

HONORS AND AWARDS

Nuclear Pioneer Award

At its annual meeting in Dallas on June 28, the Society of Nuclear Medicine presented its Third Nuclear Pioneers Award to Glenn T. Seaborg, chairman of the Atomic Energy Commission. At the same time, the award honored the memory of two of Dr. Seaborg's former associates at the University of California at Berkeley, the late Joseph G. Hamilton and Bertram Low Beer, both of whom made significant contributions to nuclear medicine. The purpose of the award is to pay tribute to persons in allied fields who have made nuclear medicine possible and simultaneously to honor those who, because of death or retirement, no longer participate in nuclear-medicine activities. The first such award was made in 1960 to Edward Teller and honored the memory of Ernest O. Lawrence; the second was given to George de Hevesy as a memorial to Marie Curie and Henri Becquerel.

Navy Distinguished Achievement Award

Herbert Friedman, superintendent of the Naval Research Laboratory's Atmosphere and Astrophysics Division since 1958, was honored by the Navy on June 5, when he received the Navy Award for Distinguished Achievement in Science. The award, consisting of a medal and \$5000, was the first to be given by the Navy under the Government Employees Incentive Award Act.

Dr. Friedman, who is credited with numerous contributions involving upper-air research and the development of rocket astronomy, was cited for his achievements in astronomy and astrophysics. Since 1940, when he joined NRL, he has been concerned primarily with radiation-measurement programs, and in May 1959 he received the Defense Department's Distinguished Civilian Service Award for the development of radiation-detection devices.

In addition to his regular work at the Naval Research Laboratory, Dr. Friedman serves as part-time professor of physics supervising the University of Maryland's graduate program at NRL.

Lawrence Memorial Award

The Atomic Energy Commission's Ernest Orlando Lawrence Memorial Award for 1962 was presented on April 23 to five scientists. Those cited were Andrew A. Benson (Laboratory of Nuclear Medicine and Radiation Biology, University of California at Los Angeles) "for outstanding contributions to elucidation of the carbon reduction cycle in photosynthesis through his development of double labeling techniques employing C^{14} , H^3 , and P^{32} "; Richard P. Feynman (California Institute of Technology) "for important contributions to quantum field theory and particle physics, for invention of Feynman diagrams, and for broad scientific interests

and knowledge"; Herbert Goldstein (Columbia University) "for significant contributions to reactor physics and to nuclear cross sections, and for leadership in establishing a rational scientific basis for nuclear shield design"; Anthony L. Turkevich (University of Chicago) "for contributions to radiochemistry in activation analysis, to analysis of intranuclear cascades, and to utilization of radiochemical techniques throughout atomic energy"; and Herbert F. York (University of California at San Diego) "for important contributions to our knowledge of elementary particles, and especially for leadership in applying atomic energy to the national defense".

The \$5000 award was established in memory of Nobel Laureate E. O. Lawrence in 1959 and is made on the recommendation of the AEC's General Advisory Committee with the approval of the President. It is conferred on scientists less than 45 years old who have made "recent, especially meritorious contributions to the development, use, or control of atomic energy".

Rumford Premium

The Rumford Committee of the American Academy of Arts and Sciences is seeking nominations for the biennial Rumford Premium. The prize is awarded, according to a letter from Count Rumford to the Academy written in July 1796, to "the author of the most important discovery or useful improvement . . . made . . . in any part of the Continent of America or in any of the American Islands . . . on Heat, or on Light". The Committee has recognized contemporary extensions to the concepts of heat and light, such as the inclusion of the whole electromagnetic spectrum. Recent awards have gone to Charles H. Townes, George Wald, S. Chandrasekhar, James Franck, Enrico Fermi, Lars Onsager, and Willis E. Lamb.

In proposing nominees, a brief statement about the candidate, with reference to his publications, should be sent to the Rumford Committee of the American Academy of Arts and Sciences, 280 Newton St., Brookline 46, Mass. Nominations for the 1963 prize must be received not later than September 20; those received after that date will be held for consideration in subsequent years.

