Adjunct Professors -

Research Scientist -

sedimentary petrology, depositional systems associated with various tectonic settings,

Robert C. Laudon

data interpretation, computational and observational seismology, seismic hazard as a means of understanding magma chamber dynamics and mechanisms for magma transport and emplacement in the crust, and utilizing igneous rocks to constrain tectonic histories of origins.


Kelly H. Liu

Research interest in both exploration and solid-earth geophysics including 3-D seismic data interpretation, computational and observational seismology, seismic hazards, monitoring, and using converted waves to detect layered structures in the Earth’s mantle.

Francisca E. Oboh-Ikuenobe

Research interests include the origin of isotopic heterogeneity in granites and igneous rock textures as a means of understanding magma chamber dynamics and mechanisms for magma transport and emplacement in the crust. Using igneous rocks to constrain tectonic histories of origins.


David J. Wronkiewicz

New Mexico Institute of Mining and Technology, 1990. Research interests include mechanisms controlling the redistribution of trace metal contaminants in the environment, fluid evolution, corrosion processes, mineral precipitation during water-rock interaction, radioactive waste disposal, and origins of iron-concretions and implications for the presence of water and life on Mars.

Research Scientist -

Emeriti Professors -

Robert M. Rhode, Esther Al schematic view of an outcrop.

Adjunct Professors -

Our Graduate Program

The Geology and Geophysics Graduate Program (M.S. and Ph.D.) at the University of Missouri - Rolla (UMR) provides students with the educational and technological expertise in the Geosciences to graduate as independent scientists, whose careers lead to the creation of new knowledge for understanding our planet Earth, protecting our environment, and wisely utilizing our natural resources. We accomplish this by providing challenging, intellectually-stimulating, hands-on graduate courses, and through extensive student involvement in cutting-edge, externally-funded research projects. In the past ten years we have graduated over 145 MS students and 15 Ph.D. students, who are currently enjoying successful careers in academia (15%), petroleum and mining industries (30%), and environmental and government agencies (50%). Our research faculty and graduate students have published over 100 peer-reviewed articles in the past ten years as well as generating over $3 million of external funding from governmental and non-governmental agencies.

The recent addition of new faculty and new technologies are enabling us to advance even further UMR’s strong tradition in education and research in the Geosciences. We have recently established state-of-the-art laboratory facilities in Geochemistry, Geophysics, and Remote Sensing. In addition, there are well-equipped laboratories in Sedimentology, Paleontology, Petrology, and Structural Geology. These facilities allow our graduate students, who are typically supported through external funding or through scholarships provided by the $2.5 million Radcliffe Trust to conduct cutting-edge research.

Degrees Offered

* Ph.D. in Geology and Geophysics
* M.S. in Geology and Geophysics
* Master of Science for Teaching (MST) in Earth Sciences
* Fast-Track M.S. Program
* Graduate Certificate in Geospatial Information Sciences