Indianapolis, IN— Kevin Mandernack, Ph.D., an internationally respected researcher and teacher whose research impacts a variety of critical areas including climate change, deep ocean drilling, water pollution, and the biochemical processes of the geological record, has been named chair and professor of earth sciences at the School of Science at Indiana University-Purdue University Indianapolis.

"Earth scientists study the environment in which we live and breathe – the land, water and air. These ecosystems are changing rapidly. We must use the tools of the earth scientist – geology, chemistry, microbiology, hydrology, and many others to understand how changes are occurring and the effects they will have," said Mandernack, who will assume his new duties later this year.

A geomicrobiologist and biogeochemist poised at the intersection of the physical and life sciences, Mandernack comes to IUPUI from the faculty of the Colorado School of Mines, where he held a joint appointment in the department of chemistry and geochemistry and the department of geology and geological engineering. From 2008 to earlier this year, he served as program director of the Ocean Drilling Program at the National Science Foundation. He earned a doctorate in marine biology, with emphasis on marine biogeochemistry, at the Scripps Institution of Oceanography after graduating with B.S. degrees in geology and zoology from the University of Wisconsin-Madison.

Mandernack's current research focuses on the emerging field of geomicrobiology as he studies the interactions between the biosphere (those parts of the earth's surface, water, and atmosphere that support life), the chemosphere (the atmospheric regions where chemical activity occurs), and the lithosphere (earth’s crust and upper mantle). He has extensive experience in the biochemical cycles bacteria use for processing carbon dioxide and other organic substances in the environment. He has investigated ocean systems devoid of oxygen, the frigid waters of Antarctica, deep crustal aquifers and minute bacteria visible only under high-powered microscopes.

“My training in earth sciences has made me keenly aware that there is always more than one way to approach the complex geo-environmental problems that face us. I look forward to pursuing my research at IUPUI and I am also very enthused about the opportunity to work with undergraduate and graduate students to prepare the next generation of talented individuals who will be the conservers of our earth, water and air whether they pursue careers in the earth sciences or not,” he noted.

Mandernack is the author of more than 25 peer-reviewed studies, including publications in Science and Nature. He has received research funding from the U.S. Department of Energy, the National Air and Space Administration (NASA), the National Science Foundation, the U.S. Department of Agriculture and others.

The School of Science is committed to excellence in teaching, research, and service in the biological, physical, behavioral and mathematical sciences. The School is dedicated to being a leading resource for interdisciplinary research and science education in support of Indiana's effort to expand and diversify its economy. For more information go to www.science.iupui.edu

-###-