SOCIETY ACTIVITIES AND AWARDS

Navy award

The US Naval Research Laboratory's highest honor, its E. O. Hulburt Award, has been presented to Edward D. Palik, research physicist in NRL's Solid State Division. Since coming to NRL in 1958, Dr. Palik has used magneto-optical methods and the Laboratory's high magnetic field facility to study the energy-band structure of semiconductors. His measurements of infrared cyclotron resonance in semiconductors have yielded very precise values for the effective masses of conduction electrons in indium antimonide, indium arsenide, gallium arsenide, and indium phosphide, as well as of light holes in indium antimonide. The first to observe the Voigt effect experimentally in a semiconductor. Dr. Palik demonstrated the theoretically predicted dependence on wavelength and magnetic field, and showed experimentally that the Voigt effect can be used to study the anisotropy of the effective mass of current carriers. He has also discovered the dependence on free carrier concentration of the interband Faraday rotation, showing that by changing the carrier concentration, the experimenter can drastically alter the rotation and even cause it to change its sign.

Awarded his PhD in physics by Ohio State University in 1955, Dr. Palik was associated with Ohio State and Michigan Universities prior to joining NRL. He is a member of the American Physical Society.

IPPS acquires research plant

A ten-acre commercial complex of laboratories and workshops in Buckinghamshire, known as Fulmer Research Institute, has been bought by Britain's Institute of Physics and Physical Society. While prime reasons for the purchase are 'the advancement and dissemination of a knowledge of physics, pure and applied,' and to demonstrate that applying physics to industry is a paying proposition, it is also hoped that income from Fulmer (provisionally estimated at \$700,000 for 1965) will be used to support educational and scientific work of the Institute and Society.

Last autumn, an IPPS advisory group consisting of Alan Wilson, John Cockcroft, Gordon Sutherland, and others unanimously agreed to go ahead with purchase of the Fulmer Institute, a wholly owned subsidiary of Imperial Aluminum Company, which is itself owned equally by Imperial Chemical Industries and Aluminum Company of America. In addition to generous terms offered by Alcoa and Imperial, the latter agreed to advance IPPS an interest-free, ten-year loan for subsequent purchase of all the company's shares.

The Institute and Society intends, after providing for equipment needs at Fulmer, to apply its income partly to replace contributions by British industrial firms to the Physics Trust Fund. This Fund serves as a major source of support for IPPS in financing its educational work as well as its scientific gatherings. Apart from revenue, a steady capital appreciation can be expected over the years, for under current British taxation laws, continued investment in research facilities such as Fulmer is made very attractive.

Organized in 1946, Fulmer, through its 115-member staff, carries out contract research for industry, government-supported organizations, UK government departments, and agencies of the United States. Its income is derived solely from payment for work done, and the organization is run on strictly commercial lines. Approximately 25 percent of its work is performed in its physical chemistry department, another 20 percent in the physics department, and 20 percent in the process metallurgy and ceramics department. Other work is done in departments for physical metallurgy, corrosion and electrodeposition, engineering, chemical engineering, chemical and spectrographic analysis, and a development section for promotional activities. Ancillary services for the company include a technical library, construction and maintenance shops, and a clerical and accountancy staff.

Fulmer will continue to operate as a separate company with its own board of directors, which will include two or three nominated by the IPPS council. It is expected that the new arrangements will enable the present scope of research at Fulmer to be gradually extended into other fields of materials science besides physical metallurgy, to which at present it is mainly devoted. Management and staff at Fulmer, for their part, are hopeful that the IPPS membership will be instrumental in directing business to the company and in improving technical and administrative help.

Lawrence prize

Nominations of candidates for the 1966 Ernest Orlando Lawrence Memorial Award are requested by the Atomic Energy Commission's General Advisory Committee. Honoring especially meritorious contributions to the development, use, or control of atomic energy in all areas of science and technology, the award consists of a medal, citation, and monetary prize, given to not more than five individuals in any one year, in amounts not less than \$5000, and total amount not to exceed \$25 000. To be eligible, nominees must be United States citizens and must not have reached their 46th birthday by July 1, 1966. Nominations should be received by the Chairman, General Advisory Committee, US Atomic Energy Commission, Box 19029, Washington, D. C. 20036, not later than November 1. They should include a brief biographical outline and statement of the scientific or technical achievements upon which the nomination is based. It is the policy of the Committee that nominees who fail of selection will be retained on the list for two additional years, and if after that time, the name has not been selected, it will be removed unless the candidate is renominated.