

SOCIETY ACTIVITIES AND AWARDS

ISA joins AIP

On December 12th, the Executive Committee of the American Institute of Physics, upon authorization of the AIP Governing Board, unanimously elected the Instrument Society of America an Affiliated Society of the AIP. The Instrument Society is the fifteenth organization to acquire affiliated status with the Institute. The Society's stated purpose is "to advance the arts and sciences related to the theory, design, manufacture and use of instruments and controls in the various sciences and technologies". To this end, the ISA sponsors various conferences and exhibits, establishes standards and practices, develops educational programs, honors achievement in the field, and disseminates relevant information through the *ISA Journal* and *Transactions*, as well as other publications.

The Instrument Society was founded in 1945 by fifteen local, independent organizations whose delegates drafted a constitution which was ratified in January 1946. The local societies became sections of the ISA, and by the end of August 1946 the organization had twenty-one sections with a total membership of 1075. At the present time, the Society has some 15 000 members who participate in 116 sections throughout the United States and Canada.

William A. Crawford is president of the Society for 1965. John G. Truxal is president-elect and secretary, and Paul M. Hankison is treasurer. The immediate past president is Allan E. Lee.

Royal Society

At ceremonies held in London during December, the Royal Society presented a number of awards for distinguished scientific achievement. Among them were a number of medals given for work in physics or related areas.

The Rumford Medal of the Royal Society was presented to H. C. van de Hulst, professor of theoretical astronomy at the University of Leiden, for



H. C. van de Hulst

his work on the scattering processes in the interplanetary medium and his prediction of the 21-cm spectral line from interstellar neutral hydrogen.

Dr. van de Hulst, a native of Utrecht, Holland, studied at the State University of Utrecht, where he won his doctor's degree in 1946. For several years, he worked at various observatories in the United States, and in 1948 returned to Holland to join the Leiden faculty.

It was during the latter part of World War II, while Holland was an occupied country, that van de Hulst made his prediction that it would be possible to observe a discrete line in the radio region emitted by interstellar clouds of neutral hydrogen. The radiation arises from a transition between two closely spaced energy levels in the hyperfine structure of the ground state of the hydrogen atom. The 21-cm line was first observed in 1951 by Purcell and Ewen at Harvard and within six weeks was detected by Dutch and Australian astronomers as well. Subsequently, radio astronomers throughout the world have vigorously employed the 21-cm radiation as a powerful tool both in the study of our galaxy and in that of extragalactic nebulae.

Dr. van de Hulst has also done important theoretical work on the scattering and interaction of light and particles in the solar corona and in

interstellar space. The former head of the Committee on Space Research, he is currently vice president of the European Space Research Organization.

For his work in quantum mechanics and the theory of fundamental particles, Abdus Salam received the Royal Society's Hughes Medal. Born in Jhang, Pakistan, and educated at the Universities of the Punjab and Cambridge, Dr. Salam was awarded his doctorate in 1951 for a thesis containing fundamental work on renormalization theory. He later taught at the Government College in Lahore, and at Cambridge. Since 1960 he has served as professor of theoretical physics at the Imperial College of Science and Technology in the University of London. This past October, Dr. Salam assumed the additional post of head of the International Atomic Energy Agency's Center for Theoretical Physics in Trieste. (See page 52)

Among Dr. Salam's important contributions is his 1957 proposal that a close connection exists between the zero rest mass of the neutrino and the parity nonconserving effects in weak interactions. The several predictions which this theory makes about neutrino properties and the way parity is violated in neutrino interactions, have since been confirmed by experiment. Dr. Salam also proposed in 1961, with J. C. Ward, that strong



Abdus Salam