

AIP Recognizes Achievements in Science Writing

The American Institute of Physics has bestowed honors for science writing in several categories.

The 2000 AIP Science Writing Award for Literature Intended for Children went to writer **Jill Frankel Hauser** for her books *Science Play* (Williamson, 1998) and *Gizmos & Gadgets* (Williamson, 1999).

Charles H. Townes is the recipient of the 2000 AIP Science Writing Award to a Scientist for his book *How the Laser Happened* (Oxford U. Press, 1999). Townes, cowinner of the 1964 Nobel Prize in Physics, is a professor of physics in the graduate school at the University of California, Berkeley.

The 2000 Science Writing Award in Broadcast Media went to **Craig Heaps** for two pieces: "Time and Space" and "Space Weather," produced for KTVU, a television station in San Francisco where Heaps is a reporter and producer.

The 1999 Science Writing Award in Broadcast Media was given to **Dan Falk**, a freelance writer and broadcaster in Toronto, Canada, for his radio documentary entitled "From Empedocles to Einstein," which aired on the Canadian Broadcasting Corp network.

Ron Cowen, a staff writer at *Science News*, garnered the 2000 Science Writing Award to a Journalist for his overall excellence in science writing and in particular for his articles "Quantum Leap in Research Draws Cosmic Insight Closer," "Now Hear This!" and "Travelin' Light," which appeared in *USA Today*, *The Washington Post*, and *Science News*, respectively.

The recipient of the 1999 Science Writing Award to a Journalist went to **Michael Lemonick** for his book *Other Worlds: The Search for Life in the Universe* (Touchstone Books, 1999). Lemonick is a senior science writer at *Time* magazine.

OSA Honors Contributions to Optics

The Optical Society of America has announced the following awards for 2000, recognizing the following individuals' contributions to the field.

The Frederic Ives Medal/Jarus W. Quinn Endowment goes this year to **Aleksandr Prokhorov** for his "distinguished contributions and monumen-

tal role over the past 45 years in creating and developing quantum electronics," says the awards citation. Prokhorov, cowinner of the 1964 Nobel Prize in Physics, is the honorary director of the General Physics Institute of the Russian Academy of Sciences.

Henry Stark, Bodine Distinguished Professor of Electrical and Computer Engineering at the Illinois Institute of Technology in Chicago, is the recipient of the Esther Hoffman Beller Award. Stark is being recognized for the "educational value of his books to the optics community and his successful attempts to enrich the classical engineering curriculum with optics and photonics."

John Warnock, chief executive officer and chairman of the board of Adobe Systems Inc. in San Jose, California, receives the Edwin H. Land Medal for "significant contributions to the advancement of image processing via software and his personification of the spirit of Edwin H. Land."

The OSA Leadership Award/New Focus Prize goes to **Denis Pelli** for "leadership in visual science and the resulting benefits to artists, scholars, and the visually impaired." The citation notes that Pelli's work has made "significant contributions that have transcended both interdisciplinary and international boundaries." Pelli is a professor of psychology and neural science at New York University.

The Adolph Lomb Award goes to **Mikhail Lukin** for his "contributions to theoretical developments and realization of atomic coherence effects in optics, including lasers without inversion, resonant enhancement of refractive index, and nonlinear processes and spectroscopy of coherent media." Lukin is a postdoctoral fellow of the Institute for Theoretical Atomic and Molecular Physics at Harvard University and the Harvard-Smithsonian Center for Astrophysics.

Paula Heron and **Lillian McDermott** share the Archie Mahan Prize for the "current relevance of their article [in *Optics and Photonics News*] to the important dialogue concerning science education and the accessibility to a general readership through use of clear, well-illustrated examples." Heron is an assistant professor and McDermott is a professor of physics at the University of Washington in Seattle.