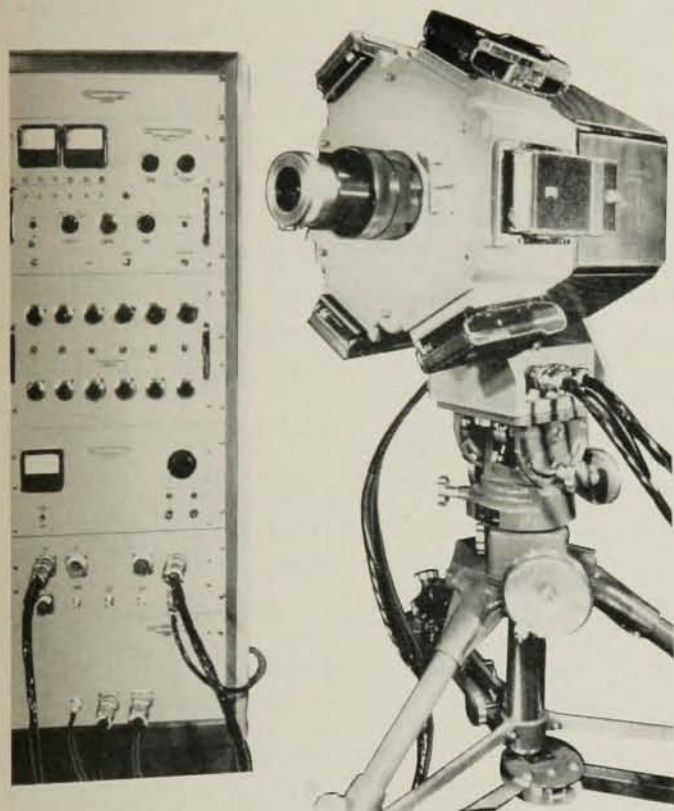
Essay Awards

Winners of this year's Gravity Research Foundation essay contest will receive their awards during ceremonies to be held by the Foundation in New Boston, N. H., on August 25. The first award (\$1000) will be received by Gerald M. Clemence of the US Naval Observatory in Washington, D. C. R. L. Forward of the Hughes Research Laboratory, Malibu, Calif., has been



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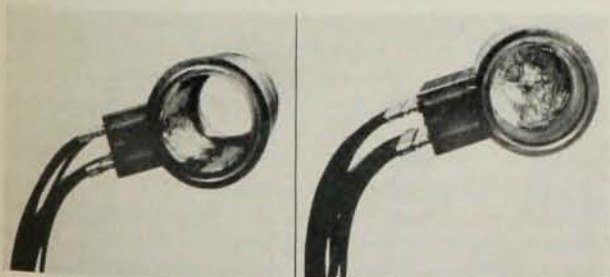
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named to receive the second prize (\$300). The third prize (\$200) has been won by D. W. Sciama of Cambridge University, England. The recipient of the fourth prize (\$150) is Freeman J. Dyson of the Institute for Advanced Study in Princeton. C. Y. Wang of Harvard will receive the fifth award (\$100). Honorable mention awards will be presented to Bruno Bertotti (Frascati, Rome, Italy), L. E. Halpern (Institut de Physique, Brussels, Belgium), Christopher Hunter (Massachusetts Institute of Technology), and B. C. Maglic (University of California at Berkeley).

The Directors of the Teyler Foundation and Members of the Second Teyler Society have announced that the official topic for critical essays to be entered in the next Teyler medal competition is "modern theories on the genesis of organic matter and of macromolecules originating therefrom during a phase of development of the Earth, prior to the first appearance of living organisms".

The winner of the Teyler prize may choose to receive either a gold medal with the stamp of the Foundation, which is worth 400 Dutch guilders, or the 400 guilders in cash. No limit has been set on the length of essays. Manuscripts should be signed, not with an entrant's name, but with a code designation; this code should also appear on an accompanying sealed envelope, containing the entrant's name and address. Entries may be submitted in English, French, German, or Dutch and should be sent before January 1, 1963, to the Directors of Teylers Stichting, Fundatiehuis, Damstraat 21, Haarlem, Holland. The winning entry will become the property of the Teyler Foundation.

