

moted to associate professor at Old Dominion University, Norfolk, Va. New members of the physics faculty are assistant professors **Grayson H. Rayborn** and **James L. Cox**. Rayborn was formerly at the University of Florida and Cox at North Carolina State University.

At Alfred University, Alfred, N. Y., **Fred W. Dix** has been appointed assistant professor, and **Michael Webb** has been promoted to associate professor. Dix is a recent graduate of Case-Western Reserve University.

Joseph L. Snider, formerly an assistant professor at Harvard, has been named associate professor of physics at Oberlin College.

New appointments in the Division of Undergraduate Science Education at the National Science Foundation are **Leo L. Baggerly** of Texas Christian

University as associate program director, Science-Curriculum Improvement Program, and **Gregg Edwards** of the Commission on College Physics as assistant program director.

Frank E. Jamerson has been named head of the 75-man physics department at General Motors Research Laboratories. He joined GM as a senior nuclear physicist in 1957. **Nils L. Muench**, former physics-department head, is now technical director of the mathematical-sciences departments at the GM labs.

The new chairman of Wayne State University's Department of Chemical Engineering and Material Sciences is **Julius L. Jackson**, formerly professor of physics at Howard University.

Promoted at Florida Atlantic University were **Robert F. Stetson** to professor and **Björn N. A. Lamborn** to associate professor. New appointments include **Herman E. Matthews**, for-

merly of Stanford University, as assistant professor.

Alexander Stein, formerly of Control Data Corporation, is now at Quantronix Corporation, New York, as head of laser-component research.



PANOFSKY

Wolfgang Panofsky, director of the Stanford Linear Accelerator Center, is to be awarded a 1970 National Medal of Science. He has been cited "for classic experiments probing the

elementary particles of matter and for contributions to advancing the means of experimentation in this challenging field." The medal, established by Congress in 1959, is the US Government's highest science and engineering award. Six of these medals will be presented by President Nixon at ceremonies early this year.

IEEE Elects Officers And Presents Awards

John V. Granger is the president of the Institute of Electrical and Electronics Engineers for 1970. Granger, chairman of the board of Granger Associates, Palo Alto, succeeds **F. Karl Willenbrock** of the State University of New York, Buffalo. **James H. Mulligan**, executive secretary of the National Academy of Engineering, has been elected vice-president of the IEEE; two additional vice-presidents were to be elected in January.

Ragnar Holm, a Swedish-born physicist, received the 1969 Contribution Award of the Parts, Materials and Packaging Group of the IEEE. Holm, now a consultant for the Stackpole Carbon Co., St. Mary's Pa., was honored as the man whose "... work is the basis for all present activities on electrical contacts ..."

Robert Rediker, professor of electrical engineering at MIT, received the David Sarnoff Award of the institute during the IEEE October meeting in Washington. Cited for contributions to semiconductor-device research and injection lasers, Rediker received a medal, certificate and \$1000.

The IEEE Leeds Award for 1970 has been awarded to **Harold I. Ewen** of Ewen Knight Corp., East Natick,

Mass. Ewen, a radioastronomer, was cited "for contributions to the design of sensitive radiometric systems, and for the codiscovery of the 21-cm spectral line of interstellar hydrogen."

John A. Copeland of Bell Telephone Laboratories has been honored for his discovery of the limited space-charge accumulation mode of oscillation. The institute has awarded him its Liebmann medal; the presentation will be made in 1970. Copeland has been doing research on the Gunn effect; his present work includes theoretical studies of space-charge dynamics, thermal noise generation and interactions of bulk devices with external circuits.

Bradbury to Retire From Los Alamos Laboratory

Norris E. Bradbury, director of the Los Alamos Scientific Laboratory, will resign no later than October 1970, the date that marks his 25th anniversary as director. Bradbury succeeded **J. Robert Oppenheimer** and is only the second director in the history of the laboratory. He came to Los Alamos in 1944 from the Naval Proving Ground at Dahlgren, Va., to head the implosion field-test program.

A naval reserve officer, (and concurrently professor of physics at Stan-

ford University) Bradbury was released from active duty to become director of the laboratory. He is a fellow of the American Physical Society and the National Academy of Sciences, and has received the Department of Defense distinguished public service medal and an AEC citation. (The citation is the highest AEC award.)

Samuel Devons Wins IPPS Rutherford Medal and Award

The Institute of Physics and the Physical Society Rutherford Medal and Award for nuclear physics has been won by **Samuel Devons** of Columbia University. The biennial award was given in 1968 to **B. H. Flowers** of the University of Manchester; in 1966 **Peter Kapitsa** of the USSR Institute for Physical Problems was the winner. Devons, born in Wales, has been a professor at Columbia since he came to the US from England in 1959. He is director of the history of physics laboratory at Barnard College.

Franklin Institute Has New Head and Presents Awards

Bowen C. Dees is new president of the Franklin Institute. Dees, most recently provost for academic affairs at the University of Arizona, received a