

**DEPARTMENT OF GEOLOGY
McMicken-College of Arts & Sciences**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: MARCH 1, 2005

The Department of Geology is pleased to offer the following research project for the summer of 2005. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and if possible, develop a timetable for the twelve-week research period.

Lead (Pb) In Drinking Water

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Pb in drinking water has long been an issue for water utilities, one that was pushed to the forefront by the recent outbreak of high Pb readings in the District of Columbia. This Pb comes from within the distribution system, some from Pb solder and brass fixtures, but mostly from Pb service lines between the house and the street. As part of a project funded by the American Water Works Research Foundation, the UC Geology and Physics Departments are studying the chemistry and mineralogy of the Pb compounds that are found within these distribution systems. The task for the WISE project will be characterization of the minerals forming in the pipes of one distribution system using X-ray diffraction, Laser Raman spectroscopy, and scanning electron microscopy. The project team will then be relating this mineralogy to the chemistry of the water at this site, and to the mineralogy of pipe scales found at other sites around the US and in Great Britain. Contact Barry Maynard in Geology.