



Colorado School of Mines
1500 Illinois Street
Golden, CO 80401 U.S.A.
Web site: <http://www.mines.edu/Research/>

Institute for Resource and Environmental Geosciences (IREG)

The Institute for Resource and Environmental Geosciences (IREG) was established to advance interdisciplinary earth science research. Its board of directors is comprised of the heads of the Departments of Engineering, Geology and Geological Engineering, Geophysics, Math and Computer Science, Mineral Economics and Petroleum Engineering. IREG's mission is to stimulate innovation and support initiatives in integrated, multidisciplinary research and education of earth scientists and engineers for resource exploration and production, geo-engineering and applied environmental geo-sciences.

IREG conducts interdisciplinary projects in subsurface characterization for energy exploration, environmental site remediation studies, evaluation of the natural radiation background, and promotes diversity principles in minority education for government, industry, and academia. Areas of expertise include: integrated geology, geophysics, environmental science and petroleum engineering; geohydrologic modeling; subsurface characterization; fate and transport; risk assessment; groundwater contamination and containment; remediation technologies testing; geostatistics/modeling/neural networks. Current projects include site characterization, characterization of geo-aerosols; rapid identification of microbes, dust and aerosol characterization, stratigraphic inversion at the Brent/Mesa Verde field, and permeability/porosity measurements.

Background:

- Created in 1992
- Working towards a multidisciplinary research and educational program in environment and resources

Areas of Expertise:

- Integrated geology, geophysics, environmental science, petroleum engineering, and geochemistry
- Geohydrologic modeling
- Subsurface characterization
- Fate and transport
- Risk assessment
- Groundwater contamination and containment
- Remediation technologies testing
- Geostatistics/modeling/neural networks
- Nuclear physics

Sponsoring Organizations:

- ARAMCO; ARCO; AMOCO; BP; Chevron; Conoco; Exxon; Mobil; Phillips
- Gas Research Institute
- U. S. Army
- U. S. Department of Energy
- National Science Foundation

Method of Technology Transfer:

- Workshops
- Visits of company representatives
- Participation in symposia
- Public domain reports

Spin-offs / Contributions:

- Expanded liaison with companies for enhanced education and research focus
- Reduced hazards, improved safety in hazardous environments
- Distance Learning Initiatives

Contact IREG Director, Dr. Michael Reimer, Geophysics, (303) 273-3505; mreimer@mines.edu