

WE HEAR THAT

IN BRIEF

Thomas Ackerman has accepted the position of chief scientist of the US Department of Energy's Atmospheric Radiation Measurement (ARM) program. He is currently making the transition to his new position, and next summer will move from Pennsylvania State University, where he is a professor of meteorology, to Pacific Northwest National Laboratory, where ARM is based. Ackerman is replacing **Gerald Stokes**, who will direct the environmental and health sciences division at PNNL. Ackerman will also be a Battelle fellow, only the second person to bear such a title.

In September, the White House gave ten individuals and ten institutions Presidential Awards for Science, Math and Engineering Mentoring. One of the ten institutions was the physics department at Bryn Mawr, where 5% of graduates in recent years have been physics majors—ten times the national average. (See *PHYSICS TODAY*, August 1996, page 57.)

In September, **Michael A. Strosio**, principal scientist at the US Army Research Office, received the 1998 Harry Diamond Memorial Award from the Institute of Electrical and Electronics Engineers.

The nuclear medicine division of Mallinckrodt Inc, in Petten, The Netherlands, has dedicated a new building to **Powell "Jim" Richards**. Richards suggested the medical use of technetium-99m in 1960 while working for Brookhaven National Laboratory, from which he retired in 1983. With its short half-life and absence of beta decay, technetium-99m is now used each year in nearly 20 million diagnostic procedures worldwide.

In a ceremony in Heidelberg, Germany, in September, the Astronomische Gesellschaft presented the 1998 Karl Schwarzschild Medal to **Peter A. Strittmatter**, in part "for his theoretical work on stellar structure and star formation within rotating and strongly magnetic fields and for his observational work on white dwarfs and on quasars." Strittmatter is a regent's professor of astronomy at the University of Arizona and director of the university's Steward Observatory.

In February, **Jean Futrell** will become the new director of the Environmental Molecular Sciences Laboratory at the Pacific Northwest National Labora-

tory. Futrell is currently the Willis F. Harrington Professor of Chemistry at the University of Delaware. He will replace **Teresa Fryberger**, who led the EMSL during its first year of operation as interim director.

In February, **Stephen Strom**, a professor of astronomy at the University of Massachusetts, Amherst, will join the National Optical Astronomy Observatories as an astronomer in the science/operations division in Tucson, Arizona. Strom served as director of the Large Millimeter Telescope project from 1996–98 and will continue to

work with the project after his move.

Last May, **Thomas Mason**, formerly an associate professor of physics at the University of Toronto, became the deputy project manager for neutron science at the Oak Ridge National Laboratory.

William Moerner became a professor of chemistry at Stanford University in July but, until his lab is ready next spring, he will continue to do research at the University of California, San Diego, where he had previously held the position of distinguished chair of physical chemistry.

OBITUARIES

Shlomo Alexander

Shlomo Alexander, a versatile physicist who both experimented and theorized on condensed matter, was killed in a car accident near Caesarea, Israel, on 6 August.

Born in Freiburg, Germany, on 4 September 1930, Shlomo grew up in Jerusalem, where he earned a BSc from the Hebrew University of Jerusalem in 1955. Under the guidance of Saul Meiboom, he earned a PhD in physics from the Weizmann Institute of Science in 1958.

Although Shlomo is best known for his theoretical contributions to condensed matter physics, for which he was awarded the Israel Prize in 1993, he began his research career as an experimenter. As part of his thesis work, he helped to build a high-resolution nuclear magnetic resonance spectrometer—no small feat in 1950s Israel. Using this instrument, he studied the structure of the proton NMR spectrum in vinyl derivatives. Contrary to the generally accepted view in those days, he found that proton spin-spin couplings could be negative, as well as positive. He then went on—still as part of his thesis—to use the Dirac vector model to explain the origin of the coupling sign.

In 1961, Shlomo went as a postdoc to AT&T's Bell Laboratories to study—with Phil Anderson—the interactions between magnetic moments in metals and to participate in experimental work on metals and superconductors. At the same time, he wrote two definitive papers on dynamic NMR line shapes, using the density matrix formalism.

In 1962, Alexander returned to the Weizmann Institute and initiated theoretical and experimental activity in pure nuclear quadrupole resonance



SHLOMO ALEXANDER

(PNQR) spectroscopy. He formulated a new theory, which involved the sudden approximation, to account for the effect of molecular jumps on the PNQR relaxation and applied it to molecular crystals. In these systems, he discovered second-order displacive phase transitions, which, though well known in ferroelectrics, were a surprise in molecular crystals.

In 1969, Shlomo moved to the Hebrew University, where he established a theoretical physics group at the university's Racah Institute. From that time on, he never set up an experimental lab again, though he always maintained a close connection with experimentalists.

In the 1970s, Shlomo continued his work on dynamic effects on NMR spectra and studied fluctuation effects on NMR in superconductors. He also branched into new directions—namely, phase transitions, disordered systems and soft condensed matter. Many of