## OFFICERS AND PRIZES

New AAPT and APS officers will take on their assignments at the end of the annual meeting. AAPT will award its Oersted Medal at the joint ceremonial session and APS will present a solid-state physics prize at the banquet.

#### AAPT officers

Melba Phillips, physics professor at the University of Chicago, will be president of AAPT. She succeeds H. Richard Crane of the University of Michigan. In elections held in the fall Arnold Arons, physics professor at Amherst College, was chosen as this year's president elect. Ralph Winch of Williams College, who has served as AAPT secretary for the past five years, has resigned, and the rest of his term will be filled by Alfred Romer of St. Lawrence University. Irving E. Dayton of Montana State University, Bozeman, will be the new treasurer. J. W. Buchta will continue to serve as executive secretary.

The incoming AAPT president, who earned her PhD from the University of California at Berkeley, was a student of J. Robert Oppenheimer. Prior to joining Chicago in 1962 Prof. Phillips spent six years at Washington University. In recent years she has also taught at Brooklyn College



Melba Phillips



Arnold Arons

and the University of Minnesota. She is the coauthor of two widely used textbooks: *Electricity and Magnetism* with Wolfgang Panofsky and *Principles of Physical Science* with F. Bonner. As a theoretical physicist she has specialized in atomic spectra, atomic magnetic moments, and light nuclei.

Arnold Arons received his PhD in physical chemistry from Harvard University. He did wartime research on explosion phenomena and supervised blast measurements during Operation Crossroads at Bikini Atoll. In 1952, after teaching at Stevens Institute of Technology, Arons went to Amherst College. Since 1950 he has also worked on research in physical oceanography at Woods Hole Oceanographic Institution. Arons is the author of a freshman physics textbook entitled *Development of Concepts of Physics*, and he is the editor of the book *Science and Ideas*. Since 1963 he has been editor of AAPT's *Resource Letters*.

### APS officers

John A. Wheeler, professor of physics at Princeton University, will succeed Felix Bloch of Stanford University, as president of APS. The new



John A. Wheeler



Charles H. Townes



John Bardeen



Leonard Schiff

vice president will be Charles H. Townes, who is provost of the Massachusetts Institute of Technology. John Bardeen, professor of physics and electrical engineering at the University of Illinois, was chosen as vice president elect in recent elections. Karl Darrow will continue as APS secretary and Shirley L. Quimby as APS treasurer.

John A. Wheeler, incoming president, received his PhD from Johns Hopkins University and then taught at the University of California and Princeton. In 1939 he and Niels Bohr wrote a basic paper on nuclear fission. Wheeler began work on the US atomic energy project that same year and continued throughout the war. A few years later he worked on the fusion project (Matterhorn) as well. For the past ten years he has been interested in geometrodynamics, a subject almost synonymous with his name. He will give an invited paper at this meeting on gravitational collapse.

Charles H. Townes received his PhD from the California Institute of Technology. He spent several years at Bell Telephone Laboratories, and then joined Columbia University. He served as head of its physics department from 1952 to 1955 and director of its radiation laboratory the preceding two years. It was there that he proposed the idea for a maser, and then built one in collaboration with James Gordon and Herbert Zeiger. Four years later Townes and Arthur Schawlow suggested that an optical maser could be built using a Fabry-Perot interferometer. (Theodore H. Maiman, who produced the first laser

two years later, will receive a prize at the meeting for this work.) Townes shared the 1964 Nobel Prize for his work on masers and lasers. He became MIT provost in 1961.

John Bardeen took all three of his degrees from Princeton University. During World War II he was principal physicist at the Naval Ordnance Laboratory. In 1945 he joined Bell Telephone Laboratories as a research physicist. He collaborated there with William Shockley and Walter H. Brattain. In 1956 the three men were awarded the Nobel Prize for their invention and development of the transistor. Bardeen moved to his present post at Illinois in 1951. Since then he has been active in superconductivity, and is well-known for the BCS theory (C=Leon M. Cooper and S= J. R. Schreiffer), published in 1957.

#### Prizes

Both AAPT and APS will award prizes at the meeting. The Oersted medal for excellence in teaching will go to Leonard Schiff, executive head of Stanford University's physics department. The prize that Theodore H. Maiman will receive will be the Oliver E. Buckley Solid-State Physics Prize.

Leonard Schiff was awarded his PhD by the Massachusetts Institute of Technology. He was a staff member at Los Alamos Scientific Laboratory in 1945 and 1946, served as acting department chairman at the Univer-



Theodore H. Maiman

sity of Pennsylvania, and in 1947 joined the Stanford faculty. He is the author of about 85 papers and two books: Quantum Mechanics and Our Atomic World. He has served as an editor of Annual Reviews of Nuclear Science.

Theodore H. Maiman was cited by the Buckley Prize Committee "for having been the first to demonstrate experimentally the generation and amplification of optical radiation in solid crystals by stimulated emission." Maiman used pulsed optical pumping on a ruby crystal to achieve the first operating laser in 1960. At that time he was head of the quantum-electronics section at Hughes Research Laboratories. Later he became vice president of Quantatron, Inc. He is now head of Korad Corp., a firm specializing in laser research, development, and manufacture.

# Physics Show

The annual physics show at this year's APS-AAPT meeting will be the largest ever held, with 181 booths displaying the wares of 118 companies. Theodore Vorburger, AIP exhibits director, says that the show will have the largest research-instrument exhibit in the country.

The show has become so popular with exhibitors that 40 companies had to be turned down for lack of space at the Hilton. Some 7500 visitors are expected to see the show.

The first physics show, with ten booths, was held in 1936 to celebrate the fifth anniversary of AIP. When the joint annual meeting moved to a hotel, the physics show became a regular feature.

Exhibits are a good sign of the times in physics. This year the popular items are multichannel analyzers, electromagnets, vacuum equipment, and lasers.

The size of an exhibit occasionally gets out of hand. Last year a digitized scanning table was so tall that the hotel had to remove a chandelier to make room for it. And the hotel simply could not accommodate another—its 9000 pounds might have collapsed the Statler Hilton floor.