



THE PRESIDENT

welcomes you to

THE WHITE HOUSE

on the occasion of the presentation of

THE NATIONAL
MEDAL OF SCIENCE

AND

THE NATIONAL
MEDAL OF TECHNOLOGY



Monday, February 13, 2006

Congratulations to the 2004 Laureates of the National Medal of Science and the National Medal of Technology. These awards recognize your many contributions as leaders in innovation.

The desire to explore and understand is part of our Nation's character, and we have a rich history of scientific and technological achievement. Through dedication and ingenuity, you have helped develop solutions to real-world problems and revolutionize the way we live. Your efforts also help ensure that America is at the forefront of technology and development for decades to come.

President George W. Bush

PROGRAM

Remarks by

THE PRESIDENT

Presentation of Medals



Reception to follow



THE NATIONAL MEDAL OF SCIENCE

The National Medal of Science is the Nation's highest scientific honor. Established by Congress in 1959, and administered by the National Science Foundation, it is bestowed annually by the President of the United States on a select group of individuals deserving of special recognition for their outstanding contributions in one of the following fields: biology, chemistry, geology, physics, mathematics, sociology, behavioral and economic sciences, and engineering. President John F. Kennedy awarded the first Medal of Science in 1962 to the late Theodore Von Karman, professor emeritus, California Institute of Technology. Four hundred and seventeen individuals have been awarded the Medal of Science including such distinguished scientists and engineers as Eugene M. Shoemaker, co-discoverer of the Shoemaker-Levy comet; economist Milton Friedman; Edward Witten, for string theory; and C. Kumar N. Patel, inventor of the carbon dioxide laser, which helped revolutionize the medical surgery field. Each year, an independent twelve-member presidentially-appointed committee of scientists and engineers reviews nominations and makes its recommendations to the President, who selects the laureates.



THE NATIONAL MEDAL OF TECHNOLOGY

The National Medal of Technology is the Nation's highest award for technological achievement. It recognizes American innovators whose vision, intellect, creativity and sheer determination have made profound and lasting contributions to our economy and quality of life. Established by Congress and administered by the Technology Administration within the U.S. Department of Commerce, one hundred and fifty-nine Medals have been awarded to individuals, team members and companies. The first Medal of Technology was presented in 1985 by President Ronald Reagan. Recipients have included such technological pioneers as Ray M. Dolby of Dolby Laboratories; Steve Wozniak, formerly of Apple Computer; Stephanie Kwolek, formerly of Dupont; and outstanding American companies that have led the world in technological innovation. An independent committee representing both private and public sectors evaluates the merits of all candidates nominated through an open, competitive solicitation process. Committee recommendations are forwarded to the Secretary of Commerce, who makes recommendations to the President for final decision.



LAUREATES OF THE 2004 NATIONAL MEDAL OF SCIENCE

Kenneth J. Arrow

Stanford University

For his contribution to the field of economics exemplified by his work on general equilibrium theory, social welfare theory, endogenous growth theory, health economics, and information economics.

Norman E. Borlaug

Texas A&M University

For his success in breeding semi-dwarf, disease-resistant high-yield wheat and instructing farmers in its cultivation under harsh growing conditions, thus providing a new high-quality food source for millions of people around the world.

Robert N. Clayton

The University of Chicago

For his contributions to geochemistry and cosmochemistry that provided major insights into the evolution of the solar system through his discovery of non-mass-dependent isotope shifts in meteorites.

Edwin N. Lightfoot

University of Wisconsin, Madison

For his innovative research and leadership in transport phenomena focusing on biochemical and biomedical engineering with application to blood oxygenation, bioseparation techniques, and diabetic responses.

Stephen J. Lippard

Massachusetts Institute of Technology

For pioneering research in bioinorganic chemistry, which enriched our understanding of how metal compounds interact with DNA, provided important synthetic models for the active sites of metalloproteins, and elucidated key structural and mechanistic features of methane monooxygenase.

Phillip A. Sharp

Massachusetts Institute of Technology

For his contributions to understanding the biochemical pathway of RNA interference phenomena and for his use of RNA interference techniques to perform genetic analyses in mammalian cells.

Thomas E. Starzl

University of Pittsburgh School of Medicine

For his pioneering work in liver transplantation and his discoveries in immunosuppressive medication that advanced the field of organ transplantation.

Dennis P. Sullivan

*City University of New York Graduate Center and
State University of New York at Stony Brook*

For his achievements in mathematics, including solving some of the most difficult problems and creating entirely new areas of activity, and for uncovering striking, unexpected connections between seemingly unrelated fields.

LAUREATES OF THE 2004 NATIONAL MEDAL OF TECHNOLOGY

Ralph H. Baer
Engineering Consultant

For his groundbreaking and pioneering creation, development and commercialization of interactive video games, which spawned related uses, applications, and mega-industries in both the entertainment and education realms.

Roger L. Easton
RoBarCo

For his extensive pioneering achievements in spacecraft tracking, navigation, and timing technology that led to the development of the NAVSTAR-Global Positioning System.

Gen-Probe Incorporated

For the development and commercialization of new blood-testing technologies and systems for the direct detection of viral infections, including direct identification of West Nile virus and simultaneous identification of HIV-1 and Hepatitis C virus in plasma of human blood and organ donors prior to transfusion.

IBM Microelectronics Division

For four decades of innovation in semiconductor technology that has enabled explosive growth in both the information technology and consumer electronics industries through the development and fabrication of smaller, more powerful microelectronic devices.

Industrial Light and Magic

For 30 years of innovation in visual effects technology for the motion picture industry.

Motorola, Inc.

For over 75 years of achievement and leadership in mobile communications, and for the development of innovative technologies that allow people to seamlessly connect with their world.

PACCAR Inc

For pioneering efforts and industry leadership in the development and commercialization of aerodynamic, lightweight trucks that have dramatically reduced fuel consumption and increased the productivity of U.S. freight transportation.



THE PRESIDENT'S COMMITTEE ON THE NATIONAL MEDAL OF SCIENCE

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