

## **Free Public Lecture:**

## Frozen in Time— **How Ice Cores Are Revealing the Composition and Temperature of Earth's Atmosphere During the Past Million Years**

By Todd Hinkley, Geologist

- Scientifically invaluable ice cores taken from **Antarctic and Arctic ice are stored and safe** quarded at the U.S. National Ice Core Laboratory, operated by the U.S. Geological Survey
- These ice cores are the only systematic record of the composition (including "greenhouse" gasses) and temperature of the Earth's atmosphere over the past million years
- The ice cores show that most of Earth's geologically recent climate history has been characterized by great instability and rapid, extreme swings of temperature, beyond anything we have experienced in historical times
- These ice cores are our only source of information about natural, pre-industrial levels of toxic trace metals and other substances deposited from the atmosphere into the world's ecosystems

Thursday, December 8, 2005, at 7 p.m. **USGS, Building Three, Menlo Park, CA** 

See other side for USGS site map.

For information on USGS public events, call (650) 329-5000 or visit our website at http://online.wr.usgs.gov/calendar/ U.S. Department of the Interior • U.S. Geological Survey • Western Region Center

The Earth Science Information Center (Map and Publication Sales) in Building 3 will remain open until 7:00 pm

on the evening of the lecture.