

WE HEAR THAT

AAAS Announces Annual Awards

The American Association for the Advancement of Science announced in December the recipients of its nine awards for 1995–96. The list included **Carl Sagan**, **William O. Baker** and **Joseph H. Hamilton**.

Sagan, who is the David Duncan Professor of Astronomy and Space Sciences and director of the Laboratory for Planetary Studies at Cornell University, is to receive the Award for Public Understanding of Science and Technology. According to the AAAS announcement, Sagan has devoted much of his career to “conveying the excitement and importance of scientific findings to a broad public.”

Baker, who has retired as chairman of the board of AT&T Bell Laboratories in Murray Hill, New Jersey, is being honored with the Philip Hauge Abelson Prize for “his unparalleled contributions to advancing science and technology, as well as for his efforts in applying science and technology to meet national needs, in reforming education and in promoting government–industry–university cooperation.”

The Award for International Scientific Cooperation is being given to Hamilton, the Landon C. Garland Distinguished Professor of Physics at Vanderbilt University. The AAAS announcement lauds “his lasting contributions to international cooperative work, education and research in nuclear physics.”

OSA Names Award Recipients for 1996

The Optical Society of America has announced the recipients of a number of its awards for 1996. Most of them will be presented at the OSA annual meeting, to be held in Rochester, New York, in October.

The Frederic Ives Medal–Quinn Endowment, OSA's most prestigious honor, goes this year to **Charles H. Townes** for “five decades of major contributions to the field of optics, including research, education and administration, but especially for his inspiring creativity in optical physics, from quantum electronics to airborne infrared astronomy.” Townes is University Professor of Physics at the University of California, Berkeley.

The winner of the Adolph Lomb Medal is **Frederick A. Kish Jr.**, who is cited for “pioneering work in solving the problem of replacing the absorbing

substrate of red-orange-yellow-green In(AlGa)P light-emitting diodes by wafer bonding and introducing a new high-volume family of ultrahigh brightness ROYG LEDs exceeding in performance conventional sources such as the incandescent and halogen lamps.” Kish is an R&D project manager in the materials technology department of the optoelectronics division of the Hewlett–Packard Co.

Jerzy A. Dobrowolski is this year's recipient of the David Richardson Medal for “contributions to the invention and development of optical thin film security coatings for the protection of documents and paper currency.” Dobrowolski retired in 1991 as a principal research officer with the National Research Council of Canada and is now a guest worker there.

The R. W. Wood Prize goes to **Eli Yablonovitch**, a professor of electrical engineering at the University of California, Los Angeles. OSA cites Yablonovitch for “proposing the concept of photonic crystals and electromagnetic band structure engineering.”

The winner of the Allen Prize is **William E. Eichinger**, a staff member in the geophysics group at Los Alamos National Laboratories. Eichinger is recognized by OSA for “significant contributions to atmospheric remote sensing by innovative applications of lidar to important areas in the atmospheric sciences.”

H. Jeffrey Kimble has garnered the Max Born Award for “his many original contributions to the field of quantum optics, including the definitive experiments on photon antibunching and a quantitative analysis of optical bistability.” Kimble is a professor of physics at Caltech.

The combined Joseph Fraunhofer Award–Robert M. Burley Prize goes to **Jerry Earl Nelson**, a professor of astronomy and astrophysics at the University of California, Santa Cruz. Nelson was chosen for his “exceptionally creative optical design, engineering and testing of the 10-meter Keck telescope segmented primary mirror.” These contributions, the award citation states, “were the keystone of the world's largest and highest performance optical telescope.”

The recipient of the William F. Meggers Award is **Robert W. Field**, a chemistry professor at MIT. Field is cited for “his invention of powerful high-resolution spectroscopic methods, including stimulated emission pumping, which have found widespread application. These methods, combined with his definitive studies of perturba-

tions in diatomic molecular spectra, have changed the way we think about molecular complexity.”

Chung L. Tang is the winner of the Charles Hard Townes Award, which will be presented at the Conference on Lasers and Electro-Optics in June. Tang, the Spencer T. Olin Professor of Engineering at Cornell University, is cited for his “seminal and pioneering advances in the field of nonlinear optics and laser physics,” including nonlinear optical materials, processes and devices, femtosecond optical sources and ultrafast processes in semiconductors and molecules.

The Edgar D. Tillyer Award goes to **John G. Robson**, a reader in neurophysiology at the Physiological Laboratory of the University of Cambridge. OSA recognizes Robson for “his research in visual psychophysics, physiology and optics, which has shown us how to apply linear systems theory and sinusoidal gratings to characterize how visual contrast is transmitted through the optics, retina and cortex to perception, elucidating the relation between the visual scene in front of the eye and the neural image in the brain.”

Kenneth O. Hill is the recipient of the John Tyndall Award, which was presented at the Optical Fiber Communications Conference in February. Hill, a principal scientist at the Communications Research Centre in Ottawa, Canada, was chosen for “the discovery of photosensitivity in optical fibers and its application to Bragg gratings used in device applications in optical communications and sensor systems.”

IN BRIEF

Paul Horn has become senior vice president for research at IBM's Thomas J. Watson Research Center in Yorktown Heights, New York, after serving as director of IBM's Almaden Research Center in San Jose, California. Horn succeeds **James C. McGroddy**, who is now a senior vice president and special adviser to IBM chairman Lou Gerstner.

Three researchers at Lawrence Berkeley National Laboratory have been promoted to distinguished scientist, a title currently held by only three others at the lab. **David Nygren** is cited for “his invention of the time projection chamber.” **Arthur Poskanzer** is credited with “uniting the diverse elements of the relativistic nuclear collisions program into a dominant group.” **Frank Stephens** is identified as “the originator and spiritual leader of the Gammasphere project.”