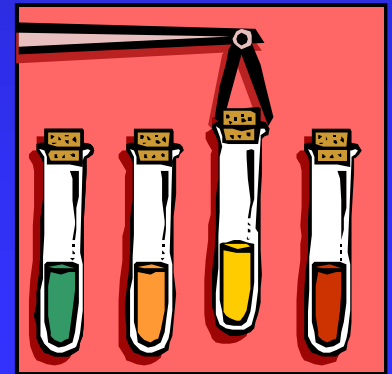




Center for Environmental Analysis

Dr. John Kraemer

Director





Research Projects

- Groundwater Contamination from Pesticides in Stoddard County.
 - ◆ Over 120 reported pesticide mixtures applied in the region.
 - ◆ Sample results have shown elevated levels above the EPA drinking water standards or health advisories.

Research Projects

- Groundwater Contamination
 - ◆ GIS modeling of contaminant transport.
 - ◆ Fate and transport modeling of aquifers and potentially affected populations.



Research Projects

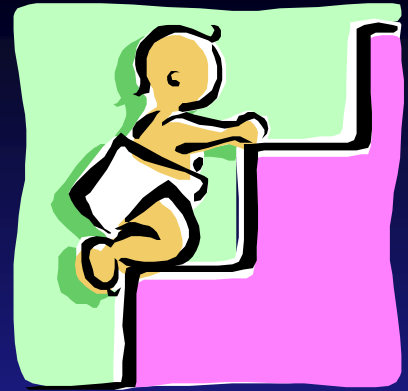


- Dermal Absorption of Pesticides
(Organophosphates, triazines and others)
- Female flux and absorption coefficient modeling.
- Electronic measurement of skin integrity.
- Steady state vs. Nonsteady state exposures.
- PB-PK Modeling of pesticide uptake.

Research Projects

- GIS/Remote Sensing Program
 - ◆ Urban Planning
 - ◆ Land-Use Mapping
 - ◆ Contaminant Identification using multispectral and hyperspectral remote sensing techniques.

Research Projects



- Lead Exposure in urban and rural settings.
 - ◆ Inhalation studies of various dust size fractions (ICP).
 - ◆ Geomorphology of dust fractions and heavy metal content (XRD).



Research Projects

- Earthworm species identification in Missouri and at CERCLA sites.
 - ◆ Bioavailability studies with the University of North Texas.

Research Projects

- Surface Water Quality in the St. Francis River Silver Mines Recreational Area.
 - ◆ Nonpoint source discharges from swine farm operations.
- Water chemistry in Apple Creek.
- Pesticide effects on native macroinvertebrates.



Research Projects

■ Pediatric Environmental Health

- ◆ Asthma triggers in homes.
- ◆ Dermal penetration following indoor pesticide application.
- ◆ Identification of environmental hazards in southeast Missouri counties.

Center for Environmental Analysis



- Curious?
 - ◆ Come and find out more!

