## PHYSICS COMMUNITY

## APS ESTABLISHES PRIZE IN HONOR OF ONSAGER

The American Physical Society has established a new prize in memory of the late Lars Onsager, thanks to a \$100 000 donation from a University of Oregon physicist and his wife. The prize, endowed by Russell J. Donnelly and his wife, Marian Donnelly, an architectural historian at Oregon, will recognize outstanding research in theoretical statistical physics covering a wide range of physical phenomena, including work related to Onsager's research on quantum fluids.

Born in Norway in 1903, Onsager later became an American citizen; at the time of his death in 1976, he was the J. Willard Gibbs Professor of Chemistry at Yale University. In 1946 he first put forth the theory of quantized vortices in superfluid helium. He received the Nobel Prize in chemistry in 1968 for his discovery of reciprocal relations in thermodynamics.

Despite these and other contributions, Onsager's is not exactly a household name, except perhaps among theoretical physicists and chemists. "I think Onsager was perhaps the greatest theoretical chemist



Russell J. Donnelly

in history, but he has not the name recognition his achievement deserves," says Donnelly. "In his day he certainly was never a media figure—he just got on with his work."

Donnelly also feels a certain personal indebtedness to Onsager. As a graduate student at Yale in the mid-1950s, Donnelly often turned to Onsager for help on his thesis work in low-temperature physics and fluid mechanics, although Onsager was in the chemistry department. "In many ways I consider him my true mentor," Donnelly says. In addition to honoring Onsager, he hopes the prize will encourage future work in statistical physics by recognizing current research in the field.

Since his grad student days at Yale, Donnelly, now a professor of physics at Oregon, has been working on the hydrodynamics of classical fluids and superfluids. He has made many contributions to the study of Taylor–Couette flow. In superfluid helium-2, he has studied the structure and dynamics of the quantized vortices first hypothesized by Onsager. At present Donnelly is looking at high-Reynolds-number turbulence using liquid helium as the working fluid.

The biennial Onsager Prize carries a cash award of \$10 000; APS will name the first recipient later this year.

## HILBORN IS NEW AAPT VICE PRESIDENT

Results of elections for national offices of the American Association of Physics Teachers were announced at the 1994 AAPT winter meeting, held in January in San Diego.

Robert C. Hilborn, a professor of physics at Amherst College since 1986, was elected AAPT vice president. Hilborn will serve as vice president in 1994, followed by a year as president elect, a year as president and a final year as past president.

Hilborn received a BA in physics from Lehigh University (1966) and an MA (1967) and a PhD (1971) from



Robert C. Hilborn

Harvard University. Before coming to Amherst, Hilborn was a professor at Oberlin College. He was a visiting research associate professor at the University of California, Santa Barbara in 1979-80, and he spent the summer of 1984 as a visiting lecturer at Taiyuan University of Technology in the People's Republic of China. Hilborn has been involved with physics education at all levels: He has judged science fairs, been a faculty staff member in an NSF program for middle school and high school science teachers, and organized workshops for college physics and chemistry faculty.

Hilborn's research has concentrated on laser spectroscopy of atoms and molecules, with an emphasis on quantum coherence effects. He is also interested in nonlinear dynamics and chaos and has written an introductory text on the topic. Hilborn told us that one of his efforts will be "to let younger faculty know of the benefits of AAPT. AAPT can help faculty approach teaching with as much professionalism as they use when doing research."

Mary Beth Todd Monroe, a physics teacher at Southwest Texas Junior College, in Uvalde, Texas, is the new AAPT two-year-college representative. She received her BS (1970) and MS (1973) in physics from Sam Houston State University.