The recipient of the David Richardson Medal is **Achim Leistner**, senior specialist with the Common-



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wealth Scientific and Industrial Research Organization (CSIRO) in Australia. Leistner is being cited for the "development of novel optical fabrication techniques and the design improvement of optical test equipment."

The R.W. Wood Prize is shared by **Paul Davidovits**, **M. David Egger**, and **Marvin Minsky** for "seminal contributions to

confocal microscopy." Davidovits is a professor of chemistry at Boston College, Egger is a professor and vice chairman of the neuroscience and cell biology department at the Robert Wood Johnson Medical School at Rutgers University, and Minsky is Toshiba Professor at MIT in the media and artificial intelligence labs.

Remy Avila, an assistant professor at the Instituto de Astronomia UNAM in Morelia, Michoacan, Mexico, receives the Allen Prize for his "outstanding contributions to generalized scidar and grating scale monitor techniques, which permit measurements of optical turbulence profiles in the whole optical path, and of the wavefront outer scale."

The Max Born Award recipient is **Jagdeep Shah**, a researcher at Bell Labs, Lucent Technologies, in Holmdel, New Jersey. Shah is being recognized for his "pioneering contributions in the field of optics and optoelectronics of semiconductors and their heterostructures."

The Joseph Fraunhofer Award/Robert M. Burley Prize goes to **Philip St. John Russell** for "his invention of the photonic crystal fiber, an array of micron-spaced submicron holes allowing extremely large mode area single-mode fibers offering solid-core fibers with better power handling." Russell is a professor of physics and head of the optoelectronics group at the University of Bath in England.

Zhores Alferov, director of the Ioffe Physico-Technical Institute in St. Petersburg, Russia, is the winner of the Nick Holonyak Jr Award for his "original investigations of heterostructure injection lasers and [continuous-wave] room-temperature semiconductor lasers."

The Ellis R. Lippincott Award, given jointly by OSA, the Coblenz Society, and the Society for Applied Spectroscopy, goes to **Donald Levy**, Albert A. Michelson Distinguished Service Professor in the chemistry department at the University of Chicago. Levy is being recognized for the "invention of supersonic jet spec-

trospectroscopy and numerous applications to important molecular problems.”

The William F. Meggers Award recipient is **Roger Miller**, a professor of chemistry at the University of North Carolina, Chapel Hill. Miller is being honored for his “work in the development and utilization of high-resolution infrared spectroscopy in the study of loosely bonded clusters in the gas-phase as well as in liquid He droplets.”

John Mollon receives the Edgard D. Tillyer Award for his leadership for more than 25 years in vision research, “with contributions to psychophysics, microspectrometry, molecular genetics, field studies of wild primates, and normal and defective color vision.” Mollon is a professor of visual neuroscience at the University of Cambridge in England.

Georgi, Pati, Quinn Receive Dirac Medal

For the first time in the 15-year history of the Dirac Medal, the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy, has selected a woman as one of the prizewinners. **Helen Quinn**, a theoretical physicist with Stanford University’s Linear Accelerator, shares the medal with **Howard Georgi**, Mallinckrodt Professor of Physics at Harvard University, and **Jogesh Pati**, a professor of physics at the University of Maryland, College Park.

Every year on 8 August, the birthday of physicist and Nobel Prize winner Paul Adrien Maurice Dirac, ICTP hands out the Dirac Medal “in recognition of outstanding contributions to theoretical physics and mathematics.” All three of this year’s award winners are being honored for “their pioneering contributions to the quest for a unified theory of quarks and leptons and strong, weak, and electromagnetic interactions,” according to the awards citation.

The award to Quinn specifically recognizes “the Georgi-Quinn-Weinberg computation and her fundamental insights (with Roberto Peccei) about CP conservation by strong interactions.” The award to Georgi acknowledges his discovery of “many of the most significant models of grand unification, including the SU(5) model (with [Sheldon] Glashow) and the SO(10) model, as well as his role in the Georgi-Quinn-Weinberg computation.” The award to Pati praises “his formulation (with Salam) of the original gauge theory with quark-lepton unification, and

their resulting insight that baryon number violation is a likely consequence of such unification.”

