

Edelstein to Receive Industrial-Physics Award

William Edelstein, a retired GE physicist, will receive the biennial American Institute of Physics Prize for Industrial Applications of Physics in November. He is receiving the award "for his pioneering developments leading to commercialization of high-resolution Magnetic Resonance Imaging (MRI) for medical applications," according to AIP's announcement.



Edelstein

As part of the award, which is co-sponsored by General Motors and AIP Corporate Associates, Edelstein will receive \$10 000 and a certificate citing his contributions. A resident of Schenectady, New York, he will accept the honor during the three-day 2005 annual Industrial Physics Forum (see page 67). In 1977, AIP established the prize "to publicize the value of physics research in industry, to encourage physics research in industry, and to enhance students' awareness of the role of physics in industrial research."

In Brief

Two scientists, one renowned for more than three decades of contributions to the area of experimental inertial fusion and the other for his seminal role in the development of fast ignition, have been selected by the American Nuclear Society to receive the 2005 Edward Teller Medals. **Joe Kilkenny** and **Max Tabak**, who were honored for their "pioneering work in the field of fusion research," are receiving the medals this fall at the Fourth International Conference on Inertial Fusion Sciences and Applications in Biarritz, France. Kilkenny is vice president for Inertial Fusion Technology at General Atomics in San Diego, California, and associate director for science and technology at the Laboratory for Laser Energetics of the University of Rochester in New York. Tabak is a senior scientist and group leader at

Lawrence Livermore National Laboratory in Livermore, California.

Wayne Rosing, an adviser at Google Inc, where he was a senior vice president for engineering, has been named the first senior fellow in mathematical and physical sciences at the University of California, Davis. Rosing, a keen astronomer also renowned in the computer industry, is working with J. Anthony Tyson, pro-

fessor of physics, on the proposed Large Synoptic Survey Telescope.

C. Matthias Mountain, director of the Gemini Observatory in Hilo, Hawaii, has been named director of the Space Telescope Science Institute in Baltimore, Maryland. Mountain, who begins his term 1 September, had been with the Gemini Observatory since 1992 and assumed directorship in 1994. He succeeds **Steven Beckwith**.

Obituaries

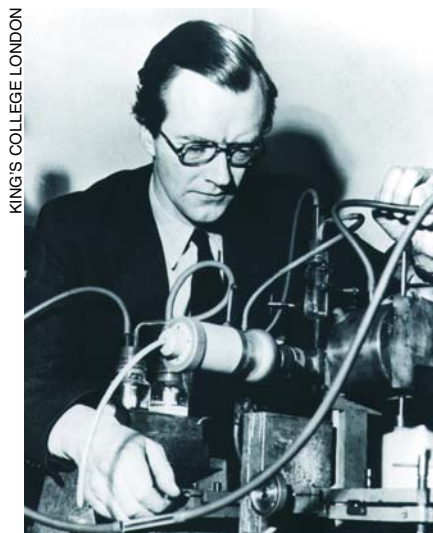
Maurice Hugh Frederick Wilkins

Maurice Hugh Frederick Wilkins, awarded the 1962 Nobel Prize in Medicine with Francis Crick and James Watson for "their discoveries concerning the molecular structure of nucleic acids and its significance for information transfer in living material," died in London on 5 October 2004.

Born in Pongaroa, New Zealand, on 15 December 1916, Wilkins was six years old when the family moved to Birmingham, England. He attended the local schools and later won a scholarship to Cambridge University, where he graduated with a degree in physics. From there he went to the University of Birmingham and began a long relationship with John Randall, who supervised Wilkins's PhD research on luminescence in crystals.

After spending World War II working first in Birmingham on radar and then in Ernest Lawrence's laboratory in Berkeley, California, on research related to the Manhattan Project, he accepted a lectureship at the University of St. Andrews in Scotland, where Randall was reorienting the physics department to attack biological problems. In 1946, Randall moved to King's College at the University of London as head of the department of physics and director of the newly formed Medical Research Council Biophysics Research Unit. Randall invited Wilkins to join him at the unit.

Wilkins was stimulated to work on biological problems by reading Erwin Schrödinger's *What Is Life?* (University Press and Macmillan, 1944). The speculations of one of the great physicists of the 20th century on the central problem of biology encouraged Wilkins



KING'S COLLEGE LONDON

Maurice Hugh Frederick Wilkins

to direct his research to microscopic studies of cells, and in particular the DNA content of those cells. That research led to his work on the structure of DNA itself and to the application of x-ray diffraction techniques.

At the time, most DNA was prepared by methods that produced small fragments of the molecules; those fragments were difficult to align into fibers and yielded poor x-ray data. However, Rudolf Signer of the University of Bern in Switzerland used gentler techniques to prepare much less degraded DNA, and in 1950 he made his invaluable material available to researchers. One of the fortunate recipients was Wilkins. With graduate student Raymond Gosling, he obtained x-ray patterns that showed unmistakable evidence of microcrystallinity. For the first time, it was clear that DNA had a regular, and potentially solvable, structure.

Watson, well aware of the central importance of DNA, first saw these photographs when Wilkins gave a talk