



CHEMICAL ENGINEERING

Winning the Wolf Prize

Pioneering engineer Ching Tang earns international honor.

By Kathleen McGarvey

“THE CONCEPT IS, IN PRINCIPLE, VERY SIMPLE—to create a layer of thin film and pass a current through it to emit light,” says Ching Tang, the Doris Johns Cherry Professor of Chemical Engineering.

Carrying out that concept—the organic light-emitting diode (OLED), which is now used to provide displays in cell phones, computers, and televisions that are clear-

▲ **PROFESSOR OF INVENTION:** Tang, who’s credited with developing a new form of light-emitting diode, talks with graduate students Hao Lin (left), Kevin Klubek, and Prashant Kumar Singh (right).

er, thinner, and more energy efficient than liquid crystal displays (LCD)—hasn’t been so simple.

This winter, the Wolf Foundation recognized Tang’s contributions to the field of chemistry with the 2011 Wolf Prize, considered second in prestige only to the Nobel Prize. Tang shares the 2011 prize with Stuart Alan Rice of the University of Chicago and Krystof Matyjaszeski of Carnegie Mellon. The president of Israel and the Israeli Minister of Education will present them with the prize at a special ceremony at the Knesset on May 29.

The award also recognizes Tang for his seminal early work in photovoltaics, which could lead to major improvements in the

ability to produce low-cost solar cells to capture energy from the sun.

Tang is the second Rochester winner of the Wolf Prize since 2000, when physicist Masatoshi Koshiba ’55 (PhD) was recognized. Koshiba went on to receive the 2002 Nobel Prize in physics.

Tang, who came to the University in 2006, developed OLED technology while working at the Eastman Kodak Co. “I came up with the concept when I was at Kodak—and then stayed with it for 25 or 30 years, and tried to solve as many problems as I could along the way.” He cites his development of sandwiching electrodes between two layers of organic film as key for the greater control over light emission it provides.

“In Chinese, two is always better than one,” he laughs. “We call it ‘double happiness.’” 