

GRAY WINS
WOLF PRIZE

Harry B. Gray, Beckman Professor of Chemistry and founding director of the Beckman Institute, continues to attract honors the way an azurin molecule attracts electrons from an excited ruthenium complex. He has just been named the sole recipient of the 2004 Wolf Prize in Chemistry for his “pioneering work in bioinorganic chemistry, unraveling novel principles of structure and long-range electron transfer in proteins,” and will receive the \$100,000 prize in May from the President of the State of Israel, Moshe Katsav, at a ceremony at the Knesset. The Wolf Foundation noted that “his ingenious chemistry, meticulously executed, has given us a real understanding, for the first time, of a biological process of great significance for life.”

Gray has also been awarded a 2004 Benjamin Franklin Medal by the Franklin Institute in honor of his work on metallo-proteins. And in November, he became an honorary doctor of science at the University of Copenhagen, an event attended by Queen Margrethe II of Denmark. □

HONORS AND AWARDS

Deniz Armani, a fourth-year grad student in the research group of Jenkins Professor of Information Science and Technology and professor of applied physics **Kerry Vahala**, has won first prize at the Leading Edge Student Symposium, held as part of the 36th Annual Symposium of the Southern California Chapter of the American Vacuum Society (AVS). The title of his presentation was “Ultra-High-Q Toroid Microcavity on a Chip” and described research on the first ultra-high-Q microresonator on a chip and related applications. Other grad student coauthors on the presentation were **Sean Spillane**, **Tobias Kippenberg**, **Lan Yang**, and **Andrea Martin**, all of applied physics.

David Baltimore, Caltech president and Nobel laureate in physiology or medicine, is the seventh most-cited scientist of the last two decades, according to the top-50 list published by Thomson ISI in *Science Watch*. The rankings are based on the number of times the researchers’ papers were cited by their peers between 1983 and 2002 in journals indexed by Thomson ISI.

Barry Barish, the Linde Professor of Physics and director of the Laser Interferometer Gravitational-Wave Observatory Laboratory, has been elected a fellow of the American Association for the Advancement of Science.

Seymour Benzer, the Boswell Professor of Neuroscience, Emeritus, and Crafoord laureate in genetics, has been awarded a 2004 Benjamin Franklin Medal by the Franklin Institute. He is being honored for his work in neurogenetics.

Robert Grubbs, the At-

kins Professor of Chemistry, has received the 2003 Pauling Award Medal, which is presented annually by the Oregon, Portland, and Puget Sound Sections of the American Chemical Society. Named after the late Linus Pauling, the medal recognizes “outstanding contributions to chemistry . . . that have merited national and international recognition.”

Babak Hassibi, assistant professor of electrical engineering, has been awarded a five-year, \$625,000 David and Lucile Packard Fellowship in Science and Engineering.

Michael Hoffmann, the Irvine Professor of Environmental Science and dean of graduate studies, was honored by the University of Toronto’s department of chemistry as the 2003–04 A. R. Gordon Distinguished Lecturer in Chemistry.

Fatemeh Jalayer, the Housner Postdoctoral Scholar in Civil Engineering, has been named a corecipient of the Norman Medal, which is awarded by the American Society of Civil Engineers for a paper “judged worthy of special commendation for its merit as a contribution to engineering science.”

Alexander Kechris, professor of mathematics, has been selected to give the 2004 Alfred Tarski Lecture at UC Berkeley. Tarski founded Berkeley’s Group in Logic and the Methodology of Science.

Bruce Kennedy, facility manager/senior research associate II in the biology division’s Transgenic Mouse Core Facility, has received the George R. Collins Award from the American Association for Laboratory Animal Science (AALAS) “for outstanding contributions to the

field of laboratory animal technology.”

