

of electric polarizabilities of atoms, molecules and small clusters.

Although Bederson is scheduled to retire from NYU this fall, he plans to keep his affiliation with the school and to conduct his editorial activities there when he is not at APS's Ridge facility on Long Island.

Lazarus, the outgoing editor in

chief, received a PhD in physics from the University of Chicago in 1949. He joined the physics faculty at Illinois as an instructor that year and became a full professor in 1959. His research in solid-state physics has dealt mainly with the defect and electronic properties of solids and high-pressure physics.

APS ESTABLISHES GUIDELINES FOR PROFESSIONAL CONDUCT

At a meeting in November in Tampa, Florida, the council of The American Physical Society voted to adopt a set of guidelines outlining professional conduct by physicists.

The guidelines were drafted by a subcommittee of the APS Panel on Public Affairs that was chaired by Robert Richardson of Cornell University. They elaborated on a previous statement on integrity in physics, which was issued in April 1987 (see PHYSICS TODAY, June 1987, page 81). "There were many who felt [a new statement] was unnecessary," says Martin Blume of Brookhaven National Laboratory, who chaired POPA at the time the new guidelines were drawn up. But a general change in attitudes regarding scientific misconduct and the fact that other science societies had issued more detailed ethics guidelines "made it clear that we had to say something more than the relatively simple statement of 1987," Blume says. In 1990 the APS council asked POPA to draft a new statement on ethics.

The new guidelines include specific recommendations on how physicists should handle research results, publication, peer review and conflict of interest. The guidelines address professional activities only and do not discuss matters related to teaching, classified research or general morality.

The text of the guidelines follows:

The constitution of The American Physical Society states that the objective of the society shall be the advancement and diffusion of the knowledge of physics. It is the purpose of this statement to advance that objective by presenting ethical guidelines for society members.

Each physicist is a citizen of the community of science. Each shares responsibility for the welfare of this community. Science is best advanced when there is mutual trust, based upon honest behavior, throughout the community. Acts of deception, or any other acts that deliberately compro-

mise the advancement of science, are therefore unacceptable. Honesty must be regarded as the cornerstone of ethics in science.

The following are minimal standards of ethical behavior relating to several critical aspects of the physics profession.

A. Research results

The results of research should be recorded and maintained in a form that allows analysis and review. Research data should be immediately available to scientific collaborators. Following publication the data should be retained for a reasonable period in order to be available promptly and completely to responsible scientists. Exceptions may be appropriate in certain circumstances in order to preserve privacy, to assure patent protection, or for similar reasons.

Fabrication of data or selective reporting of data with the intent to mislead or deceive is an egregious departure from the expected norms of scientific conduct, as is the theft of data or research results from others.

B. Publication and authorship practices

Authorship should be limited to those who have made a significant contribution to the concept, design, execution and interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors. Other individuals who have contributed to the study should be acknowledged but not be identified as authors. The sources of financial support for the project should be disclosed.

Plagiarism constitutes unethical scientific behavior and is never acceptable. Proper acknowledgement of the work of others used in a research project must always be given. Further, it is the obligation of each author to provide prompt retractions or correction of errors in published works.

C. Peer review

Peer review provides advice concerning research proposals, the publication of research results and career advancement of colleagues. It is an essential component of the scientific process.

Peer review can serve its intended function only if the members of the scientific community are prepared to provide thorough, fair and objective evaluations based on requisite expertise. Although peer review can be difficult and time-consuming, scientists have an obligation to participate in the process.

Privileged information or ideas that are obtained through peer review must be kept confidential and not be used for competitive gain.

Reviewers should disclose conflicts of interest resulting from direct competitive, collaborative or other relationships with any of the authors and avoid cases in which such conflicts preclude an objective evaluation.

D. Conflict of interest

There are many professional activities of physicists that have the potential for a conflict of interest. Any professional relationship or action that may result in a conflict of interest must be fully disclosed. When objectivity and effectiveness cannot be maintained the activity should be avoided or discontinued.

It should be recognized that honest error is an integral part of the scientific enterprise. It is not unethical to be wrong, provided errors are promptly acknowledged and corrected when they are detected. Professional integrity in the formulation, conduct and reporting of physics activities reflects not only on the reputations of individual physicists and their organizations but also on the image and credibility of the physics profession as perceived by scientific colleagues, government and the public. It is important that the tradition of ethical behavior be carefully maintained and transmitted with enthusiasm to future generations.

Physicists have an individual and a collective responsibility to ensure that there is no compromise with these guidelines.

APS NAMES DIRECTOR OF INTERNATIONAL AFFAIRS

The American Physical Society has added a new position to its staff, that of director of international scientific

affairs. Irving Lerch, a professor and senior physicist in the division of radiation oncology at New York University Medical Center, has been named to fill the position. Lerch is responsible for overseeing all international activities of APS.

