

Academy of Engineering Announces New Members

The National Academy of Engineering has elected 84 engineers and 7 foreign associates to membership, bringing the academy's total US membership to 1941 and the number of foreign associates to 155.

The new members and foreign associates include the following individuals who work in physics or closely related fields:

John H. Bruning, the president and chief executive officer of Tropel Corp in Fairport, New York.

Michael L. Corradini, a professor of nuclear engineering and engineering physics at the University of Wisconsin—Madison.

James A. Fay, a professor and senior lecturer in mechanical engineering at MIT.

William J. MacKnight, a distinguished university professor in the department of polymer science and engineering at the University of Massachusetts at Amherst.

George C. Maling Jr, a managing director for the Institute of Noise Control Engineering of the USA Inc in Poughkeepsie, New York.

John H. McElroy, the dean of engineering and vice provost of the graduate school at the University of Texas at Arlington.

John P. McTague, vice president for technical affairs, at the Ford Motor Co in Dearborn, Michigan.

D. Bruce Montgomery, the president of MTechnology Inc in Wayland, Massachusetts.

Duncan T. Moore, the associate director for technology in the Office of Science and Technology Policy, Executive Office of the President, Washington, DC.

Donald W. Murphy, the head of the applied materials research department at Bell Laboratories, Lucent Technologies in Murray Hill, New Jersey.

Un-Chul Paek, dean of the College of Communications at Kwangju Institute of Science and Technology in Kwangju, South Korea.

C. Paul Robinson, the president of Sandia Corp and director of Sandia National Laboratories in Albuquerque, New Mexico.

Theofanis G. Theofanous, professor in the departments of chemical engineering and of mechanical and environmental engineering and director of the Center for Risk Studies and Safety at the University of California, Santa Barbara.

Charles H. Townes, who holds the

title Professor in the Graduate School, in the physics department at the University of California, Berkeley.

H. Kumar Wickramasinghe, the manager of physical measurements at IBM's Thomas J. Watson Research Center in Yorktown Heights, New York.

Manfred Rühle, the director of the Institute for Materials Research of the Max Planck Institute for Metals Research in Stuttgart, Germany.

Ten Physicists Honored by IOP

In December, the UK's Institute of Physics announced the recipients of its 1998 awards, which were given in London last month.

IOP selected **Cyril Hilsum** to receive the Glazebrook Medal and Prize for "his sustained and successful efforts in advocating the importance of basic, applied and strategic research in the physics and materials science of functional materials, and for being a leading instigator of, and an energetic participant in, national research programmes on gallium arsenide in the 1960s, liquid crystals in the 1970s and high-temperature superconductors in the 1980s." Hilsum is a business development consultant for the Centre for Advanced Instrumentation Systems and a visiting professor of physics at University College London.

The Guthrie Medal and Prize went to **Derek Robinson**, director of fusion at the UK's Atomic Energy Authority. He was chosen for "his outstanding and generous scientific, managerial and advisory contributions to the international fusion programme, thus securing that fusion is being researched seriously as a potential energy source for future generations."

David Deutsch of the University of Oxford has garnered the Paul Dirac Medal and Prize for "his pioneering work in quantum computation, leading to the concept of a quantum computer, and for contributing to the understanding of how such devices might be constructed from quantum logic gates in quantum networks."

IOP has designated **Shaun Fisher** to receive its Charles Vernon Boys Medal and Prize. Fisher is being cited for "his distinguished early research career in low-temperature physics, in particular for contributing to the relatively new research area of superfluid physics by studying the helium-3 quasi-particle radiator and by recording one of the lowest temperatures ever measured." Fisher is at the University of Lancaster.

Maurice Ebison, formerly deputy chief executive of IOP, has been named

to receive the Bragg Medal and Prize. He is being honored for "a lifetime's devoted contribution to the teaching of physics as a schoolmaster, a college lecturer, a gifted leader of the education department of the American Institute of Physics and a participant in the work of the Association for Science Education, of the Royal Society, of the International Commission on Physics Education and of the European Physical Society."

Meirion Lewis has won the Duddell Medal and Prize for "his fundamental contributions to the understanding of surface acoustic waves and surface-skimming bulk waves, and to the subsequent development of devices relying on these phenomena." Lewis is a visiting professor at the University of Cambridge.

The Kelvin Medal and Prize have been awarded to **Lesley Glasser**, in part for "her outstanding and prolonged contribution to the public understanding of physics, particularly in Scotland, by managing of financial, human and technological resources required for running SATRO North Scotland and for organizing several scientific exhibitions and festivals including SATRO-SPHERE, TechFest and Science on the Move." Following her early retirement from the University of Aberdeen, Glasser cofounded SATRO North Scotland, part of a national team of people dedicated to supporting science and technology.

Andrew Fisher of University College London has been named the recipient of the Maxwell Medal and Prize for "his theoretical and computational studies leading to a more profound understanding and interpretation of the images of molecules on surfaces as obtained by scanning tunneling microscopy."

Neil Loxley received the Paterson Medal and Prize for "applying the physics of x-ray diffractometry and reflectivity in a commercial setting by successfully developing and manufacturing a number of exceptionally high-quality, high-resolution x-ray optical instruments." Loxley is managing director of Bede Scientific.

IOP has awarded its Rutherford Medal and Prize to **Michael Hilas** of the University of Leeds. The institute praises Hilas for a "lifetime's authoritative contributions to the theoretical and experimental understanding of cosmic ray physics, particularly in the extremely-high-energy range."

IN BRIEF

In late February, **Hermann A. Gruner**, director of the Thomas Jefferson National Accelerator Facility, in New-