the physics community

Corporate heads suggest changes in graduate programs

Some industrial managers would like to see changes in the curriculum for PhD-physics programs, including greater laboratory experience and more numerous opportunities for elective and thesis-topic options in applied areas. These opinions were expressed in response to a questionnaire sent to 71 managers of corporations by the Committee on Applications of Physics of The American Physical Society.

For the most part, those who responded agreed that doctoral-physics programs provide the necessary fundamentals to a student seeking an industrial career; however, they also agreed that graduate education breeds a certain anti-industrial attitude, coupled with an inability to produce results quickly, set priorities and communicate results to non-physicist colleagues. Among the specific suggestions the managers submitted were greater emphases in these areas: vacuum science, electronics, optics and the most up-to-date techniques of practical importance. They also suggested that students pay more attention to what they choose as a minor subject. On the nonscientific side, they would place a greater importance on interpersonal relations, economics, decision making and oral and written communications.

Despite a low return—only 27 replies were received—committee members Albert M. Clogston (Bell Laboratories), James R. Stevenson (Georgia Institute of Technology) and J. Ross Macdonald (University of North Carolina) felt that the questionnaire was an important step in stimulating industry-university dialogue and exploring the need to alter graduate-school curricula. Stevenson's reaction to the viewpoints expressed by the industrial managers was that "Although graduate students are probably not going to change their research programs, they could profit by guarding against the development of an anti-industrial attitude during the course of their research."

Copies of the report, "Industrial Impressions of Graduate Education in Physics," may be obtained from the APS Committee on Applications of Physics, 335 East 45th Street, New York, New York 10017.

New AIP prize will reward work done in industry

The American Institute of Physics has established a Prize for Industrial Applications of Physics. The prize, which is to be awarded by AIP on behalf of its Cor-



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porate Associates, was created to publicize and encourage physics research in industry, and to enhance students' awareness of the role of physics in industrial research. The prize will consist of \$5000 and a certificate; it will be given every two years following the first presentation in 1978.

Residents of the US who have worked primarily in the US are eligible for nomination. The prize will recognize contributions to an industrial application of physics, which may be either a product, process or potential for such a contribution. The work that is cited by the prize must have been done during employment in industry and within a ten-year period prior to the award. Presentation of the prize will be at a meeting of an AIP Member Society in the field that corresponds with the subject area of the work being honored. No more than two people may share a single prize.

Nominations must be accompanied by a two-page statement including a resume, description of the work to be cited, publications and patents, if any. Letters may be submitted until 1 October to the chairman of the Award Committee, Frank E. Jamerson, Physics Department, General Motors Research Laboratories, Warren, Michigan 48090.

NAS committee lends aid to dissident scientists

Taking a stance in support of eight dissident scientists in Uruguay, Argentina and the USSR, the National Academy of Sciences Committee on Human Rights has begun efforts to obtain information and possible release of these individuals, all of

whom have been imprisoned or reported as missing. More than 250 members of the Academy have agreed to serve as correspondents—communicating with colleagues and governments on behalf of persecuted scientists and helping to identify other cases of political repression of scientists.

Five Argentinian physicists are included in the group (see page 62); they are Frederico Alvarez Rojas, Gabriela Carabelli, Juan Carlos Gaillardo, Antonio Misetich and Eduardo Pasquini. The others are José Luis Massera, a Uruguayan mathematician, Sergei A. Kovalev, a Soviet research biologist, and Yuri Orlov, also of the Soviet Union, who is a physicist (see PHYSICS TODAY, May, page 112).

Undergraduate students hold conference in Austin

For the first time, senior physics majors gathered for a scientific conference of their own in March at the University of Texas, Austin. The "Inter-American Undergraduate Conference on Theoretical Physics," sponsored by the University of Texas physics department with funds donated by contributors throughout the state of Texas, was attended by 22 students from colleges and universities in Canada, Mexico and the US.

The majority of students reported on their own work, while others spoke on items from recent scientific literature. The presentations included topics such as the polarization of fast neutrons and the breakdown of predictability in gravitational collapse. Three addresses were given by Yuval Ne'eman (University of Texas and University of Tel Aviv), Harlan J. Smith (University of Texas), and Tullio Regge (University of Torino and the Institute for Advanced Study, Princeton, N.J.).

John A. Wheeler was chairman of the organizing committee.

in brief

The American Institute of Physics desires to expand its listings in the 1977–78 Directory of Physics and Astronomy Staff Members and the 1977–78 Graduate Programs in Physics, Astronomy and Related Fields. Additions to the coverage of physics-related and astronomy-related departments, as well as government laboratories, should be sent to Dion W. J. Shea, Society of Physics Students, Graduate Physics Building, State University of New York, Stony Brook, N.Y. 11794.