



**Juan G. Roederer**

**USA**

Juan Gualterio Roederer is Emeritus Professor of Physics, Geophysical Institute, University of Alaska Fairbanks (UAF). His principal research fields are space physics and information theory; secondary fields are psychoacoustics and science policy. He conducted pioneering research on solar cosmic rays and the theory of radiation belts, the foundations of information theory, and on music perception. He is author of over 250 scientific articles and six scientific text books, the most recent ones on radiation belt and space plasmas, and electromagnetism, published in 2014 and 2015, respectively. He also is an accomplished organist.

Roederer was born in Trieste, Italy, on September 2, 1929. He lived as a child in Vienna, Austria, where he went to primary school. In 1939 his family immigrated to Argentina where in 1952 he earned a Ph.D. in physical-mathematical sciences at University of Buenos Aires. From 1953 to 1955 he worked as a research scientist at the Max Planck Institute for Physics in Göttingen, Germany. From 1959 to 1966 he was professor of physics at the University of Buenos Aires and during that time directed the National Cosmic Ray Center. In 1967 he moved to the United States, where he became professor of physics at Denver University, Colorado. In 1977 he became director of the UAF Geophysical Institute until 1986, and professor thereafter. A visiting staff member of the Los Alamos National Laboratory since 1968, he was chairman of its advisory committee on Earth and Space Sciences. Between 1986 and 1992 he served two United States presidents as chairman of the U.S. Arctic Research Commission. Since September 2014 he lives in Boulder, Colorado, but continues his professional association with UAF.

During over four decades Roederer was active in the international coordination of research in geophysics and space science. He was a member or chairman of several national geosciences committees in Argentina and the United States. He attended all IUGG General Assemblies between 1960 and 1999; his first working relation with IUGG came in 1964 as member of the so-called Committee of Fourteen. He was elected Vice President and then President of IAGA; during his term as Vice President he was in charge of a radical reorganization of the structure of IAGA. He also was Vice President and President of ICSU's Scientific Committee on Solar-Terrestrial Physics and directed its International Magnetospheric Study 1973-77; in 1983 he presented to ICSU, on behalf of the US Academy of Sciences, the proposal of what in 1986 became the International Geosphere-Biosphere Program. Finally, Roederer served as the IUGG Representative in the COSPAR Council during ten years.

#### Awards and Honors:

- Corresponding Member of the National Academy of Sciences of Argentina
- Corresponding Member of the National Academy of Sciences of Austria
- Fellow of the Academy of Sciences for the Developing World
- Fellow of the American Geophysical Union
- Fellow of the American Association for the Advancement of Science
- Fellow of the International Union of Geodesy and Geophysics
- Medalist "100 Years of International Geophysics", Soviet Academy of Sciences
- Edward A. Flinn III Award, American Geophysical Union
- Four NASA Group Achievement Awards concerning the Galileo Mission to Jupiter.
- Teacher of the Year Award, Denver University