system to the age—and future—of the universe." He has been a member of the University of Chicago faculty since 1974, and is currently professor of astronomy and astrophysics in the Enrico Fermi Institute there. He took his bachelor's degree at MIT in 1967, and his PhD, awarded in 1971, at Caltech.

James M. Moran Jr has been at the Harvard University Astronomy Department and the Smithsonian Astrophysical Observatory since 1970. The Pierce Prize committee cites him for his contributions to very long baseline interferometry including "the development of powerful data-handling methods, the planning and execution of many VLBI observations, and the mapping of interstellar maser sources with sub-milliarc-second resolu-He has a bachelor's degree from tion." Notre Dame (1963), and master's and doctoral degrees from MIT (1965 and 1968). After two years at MIT's Lincoln Laboratory he joined Harvard and the SAO in 1970.

Bernhard Authier wins Walter Schottky Prize

Bernhard Authier of Wacker-Chemitronic, Burghausen, and Horst Fischer of AEG-Telefunken in Heilbronn jointly received the Walter Schottky Prize for Solid State Research at the German Physical Society's meeting in Freudenstadt last March.

Authier and Fischer share the prize for their work on a new process for economic production of semiconductor materials for solar cells. By "directional freezing" of a poured melt of silicon they can produce a block that contains columnar single crystals oriented perpendicular to the surface. Such oriented polycrystals, when employed in silicon solar cells, have efficiencies of around 9–10%; ordinary polycrystalline cells have efficiencies of only 2–3%, while single-crystal cells, though having higher efficiencies (12–14%) are much more costly to produce.

The first holder of the newly established Theodore and Sydney Rosenberg professorship in applied physics at Stanford University will be **Theodore Geballe**, currently professor and chairman of applied physics, professor of materials science and engineering and director of the Center for Materials Research at Stanford.

Henry V. Bohm, professor of physics at Wayne State University, was elected president of the Argonne Universities Association. The AUA is part of a three-member group, along with the University of Chicago and the US Department of Energy, that directs and operates the Argonne National Laboratory.

Arthur L. Schawlow has been chosen as the first holder of the J. G. Jackson and C. J. Wood Professorship in Physics at Stanford University.

At Cornell University Maury Tigner, formerly the director of operations of the Wilson Synchrotron Laboratory, has been appointed professor in the department of physics and laboratory of nuclear studies.

The American Chemical Society awarded its Willard Gibbs Medal to **William O. Baker**, president of Bell Laboratories.

The winner of the fourth Marconi International Fellowship is Colin Cherry, who is the Henry Mark Pease professor of telecommunications at Imperial College, London.

obituaries

Henry W. Newson

Henry Winston Newson, distinguished experimental physicist who worked with Enrico Fermi and others at Stagg Field, Chicago, in 1942 where the first nuclear chain reaction was observed, and who is known (with colleagues) as an inventor of the overall control system still used in modern nuclear reactors, is dead at the age of 68. He died in Durham, N.C. on 14 May.

James B. Duke Professor of Physics at Duke and director of the Triangle Universities Nuclear Laboratory, Newson had been a member of the faculty for 30 years and served as chairman of physics during 1973–75. He was author of numerous papers in his special fields of neutron resonances, nuclear shell structure,

high-resolution neutron scattering, fission and "doorway states." His contribution to the book, *Fast Neutron Physics* (with J. H. Gibbons, Wiley, 1960 and 1963) is widely known.

He was born in Lawrence, Kansas, in 1909, and earned a BS in chemistry at the University of Illinois in 1931 and the PhD at the University of Chicago in 1934. From the early days of his career, he collaborated in experimental nuclear research that led to major discoveries and unique contributions in the field of nuclear energy.

Newson was the first scientist to observe neutron disintegration of fluorine. He demonstrated the structure of the compound nucleus both experimentally and theoretically, and as an unpaid research fellow at Lawrence Radiation

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