation of the Integrated European Power Grid. From 1964 to 1971, he headed the G. M. Krzhizhanovskii State Scientific Research Energy Institute. (GSE 9, p. 639.)

Zhuchenko, **Aleksandr A** ., D. Bio S. Born in 1935. Since 1978 president of the Moldavian Academy of Sciences. Corresponding member of the General Biology department of the AN SSSR since 1979. (LDA 89-11378.)

Zhuravlev, **B. F.** Corresponding member of the Academy in 1993.

Zhuravlev, Iurii N. Corresponding member of the Academy in 1993.

Zibarev, A. G. Corresponding member of the Academy in 1993.

Zliashberg. G. M. Corresponding member of the Academy in 1993.

Zoloev, K. K. Corresponding member of the Academy in 1993.

Zotikov, **I.** A. Corresponding member of the Academy in 1993.

Zubov, **Vladimir I** ., D. PM. S. Born in 1930. Corresponding member of the Problems of Machine Building, Mechanics and Control Processes Department of the Academy since 1981.

Zverev, Mitrofan S., D. PM. S. Born in 1903 in Voronezh. Astronomer. Corresponding member of the General Physics and Astronomy Department of the Academy since 1953. Originally elected to the Physical Mathematical Sciences department. He graduated from Moscow State University in 1931. From 1931 to 1951, he worked at the University becoming a professor there in 1948. In 1951 he became Deputy Director of the Pulkovo Observatory. Since 1972, he has been Deputy Director of the Main Astronomical

Observatory in Leningrad. He has computed a number of star catalogues, directs international work on a catalog of faint stars and studies time service, gravimetry, and variable stars. (GSE 9, p. 700.)

Bibliography

[Note: Gathering biographical material on members of the revitalized Russian Academy of Sciences starts, of course, with an official listing of the members themselves, then searching through all materials in which information about each scientists may be found. I have listed below some of the sources from which this list was compiled. Undoubtedly there are some errors of omission and commission. I accept responsibility for those. Reading through these biographies, however from A to Z, gives one a much better understanding of the breadth and scope of Russian science as personified in these individual biographical sketches, incomplete as they are. You will note that a number of the newer members of the Academy have virtually no information about them. Dr. Sokolov and I are working to remedy that, and hopefully with the next update of the listing next year, that shortcoming of the list will be corrected.]

Unpublished material:

Staff Personnel, 1957-1989: Biographical sketches of the Academicians and Corresponding members of the Siberian Department of the Russian Academy. Novosibirsk: The History Institute of the Siberian Department, 1989. 200 legal sized sheets.

Books:

Akademia Nauk SSSR: sibirskoe otdelenie: khronika, 1957-1982 gg. Novosibirsk: izdatel'stvo "nauk", sibirskoe otedlenie, 1982. 338 pp.

Directory of Soviet Officials: Science and Education. Washington, D. C.: Central Intelligence Agency. Vols. CR80-13202 (1980), CR 85-14547 (1985)

Directory of Soviet Officials: Science and Education: A Reference Aid.

Washington, D. C.: Directory of Intelligence, LDA 87, 11012 (1987); LDA 80.

Washington, D. C.: Directorate of Intelligence, LDA 87-11012 (1987); LDA 89-11378, May 1989.

GKNT (Gosdarstvenniy komitet SSSR po nauke i technike) Svodnaia skhema razvitiya i razmeshcheniya otraslai narodnogo khozyaystva "nauka i nauchnoe obslyzhivanie" no period do 2005 goda kratkiy istogoviy dokument . Moskva: VNIIPI, 1989. tom I, 264 pp.; tom II, 260 pp.

Komkov, G. *The USSR Academy of Sciences: 250 Years.* Moscow: Novosti Press Agency Publishing House, 1974. 47 pp. (British Museum).

Makarov, V. L., (ed.). *Personal'niy sostav:* 1957-1982. Novosibirsk: izdatel'stvo "nauka" Siberian Department of the SSSR academia nauk, 1982. 120 pp. *Novosibirsk Science Center.* Novosibirsk: the USSR Academy of Sciences Siberian Division, Vneshtorgizdat, 1987, 156 pp.

Teeter, Mark H., Robert Mdivani, Viktor Pliushchev, Blair Ruble, Lev Skvortsov, and Wesley Fisher, Editors, *A Scholars' Guide to Humanities and Social Sciences in the Soviet Union.* Armonk, New York: M. E. Sharpe, Inc., 1994. This was a project of the Institute of Scientific Information in the Social Sciences of the Academy of Sciences of the USSR, the Kennan Institute for Advanced Russian Studies, Woodrow Wilson International Center for Scholars. Academician Vlaidimir Vinogradov and Dr. Blair Ruble, were joint supervisors

of this very important project. A project working group consisted of Valerii Osinov, Viktor Cherviakov, Galina Levina, Mark H. Teeter, Viktor Pliushchev, Robert Mdivani, Olga Dorokhina, Elena Magai, and Pavel Arefev. The project itself was supported by the American Council of Learned Societies, the Soviet Academy of Sciences Commission on the Humanities and Social Sciences, and it was administered in the United States by the International Research & Exchanges Board (IREX) and in the USSR by the Institute of Scientific Information in the Social Sciences (INION).