The award recipients’ research follows the same line of investigation that earned Salam, ICTP’s founding director, the Nobel Prize in 1979. Salam, Steven Weinberg, and Glashow shared that prize for proposing a theory of unification of nature’s electromagnetic and weak forces. The three Dirac medalists will each receive \$5000.

IN BRIEF

The Otto Klung Foundation has awarded the Otto Klung Prize to **Roland Ketzmerick**, a theoretical physicist with the Max Planck Institute for Hydrodynamic Research in Göttingen and with the University of Göttingen’s Institute for Nonlinear Dynamics. The prize alternates annually between a German physicist and a German chemist. The foundation acknowledged Ketzmerick’s “path-breaking studies of nonlinear dynamics in low-dimensional electron systems.” Ketzmerick received a cash award of DM 30 000 (about \$14 000).

David K. Campbell, editor-in-chief of *Chaos*, became the dean of Boston University’s college of engineering and a professor of electrical and computer engineering and physics there in August. Campbell had been a professor of physics and the head of the department of physics at the University of Illinois at Urbana-Champaign. Campbell plans to continue in his post with *Chaos*, a position that is, he reports, “completely compatible—in fact, symbiotic—with my new position.”

The Overseas Chinese Physics Association (OCPA) handed out its Outstanding Young Researcher Award to **Wayne Tzu-Ping Hu**, who joined the University of Chicago in September as an assistant professor. The award is given annually to young ethnic Chinese physicists working outside of Asia. The OCPA honored Hu for providing “important insights on how to use [cosmic microwave background radiation] anisotropies to test cosmological theories and to determine cosmological parameters.” Hu received \$1500 and a certificate citing his research accomplishment.

The OCPA also presented its Achievement in Asia Award this past summer to cowinners **Emily**

Shuk-Chi Ching and **Jian Wang** at the OCPA 2000 conference in Hong Kong. This award is given annually to Chinese physicists working in Asia. Ching, an associate professor at the University of Hong Kong, was recognized for “her contributions to the understanding of the complex fluctuations in fluid turbulence” as well as “her work on dynamic instability of fracture propagation.” Wang, also an associate professor at the University of Hong Kong, was cited for “his contributions to quantum transport theory of mesoscopic and nanoscale electronic device systems.” The two winners will share the \$1500 cash award.

In July, **George Lake**, a professor of astronomy and physics at the University of Washington in Seattle for nearly 15 years, joined the Institute for Systems Biology, also in Seattle, as its founding member and chief information officer. Lake also is a chief scientist with NASA’s High Performance Computing in Earth and Space Science program.

The European Physical Society Interdivisional Group on Accelerators presented its two EPAC2000 Prizes at the European Particle Accelerator Conference in Vienna, Austria, in June. **Pantaleo Raimondi**, a physicist with SLAC’s beam delivery system research and development group, received the prize awarded to a person “in the early part of his or her career for a recent, significant, original contribution to the accelerator field.” Raimondi was recognized especially for his “significant contribution to understanding the effects, which, in a practical real-life situation, can be optimized at the interaction point of an e^+e^- collider to improve the luminosity.” **Eberhard Keil**, a physicist at CERN, received the prize awarded to an individual for “outstanding work in the accelerator field.” He was recognized particularly for “his seminal contributions in a multitude of topics, which include instabilities, beam-beam effects, beam optics, nonlinear resonances, and beam environment impedance.” Each prizewinner received Swiss Fr 2500 (about \$1450).

The new director of the recently created International Center for Physics and Mathematics at Pelita Harapan University in Tangerang-Karawaci, Indonesia, is **Waldemar Gorzkowski**. The center comprises a research unit whose role is to conduct basic research in theoretical physics and mathematics. Gorzkowski, who