Department of Earth and Environmental Systems

Indiana State University

More from Day One



Geobiology

Sandra Brake is a geologist with special interest in microbial biofilms in acid mine drainage systems. Her current research focuses on the formation of iron-rich stromatolites by eukaryote-dominated biofilms. She uses field and microscopic techniques to characterize how various biofilm communities contribute to the micro- and macro-layering in the stromatolites. She also has collaborative projects that explore for biomolecular traces indicative of the formation of organosedimentary structures by eukaryotic microorganisms. (Sandra.Brake@indstate.edu)

Anthony Rathburn's research interests include the biogeochemistry and ecology of foraminifera (single-celled organisms) in marine ecosystems. His current projects focus on the ecology and stable isotope biogeochemistry of seafloor methane seep organisms (off Costa Rica, in Monterey Bay; at Hydrate Ridge off Oregon); trace metal compositions of biogenic carbonate in contaminated environments (Australia and Venice, Italy); the relationship between foraminiferal test (shell) morphology and oxygen availability (off California and elsewhere); the ecology and stable isotope biogeochemistry of deep-sea foraminifera on the Australian margin and from oxygen minimum zones (off Costa Rica and California). His field work often includes the use of Alvin (manned submersible) or Jason (remotely operated vehicle). He actively involves students in all of his research projects. (trathburn@gmail.com). Visit our site at:

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