

FAZLOLLAH REZA

A BRIEF CURRICULUM VITAE

Fazlollah Reza, scientist and educator, was born in the town of Resht near the Caspian Sea in the North of Iran.

FORMAL EDUCATION

His formal education includes several baccalaureates and university degrees from Iran, a Master of Science degree in Electronics from Columbia University in 1946, and a Doctorate in Electrical Engineering from the Polytechnic University of New York in 1948-1950.

His doctoral dissertations on "The Synthesis of Two-Terminal Networks", was described by the renowned American scientist Dr. E. Weber, President of Polytechnic University of New York, as an "extraordinary contribution". During his doctoral and post-doctoral studies he was privileged to work with several outstanding American scientists such as R.M. Foster, E.A. Guillemin, E. Weber, J.L. Walsh and Norbert Wiener.

RESEARCH AND TEACHING

Fazlollah Reza has devoted his professional life to scientific research and teaching. He has taught, conducted research and contributed to the advancement of science, for more than four decades in leading scientific centres of the United-States, Europe, Canada, and Iran.

He is internationally recognized for his contributions to the Theory of Electrical Circuits and Systems, Information Theory, Cybernetics and related Applied Mathematics.

He has lectured at many major academic centres throughout the world and published many scientific and literary works in Farsi, French and English. His scientific contributions, papers and books have received international recognition and his three English books Published in the USA were subsequently translated into several languages. He has been honoured by the Scientific Communities, Universities and Academies in Canada, Denmark, France, Hungary, Iran, Pakistan, Rumania, Soviet Union, Switzerland, United States and Venezuela. Translations of his scientific books include editions in Hungarian, Rumanian, Russian and Spanish.

In addition to his scientific career, Fazlollah Reza is a devoted scholar of Persian literature, Sufism and philosophy. His books and articles on Persian literature (four [4] volumes and over seventy [70] published articles and discourses) have earned him a place of distinction in Persian literary circles.

UNIVERSITY AFFILIATIONS

For more than forty years, Fazlollah Reza has remained devotedly active in intellectual pursuit. He has taught and conducted research in the field of communication theory, cybernetics, circuit and systems science at:

- Massachusetts Institute of Technology, Cambridge, Massachusetts: 1951-1955.

- Syracuse University, Syracuse, New York:
Professor, 1955-1968.
- Colorado University, Boulder, Colorado:
Professor, Summers 1962 and 1966.
- Zurich Polytechnic (E.T.H.), Zurich, Switzerland:
Guest Professor, 1962.
- Royal Technical University of Copenhagen, Denmark:
Visiting Professor, 1963.
- Institut Henri Poincaré, Paris, France:
Visiting Professor, 1965.
- Université de Paris, Sorbonne, France:
(While Iran's Ambassador to UNESCO, Professor, 1969-1974).
Dept. of Physics, Paris VII
- McGill University, Montreal, Canada:
(While Ambassador to Canada 1975 to 1978 and continued to this date, 1989.
Honorary and Adjunct Professor.
- Concordia University, Montreal, Canada:
Visiting and Adjunct Professor, 1979 to present.

Fazlollah Reza has taught at Teheran University (1940-1944) at the beginning of his career, and years later was Chancellor of two major Iranian Universities:

- University of Technology (formerly Aryamehr)
- Teheran University, (the leading university of Iran, with a student body of over 20,000 and a teaching faculty of over 2000).

Upon his appointment to these positions, and after twenty years of academic contribution in the United-States, he succeeded in attracting over one hundred and fifty Iranian scientists and scholars to Teheran, who contributed immensely to the new university orientation and to the academic foundations of science and technology in Iran. He implemented a rapid and innovative modernization program in the reorganization of academic departments, institutes, curricula and research. This reorientation provided a major impetus towards development of the Iranian scientific nucleus.

INTERNATIONAL AFFAIRS

During the years 1969 to 1979, he assumed diplomatic duties on behalf of his native land. He served as Iran's Ambassador in Paris at the United Nations Educational and Scientific Organization (UNESCO), a mission which he headed for five years from 1969 to 1974. Subsequently he was designated Ambassador of Iran to Canada, a position he held from 1974 until the end of 1978.

During his mission at UNESCO Fazlollah Reza has advocated an increased participation of scientists in global concerns, in order to enhance the international dialogue between nations by the implementation of scientific concepts, methods and the transfer of technology.

