

## **Dr. Timothy Schroeder**

Division of Science and Mathematics  
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### **ACADEMIC PREPARATION**

**University of Wyoming;** Postdoctoral Researcher, May – Aug. 2003  
Participation in Ocean Drilling Program Leg 209

**University of Wyoming;** PhD Geology, 2003

Dissertation: “Modes and Implications of Mantle Denudation at Slow-Spreading Mid-Ocean Ridges”, Advisor: Barbara John

**Northern Arizona University;** M.S. Geology, 1996

Thesis: “Physical Volcanology of the Enebro Mountain Rhyolite”, Advisor: Nancy Riggs

**University of Wisconsin-Madison;** B.S. Geological Engineering and Geology, 1993

Undergraduate Thesis: “Design of a Storm Water Retention System for a Small Drainage Basin in SW Wisconsin”

### **ACADEMIC POSITIONS**

Bennington College, Member of the Faculty, 2008 – Present

Hanse-Wissenschaftskolleg, Delmenhorst, Germany, Fellow, Sept. 2013 – May 2014

Eastern Connecticut State University, Assistant Professor, 2003 – 2008

### **INDUSTRY / PROFESSIONAL POSITIONS**

#### **Contract Geologist**

Ursa Major Minerals, Toronto, ON, 1999-2001

Safety-Kleen Environmental Consulting, 1999

Pikes Peak Mining Company, Victor, CO, 1998

Benchmark Geologic Services, Englewood, CO, 1997

Ryan Lode Mines Inc., Fairbanks, AK, 1997

#### **Staff Hydrogeologist / Geotechnical Engineer**

Adrian Brown Consultants, Denver, CO, 1996-1997

#### **Field Geologist**

Colorado Geologic Survey, Denver, CO, 1996

#### **Engineering Intern**

Barr Engineering, Minneapolis, MN, 1993

#### **Driller**

Wisconsin Geologic and Natural History Survey, Madison, WI, 1991-1993

### **GRANTS AND FELLOWSHIPS**

2016 “RAPID: Understanding the Hoosick Falls Water Crisis”, NSF Division of Undergraduate Education, Co-PI, \$89,810, Funded

2012 “TUES: The Future of a New England Mill Town”, NSF Transforming Undergraduate Education in Science, Technology, Engineering and Math - Type 1 Project, \$200,000, Funded

2012 Bennington College Faculty Research Grants, total \$2,400 Funded

2012 “Collaborative Research: An investigation of upper-mantle and crustal xenoliths and host lavas in central Arizona: Implications for mid-Tertiary Cordilleran lithospheric structure” NSF Tectonics, Not Funded

2011 “The role of melt-rock interaction and the formation of hybrid mantle-crustal rocks in lithospheric accretion at slow-spreading mid-ocean ridges” Fellowship from the Hanse-Wissenschaftskolleg Institute for Advanced Study, Salary, travel and living expenses for a 9 month project in Bremen Germany; Awarded

2010 “Paper Presentation at the 2010 annual Geological Society of America Meeting”, Bennington College Faculty Grant, \$1,200, Funded

2010 “Mineral Chemistry Investigation of Lower Crustal Xenoliths from Arizona”, Bennington College Faculty Grant, \$1,200, Funded

2009 “Collaborative research: An investigation of lower-crustal xenoliths and host lavas across central Arizona: Implications for the initiation of Cordilleran metamorphic core complexes”, NSF EarthScope, Not Funded

2009 “Paper Presentation at the fall 2009 Meeting of the American Geophysical Union”, Bennington College Faculty Grant, \$1,200, Funded

