

Optical Society selects 1978 award recipients



HOPKINS



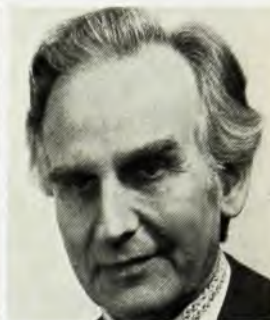
JOHNSON



YABLONOVITCH



WESTHEIMER



FELGETT

The Optical Society of America has selected the recipients of its 1978 series of awards, prizes and medals. The honors to be presented this year are the R.H. Wood Prize, the Frederick Ives Medal, the Adolph Lomb Medal, the David Richardson Medal and the Edgar D. Tillyer Award.

The R.H. Wood Prize will be given to Peter Fellgett, professor and head of the department of cybernetics at the University of Reading in the United Kingdom. Fellgett will be cited at the award ceremony, scheduled for 10 September at the Eleventh Congress of the International Commission for Optics in Madrid, for his discovery of the multiplex advantage, an innovation that has led to a modern renaissance in Fourier transform spectroscopy.

Fellgett joined the University of Reading in 1965, after having worked at the Royal Observatory in Edinburgh.

The Wood Prize, established in 1975, recognizes outstanding achievement, scientific or technological discovery or invention in the field of optics. The Prize is awarded annually and consists of a scroll and a cash award.

The 1978 Frederick Ives Medal will be given to Harold H. Hopkins, professor of applied optics and also of the University of Reading. The Medal will be presented at the annual fall meeting of the Society to be held in San Francisco starting 31 October. Hopkins was selected for his many unique contributions to the field of optics, including advances in aberration theory, optical design, image evaluation, coherence theory, interferometry and fiber optics. He was a member of the faculty at Imperial College for twenty years prior to joining the University of Reading in 1967.

The Ives Medal is the Society's highest award and is given for overall distinction in the field of optics. The annual award consists of a silver medal and a scroll.

The Adolph Lomb Medal will go to Eli Yablonovitch of the Division of Applied Sciences at Harvard University. Established in 1940 to honor a person who has made a noteworthy contribution to optics before reaching the age of thirty, the Medal will be presented to Yablonovitch for his pioneering work in laser physics and technology. His work has focussed on the understanding of the optical breakdown strength in laser window material, the development of ultrashort CO₂ laser pulses and the identification of laser plasma heating processes.

Yablonovitch was a staff scientist at Bell Laboratories before his appointment at Harvard. The award, a medal and a scroll, will be presented to him at the fall meeting of the Society in San Francisco.

Thomas J. Johnson, chairman of the board of directors of Celestron International, will receive the David Richardson Medal for 1978. The Richardson Medal was established in 1967 to honor individuals for distinguished contributions to applied optics. Johnson will be cited for his design and manufacture of high-quality, low-cost Schmidt-Cassegrain telescopes. His design production equipment used for fabricating and testing Schmidt corrector plates has led to the creation of a series of telescopes well-suited for amateur and educational astronomy.

Johnson's early career was in electronics, where he founded his own company, Valor Electronic Components, in 1954. Celestron International was established as a division of Valor, but has since displaced all electronics manufac-

turing activities of the parent company. The award consists of a medal and a scroll and will be presented with the previously mentioned honors.

The Edgar D. Tillyer Award will be given to Gerald Westheimer of the department of physiology-anatomy of the University of California at Berkeley. The Tillyer Award is given biannually and was established in 1955 to honor an individual who has performed distinguished work in the field of vision.

Westheimer will be cited for his contributions to the understanding of linear systems, vergence movements and modulation transfer functions in the eye. His early graduate work was done in physiological optics at Ohio State University, and prior to joining the University of California he held appointments at the University of Houston and Ohio State University. The award consists of a medal and a scroll and will be presented at the San Francisco meeting.

Malvern Correlator team wins MacRobert Award

The 1977 MacRobert Award, Great Britain's major engineering prize, was presented to a five-person team, three of whom were physicists, for their development of the Malvern Correlator, an extremely sensitive instrument for measuring the movement of particles and molecules. The Award, sponsored by the Council of Engineering Institutions on behalf of the MacRobert Trust, is given in recognition of an outstanding contribution or innovation in engineering or physical technology that serves to enhance the prestige or prosperity of the United Kingdom.