Guggenheim Fellowships

Applications for 1963-64 Guggenheim fellowship awards are due on or before October 15, 1962. The necessary forms can be obtained from the John Simon Guggenheim Memorial Foundation, 551 Fifth Avenue, New York 17, N. Y. The fellowships are awarded to US citizens and to citizens of all other American republics, the Republic of the Philippines, Canada, and the British Caribbean for support of studies carried out in the United States. (In exceptional cases, permanent residents who are not US citizens are also eligible.) Appointments are ordinarily made for one year, although longer or shorter periods will be considered. The amount of each grant is determined by the needs of the applicant. Final selection of next year's fellows will be made in April 1963.

The 1962-63 recipients of Guggenheim awards in physics and some related areas include the following:

Ernest Ambler (National Bureau of Standards), cooperative properties of spin systems at low temperatures.
Robert D. Bent (Indiana University), short nuclear lifetimes by the Doppler-shift attenuation method.
Sheldon Brown (Fresno State College), gyromagnetic ratios of ferromagnetic elements and alloys.

Ugo Camerini (University of Wisconsin), decay modes of neutral k -mesons.
Richard H. Capps (Northwestern University), strong interactions of strange particles.
Robert L. Chasson (University of Nebraska), structure of interplanetary and interstellar magnetic fields.
George W. Clark (MIT), properties of primary cosmic gamma rays and of neutrons associated with solar disturbances.
Charles D. Coryell (MIT), nuclear energetics.
Frank N. Edmonds, Jr. (University of Texas), stellar atmospheres and analysis of spectral lines.
Gordon Feldman (Johns Hopkins University), strong interactions of elementary particles.
Michael W. Friedlander (Washington University), characteristics of cosmic radiation.
Kurt O. Friedrichs (New York University), asymptotic phenomena and other problems in mathematical physics.
Bernard Goodman (University of Missouri), Mössbauer effect, x-ray and related radiation phenomena.
Isaac Halpern (University of Washington), nuclear reactions.
Lawrence J. Heidt (MIT), charge and energy-transfer processes related to solar-energy conversion.
A. C. Helmholz (University of California, Berkeley), pion-nucleon interaction.
Noah R. Johnson, Jr. (Oak Ridge National Laboratory), nuclear spectroscopy.
Paul J. Kellogg (University of Minnesota), generation and propagation of waves in the earth's exosphere.
Jan Korringa (Ohio State University), equilibrium properties and relaxation of interacting spin systems in liquids and solids.
William I. Kraushaar (MIT), galactic structure.
George C. McVittie (University of Illinois), predictions of theoretical models of the universe.
Forrest S. Mozer (Aerospace Corp., Los Angeles), upper-atmospheric instrumentation.
Isadore Perlman (Lawrence Radiation Laboratory), nuclear spectroscopy.
James C. Phillips (University of Chicago), electronic structure of metals and semiconductors.
David Pines (University of Illinois), elementary excitations in many-body problems.
Max E. Reissner (MIT), derivation of two-dimensional theories of thin elastic shells from equations of three-dimensional elasticity.
Fred L. Ribe (Los Alamos Scientific Laboratory), high-temperature laboratory plasmas and their application to astrophysical problems.
Maurice M. Shapiro (US Naval Research Laboratory), cosmic radiation and theory of nuclear structure.
Laszlo Tisza (MIT), extension of thermodynamics to the microscopic structural properties of matter.
James L. Tuck (Los Alamos Scientific Laboratory), plasma physics and molecular biology.
John S. Waugh (MIT), theory of spin resonance.
Joseph Weber (University of Maryland), classical and quantized general relativity.
Richard L. Wolfgang (Yale University), chemical reaction mechanisms of high-energy atoms.
Arthur E. Woodward (Pennsylvania State University), dynamic properties of high-polymer crystals.
Chen Ning Yang (Institute for Advanced Study), weak interactions and superconductivity.