The creation of the position was based on a recommendation from the APS Task Force on International Scientific Affairs, headed by Mildred Dresselhaus of MIT. In a report released in November, the task force concluded that there is "a clear and growing need" for a staff member who would handle the increasing number of requests for cooperation with foreign physics groups.

Lerch has had considerable experience in international scientific exchange. From 1973 to 1975 he worked as a staff scientist with the International Atomic Energy Agency in Vienna, and from 1976 to 1986 he was a technical consultant for the IAEA and the World Health Organization in Eastern Europe, Asia and the Middle East.

Lerch received a PhD in medical physics from the University of Chicago in 1969 and worked as a research associate at the university before joining the IAEA. He has been at New York University since 1976.

CRYSTALLOGRAPHERS ELECT MARSH VICE PRESIDENT

Richard E. Marsh, senior research associate emeritus at Caltech, is the new vice president of the American Crystallographic Association. He succeeds Keith D. Watenpugh of the Upjohn Company, who is the 1992 president. Marsh will become presi-

Richard E. Marsh



dent in 1993.

Marsh earned his BS at Caltech in 1943 and his PhD in physical chemistry at the University of California, Los Angeles, in 1950. He spent his entire career at Caltech, from 1950 to his retirement in 1990, mainly studying the molecular and crystal structure of intermetallic compounds and biological materials such as peptides and nucleotides. He is an expert on x-ray diffraction techniques.

ACA reelected as treasurer S. Narasinga Rao, who is a professor of physics in the college of mathematics and science and assistant dean of the graduate college at the University of Central Oklahoma in Edmond.

BARNES SUCCEEDS KNAPP AS HEAD OF LAMPF

Peter Barnes has been named director of the Los Alamos Meson Physics Facility at Los Alamos National Laboratory. He is also leader of the lab's medium-energy physics division, which operates LAMPF, and program director for nuclear and particle physics. He succeeds Edward Knapp, who retired to become president of the Santa Fe Institute (PHYSICS TODAY, October, page 104).

Barnes earned his BS at Notre Dame (1959) and his MS (1960) and PhD (1965) at Yale. He was a fellow in nuclear physics at the Niels Bohr Institute in Copenhagen from 1964 to 1966 and at Los Alamos from 1966 to 1968, when he joined the faculty at Carnegie-Mellon University. He became a full professor at Carnegie-Mellon in 1978.

Barnes has done research on strong, electromagnetic and weak interactions in atomic, nuclear and elementary particle systems. This includes studies of kaonic, antiprotonic and sigma atoms, few nucleon and complex nuclei, lambda hypernuclei, as well as antiproton and kaon physics.

AVS TO PUBLISH SURFACE SCIENCE SPECTRA

This March the American Vacuum Society, in cooperation with the American Institute of Physics, will begin publishing a refereed journal containing surface spectroscopy data. Called *Surface Science Spectra*, the journal will initially be published quarterly in a hard-copy format.

The editors are Charles E. Bryson of Surface/Interface Inc in Mountain View, California, and Gary E. McGuire of the Center for Microelectronics in Research Triangle Park, North Carolina.

To prepare the journal, AVS has established a data archive that will contain spectra of all classes of solid materials. Researchers will contribute spectra of any material with a reproducible or technologically interesting surface. Published spectra will include information on specimen specification and the methodology used to obtain the spectra. Eventually, AVS expects the database to be accessible to the research community in an electronic format.

A one-year subscription to *Surface Science Spectra* is \$987 in the US, \$997 in Canada and Mexico, and \$1007 elsewhere. Subscriptions can be obtained by contacting American Institute of Physics, Member and Subscriber Services, 500 Sunnyside Boulevard, Woodbury NY 11797-2999; telephone (516) 576-2270, fax (516) 349-9704.

IN BRIEF

Lawrence Livermore National Laboratory has established a Center for Applications of Laser and Electro-optic Technologies, with the mission of fostering Livermore's laser programs. The director is Ralph Jacobs.

On 16 September the Solar Energy Research Institute in Golden, Colorado, was officially renamed the National Renewable Energy Laboratory. The lab is operated for DOE by the Midwest Research Institute in Kansas City, Missouri.

Australia signed a cooperation agreement with CERN on 1 November, anticipating among other things Australia's possible participation in the Large Hadron Collider project, Europe's competitor to the SSC. CERN already has similar agreements with Brazil, Bulgaria, Czechoslovakia, Hungary, India and Israel.

The *Optics Cooke Book*, first published by OSA in 1984, is available in a second edition. The book contains Frank Cooke's contributions to optical fabrication, based on a column he edited in *Applied Optics* for 28 years. The book's cost is \$24 for OSA members and \$60 for nonmembers and is available from Publications Department, OSA, 2010 Massachusetts Avenue NW, Washington DC 20036. ■