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Recipients of the Award are Eric Jakeman, Robin Jones, Christopher Oliver and Roy Pike of the Royal Signals and Radar Establishment and Stephen Trudgill of the Malvern Instruments Company. The honor consists of a gold medal and prize money totalling £25 000 (close to \$50 000).

The Malvern Correlator measures the periodicity in a stream of laser-produced photons as they are scattered by molecules in motion. The device analyzes the patterns of the signals produced by this scattering and plots the motion of the molecules from these data. The range of applications include studying jet-engine airflow, the flow of blood in the human retina and the twinkling of starlight.

Eric Jakeman received his doctorate in mathematical physics from Birmingham University in 1963. Following a year at the University of California at Los Angeles, he joined the Royal Radar Establishment—which later merged with the Signals Research and Development Establishment to form the RSRE. His work since then has ranged from superconductivity theory to the hydrodynamics of crystal growth to his central interest in optical-signal processing and light-scattering techniques. He has been the recipient of the Institute of Physics' Maxwell Medal for his work in this field.

Christopher Oliver, PhD in nuclear physics from Liverpool University, joined the RRE in 1967, and is at present a principal scientific officer working in the signal-processing division. Like Jakeman, his interests have centered on the processing of optical signals.

Roy Pike earned a PhD in x-ray diffraction at University College Cardiff. After a year's postdoctoral fellowship there he moved to the Massachusetts Institute of Technology on a Fulbright Scholarship where his research interests also moved to solid-state physics. He joined the physics group at RRE in 1960. In 1975, Pike was awarded the Charles Parsons Prize for his work in laser physics.

Robin Jones began his work at RRE in 1961 as a student apprentice. Since then he has earned degrees in electrical engineering and has been chiefly concerned with the design of high-speed digital electronic systems.

Stephen Trudgill, managing director of the Malvern Instrument Company, worked at RRE in the field of low-noise systems and airborne radar before joining Malvern.

Hawking receives Einstein Award

Stephen W. Hawking, astrophysicist and mathematician at Cambridge University, is this year's Albert Einstein Award re-

cipient. The prize, established by the Lewis and Rosa Strauss Memorial Fund, is awarded irregularly and consists of a cash prize of \$15 000 and a gold medal bearing the likeness of Einstein.

Hawking received the award for his outstanding work in the study of black holes and exceptionally strong gravitational fields. He presently leads a group at Cambridge, composed of other astrophysicists and mathematicians, who are working in the area of nuclear particles and radiations emanating from regions where it is thought stars have collapsed.

David R. Smith, a member of the Los Alamos Scientific Laboratory's critical experiments and diagnostics group, has received an Achievement Award from the American Nuclear Society's Nuclear Criticality Safety Division. Smith's activities at LASL involve nuclear critical assemblies, shipping containers, reprocessing and industrial safety.

Gerald A. Smith has been named associate laboratory director for high-energy physics at the Department of Energy's Argonne National Laboratory. Smith, a professor of physics at Michigan State University, replaces Thomas H. Fields, the former associate director, who will be returning to full-time research.

John W. Taylor, staff member at the Los Alamos Scientific Laboratory since 1957, has been named to head the Laboratory's Theoretical Design Division, succeeding Raymond Pollack in the post.

Charles M. Chambers, the former associate dean at George Washington University, was named staff associate on the Council on Postsecondary Accreditation. Chambers holds both a PhD in physics and a JD in administrative law.

Jeffrey A. Davis, formerly of the Illinois Institute of Technology, has joined the physics department of San Diego State University as associate professor.

Jesse R. Lien was elected vice-president for engineering at the General Telephone and Electronics's Product Group and president of GTE Laboratories. Lien joined GTE in 1953.

Robert J. Scroggs, formerly with the neutron-physics group at the Oak Ridge National Laboratory and most recently the manager of the European affiliates for Ortec, Inc, has been elected the president of Tenelec, Inc, a manufacturer of nuclear instrumentation.

Jocelyn Bell Burnell, researcher on the staff of the Mullard Space Science Laboratory of University College London, is the recipient of the 1978 J. Robert Oppenheimer Memorial Prize. Sponsored by the Center for Theoretical Studies at the