- 2008 "Radiometric Dating and Mineral Chemistry on Lower Crustal Xenoliths from Arizona", Bennington College Faculty Grant, \$1,200, Funded
- 2008 "Paper Presentation at the Annual Meeting of the Geologic Society of America", Bennington College Faculty Grant, \$1,200, Funded
- 2007 "CAREER: Undergraduate Earth Science Curriculum Integrating Field and Laboratory Research on mid-Tertiary Cordilleran Rifting in Central and Western Arizona" NSF Earth Career Development grant, \$404,944, Not Funded
- 2007 "MRI: Instrument Acquisition to establish a Multidisciplinary Microscopy Center for Undergraduate Research and Instruction", NSF Major Research Instrumentation grant, \$404,544, Not Funded
- 2007 "Using Syn-Tectonic Volcanic Deposits to Study the Formation of Mid-Tertiary Metamorphic Core Complexes in SW Arizona", CSU-AAUP Research Grant, \$5,000 Funded
- 2006 "Bedrock Mapping of the Hartford South Quadrangle: Exploring and Preserving Connecticut's Geological Heritage under Development Pressure", USGS EDMAP Grant, Collaborative with Dr. Peter Drzewiecki, \$21,262.00 Funded
- 2006 "Developing Online Earth Science Learning Tools: Bringing Integrated Laboratory and Field Experiences into the Classroom", Submitted to CSU-AAUP Summer Curriculum Development Grants, Collaborative project with Dr. Peter Drzewiecki, \$3,892 Funded
- 2006 "Improving Our Understanding of Stratigraphic Correlation and Fault Mineralization in the Hartford Basin Using Gamma Ray and X-ray Fluorescent Spectrometry", CSU-AAUP Research Grants, Collaborative with Dr. Peter Drzewiecki, \$9,867.80 Funded
- 2006 "Professional Development through Attending an Introduction to ArcGIS Short Course", CSU-AAUP Faculty Development Grant, \$1238.30, Funded
- 2006 "Deciphering a Record of Tectonic vs. Climactic Controls on Sedimentation Patterns in a Small Mesozoic Rift Basin, Hartford Basin, Connecticut and Massachusetts, U.S.A." Submitted to American Chemical Society, Petroleum Research Fund, \$50,000 requested; Not funded
- 2005 "Creating 21st Century Physical Geology Laboratory Exercises for ECSU Students: Integration of Technology with Local Issues to Improve Learning" AAUP Curriculum Development Grant; Collaborative with Peter Drzewiecki, \$3,000, Funded
- 2005 "Climatic and Tectonic Controls on Mesozoic Hartford Basin Lake Cycles: Deciphering a Record of Ancient Climate Change" AAUP Research Grant; Cooperative research with P. Drzewiecki, \$10,000, Funded
- 2005 "Establishing Streaming Video Infrastructure in Support of Innovative Learning in Earth Science" CSU Pilot Project Award, Cooperative research with J. Hyatt, P. Drzewiecki, C. Coron, T. Fleming, \$40,990, Funded
- 2004 "Web-delivered and video-enhanced learning tools for GER/AUR Earth Science classes at ECSU and SCUS" Cooperative research with J. Hyatt, P. Drzewiecki, C. Coron, T. Fleming. CSU System Office / CTDLC/Davis Foundation Gant, \$11,265, Funded
- 2004 "Structural and Stratigraphic Constraints on the Mesozoic Tectonic History of Eastern Connecticut", AAUP Research Grant, Cooperative research with P. Drzewiecki, \$9,866, Funded
- 2004 "Investigation of Brittle Deformed Peridotite and Gabbro Drilled along the Mid-Atlantic Ridge during ODP Leg 209", U.S. Science Support – Joint Oceanographic Institutions research grant, \$18,933, Funded
- 2003 "Faculty development through conference participation and local field excursions", AAUP Faculty Development Grant, \$1,500, Funded
- 2003 "Support for Leg 209 Participation" Ocean Drilling Program, \$7,000
- 2002 Paul Stock Grant-In-Aid, \$470
- 2001 Paul Stock Grant-In-Aid, \$300
- 2000 GSA graduate research grant, \$1,800
- 1994 GSA graduate research grant, \$1,200
- 1994 Northern Arizona University Geology Alumni Research Grant, \$700
- 1992 Hilldale undergraduate research fellowship, \$4,000

### STUDENT RESEARCH PROJECTS ADVISED

- 2013 Sara Heger, Co-advised M.S. thesis at Northern Arizona University, "Thermobarometry and geochronology of mid-Tertiary alkalic lavas, Chino Valley, Arizona: Relation to metamorphic core complexes"
- 2013 Nora LaCasse, Bennington College Advanced Work Research Project, "Arsenic mobility in Tacaonic Slate Aquifers"
- 2012 Ella Darham, Advanced Work Research Project, "Snow Stability and Avalanche Safety at Bridger Bowl Ski Area, Montana",

