

academies of various other countries and will direct the work of the NAS-NRC Office of International Relations, which was established to perform staff functions in connection with the activities of the Academy in furthering international scientific cooperation and exchange.

In addition, Roger Revelle, who is on leave from the University of California at San Diego while serving as science adviser to the Secretary of the Interior, and W. Barry Wood, Jr., of the Johns Hopkins School of Medicine, have been elected as new members of the Academy's Council.

Among the medals awarded by the Academy at the time of the annual meeting in Washington were the John J. Carty Medal, which was presented to Charles H. Townes, provost of the Massachusetts Institute of Technology, and the J. Lawrence Smith Medal, which was given to Harold C. Urey, professor-at-large at the University of California at San Diego. Dr. Townes was honored for his pioneering work in the development of the maser, and Prof. Urey was cited in recognition of his contributions to the knowledge of the chemical composition of meteorites.

New members of the Academy, elected on the basis of "distinguished and continued achievements in original research", include the following:

- Lawrence H. Aller, professor of astronomy, University of Michigan
- William A. Arnold, principal biologist, Oak Ridge National Laboratory
- Harvey Brooks, professor of applied physics and dean of the Division of Engineering and Applied Physics, Harvard University
- Geoffrey F. Chew, professor of physics, University of California at Berkeley
- Scott E. Forbush, chairman of the Section of Theoretical Geophysics, Department of Terrestrial Magnetism, Carnegie Institution of Washington
- Donald A. Glaser, professor of physics, University of California at Berkeley
- Paul Herget, professor and director of the Observatory, University of Cincinnati
- Martin D. Kamen, professor of biochemistry and chairman of the Department of Biophysics, Brandeis University
- Chia-Chiao Lin, professor of mathematics, Massachusetts Institute of Technology
- Abraham Pais, professor of physics, Institute for Advanced Study

American Academy Elects Fellows

At its annual meeting in May, the American Academy of Arts and Sciences elected the following new fellows to its Physics Section: Hans A. Bethe of Cornell University, George W. Clark of the Massachusetts Institute of Technology, Conyers Herring of the Bell Telephone Laboratories, Benjamin Lax of MIT, Edwin M. McMillan of the University of California at Berkeley, Wolfgang K. H. Panofsky of Stanford University,

Frederick Seitz of the University of Illinois, and Roman Smoluchowski of Princeton University.

New fellows elected to the Academy's Astronomy and Earth Sciences Section were G. E. Backus of the University of California at San Diego, Guido Münch and Allan R. Sandage of the Mount Wilson and Palomar Observatories, Norman A. Phillips of MIT, and W. S. Von Arx of the Woods Hole Oceanographic Institute.

New foreign honorary members of the Academy include Edoardo Amaldi of Rome and Rudolf E. Peierls of the University of Birmingham, both of whom were elected to the Physics Section, and Hannes Alfvén of Sweden's Royal Institute of Technology in Stockholm, who was elected to the Astronomy and Earth Sciences Section.

Commerce Department Awards

The US Department of Commerce has awarded its Gold Medal for Exceptional Service to the following National Bureau of Standards personnel:

- Karl G. Kessler, chief of the Bureau's Spectroscopy Section, for exceptional originality, scientific achievement, and leadership in the development of atomic beam standards of wavelength and for exceptional contributions to the organization and leadership of research programs to meet the rapidly growing needs of the space sciences for spectroscopic data;
- H. William Koch, chief of the High-Energy Radiation Section, for outstanding scientific administration, research accomplishments in the fields of scintillation spectrometry, high-energy bremsstrahlung spectra, and attenuation of high-energy radiation;
- Edward W. Cannon, chief of the Applied Mathematics Division, for pioneering in the evaluation and application of electronic digital computers and development of a general computation center;
- Earle K. Plyler, chief of the Infrared Spectroscopy Section, for pioneering advances in the physics of infrared radiation and for major advances in instrumentation for infrared spectroscopy;
- Kenneth A. Norton of the NBS Boulder Laboratories, for outstanding contributions and leadership in the field of radio propagation research.

The Department's Silver Medal for Meritorious Service has been awarded to:

- Harvey W. Lance, a physicist at the NBS Boulder Laboratories, for outstanding performance in improvement of electronic standards, measurements, and calibrations, and particularly the organization and management of the National Electronic Calibration Center, a unit of the Radio Standards Laboratory;
- Zoltan L. Bay, a physicist in the Radiation Physics Division, for meritorious service in the determinations of the average energy required to produce an ion pair in gases;
- Margarete Ehrlich, a physicist in the Bureau's Radiological Equipment Section, for pre-eminence in establishing basic factors in the use of photographic emulsions for the measurement of radiation.