Telberg, Ina (Ed.). Who's Who in Soviet Science and Technology. New York: Telberg *Corporation, 1964. 302 pp.*

The Great Soviet Encyclopedia. New York: Macmillan, 1983.

Vuchinich, Alexander. *Empire of Knowledge: The Academy of Sciences of the USSR (1917-1970)*. Berkeley: The University of California Press, 1984. 494 PP.

Pamphlets and Brochures:

Altai International Centre for Humanitarian and Biophysical Research. Novosibirsk: The Siberian Department in ALTAICA, Spring 1992, Issue 1. 58 pp. Buryat Branch. Novosibirsk: the USSR Academy of Sciences Siberian Division, Veshtorgizdat, 1987, 26 pp.

Development of Academic Science in Siberia. Novosibirsk: the USSR Academy of Sciences Siberian Division, Vneshtorgizdat, 1987. 76 pp.

Institute of Biochemistry and Physiology of Microorganisms. Puschino: USSR Academy of Sciences, 1990. 50 pp. Updated material provided by enclosure in letter.

Institute of Catalysis. Novoskibirsk: the Siberian Branch of the USSR Academy of Sciences, 1982. 66 pp. In English and Russian.

Institut fiziki zemli imeni O. Iu. Shmidta. Moskva: izdatel'stvo "nauka", 1978. 92 pp.

Institute of Geology and Geophysics. Novosibirsk: Siberian Department, 1982. 80 pp. In both Russian and English.

Institute of Marine Biology. Vladivostok: Far East Branch of the USSR Academy of Sciences, 1990. 24 pp.

Institute of Nuclear Physics. Novosibirsk: Siberian Department, v neshtorgizdat, 1989. 72 pp. In both Russian and English.

Institute of Soil Science and Photosynthesis. Pushchino: USSR Academ;y of Sciences Biological Centre, 1989. 16 pp.

Karavayko, G. I. (ed.) *Institut mikrobiologii*, 1934-1984. Moskva: izdatel'stvo "nauka", 1984. 80 pp.

Kazhuev, V. N. (ed.) The Joint Research and Manufacturing Establishment: D. I. Mendeleev Research Institute for Metrology (VNIIM). St. Petersburg, 1992. 36 pp.

Koton, M. M. (ed.) *Institute of Macromolecular Compounds*. Leningrad: "nauka" Publishers, Leningrad Branch, 1985. 40 pp.

Krasnoiarsk Branch. Novosibirsk: the USSR Academy of Sciences Siberfian Branch, Vneshtorgizdat, 1987, 34 pp.

Paderin, Gennadii. sost'avitel. Moskva: "Sovremenik", 1982. 351 pp. Science, Russia (Federation) Akademgorodok (Novosibirsk) history.

Protein Institute Phonebook, 1987.24 pp.

Ruble, Blair A. Soviet Research Institutes Project--Prepared for the United States International Communications Agency . Washington, D. C.: The Keenan Institute for Advanced Studies, the Woodrow Wilson International Center for Scholars, Vol I (1981) *The Policy Sciences*; Vol. II (1981) *The Social Sciences*; and Vol. III (1981) *The Humanities*.

Scientific Institutions in Chita, Kemerova, Tyumen, Barnaul, Kysl, Omsk. Novosibirsk: the USSR Academy of Sciences Siberian Division, Vneshtorgizdat, 1987, 28 pp

Sergienko, A. (ed.) *The Kola Science Center: Murmansk Marine Biological Institute.* Murmansk: Murmansk Branch USSR Academy of Sciences, 1990. 15 pp.

Shemiakin Institute of Bioorganic Chemistry, 1959-1989. Novosibirsk: USSR Academy of Sciences Siberian Department, 1988. 74 pp.

Sibirskoe otdelenne akademii nauk--SSSR. Novosibirsk: izdatel'stvo "nauka" Siberian Department, 1967. 96 pp. An important early document detailing the first ten years of the development and growth of the Siberian Department.

The Institute for Problems of Information Transmission. Moscow: Academy of Sciences, 1991. 32 pp.

The Vernadsky Institute of Geochemistry and Analitical Chemistry. Moscow: The USSR Academy of Sciences, 1983. 58 pp.

Tomsk Branch. Novosibirsk: USSR Academy of Sciences Siberian Division, Vneshtorgizdat, 1987. 36 pp.

Troitsk: ego istoricheskoe proshloe i nastoyashchee. Moscow: "izobrazitel'noe iskusstvo", 1991. 48 pp.

Yakut Branch. Novosibirsk: USSR Academy of Sciences Siberian Division, Vneshtorgizdat, 1987. 44 pp.