Northwestern opens Center for Quantum Devices

McCormick's new Center for Quantum Devices opened June 7 with Nobel laureates Leo Esaki, president of Japan's University of Tsukuba, and Klaus von Klitzing of Germany's Max Planck Institute joining center director Manijeh Razeghi in cutting the ceremonial red ribbon.

The center, believed to be the most advanced of its kind in the world, has already received federal grants totaling $2,421,362 a year from the Advanced Research Projects Agency and the Office of Naval Research as well as a number of grants from private firms.

The ribbon-cutting ceremony launched a two-day conference called "Workshop on Future Trends of Quantum Structures and Device Applications," chaired by Razeghi, Walter P. Murphy Professor of Electrical Engineering and Computer Science.

Leading researchers from industry, government, and academia reported on the new microelectronic and optical devices being developed for the next generation of computers and communications systems at the international conference.

The 35 speakers who addressed the conference included many of the top scientists in the field, including G. K战术, N. Patel of the University of California, Los Angeles; a pioneer in the development of the laser; Kari Hess of the University of Illinois at Urbana-Champaign; Mildred S. Dresserhaus of the Massachusetts Institute of Technology; Venkatesh Narayanswamy of the University of California, Santa Barbara; Lester Eastman of Cornell University; and François Julien of the University of Paris.

Researchers from some of the major corporations involved in the field also addressed the conference, including John B. Escher, director of research for Motorola Inc.; Federico Capasso from AT&T Bell Laboratories in Murray Hill, N.J.; Aram Movchan of MIRACOR, Inc.; J. P. D'Heane of Thomson-CSF; and David Lewis of Armaco Technology Co.

The speakers discussed ways to take advantage of quantum effects, the unique physical laws that apply to subatomic particles, in constructing new microscopic devices such as lasers and detectors.

From left to right:
Leo Esaki, center director Manijeh Razeghi, and Klaus von Klitzing cut the ceremonial red ribbon at the opening of McCormick's Center for Quantum Devices.