

WE HEAR THAT

Scientists, Engineers Honored with National Medals

President Bush bestowed the 2001 National Medal of Science and the 2001 National Medal of Technology on 15 and 5 winners, respectively, in a ceremony last month in the White

House East Room. The medals are the nation's highest science and technology awards.

Including the 15 recipients for 2001, the National Medal of Science, which is administered by NSF, has been presented to 401 scientists and engineers since 1959. Among the recipients of the 2001 award are six winners who were acknowledged for their work in physics-related fields.

Andreas Acrivos received the medal for his "pioneering research in fluid mechanics, leadership in the fluid mechanics and chemical engineering communities, editorial initiative with the *Physics of Fluids*, and mentoring several generations of engineering scientists." He is the Albert Einstein Professor of Science and Engineering, emeritus, at the City College of the City University of New York.

Marvin L. Cohen, University Professor of Physics at the University of California, Berkeley, was recognized for his "creation and application of a quantum theory for explaining and predicting properties of real materials, which formed the basis for semiconductor physics and nanoscience."

Ernest R. Davidson was honored for his "innovative leadership and numerous conceptual algorithmic developments that led to the field of computational quantum chemistry and made possible the accurate modeling of chemical reactions and the response of molecules to radiation." He is a Distinguished Professor and a Robert and Marjorie Mann Chair in Computational Quantum Chemistry at Indiana University.

A medal was bestowed on **Raymond Davis Jr** for "creating the first experiment to measure solar neutrino flux, continuing research on tracking the time dependence of the solar neutrino flux, and creating the new field of neutrino astronomy." In 1984, Davis retired from his post as senior chemist with Brookhaven National Laboratory but continues to serve as a research collaborator at the lab.

Charles D. Keeling was recognized for his "pioneering and fundamental research on atmospheric and oceanic carbon dioxide, the basis for understanding global carbon cycle and global warming." He is a professor of oceanography with

the Scripps Institution of Oceanography at the University of California, San Diego.

Gabor A. Somorjai received a medal for "molecular studies of surfaces through the use of single crystals and the development of new techniques that served as foundations of new surface technologies including heterogeneous catalysis." He is a professor of chemistry at the University of California, Berkeley, and a principal investigator in the materials sciences division of Lawrence Berkeley National Laboratory.

Technology Medal winners

The Department of Commerce administers the National Medal of Technology, which was established in 1980. Including the laureates for 2001, the medal has been presented to 120 individuals and 12 companies. Four individuals and one company won the 2001 medal; of those, two laureates perform physics-related work.

Arun N. Netravali was acknowledged for his "pioneering contributions that transformed [television] from analog to digital, enabling numerous integrated circuits, systems and services" in broadcast, cable, direct broadcast satellite, and high-definition TV, and multimedia over the Internet. He also was cited for "technical expertise and leadership, which have kept Bell Labs at the forefront in communications technology." He is a chief scientist at Lucent Technologies in Murray Hill, New Jersey.

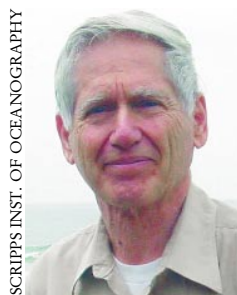
Jerry M. Woodall was cited for "the invention and development of technologically and commercially important compound semiconductor heterojunction materials, processes, and related devices, such as light-emitting diodes, lasers, ultrafast transistors, and solar cells." He is the C. Baldwin Sawyer Professor of Electrical Engineering at Yale University.

AIP Gemant Award Goes to Riordan

The American Institute of Physics has bestowed its 2002 Andrew Gemant Award on **Michael Riordan**, an adjunct professor of physics at the University of California, Santa Cruz, and a lecturer in the history and philosophy of science program at Stanford University.

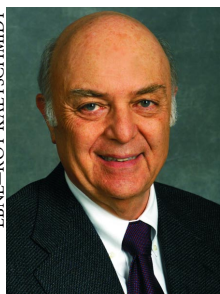


ACRIVOS

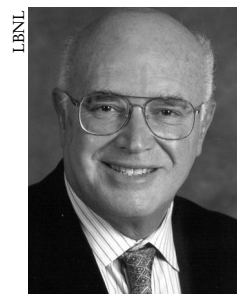


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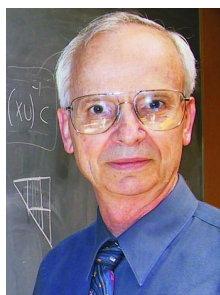


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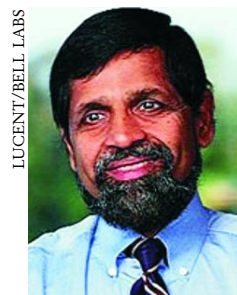


SOMORJAI

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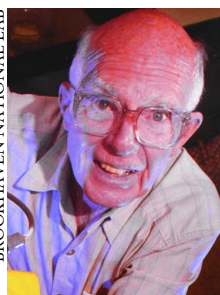


DAVIDSON

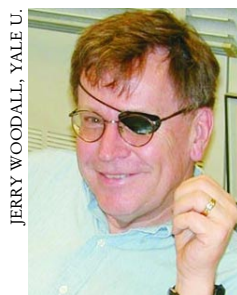


NETRAVALI

LUCENT/BELL LABS



DAVIS



WOODALL

JERRY WOODALL, YALE U.

BROOKHAVEN NATIONAL LAB