**SEMINAR**

Thursday, September 26, 2002 4:30 p.m.
(refreshments at 4:15 p.m.)

366 Hollister Hall

**Heavy Metal Mobilization in Soils : Chemical and Biological Processes**

**Prof. Murray McBride**  
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**Environment Seminar Series (CEE 601)**  
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**Abstract**

The generally accepted view that toxic heavy metals have very low mobilities in most soils is based on the simple observation that most of the metals found in contaminated soil profiles are concentrated in the surface. The standard convective-dispersive model describes this assumed behavior fairly well. However, a number of observations, which I will describe, contradict this picture of immobility. It is concluded that metals can be lost from soils by biological and chemical processes, enhanced by preferential flow and facilitated (colloidal) transport. The release of metals is not a simple or reversible chemical process, and therefore cannot be described by a simple physical-chemical model such as the convective-dispersive equation.

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Further information on the Environment Seminar Series as well as a list of future speakers can be found at: [http://ceeserver.cee.cornell.edu/eac20/cee601/](http://ceeserver.cee.cornell.edu/eac20/cee601/)

or contact Prof. Edwin (Todd) Cowen (eac20@cornell.edu).