his empirical approach to similar problems, which allow the prediction of a number of properties, especially of a thermodynamic nature, that are in surprising agreement with experiment.

Yash Pal selected for Marconi Fellowship

Yash Pal, director of the Space Applications Centre of the Indian Space Research Organization, will be awarded the 6th Marconi International Fellowship in October. Pal will be honored for his work on the Satellite Instructional Television Experiment in India, a project carried out in conjunction with NASA using the ATS-6 satellite. The object of SITE was to bring educational television to rural Indian villagers. Pal helped design the hardware for the project as well as the television programming broadcast to the villagers.

Pal earned his doctoral degree from MIT in 1958. In addition to his position at the Space Applications Centre, he is professor of physics at the Tata Institute of Fundamental Research.

The Marconi Fellowship was established in 1974 on the 100th anniversary of Guglielmo Marconi's birth. It includes a $25 000 grant to enable the recipient to undertake or complete "a project that will benefit mankind."

Vaucouleurs receives Herschel Medal

Gerard de Vaucouleurs, professor of astronomy at the University of Texas at Austin, has been awarded the Herschel Medal by the Royal Astronomical Society of London. The medal is named for Sir William Herschel, an 18th-century English astronomer who discovered the planet Uranus, among other achievements.

VAUCOULEURS

The Society cited de Vaucouleurs for his contributions to extragalactic astronomy, in particular for his demonstration of the existence of the supergalaxy. De Vaucouleurs earned a BSc (1936), a Lic es sci (1939), and a D Univ (1949) from the University of Paris. In 1957, the Australian National University awarded him a DSc degree. De Vaucouleurs has held positions with the Institute for Astrophysics, National Center for Scientific Research, France, the Yale–Columbia Southern Station, Australia, the Lowell Observatory and the Harvard College Observatory. He became a member of the Austin faculty in 1960.

W. G. Mayer is Humboldt Award winner

Walter G. Mayer, professor of physics at Georgetown University has been named recipient of a Humboldt Senior US Scientist Award in recognition of his accomplishments in research and teaching. The DM 60 000 award, which is sponsored by the West German Government and supervised by the Alexander von Humboldt Foundation, enables Mayer to spend a year in the Federal Republic of Germany to do research of his choice. He has elected to study various topics in ultrasonics and physical acoustics at the University of Saarland.

Mayer received a bachelor's degree from Hope College, Holland, Michigan (1953) and a doctoral degree in physics from Michigan State University (1958). He worked at the Siemens Research Laboratory in Erlangen, Federal Republic of Germany and Michigan State before he joined the Georgetown faculty in 1965. Mayer's research has concentrated on the measurements of ultrasonic wave characteristics by optical methods, the application of ultrasonics to the solid and liquid state, surface and interfacial waves and nonlinear acoustics.

John B. Pendry named E. W. Muller Lecturer

The E. W. Muller Lectureship for 1980 has been awarded to John B. Pendry, head of the theory group at Daresbury Laboratory, Science Research Council, Warrington, UK. Established by the Laboratory for Surface Studies at the University of Wisconsin, Milwaukee in 1978, the Lectureship is named for the late E. W. Muller, a surface physicist who invented the field electron and ion microscopes and the atom probe. It is awarded annually to a scientist who performs "outstanding achievements in surface studies."

Pendry received his PhD from Cambridge University in 1965. He is an authority on the theory of low-energy electron diffraction. Pendry will teach a course on the quantum mechanics of solid surfaces during the 1980 summer session at Wisconsin.

Physicists elected to AAA&S membership

Among the 79 scholars, scientists, public figures and artists who were elected to membership in the American Academy of Arts and Sciences in May are the following physicists and scientists working in physics-related fields:

Allan M. Cormack, professor of physics, Tufts University; Jerome I. Friedman, professor of physics, MIT; Ivan R. King, professor of astronomy, University of California, Berkeley; Joaquin M. Luttinger, professor of physics, Columbia University; Alfred O. C. Nier, Regents' Professor of Physics, University of Minnesota, Minneapolis; David Pines, professor of physics and electrical engineering, University of Illinois, Urbana; David A. Shirley, director, Lawrence Berkeley Laboratory and professor of chemistry, University of California, Berkeley, and John H. Sinfelt, senior science advisor and head of the heterogeneous catalysis research group, Exxon Research and Engineering Co, Linden, N.J.