- 2010 Caitlin Hussey, Bennington College Advanced Work Research Project, "Rainbows and Black Lights and Polarizers, Oh My!: A Quantitative Study of the Effects of Experiential, Hands-on, and Informal Learning on Knowledge of Physical Properties of Light"
- 2009 Beau Tinnin, M.S. thesis committee member, "Volcanology and petrology of the Sullivan Buttes Latite, Northern Sullivan Buttes, Chino Valley, Arizona" Northern Arizona University
- 2009 Susan Michet, Bennington College Advanced Work Project "The Use of Lichens to Track Airborne Mercury Deposition"
- 2007 Alan Dwyer, Senior Thesis, "Using geochemical variations to map faulted basalt flows in the Hartford South Quadrangle, Hartford Basin, Connecticut" Mr. Dwyer presented results at the 2008 GSA NE Section meeting.
- 2007 Matthew DePan, Senior Thesis, "Kinematic compatibility of Hartford Basin, intra-basin faults" Mr. DePan presented results at the 2008 GSA NE Section meeting.
- 2007 Jennifer Goyette, Senior Thesis in progress, "Mineralization and deformation history of the Mesozoic Eastern Border Fault, Hartford Basin, Connecticut", Ms. Goyette presented results at the 2007 ECSU Arts and Sciences Research Conference and Exhibition and will present full results at the 2007 National GSA Meeting.
- 2007 Justin Milardo, Kevin Bieler, Matthew DePan, and Alan Dwyer, "Bedrock Mapping of the Hartford South Quadrangle: Exploring and Preserving Connecticut's Geological Heritage under Development Pressure", Students performed field mapping funded by a USGS EdMap Grant
- 2006 Matthew DePan, Earth Science Practicum, "Faulting conditions on a seafloor gabbroic massif determined by microtextural analysis and amphibole-plagioclase thermometry" –Mr. DePan presented results at the 2007 ECSU Arts and Sciences Research Conference and Exhibition.
- 2006 Jennifer Goyette, Earth Science Practicum "Construction of an interactive educational module in optical mineralogy"
- 2005 Francis Massey, Earth Science Practicum, "Using web-hosted, user-controlled animations to create a virtual petrographic microscope"
- 2005 Kelley Champion, Senior Thesis, "Crustal deformation along the Mesozoic Eastern Border Fault, Central Connecticut and South Central Massachusetts"
- 2005 Martha Gordon, Service on thesis committee of University of Connecticut M.S. Student
- 2004 Dawn Berger-Debrodt, Senior Thesis, "Brittle deformation processes in gabbro recovered from Ocean Drilling Program Site 1271, 16°N, Mid-Atlantic Ridge" – Ms. Berger presented results at the 2006 GSA NE section meeting.
- 2004 Julie Rumrill, Senior thesis, "Determination of compaction during welding of andesitic ignimbrite, Gorley Volcano, Kamchatka Peninsula, Far East Russia" – Ms. Rumrill presented results at 2005 GSA NE section meeting, and a has a student-led refereed journal article in press based on this project

## TEACHING EXPERIENCE

### **Bennington College**, Member of the Faculty, 2008 – Present

- Courses: Geology of the Bennington Region with Lab (ES 2101)  
 Energy and the Environment, What Lies Ahead (ES 2201)  
 Environmental Geology (ES 2102)  
 Astrogeology (ES2109)  
 Physics I, Forces and Motion with lab (PHY 2235)  
 Physics II, Fields; with lab (PHY 4325)  
 Heavy Metal Pathways (Nothing to do with Music) (DL 2105)  
 Climate and Energy Solution Analysis (ES 4101)  
 Earth Materials with lab (ES 4102)  
 Environmental Hydrology (ES 4105)  
 Introduction to Maps and Geographic Information Systems (ES 21205)  
 Modeling Landscapes: An Intro to Applied GIS (ES 4110)  
 Applied Physics – Deformation of solid materials (PHY 4215)  
 Bedrock Geology (ES 4125)  
 Environmental Back-of-the-Envelope Calculations (MOD 2133)  
 Science and Math Fifth Term Seminar (SCMA 4105)

