

Five scientists win E. O. Lawrence Awards



MCDONALD



RICHMOND



CERNY



FURTH



HONECK

E. O. Lawrence Memorial Awards were recently presented by the Atomic Energy Commission to Joseph Cerny III of the University of California, Berkeley, Harold P. Furth of the Plasma Physics Laboratory at Princeton University, Henry C. Honeck of the Savannah River Laboratory in Aiken, South Carolina, Charles A. McDonald Jr of R&D Associates in Santa Monica, California, and Chester R. Richmond of Los Alamos Scientific Laboratory.

Cerny was recognized for his "discovery of proton emission as a mode of radioactive decay, for investigation of the limits of nuclear stability of a number of light elements and for ingenious instrument development that made these discoveries possible." A PhD graduate of the University of California (1961), Cerny for the past 13 years has been engaged in investigations of the limits of nuclear stability of light elements.

Furth's award was given "for major contributions to the theoretical understanding of the physics of plasma confined in Tokamak geometries. His concept of adiabatic compression in a toroidal system has overcome the limitations on density and ion temperature that has characterized conventional Tokamaks." Furth received both his bachelor's and doctoral degrees from Harvard University.

The AEC cited Honeck for "contributions to reactor physics, particularly the development of many-energy solutions to the transport equations in lattice cells, for application of Monte Carlo techniques to complex lattices, for his origination, planning and development of the Evaluated Nuclear Data File System for the US reactor program and recently for his work on the JOSHUA code, a major contribution in the utilization of collision theory for the analysis of thermal lattice systems

of heavy water reactors." Honeck completed his doctorate at MIT in 1959.

McDonald received the award for "skillful leadership in the design of nuclear weapons and the application of nuclear technology to weapon systems, and his contributions through his service as advisor to the Department of Defense on nuclear weapons and military systems." McDonald has been involved in nuclear weapons research since 1954, when he completed his PhD in physics at the University of California.

Richmond was cited for his "research on the radiation biology of internally deposited radionuclides, for outstanding contributions to the resolution of radiation protection problems, and for significant administrative contributions to the AEC's research program." He holds a PhD from the University of New Mexico (1958).

NAE presents Zworykin Award to Giaever

The National Academy of Engineering has presented its third Vladimir K. Zworykin Award to Ivar Giaever, a physicist at the General Electric Research and Development Center and 1973 Nobel laureate.

Upon receiving the \$5000 award, Giaever was cited for "his original contributions to the fields of electronic tunneling, super-conductivity, and *in situ* protein detection." A native of Norway, Giaever went to Canada in 1955 to work with Canadian General Electric in Peterborough, and in 1958

he joined the GE Research and Development Center in Schenectady, New York. Giaever completed his PhD at Rensselaer Polytechnic Institute in 1964, the same year he received his American citizenship.

NAS Draper Medal awarded to Spitzer

Lyman Spitzer Jr, Young Professor of Astronomy and director of the Princeton University Observatory, has been awarded the Henry Draper Medal by the National Academy of Sciences. The medal, accompanied by \$1000, is

given approximately every two years for important work in astronomical physics.

During the 1950's Spitzer's study of interstellar matter laid the ground work for much of present theory about star formation. He was also one of the first individuals to suggest magnetic containment as a method for achieving controlled thermonuclear fusion. At Princeton he was primarily responsible for the establishment of the Plasma Physics Laboratory, then named Project Matterhorn, which he directed for 13 years.

Spitzer earned his PhD at Princeton in 1938. He worked at Harvard, Yale