The Pulitzer Prize for General Nonfiction was presented to **Douglas R. Hofstadter**, assistant professor at Indiana University. He was honored for his book, *Godel, Escher, Bach: An Eternal Golden Braid*.

Francis E. Low, Karl Taylor Compton Professor of Physics at MIT, has been appointed Provost of the Institute.

Leonard J. Nugent has been selected to serve as the vice-president of engineering at Diablo Industries, San Jose, California.

Eric S. Beckford has taken the newly-created position of deputy director for science and technology at Argonne National Laboratory. He was previously director of the division of nuclear power development in the Department of Energy.

The 1979 Washington Academy of Sciences Award in Physical Sciences has been presented to **E. Joseph Friebele**, research physicist at the Optical Sciences division of the Naval Research Laboratory.

Cornell University has chosen **James A. Krumhansl** to be the Horace White Professor of Physics.

Michael J. Berry has been appointed Robert A. Welch Professor of Chemistry at Rice University.

Simon Ramo, director and chairman of the science and technology committee of TRW Inc, has been selected by the Midwest Research Institute board of trustees to receive the 1980 MRI Citation.

Wilmot N. Hess is the new director of the National Center for Atmospheric Research in Boulder, Colorado. He previously directed the Environmental Research Laboratories of the National Oceanic and Atmospheric Administration.

Henry C. Kelly, former adviser in technical and international affairs at the Office of Technology Assessment, has accepted a position at the Solar Energy Research Institute as associate director for analysis and applications.

Margaret L. A. MacVicar, associate professor of physical science and director of the Undergraduate Research Opportunities Program at MIT, has been named to the Cecil and Ida Green Professorship in Education at MIT.

Jan M. Hollis, a radio astronomer, has recently joined the Laboratory for Astronomy and Solar Physics, NASA/Goddard Space Flight Center, Greenbelt, Md.

MIT has selected **George B. Benedek** to be its first Alfred P. Caspary Professor of Physics and Biological Physics.

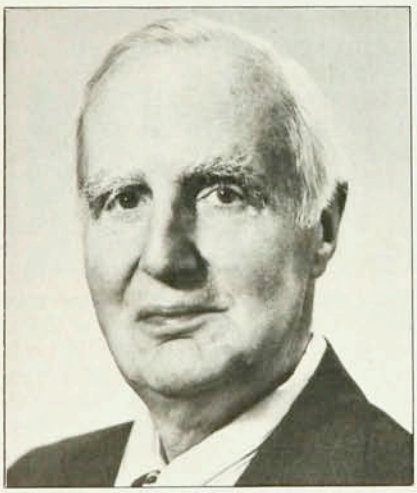
The University of Texas at Austin has appointed **Allen J. Bard** to the Jack S. Josey Professorship in Energy Studies.

obituaries

Sir Edward Bullard

Sir Edward (Teddy) Bullard died on 3 April in La Jolla, California at the age of 72. He is especially known for his distinguished contributions to geophysics, but he was a scientist of many parts. After studying at Repton School and Cambridge University he began research in experimental physics at the Cavendish Laboratory, Cambridge in 1929, his twenty-second year. His first research work was on the measurement of the angular distribution of slow electrons scattered elastically by gas atoms. It happened that I began research at the Cavendish at the same time, and we carried out this experimental work jointly. We were delighted to be the first to observe maxima and minima in the angular distributions, a matter of much interest at the time though commonplace today. It was a happy beginning of a long association that I valued highly.

After two years in experimental atomic physics, during which he also collaborated with P. B. Moon in building one of the first analogue devices for solving Schrödinger's equation, he succumbed to the blandishments of the geodesy department at Cambridge, which offered a research career in geophysics associated with world travel! This fateful decision undoubtedly contributed much to the development of geophysics today. It was not long before Bullard was applying his deep knowledge and understanding of general physics to geophysical problems, such as the determination of gravity at sea; as different from atomic physics as chalk from cheese.



BULLARD

In 1936 he was elected a Smithson Research Fellow of the Royal Society, which enabled him to continue his geophysical researches with increased status and independence. However, before long the Second World War began and someone with Bullard's unusual combination of laboratory and field research in physics was naturally in demand for scientific war service. In fact very soon he was to play a vital part in defensive measures against magnetic mines using degaussing techniques. He was invaluable in this connection because he was exceptionally good at improvisation and had a deep understanding also of the psychological aspects of a situation. During the evac-