

## **Rosenfeld wins** Fermi Award

"Wow-I'm touched."

That, said Arthur H. Rosenfeld, was his reaction on learning he was the winner of the coveted Enrico Fermi Award, the federal government's oldest award for scientific achievement.

Rosenfeld, a member of the California Energy Commission whose career has focused on energy efficiency and savings—and who holds the distinction



of being Fermi's last graduate student-received the honor from the US Department of Energy "for a lifetime of achievements ranging from pioneering scientific discoveries in experimental nuclear and particle physics to innovations

in science, technology, and public policy for energy conservation that continue to benefit humanity. His vision not only underpins national policy but has helped launch an industry in energy efficiency."

The former longtime experimental particle physicist now leads the California Energy Commission's R&D and demand-response committees and is active in its energy-efficiency committee. Rosenfeld earned his PhD in 1954 from the University of Chicago, and in 1955 he joined the physics group at the University of California, Berkeley, where for the next 18 years he was a key developer of bubble-chamber physics. But in 1973, after OPEC began its embargo on oil sales to the West, Rosenfeld recognized the potential for energy savings in the building sector and founded a program that grew into the Center for Building Science at DOE's Lawrence Berkeley National Laboratory. Under Rosenfeld's direction, the center developed numerous technologies to boost energy efficiency, including electronic ballasts for fluorescent lighting—a key component of compact fluorescent lamps—and low-emissivity windows, which have a coating that allows light in but blocks heat from entering in the summer or escaping in the winter.

Rosenfeld also developed DOE-2, a computer program for energy analysis and design of buildings that in 1978 was incorporated into California's building code, which has served as a model for other building codes around the nation.

Since joining the California Energy Commission in 2000, Rosenfeld has been implementing the demand-side technology and incentives he advocated during the previous 30 years. Rosenfeld received his award, including a medal and \$375 000, in June during a ceremony in Washington, DC. With the purse he plans to set up the Rosenfeld Fund with San Francisco's Energy Foundation to finance projects in energy efficiency worldwide.

The Fermi Award was established in 1956 as a memorial to the 1938 Nobel laureate in physics, who achieved the first nuclear chain reaction and thereby initiated the atomic age. The honor recognizes scientists of international stature for their exceptional achievement in the development, use, control, or production of energy, defined to include the science and technology of nuclear, atomic, molecular, and particle interactions and their effects on humankind and the environment.

## Winners of AGU awards selected

The American Geophysical Union has announced the recipients of two awards and a medal.

Robert H. Eather, owner and president of Keo Consultants in Brookline, Massachusetts, and a consultant, received the Athelstan Spilhaus Award "for developing low-light-level filming technology, carrying out on-site auroral filming, and, from these, producing text and media products on auroras and geospace that have reached, informed, and inspired millions of people worldwide." The award recognizes AGU members who have worked to express the excitement, significance, and beauty of the Earth and space sciences to the general public.

The Cooperative Program for Operational Meteorology, Education and Training won the Excellence in Geophysical Education Award. COMET, established by the University Corporation for Atmospheric Research (UCAR) and the National Weather Service and operated by UCAR in Boulder, Colorado, received the award "for outstanding efforts to provide and improve access to quality science education materials worldwide." The award recognizes sustained commitment to excellence in geophysical education by a team, individual, or group. Eather and COMET received the awards in May during AGU's joint assembly meeting in Baltimore, Maryland.

John A. Knauss will take home the Waldo E. Smith Medal. Dean and professor emeritus at the University of Rhode Island, Knauss is a former administrator of the National Oceanographic and Atmospheric Administration and cofounder of Sea Grant, a national network of programs that provide support, leadership, and expertise for university-based marine research and education. He is receiving the medal "for five and a half decades of extraordinary contributions to geophysics during which he led academic, research, and federal agency communities in developing innovative research programs, providing advice to state and national policy and decision-makers, creating and leading institutions, fostering the responsibility of scientists to serve the nation, fostering the careers of young scientists, and fostering a climate for open research of the highest scientific merit."

The medal honors those who have played unique leadership roles and whose accomplishments have greatly strengthened and helped advance the geophysical sciences. Knauss will receive the honor during AGU's meeting in December.

## **NSB** recognizes accomplishments

Charles Townes, Sactor Alan Alda, and the chairman Education of Intel Corp are among this year's winners of awards by the presented by the National Science Board, the governing board of NSF, in recognition of their contributions to science. The



honors were presented during a May ceremony in Washington, DC.

Townes, a Nobel laureate considered to be the father of quantum electronics, is the co-recipient of the 2006 Vannevar Bush Award, the NSB's top honor. A professor in the graduate school at the University of California, Berkeley, Townes received the award "for his no-