COMPANIES RECRUITING OUR STUDENTS
Representatives from Chevron, Arcadis, ExxonMobil, and other firms hold recruiting sessions in Bloomington during September and October. Travel support from the department will allow students to participate in AAPG jobs fairs in Houston and Laramie.

CONTACT INFORMATION
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**Atmospheric Science**

Atmospheric Science at Indiana University is a dynamic program with exciting opportunities to undertake field, satellite, or modeling research. Our faculty members actively conduct both observational and modeling studies of weather and climate processes across scales, from cold fronts and tropical cyclones, to global atmospheric cloud and circulation patterns. The Atmospheric Science Group is an active participant in the interdisciplinary research of other Earth and Atmospheric Sciences faculty, including paleoecology and research and global climate change studies. The Department’s diverse, close-knit group of researchers enjoys a collective expertise in atmosphere-hydrosphere-solid earth interactions. We are among the most active users of IU’s high-performance parallel computing facilities which include the new Big Red II machine—one of the world’s 70 fastest supercomputers.

**Faculty**: Chuan Q. Hui, Cody Kirpatrick, Ben Krautz, Travis O’Brien, Paul W. Staten

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**Biogeochemistry**

Our research programs are rooted in the exploration of molecular and isotopic characteristics of organic matter in diverse geological settings. The programs address challenges in the limits of understanding how the evolution and persistence of complex interactions between chemical, geological, and biological systems shape our planet and its neighbors. Biogeochemistry is inherently multidisciplinary, positioned at the intersection of biology, geology, and chemistry, and typically combines field investigations and sampling with laboratory analyses and experimentation to yield empirical data that can constrain computational models.

**Faculty**: Simon Brassell, Erika Elswick, Maria Mastalerz, Juergen Scheiber, Peter Sauer, Arndt Schimmelmann, Chen Zhu

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**Economic Geology**

Economic Geology encompasses all areas in the geological sciences that pertain to the extraction or production of geological materials for profit. Natural resource utilization throughout the world includes geological materials such as metals, non-metals, fuels, and water.

Here at IU, we have faculty and research scientists who are involved in both field/analytical and experimental studies of all of these natural resources. We have an active group investigating the genetic and origin of metallic ore deposits that occur in magmatic, hydrothermal, and sedimentary environments. Several faculty and research staff are also involved in studies that relate to the genesis and localization of petroleum, coal, and natural gas.

**Faculty**: Chusi Li, Maria Mastalerz

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**Sedimentary Geology**

Sedimentary geology utilizes sedimentary rocks to investigate the processes that shaped the surface of the early Earth and understand the history of how those processes have interacted to control the Earth system. In addition to traditional techniques like facies analysis and provenance analysis, cutting-edge applications of techniques ranging from stable isotope geochemistry to detrital zircon geochronology are leading rapid developments in what can be learned from the sedimentary record.

IU builds on traditional strengths in physical sedimentology and basin analysis to define new frontiers in tectonics, paleoclimate and sedimentary processes. Training in sedimentary geology provides a myriad of employment opportunities, ranging from academia to government, to careers in the energy industry.

**Faculty**: Simon Brassell, Dolgo Edmonds, Erika Elswick, Juergen Scheiber

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**Mineralogy**

Our mineralogy and petrology program involves the study of rocks from all terrestrial and some planetary environments. We have active projects in sedimentary, igneous, and metamorphic rocks funded by NSF and NASA and sited on Earth and Mars. Current investigations include research on basal and tonalitic magma generation, magmatic processes and sulfide ore formation, structural and rheological properties of metamorphic rocks, pure and applied clay mineralogy, the mineralogy of natural zeolites, and planetary mineralogy. These projects, involving natural samples and experimental methods, interface with and contribute to our hydrology, biogeochemistry, inorganic geochemistry, and geophysics research efforts.

**Faculty**: Chusi Li, Juergen Scheiber

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**Geophysics**

Critical to our understanding the Earth is knowledge of the physical processes that shape the Earth’s formation, evolution, and present-day dynamics. The combination of state-of-the-art geophysical instrumentation and advanced computational capabilities makes it possible to observe and quantitatively model complex geological systems in ways that were previously unimaginable.

At IU, our research applications of these geophysical methods include studies of global scale tectonics, earthquake-related deformation and faulting, and its neighbors. Biogeochemistry is inherently multidisciplinary, positioned at the intersection of biology, geology, and chemistry, and typically combines field investigations and sampling with laboratory analyses and experimentation to yield empirical data that can constrain computational models.

**Faculty**: Michael Hamburger, Kaj Johnson, Brian Vanyté

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**IU GEOLOGIC FIELD STATION**

The IU Judson Mead Geologic Field Station, located in the Tobacco Root Mountains of Montana, is one of the best places in the world to learn geology in the field. Our field station environment allows you to build and integrate a broad set of geoscience skills to solve 4-dimensional geologic problems. The field station environment allows you to focus on learning and having fun with minimal logistical distractions.

EAS X429 Field Geology in the Rocky Mountains (4 credits) is our 6-week capstone course that prepares geoscience majors to be successful in a geoscience career or graduate school program. X429 is an immersive, hands-on, geology course that teaches all of the fundamental field skills and includes a deep-dive into the geoscience subdiscipline of your choice. Projects range from outcrop to regional scale.

EAS X428 Fundamentals of Field Geology in the Rocky Mountains (5 credits) has the same curriculum and travel schedule as the first five weeks of X429, but without the sub-discipline concentration week.

EAS X498 (1 credit) is a 1-week, discipline-specific curriculum that is an integral part of X429 and is also open to students who don’t take X429. Current subdisciplines include: crystaline igneous rock systems; environmental geology and hydrology; geophysics; sedimentology and sequence stratigraphy; structural geology.

**Director of the Field Station**

Jim Handschy | jhandsch@iu.edu | (812) 855-1475

**IU GFS CONTACT INFORMATION FOR SUMMER ENROLLMENT**

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