### **Next Generation Science Leadership Grant Project – Teacher Professional Development**

- Methods in Place-Based Environmental Science Education (Credited by Castleton State College)

### **Eastern Connecticut State University**, Assistant Professor, 2003-2008

- Courses: Dynamic Earth with Lab (EES 104)  
 Geology of Natural Resources (EES 125)  
 Mineralogy and Rock Analysis (EES 330)  
 Structural Geology with Environmental Applications (EES 356)

Renewable Energy and the Environment (EES 205)  
 Energy in the 21<sup>st</sup> Century – Liberal Arts Colloquium (LAP-130)  
 First Year Research, Resources and Responsibilities (FYR 174)  
 Sedimentation and Tectonics (EES 440)

**University of Wyoming**, Teaching Assistant, 1999-2000

Courses: Physical Geology (GEOL 1100)  
 Structural Geology (GEOL 4610)

**Northern Arizona University**, Instructor, 1996

Courses: Summer Field Camp

**Northern Arizona University**, Teaching Assistant, 1993-1995

Courses: Introduction to Geology (GLG 100)  
 Structural Geology (GLG 435)  
 Introduction to Field Methods and Report Writing (GLG 240)  
 Advanced Field Methods (GLG 440)  
 Summer Field Camp

### INVITED TALKS AND WORKSHOPS

- 2009 “An Evolving Introductory-Level Energy Course that Combines Geology, Physics, and Public Policy” Panel talk delivered to the Teaching about Energy in Geosciences Courses workshop organized by “On the Cutting Edge – Professional Development for Geoscience Faculty” project, Laramie Wyoming, May 18, 2009.
- 2008 “Non-volcanic seafloor spreading and oceanic core complexes: You can have one without the other”, Invited talk to the session “Modes of Lithospheric Extension: Oceanic and Continental Core Complexes” at the 2008 annual meeting of the Geological Society of America.
- 2003 “Structural Evolution of Mantle and Lower Crust Exposures along Slow-Spreading Mid-Ocean Ridges”, University of Connecticut Geology and Geophysics Department Seminar Series

### LECTURES and WORKSHOPS DELIVERED

- 2014 “Faulting, seawater infiltration, and carbonate precipitation in the lower-crust and upper-mantle: Insights and implications from drilling on the Mid-Atlantic Ridge”, Hanse-Wissenschaftskolleg Fellow Lecture
- 2013 “Large-displacement normal faults in oceanic and continental rift zones”, Hanse-Wissenschaftskolleg Fellow Lecture
- 2012 “Detachment faults and “oceanic core complexes” formed during Non-volcanic seafloor spreading: You can have one without the other” Lecture to 2012 the *Structural Geology Forum*
- 2012 “Water 101: A few things that everyone should know about their water supply” Lecture to *Bennington College Water Dialogs*
- 2009 “How do Mid-Ocean Ridges Really Work?” Rensselaer Polytechnic Institute Geology Dept. Seminar Series
- 2009 “How do Mid-Ocean Ridges Really Work?” Colby College Geology Dept. Seminar
- 2009 “\$4.00/Gallon Gasoline: Nightmare in 2008!, Dream in 2015?” Bennington College Science Seminar
- 2008 “Missing: The Earth’s Crust” Bennington College Science Seminar
- 2006 “Radiometric age dating: You couldn’t live a day without it”, Seminar for ECSU Science and Society Event
- 2006 “Everything you wanted to know about non-volcanic mid-ocean ridges, but were afraid to ask” ECSU-EES colloquium series
- 2006 “Will the gas run out before you get your drivers license?”, ConnCAP summer science program
- 2006 “\$3/gallon Gasoline: 2006 Nightmare, 2012 Dream?”, ECSU “Earth Week” Special Lecture
- 2005 “Recent Developments in Plate Tectonics: Conclusions of Ocean Drilling Program Leg 209” ECSU Lunch and Learn Seminar Series
- 2004 “Oceans and Lakes from the Bottom Up”, Tunza U.N. Children’s Conference on the Environment
- 2003 “Investigating Plate Tectonics at the Source: How to Get Rocks from the Bottom of the Ocean”, ECSU Lunch and Learn Seminar Series

