

COWLEY AND MOODIE HONORED FOR WORK IN CRYSTALLOGRAPHY

The International Union of Crystallography presented the first Ewald Prize to John Maxwell Cowley (Arizona State University) and Alexander Forbes Moodie (CSIRO, Australia) last August at a meeting in Perth, Australia. The triennial prize was named for the late Paul Peter Ewald, in honor of his many contributions to crystallography and to IUCr (see *PHYSICS TODAY*, May 1986, pages 81 and 104).

Cowley and Moodie were cited for "their outstanding achievements in electron diffraction and microscopy, especially for their fundamental contributions to the theory and technique of direct imaging of crystal structures and structure defects by high-resolution electron microscopy." Beginning in the late 1950s, they developed the "multi-slice" formulation for an electron wave scattered by a crystal. One may take into account many hundreds of scattered beams using this formulation, and it has become the basis of widely used computer programs for interpreting electron micrographs and determining the structures of perfect crystals and crystals containing defects.

Cowley was educated at the University of Adelaide (Australia) where he

John M. Cowley



received a master's degree in physics in 1945. From 1945 to 1962 he was a research scientist in the chemical physics division of the Commonwealth Scientific and Industrial Research Organization in Melbourne, and from 1963 to 1970 he was a professor of physics at the University of Melbourne. He obtained a PhD from MIT in 1949, and in 1970 he was named the Galvin Professor of Phys-

ics at Arizona State. He is the author of *Diffraction Physics* (1981, North Holland).

Moodie joined CSIRO in 1948 after receiving his bachelor's degree from St. Andrews University (Scotland) in 1948. He is currently a chief research scientist in the CSIRO chemical physics division, which was incorporated into the division of materials science and technology at the end of 1986.

IN BRIEF

The Royal Society recently elected two physicists as foreign members: **Walter Gilbert**, professor of biology at Harvard University, "in recognition of his outstanding contributions to molecular biology," and **Vitaly L. Ginzburg**, head of the I. E. Tamm Department of Theoretical Physics at the P. N. Lebedev Institute of Physics of the USSR Academy of Sciences, "in recognition of his distinguished contributions to many aspects of theoretical physics."

Daniel S. Fisher, formerly a member of the technical staff at Bell Labs (Murray Hill, New Jersey), has become professor of physics at Princeton University.

Francis E. Close, senior principal scientific officer at the Rutherford Appleton Laboratory (Chilton, England), in January will become a Distinguished Scientist at the University of Tennessee in Knoxville and at Oak Ridge National Lab.

Edwin Loh, formerly a member of the research staff at Princeton University, and **Timothy Beers**, formerly a postdoc at Caltech, have joined the astronomy and astrophysics group at Michigan State University; **Joey Huston**, formerly a research associate at the University of Rochester, has joined Michigan State's high-energy group; and **Mitsuro Tohyama**, formerly a JSPS Fellow at

the University of Tokyo, has joined the nuclear physics group as an assistant professor, with a joint appointment to the National Superconducting Cyclotron Laboratory. Four individuals have joined Michigan State's condensed matter group: **Michael Dubson**, formerly a postdoc at Ohio State University; **Philip Duxbury**, formerly a postdoc at Rutgers University; **David Tomanek**, formerly a postdoc at the University of California at Berkeley; and **Roger Tobin**, currently a member of the technical staff at AT&T Bell Labs (Murray Hill, New Jersey). Tobin will remain at Bell until September 1988 when he will assume his duties at Michigan State. **B. Alex Brown** and **Gary Westfall**, who both held continuing appointment status at the cyclotron lab, have received joint appointments in the lab and as associate professors in the physics and astronomy department.

Douglas D. Osheroff, formerly head of the solid-state and low-temperature physics department at Bell Labs (Murray Hill, New Jersey), has become a professor both in physics and applied physics at Stanford University.

James L. Kinsey, formerly professor of chemistry at MIT, has joined Rice University as dean of its Weiss School of Natural Sciences and D. R. Bullard-Welch Foundation Professor of