

# High Pressure



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## we hear that

The University of Nebraska, Lincoln has announced the following changes in the physics department: **Paul D. Burrow** (Yale University) has been appointed associate professor, and **Robert G. Fuller, Donald J. Burns** and **Robert G. Hardy** all have been promoted to the rank of full professor.

**Chuan F. Chen** professor of mechanical engineering at Rutgers University, has been appointed chairman of the department of mechanical, industrial and aerospace engineering.

**Marshall N. Rosenbluth**, professor of physics at The Institute for Advanced Study, Princeton, N.J., has been elected to a six-year appointment as Andrew D. White Professor-at-Large at Cornell University.

Formerly with the chemical-kinetics department of the Aerospace Corp (El Segundo, Calif.), **Steven N. Suchard** has joined ERDA's Division of Nuclear Research and Applications as program manager for laser isotope-separation studies at Los Alamos Scientific Laboratory.

**William L. Russell**, a geneticist in the Oak Ridge National Laboratory Biology Division, has been awarded the 1976 Enrico Fermi Award and \$25 000 by the Energy Research and Development Administration.

**Ralph R. Goodman**, formerly associate director for Research in Oceanography at the Naval Research Laboratory, is now serving as the technical director of the Naval Ocean Research and Development Activity, Bay St Louis, Miss.

The 1976 *Acta Metallurgica* Gold Medal, an international award that recognizes ability and leadership in materials research, has been presented to **Alan H. Cottrell**. Cottrell has been master of Jesus College, Cambridge University (England) since 1974.

## Correction

February, page 75—A sentence describing the David Richardson Medal of the Optical Society of America should have read, "... which recognizes contributions to applied optics."

## obituaries

### Jesse W. M. DuMond

Jesse W. M. DuMond, emeritus professor of physics at the California Institute of Technology, died 4 December 1976, at the age of 84. DuMond's association with Cal Tech spanned 64 years.

DuMond entered Throop College, Cal Tech's predecessor, in 1912 and received his BS degree in electrical engineering in 1916. He worked at General Electric under Charles P. Steinmetz, during which time he received his MS at Union College in 1919. He spent one year as a design draftsman with the Thomson-Houston Company in Paris, and one year with the US National Bureau of Standards before returning to Cal Tech for graduate work in 1921. That year he also took his first position at Cal Tech as a teaching fellow.

DuMond received his PhD in physics in 1929, his thesis being a study of the line shape of the shifted line in Compton scattering of x rays. He interpreted the broadening of the Compton line in terms of a Doppler shift resulting from the momentum distribution of the scattering electrons. DuMond thus provided the first direct experimental verification of the quantum mechanical momentum distribution of electrons in atoms. In order to obtain adequate luminosity, he developed the multicrystal spectrometer—50 individual crystals arrayed tangential to a focal circle so that each crystal



DuMOND

would reflect Bragg-diffracted x rays from a point source to a common focus. In the design of this instrument, as in the latter designs of his curved-crystal spectrometers, DuMond utilized a facility for geometrical conceptualization to produce ingenious solutions to the problem of construction and precision in instrument design.

DuMond thoroughly enjoyed this total involvement with the instrumentation of physics and he decried the growth of "big