### UNIVERSITY/COLLEGE COMMITTEES

- 2014 – Present, Curriculum Planning Committee, Curriculum Coordinator for Environmental Studies
- 2014 – Present, Academic Policies Committee
- 2012 – 2013, Math Faculty Member Search Committee
- 2012 – CAPA Faculty Steering Committee
- 2011 – 2013, Academic Policies Committee
- 2011, Chair of physics full-time faculty search committee
- 2011, Chair of physics temporary faculty search committee
- 2009 – Present, Bennington College Sustainability Committee; Chair of the Research and Curriculum Sub-committee
- 2007 – 2008, Budget and Resources Allocation Committee

2007 – 2008, EES Department representative to University Senate  
2007, Committee on the Future of Eastern; Horizontal Distinction and Distinctiveness Subcommittee  
2006 – 2008, Liberal Arts Curriculum Technological Literacy Assessment Committee  
2004 – 2008, Arts and Sciences Research Conference and Exhibition Committee; Chair 2007-2008  
2004 – 2006, Sustainable Campus Committee  
2003 – 2004, Search committee for endowed chair position in sustainable energy

## **AWARDS AND HONORS**

2004; Outstanding Dissertation Award: University of Wyoming  
2003; Best Oral Presentation; University of Wyoming Graduate Research Symposium  
1993; University of Wisconsin Geology Dept. Outstanding Senior  
1992; University of Wisconsin Geology Dept. Outstanding Senior

## **FIELD EXPERIENCE/PROJECTS**

### **Western and Central Arizona, 2007 to Present**

Mapped and sampled xenolith-bearing lava flows to examine thermal structure of the lithosphere during the onset of Cordilleran rifting

### **Central Connecticut and South Central Massachusetts, summer 2004 to 2009**

Mapped and studied exposures of the Mesozoic Eastern Border Fault and associated basin fill sedimentary rocks; collaborative, multidisciplinary project with Dr. Peter Drzewiecki using structural and sedimentary techniques to study the formation of the Hartford Basin

### **Mid-Atlantic Ridge, summer 2003**

Participated on Ocean Drilling Program Leg 209 that drilled mantle peridotite and gabbro exposures along the Mid-Atlantic Ridge; analyzed brittle deformation features and alteration minerals; post cruise research uses fault/fracture orientation, microstructures and mineral chemistry to study faulting at mid-ocean ridges

### **Centennial, WY, 2000-2002**

Mapped and sampled Proterozoic mafic and ultramafic meta-igneous rocks for PGE mineral exploration

### **Mid-Atlantic Ridge, 2000**

Participated in MARVEL 2000 research cruise to study the geology of a peridotite/gabbro massif on the Mid-Atlantic Ridge; mapped and sampled seafloor outcrops with manned and remotely operated submersibles; studied seafloor landforms with side-scan sonar; described deformation textures of peridotite and gabbro samples; analyzed structural fabric of seafloor outcrops

### **Bakersfield and Imperial Valley, CA 1999**

Sampled groundwater monitoring wells at hazardous waste landfills

### **Victor, CO, 1998**

Logged core and rotary cuttings of altered volcanic rock drilled in the Pikes Peak gold mine

### **White Mountains, AK, 1997**

Mapped and sampled multiply-deformed metapelites with granitic intrusions for epithermal gold exploration

### **Grand Junction/Western Slope, CO, 1996-1997**

Sampled soil and groundwater and installed monitoring wells, developed regional shallow groundwater elevation model for multiple watersheds; managed drill rig operation in remote oil and gas fields

### **Weld County, CO, 1996-1997**

Sampled soil and groundwater and installed monitoring wells at natural gas compressor stations; Supervised removal of underground storage tanks

### **Dotsero, CO, 1996**

Mapped and sampled deformed Mesozoic sedimentary rocks and late-Tertiary volcanic rocks for the Colorado Geologic Survey's quadrangle mapping project

### **Mogollon Rim, AZ, 1993-1995**

M.S. research of middle-Tertiary volcanic deposits on the southern margin of the Colorado Plateau; mapped inter-layered, altered and structurally deformed lava flows, domes and tuff deposits; measured sections of inter-bedded tuff and volcanoclastic fluvial deposits; collected samples for K-Ar and Ar-Ar dating

