

# In Review

## LASER SCIENCE

# Water Proof?

**SELF-CLEANING SYSTEM:** A water droplet hangs on the edge of a metal surface that has been treated with a Rochester-developed process to repel moisture. Developed by optics researcher Chunlei Guo, the system uses extremely short (on the order of  $10^{-15}$  second) bursts of laser light to alter the shape of nano-sized structures in the metal to make it nearly impossible for water molecules to penetrate. Potential applications for such “super-hydrophobic” materials include sanitation and other areas where repelling water-borne pathogens is important. **PHOTOGRAPH BY ADAM FENSTER**

