

# Jānis STRADIŅŠ

1933

Chemist, science historian, public figure



He has carried out extensive research in electroanalytical chemistry and electro-chemically generated free radicals with electron spin resonance spectroscopy, also in co-operation with the Nobel Prize laureate J. Heyrovsky's research associates in Prague, A. Frumkin Institute of Electrochemistry and N. Zelinsky Institute of Organic Chemistry in Moscow.

Having worked at the Latvian Institute of Organic Synthesis from its foundation in 1957, Jānis Stradiņš was the closest associate of Solomon Hiller, founder of the Institute. J. Stradiņš was also editor-in-chief of the journal *Chemistry of Heterocyclic Compounds* (1975—1985).

He was the National Awakening leader in the 1980s, with Latvia on its way to freedom. Jānis Stradiņš called that period "the Third Awakening". On the basis of historical figures and facts, he substantiated the rights of the Latvian people to their State and State attributes.

Since 1990 he is a leading figure at the Latvian Academy of Sciences (LAS): Vice-President of LAS (1992—1998), President of LAS (1998—2004), Chairman of the LAS Senate (from 2004). He has been instrumental in transforming the LAS into a Western-type academy of sciences with international acclaim.

Jānis Stradiņš is a historian. He has studied history of science in the Baltics as a united process from the Middle Ages to this time, as well as history of universities and academies of sciences in the region. He was a long-term President of the Association of Science History and Philosophy in the Baltic States and is the Chief Researcher at the University of Latvia Institute of History of Latvia.

In the late 1980s the Latvian people demanded freedom from the fifty-year long Soviet occupation. Jānis Stradiņš provided academic grounds for the claims of the Latvian people and formulated the concept of "the Third Awakening". J. Stradiņš headed the commission that substantiated at the Supreme Soviet of the Latvian SSR the necessity to re-introduce national symbols: the red-white-red flag, the coat of arms and the national anthem of the Republic of Latvia. During the National Awakening period, Jānis Stradiņš provided arguments for the national position against totalitarian ideas and facilitated the re-establishment of historical place-names and democratisation of science.

Ever since the Awakening, Jānis Stradiņš has been the embodiment of the Latvian intellectual aspirations, by considering the everyday and present-day processes within the context of modern, as well as long-term history.

Jānis Stradiņš, son of the doctor Pauls Stradiņš, was born on 10 December 1933 in Riga. In 1951 he finished Riga Secondary School No. 5 with a gold medal; in 1956 he graduated *magna cum laude* from the Faculty of Chemistry of the Latvian State University but in 1960 he defended his doctoral thesis at Lomonosov Moscow State University. He is a disciple of the prominent Latvian chemists Gustavs Vanags, Augusts Ķešāns and Lidiņa Liepiņa.

All of his life has been devoted to science — in the capacity of a researcher at the Latvian Institute of Organic Synthesis, and a science organiser and historian at the Latvian Academy of Sciences (LAS). Jānis Stradiņš has carried out internationally acclaimed research in molecular electrochemistry: he has identified structures of organic molecules and the basic laws of electrochemical transformations. He has worked out the methods of electrochemical generation of free radicals and ways to identify the structure of these active short-lived particles. J. Stradiņš has applied polarography to study numerous medicinal preparations. In 1968 he defended his doctoral theses on the polarography and

electrostructure of nitro and carbonyl compounds. Since 1974 J. Stradiņš is professor of physical chemistry.

Jānis Stradiņš is the author or co-author of 550 science research publications (322 publications in physical organic chemistry and analytical chemistry and 232 articles on the history of science); he has published twenty-seven books. Apart from that, he has written many hundreds of popular science or informative articles. Since 1973 Jānis Stradiņš is an academician — a full member of the LAS. Over a period of at least twenty years he personifies science in Latvia and uses his authority and recognition to enhance the prestige of Latvia's science, to raise funding for it, to marshal research structures and promote academic research. Since 1990 he is a leading figure at the LAS: Vice-President (1992—1998), President (1998—2004), Chairman of the Senate (from 2004). He has always been a facilitator of international scientific relations.

Jānis Stradiņš is also a member of the Lithuanian, Estonian, Georgian, Saxonian Academies of Sciences, of the German Academy of Sciences *Leopoldina*, of *Academia Scientiarum et Artium Europaea*, a laureate of many academic awards. In 1993 he was awarded the Latvian Academy of Sciences Grand Medal.

Ever since his study years Jānis Stradiņš has indulged in systematic research in the history of natural science and research centres in the Baltics. He was the first to treat the history of Latvian science as a unified process dating back to the 16th century. His study of the fundamental contribution by P. Walden, W. Ostwald and T. Grothuss is invaluable.

J. Stradiņš has facilitated the research of science history in the Baltics. Since 1958 he has organised 21 Baltic conferences on history of sciences; since 1990 he has for several times been elected President of the Association of Science History and Philosophy in the Baltic States. Since 2005 J. Stradiņš supervises the State research programme *Lettonica*, which includes interdisciplinary research of Latvia's history, the Latvian language and culture.



**A scientist with an international image.**  
Jānis Stradiņš lecturing at the Dmitri Mendeleev Congress of Chemists in Moscow, in 1959



**A chemist working at the Institute of Organic Synthesis of the LSSR Academy of Sciences in 1961.** Jānis Stradiņš discovered the basic rules of organic molecular structures and their electrochemical changes; he undertakes many internationally recognised research projects



**A Selonian from Viesīte, the founder of the Selonian Association.** The Stradiņi clan comes from the *Stradi* (*Strazdi*) farmstead near Viesīte, where his ancestors once listened to old Stenders' sermons and were members of the parish. The Selonian Association has placed a memorial plaque at the place, where the old (wooden) church used to be. Pictured: Professor Jānis Stradiņš, his son Pēteris Stradiņš and grandson Kārlis Stradiņš, near the memorial plaque

**Historian of Medicine.** With medical history historians and scientists in other fields (1984). From left: L. Reiziņš, T. Vilciņš, K. E. Arons, J. Jākobsone, A. Viksna, J. Stradiņš

**The leaders of the Latvian Academy of Sciences.** From left: Raimonds Valters, Juris Ekmanis, Jānis Stradiņš, Tālis Millers, Andrejs Silinš in Vilnius (2003)

**The initiator and organiser of the World Congress of Latvian Scientists.** Together with Kristaps Keggi (first from left), Jānis Peters (third from left), Vaira Vīke-Freiberga (first from right) at the 1st *World Congress of Latvian Scientists* (1991)

**With his family in 1986.** Professor's son Pēteris Stradiņš (first from right) is the Head of Cardiac Surgery Department No. 21 of the P. Stradiņš clinical University Hospital; his son Pauls Stradiņš is a researcher at the National Renewable Energy Laboratory in Denver, USA; his wife Laima is a lecturer at the Stradiņš University in Riga



**The promoter of international relations in science.** An important work performed by the Professor is his research on Baltic German scientists in Latvia and their return to the realm of Latvian science. Pictured: President of the Latvian Academy of Sciences (LAS) Jānis Stradiņš greets the representative of jurisprudence, Foreign Member of the LAS, Dietrich Andreas Loeber



**The academic leader of the National Awakening.** Jānis Stradiņš was the person who created the name "*the Third Awakening*". He provided evidence for the legitimacy of the right of the Latvian nation to have its own state and national attributes. Pictured: Professor Stradiņš speaks at the National Manifestation at Mežaparks in Riga on 7 October 1988, the day before the Popular Front founding congress

