

KATHLEEN D. SCHEIDERICH

OBJECTIVE

To obtain a Ph.D in geology from the University of Maryland. My research interests generally encompass the fields of paleoceanography and paleoecology; I use a variety of geochemical tracers and techniques to address a wide variety of paleoenvironmental problems.

EXPERIENCE

1998 Brigham and Women's Hospital Boston, MA

Technician

- Implemented experimental protocols within the Circadian, Neuroendocrine, and Sleep Disorders Research Section

2003 University of Delaware Newark, DE

Teaching assistant

- Geology 308- Earth system science (lab)

2004-2007 University of Maryland College Park, MD

Teaching assistant

- Geology 110- Physical geology (lab)
- Geology 120- Environmental geology
- Geology 123- Causes and implications of global climate change
- Geology 342- Sedimentology and stratigraphy (lab)

EDUCATION

1996–2000 University of Rochester Rochester, NY

- B.S., Biology-Geology; minor, German

2001-2004 University of Delaware Lewes, DE

- M.S., Oceanography- Dr. Katharina Billups, thesis advisor
- Thesis: Paired Mg/Ca and oxygen isotopes of Neogene foraminifera: Pacific and Indian Ocean Tropic-Subtropic Paleoceanography and Paleoclimate.

2004–present University of Maryland College Park, MD

- Advanced to Ph.D candidacy 02/05/2007
- Dissertation topic: Molybdenum isotopes in sedimentary systems

PROFESSIONAL MEMBERSHIPS

- American Geophysical Union
- Geological Society of America

PROFESSIONAL SKILLS

Instrumentation and methods

- Micromass Isoprime Dual-Inlet Mass Spectrometer
- Micromass Isoprime Continuous Flow Mass Spectrometer
- Nu Plasma Multi-collector Inductively Coupled Plasma Mass Spectrometer
- Cetac-Aridus desolvating nebulizer for sample input
- Trace-metal clean lab protocols
- Ion-exchange chromatography development and implementation

General skills

- Proficiency with Microsoft Office suite
- Sigma Plot
- Fluency in German

PUBLICATIONS, PRESENTATIONS AND AWARDS

- 1998-1999 University of Cologne Fellowship (Germany)
- October 2003 Office of Women's Affairs Grant (University of Delaware)
- 2004-2005 College of CMPS Scholarship (University of Maryland)
- March 2005 Center for Teaching Excellence Distinguished TA award (University of Maryland).
- AGU meeting, December 2003, oral presentation: "Mid-Miocene Paleooceanography at western subtropical Pacific site 588: results from paired Mg/Ca and oxygen isotope measurements".
- Rosenthal, Y., Perron-Cashman, S, et al., Laboratory inter-comparison study of Mg/Ca and Sr/Ca measurements in planktonic foraminifera for paleoceanographic research, *Geochem, Geophys, Geosyst.*, doi:2003GC000650, 2004
- Billups, K. and Scheiderich, K., A review and synthesis of Late Oligocene through Miocene paleotemperatures as recorded by foraminiferal Mg/Ca ratios, in review, 2006.

COURSEWORK

Doctoral coursework:

Isotope and trace element geochemistry; Biogeochemistry; Biogeochemical cycles.

Master's coursework:

Physical Oceanography; Chemical Oceanography; Geological Oceanography; Biological Oceanography; Advanced Paleooceanography Seminar; Quaternary Geology; Oceanography seminar (1. Carbon Dioxide Sequestration; 2. Benthic Boundary Layer); Marine Inorganic Chemistry; Marine Ethnobotany; Special Problem (Stable Isotope Mass Spectrometry).

Undergraduate coursework:

Coursework: Sedimentology and Stratigraphy; Mineralogy; Structural Geology; Paleooceanography; Evolution of the Earth; Invertebrate Paleontology; Evolution; Ecology; Genetics; Biochemistry; Organic Chemistry I, II; General Chemistry I, II; Physics I, II; Calculus I, II, III; Statistics.

Field Geology in the Rocky Mountains (Indiana University).