Jeff Kimble, the Valentine Professor and professor of physics, has been awarded the 2004 Lilienfeld Prize by the American Physical Society (APS) “for his pioneering work in quantum optics, for his innovative experiments in single-atom optical experiments, and for his skill in communicating the scientific excitement of his research to a broad range of audiences.”

David MacMillan, professor of chemistry, has been selected to receive a 2003 Camille Dreyfus Teacher-Scholar Award from the Camille and Henry Dreyfus Foundation.

Tom Phillips, professor of physics and director of Caltech’s Submillimeter Observatory, has been selected to receive the American Astronomical Society’s 2004 Joseph Weber Award for Astronomical Instrumentation.

Fred Raichlen, professor of civil and mechanical engineering, emeritus, has received the 2003 International Coastal Engineering Award from the Coasts, Oceans, Ports, and Rivers Institute of the American Society of Civil Engineers “in recognition of his outstanding achievements and contribution to the advancement of coastal engineering through research, education, engineering practice, and professional leadership.”

Anneila Sargent, professor of astronomy and director of the Owens Valley Radio Observatory, has been designated by the Council of the National Academy of Sciences and the Governing Board of the National Research Council a lifetime National Associate of the National Academies “in recognition of extraordinary service to the National Academies in its role as advisor to the nation in matters of science, engineering, and health.”

Brian Stoltz, assistant professor of chemistry, has been named a Cottrell Scholar by the Research Corporation “for excelling in both teaching and research.”

Jeroen Tromp, McMillan Professor of Geophysics and director of the Seismo Lab, **Dimitri Komatitsch**, senior research fellow in geophysics, and **Chen Ji**, associate scientist, together with Seiji Tsuboi of Japan’s Institute for Frontier Research on Earth Evolution, have been awarded the 2003 Gordon Bell Prize for “A 14.6 Billion Degrees of Freedom, 5 Teraflop/s, 2.5 Terabyte

Earthquake Simulation on the Earth Simulator.” The Earth Simulator was used to model seismic-wave propagation resulting from large earthquakes.

Alexander Varshavsky, the Smits Professor of Cell Biology, has been chosen by the Israel Cancer Research Fund to receive its Excellence in Clinical Research Award.

Ahmed Zewail, Nobel laureate in chemistry, the Pauling Professor of Chemical Physics and professor of physics, has been elected a Foreign Member of the Russian Academy of Sciences. □

AND NOW FOR SOMETHING COMPLETELY DIFFERENT



Steve Koonin, London-bound

Steve Koonin, Caltech’s provost for the past nine years, is stepping down from that post February 2 and in March will begin a leave of absence from his faculty appointment as professor of theoretical physics to become chief scientist for BP, based in London. BP, with annual revenues of roughly \$200 billion, is the world’s second largest integrated oil company and the largest U.S. oil and gas producer.

The new post will provide Koonin with the opportunity to do some strategic thinking about one of the most important problems facing society—energy. Among other duties in his new position, he’ll be responsible for scientific and technological input to the company’s long-range strategies in an industry that has important economic, social, political, and environmental dimensions. Exposure to business and the private sector is also attractive to him at this point in his career, he says, since he feels he knows academia “pretty well” and has already done a fair bit of

advising to government.

Koonin has spent almost his entire academic career at Caltech: from his freshman year in 1968 (he received his BS in 1972) to the present, he has spent only three years away from the Institute—from 1972 to 1975 when he was earning his PhD at MIT. He came back to Caltech in 1975, was named full professor in 1981, and served as faculty chair from 1989 to 1991.

Koonin’s departure “will leave a tremendous hole in the Institute’s administrative and academic structure,” wrote President David Baltimore. “Over the past six years, I have relied on his insight, energy, innate intelligence, and detailed knowledge of Caltech as we have worked to further the Caltech cause.”

Edward Stolper, the Leonard Professor of Geology and chair of the Division of Geological and Planetary Sciences, will serve as acting provost, while the search committee, chaired by Ahmed Zewail (see above), works to fill the position. □