

Sorokin, Crawford, Madden win Optical Society awards

The Optical Society of America will present awards to three outstanding optical scientists at its annual meeting in October. The 1978 R.W. Wood Prize will be presented to Peter P. Sorokin; the 1978 Ellis R. Lippincott Award will be presented to Bryce L. Crawford, Jr; and the 1978 William F. Meggers Award will be presented to Robert P. Madden.

The Wood Prize is awarded to Sorokin for his contribution to the development and application of tunable lasers, exemplified by his discovery and demonstration of the first organic dye laser. After completing graduate studies in applied physics at Harvard University, he joined the IBM Thomas J. Watson Research Center as a staff physicist in 1957. He currently holds the position of IBM Fellow. Sorokin's contributions to quantum optics are numerous and include discovery of the second and third solid-state lasers and invention of the passive laser Q-switch. In 1966, he discovered stimulated emission from an organic dye, pumped by a giant-pulse ruby laser. The wide tunability of dye lasers has opened new fields of research in both chemistry and physics. Sorokin's prize consists of a cash award of \$1000 and a scroll.

Bryce L. Crawford, recipient of the Lippincott Award, is cited for his many contributions to the field of experimental and theoretical vibrational spectroscopy during a career that has spanned more than fifty years. He has done significant work in molecular dynamics in liquids, vibrational intensities and simultaneous transitions in gases and in the theoretical treatment of normal coordinates. Crawford, professor of physical chemistry at the University of Minnesota, received his education at Stanford University. After having taught at Stanford, Harvard and Yale Universities, he joined the faculty of the University of Minnesota in 1940. The Lippincott Award is a joint award of the Optical Society of America, the Coblentz Society and Society for Applied Spectroscopy. The award has been presented annually since 1976 to an individual who has made significant contributions to vibrational spectroscopy.

The Meggers Award is being presented to Robert P. Madden for his pioneering experiments that demonstrated the effective use of synchrotron radiation as a



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MADDEN

source for extreme ultraviolet spectroscopy, and for ultraviolet spectroscopy of the inert gases, including the study of inner-shell excitation and auto-ionizing states. Madden received the bachelor's degree in physics from the University of Rochester and doctoral degree from Johns Hopkins University. From 1958 to 1961 he was a physicist with the US Army Engineering Research and Development Laboratories. In 1961 he joined the National Bureau of Standards, where he is principal scientist of the ultraviolet physics group. Established by the Opti-

cal Society in 1970, the annual Meggers Award recognizes work in spectroscopy.

The awards will be presented at the annual meeting of the Optical Society of America to be held 31 October through 3 November in San Francisco, California. Other awards to be presented at the meeting include the Frederic Ives Medal to Harold H. Hopkins, the Adolph Lomb Medal to Eli Yablonovitch, the David Richardson Medal to Thomas J. Johnson and the Edgar D. Tillyer Award to Gerald Westheimer (see PHYSICS TODAY, April 1978, page 67).

American Nuclear Society honors three

The American Nuclear Society presented three awards at a ceremony during the Society's annual meeting on 20 June. The society selected Kent F. Hansen, a professor in the nuclear engineering department of MIT, to receive the 1978 Arthur Holly Compton Award for outstanding contributions to education in the fields of nuclear science and engineering. Aubrey J. Wagner was presented with the Walter H. Zinn Award for outstanding contributions to the advancement of nuclear power. The third recipient, Chih H. Wang, director of the Nuclear Research Center, Oregon State University, won the Award for Distinguished Service.

Hansen, who received \$1000 in addition to the award, was cited for having stressed in his teaching, "a sound understanding of nuclear fundamentals." The citation goes on to say, "His research efforts reflect

this basic philosophy and are at the forefront of nuclear technology. He has also been outstanding in communicating the principles and safety of nuclear power to the public."

Hansen received his BS in physics from MIT in 1953 and completed his PhD in nuclear engineering there in 1958. In 1960 he was appointed the first Ford Postdoctoral Fellow in Nuclear Engineering at MIT. He was appointed assistant professor of nuclear engineering in 1961, an associate professor in 1965 and a professor in 1969.

His teaching activities have concentrated in the area of reactor mathematics and computation, reactor theory and reactor physics. He is co-author of *Numerical Methods of Reactor Analysis*, which is now used as a standard text at many campuses in courses on computa-