During the past four decades, he has participated, chaired and delivered addresses to many international scientific meetings, at academic centres, as well as in UNESCO and UN conferences. He has served at times as a consultant to various government and private organizations including IBM, General Electric, the Scientific Section of the United-States Airforce and the Iranian Government.

HONOURS AND AWARDS

- Fellow of the Institute of Electrical and Electronics Engineers, 1962, for "outstanding contributions to Circuit Theory and Information Theory".
- Fellow of the American Association for the Advancement of Science, 1975.
- New York Academy of Science (life member).
- Honorary Professorship from the Polytechnic Institute of New York, 1975.
- Honorary Adjust Professor of the Faculty of Engineering of Carleton University in Ottawa, 1976.
- Honorary Professorship from McGill University, Montreal, Canada, 1978.
- Member of several scientific and Cultural societies, including the American Mathematical Society (emeritus), the Society for Industrial and Applied Mathematics, and Sigma Xi.
- Member of the Board of Governors:
International Council for Computer Communications.
- Honoured by the Government of Pakistan (IQBAL) centennial medal).
- Honorary member of the Atomic Energy Centre of Iran.
- Honours and awards at several different occasions by the Government of Iran.
- LISTED: In Who's Who in American Education,
Who's Who in the East,
Dictionary of International Biography,
and several other sources.

Wife: Mary Theresa Reza

Children: Nora, Michael, Sharieh, Pary, David & Arianne

SCIENTIFIC PAPERS

Over 100 Papers on Communication, System, and Circuit Theories, and on Applied Mathematics published in International Scientific Journal:

- Proceedings of the Institute of Electronics and Electrical Engineers
- IEEE Transactions on Circuits and Systems
- IEEE Spectrum
- Proceedings of AIEE and IRE
- Proceedings of the Institute of Electrical Engineers, U.K.
- Archiv Fur Elektronik Und Ubertragungstechnik
- Canadian Electrical Engineering Journal
- The Journal of the Franklin Institute
- MIT Quarterly Progress Report of Research Laboratory of Electronics.
- Proceedings of American Mathematical Society
- Bulletin of the American Mathematical Society
- Journal of Mathematics and Physics
- Society for Industrial and Applied Mathematics, SIAM Review
- Zeitschrift fur Angewandte Mathematik und Physik
- Journal of Applied Physics
- Comptes Rendus de l'Academie des Sciences, Paris
- Journal of Applied Mathematics, Ceskoslovenska Akademie
- Electronics Letters
- Le Journal De Physique - Lettres

SCIENTIFIC BOOKS

LINEAR SPACES IN ENGINEERING, GINN - BLAISDELL CO. WALTHAM, MASS.
416 Pages 1971. (John Wiley, New York).

LINEAR SPACES IN ENGINEERING, Translated into Romanian, Romanian Academy of
Science 1973.

AN INTRODUCTION TO INFORMATION THEORY, McGraw-Hill Book Co., New York,
1961, 496 Pages.

AN INTRODUCTION TO INFORMATION THEORY, Translated into Hungarian,
Hungarian Academy of Science, 583 Pages, 1966.

MODERN NETWORK ANALYSIS (With S. Seely), McGraw-Hill Book Co., New York,
1958, 373 Pages.

MODERN NETWORK ANALYSIS, Translated into Russian, 1964.

STABILITY OF LINEAR DYNAMICAL SYSTEMS, Tehran University Press, Tehran, 1974,
140 Pages.

CONTRIBUTED CHAPTERS

ENCYCLOPEDIA OF PHYSICAL SCIENCE AND TECHNOLOGY
Academic Press, USA, 1987, Chapter on Circuit Theory, Vol. 2, pp. 797-819.

SYSTEMS ENGINEERING HANDBOOK, McGraw-Hill Co., New York 1965, Chapter on
Information Theory, Ch. 22, pp. 1-28.

ENCYCLOPEDIA AMERICANA, USA, 1971, Vol. 14, Information Theory, pp. 166-169.

ASPECTS OF NETWORK AND SYSTEM THEORY, Edited by R.E. Kalman and
W. Declaris
Holts Rinehart and Winston, New York 1971, Chapter: "On Passivity, Reciprocity and
Linear Operators", pp. 447, 467.