

Channels

India News

National

World

Business

Sports

Entertainment

Interviews

News

by City

by State

People

Acting

Artists

Movies

Resources

Indian Recipes

[Ads by Google](#) [Laser Trimming](#) [Fiber Laser](#) [Micromachining](#) [Mira Laser](#)

Scientists use laser to create black metal

ROCHESTER, N.Y., Nov. 21 (UPI) -- U.S. scientists say they have created a laser technology that can change the properties of nearly any metal and render it, literally, black.

[Ads by Google](#)

University of California

Int'l Relations Masters Degree Asia and Latin America focused
irps.ucsd.edu

International Relations

Earn an international relations degree. 100% online. Free info.
www.apus.edu/InternationalRelations

Woodrow Wilson School

Master in Public Policy One Year Program
www.wws.princeton.edu

"We've been surprised by the number of possible applications for this," said Chunlei Guo, University of Rochester assistant professor of optics and lead investigator. "We wanted to see what would happen to a metal's properties under different laser conditions and we stumbled on this way to completely alter the reflective properties of metals."

The process involves an ultra-brief, ultra-intense beam of light called a femtosecond laser pulse. The laser burst lasts only a few

quadrillionths of a second; a femtosecond is to a second what a second is to about 32 million years, the scientists explained.

During its brief burst, the laser unleashes an immense amount of power onto a spot the size of a needlepoint. That intense blast forces forms nanostructures that both dramatically increase the area of the surface and capture radiation.

Guo's research team tested the absorption capabilities of the black metal and confirmed it can absorb virtually all the light that falls on it, making it pitch black.

Copyright 2006 by United Press International

The Ultimate LIBS Website

Laser induced breakdown spectroscopy products and articles

Laser Light Scattering

Research-Oriented Light Scattering Instruments. View Publications!

[Ads by Google](#)