

Dr. Gustaf Arrhenius elected to Swedish Royal Academy of Sciences

May 21, 1975

Dr. Gustaf Arrhenius, professor of oceanography at Scripps Institution of Oceanography, University of California, San Diego, has been notified of his election as a foreign member of the prestigious Swedish Royal Academy of Sciences.

Dr. Arrhenius said today he received notification of his election from Dr. Carl Gustaf Bernhard, the Permanent Secretary of the academy.

The academy was founded in 1739; among early members were Carl Linnaeus and Anders Celsius. The academy designates the Nobel Laureates in physics and chemistry.

The academy has about 200 Swedish and 120 foreign members. Among U.S. members are Dr. Daniel Arnon, UC-Berkeley; Dr. Jules Charney, Massachusetts Institute of Technology; Dr. Carl Djerassi, Stanford University; Dr. Willard Libby, UCLA; Dr. Lars Onsager, University of Miami; and Dr. John Slater, University of Florida.

Dr. Arrhenius becomes the fourth faculty member at UCSD to be recognized by the Swedish Royal Academy of Sciences. Others are Dr. Per F. Scholander, professor emeritus of physiology at Scripps, who was elected in late 1974; Dr. Harold C. Urey, University professor, emeritus, who was elected to the academy in 1941, seven years after having been named a Nobel Laureate in chemistry; and Dr. Hannes Alfvén, professor of applied physics, who was elected to the academy in 1947 and designated a Nobel Laureate in physics in 1970.

Dr. Arrhenius was elected a foreign member of the academy in the Ninth Section, designated for technological sciences. Among other foreign members in that section are Sir Bernard Lovell, professor of radioastronomy and director of the Jodrell Bank Radioastronomy Laboratories, in England; Dr. Glenn T. Seaborg, of UC-Berkeley, a Nobel Laureate in chemistry; and Dr. John T. Pierce, professor of engineering at California Institute of Technology.

Dr. Arrhenius' fields of research include those of oceanography, geochemistry, space science, and solid state chemistry. His oceanographic studies include the relationship between the wind-driven ocean circulation and the sedimentary record on the ocean floor.

Other research concerns the injection of solutions from the Earth's interior into the deep ocean at what is now recognized to be centers of sea-floor spreading. He has also worked on the relationship between crystal structure and superconductivity, on problems related to condensation and aggregation of matter in outer space, and on the origin and evolution of the solar system.

In 1967 he was selected by the National Aeronautics and Space Administration as a principal investigator on the lunar samples subsequently collected during the Apollo missions, and from 1969 to 1971 he was a member of NASA's Lunar Sample Analysis Planning Team.

Presently Dr. Arrhenius' research group in Scripps is focusing much of their interest on those processes which are responsible for the formation of mineral resources on the deep ocean floor, and on future technologies that can be based on the seabed resources.

In UCSD's Institute for Pure and Applied Physical Sciences, where Dr. Arrhenius serves as Associate Director, he and his collaborators are continuing their attempts to reconstruct the origin of the solar system, and to model experimentally the ongoing processes of formation of organic molecules and dust in space.

Dr. Arrhenius is a member of the Geophysical Society of Sweden, the Geological Society of Stockholm, the Geochemical Society, the American Geophysical Union, and the Meteoritical Society. In 1957 he was the recipient of a Guggenheim Fellowship and in 1961 of the American Chemical Society's PRF Award. He was elected a Fellow of the American Mineralogical Society in 1973, and a corresponding member of the International Academy of Astronautics earlier this year.

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