### **Stoughton, WI, 1992**

Undergraduate thesis research; installed weather and stream gauging stations to monitor stream response to precipitation events; numerically modeled stream response to hypothetical large storms and designed a storm water retention system to prevent flooding; system was later installed by town

### **Numerous sites across Wisconsin, 1991-1992**

Installed groundwater monitoring wells as a driller for the Wisconsin Geologic and Natural History Survey

**PUBLICATIONS (Student author denoted by \*)****Refereed Journal Articles**

- Schroeder, T., W. Bach, N. Jöns, S. Jöns, P. Monien, and A. Klügel (2015), Fluid circulation and carbonate vein precipitation in the footwall of an oceanic core complex, Ocean Drilling Program Site 175, Mid-Atlantic Ridge, *Geochem. Geophys. Geosyst.*, 16, 3716–3732, doi:10.1002/2015GC006041
- Schroeder T., Bach, W., Jöns, N., Rausch, S., Monien, P., and Kluegel, A., 2015, Multiple generations of deformation-controlled fluid movement and mineralization recorded by carbonate veins in the footwall of an oceanic detachment fault, ODP Site 1275; Manuscript in prep.
- Jöns, N., Bach, W., and Schroeder, T., 2008, Formation and alteration of plagiogranites in an ultramafic-hosted detachment fault at the Mid-Atlantic Ridge (ODP Leg 209): Contributions to Mineralogy and Petrology, DOI 10.1007/s00410-008-0357-2
- Schroeder, T., Cheadle, M., Dick, H.B.J., Faul, U., Casey, J.F., Kelemen, P., 2007, “Non-volcanic seafloor spreading and corner-flow rotation accommodated by extensional faulting at 15°N on the Mid Atlantic Ridge: A structural synthesis of ODP Leg 209”, *Geochemistry Geophysics Geosystems*, v. 8, Q06015 DOI 10.1029/2006GC001567
- \*Rumrill, J.A., Schroeder, T., Dickson, L.D., and Philpotts, A.R., 2007, Qualitative Determination of Compaction in an Andesitic Welded Ignimbrite from Gorely Volcano, Kamchatka Peninsula, Far East Russia: The Compass
- Schroeder, T., John, B., 2004, Strain localization on an oceanic detachment fault system, Atlantis Massif, 30°N, Mid-Atlantic Ridge: *Geochemistry Geophysics Geosystems*, v. 5, N. 11
- Blackman, D. K., Karson, J.A., Kelley, D.S., Cann, J.R., Früh-Green, G.L., Gee, J.S., Hurst, S.D., John, B.E. Morgan, J., Nooner, S.L., Ross, D.K., Schroeder, T.J., and Williams, E.A., 2004, Geology of the Atlantis Massif (Mid-Atlantic Ridge, 30°N): Implications for the Evolution of an Ultramafic Oceanic Core Complex: *Marine Geophysical Researches*, v. 23, p. 443-469.
- Schroeder, T., John, B., and Frost, B.R., 2002, Geologic implications of seawater circulation through peridotite exposed at slow-spreading ridges, *Geology*, v. 30, p. 367-370.
- Kelley D.S., Karson J.A., Blackman D.K., Fruh-Green, G.L., Butterfield D.A., Lilley, M.D., Olson E.J., Schrenk M.O., Roe, K.K., Lebon, G.T., Rivizzigno, P., Applegate, B., Bacher, N., Cann, J., Gee, J., Hanna, H., Hurst, S., John, J., Lyons, S., Morgan, J., Nooner, S., Ross, K., Sasagawa, G., and Schroeder, T., 2001, An off-axis hydrothermal vent field discovered near the Mid-Atlantic Ridge at 30°N: *Nature*, v. 412, p. 145-149.
- Kelley, D., Karson, J., Blackman, D., Fruh-Green, G., Butterfield, D., Lilley, M., Schrenk, M., Olson, E., Roe, K., Lebon J., Applegate, B., Bacher, N., Cann, J., Gee, J., Hanna, H., Hurst, S., John, J., Lyons, S., Morgan, J., Nooner, S., Ross, K., Sasagawa, G., and Schroeder, T., 2001, Discovery of Lost City: An off-axis peridotite-hosted, hydrothermal field near 30°N on the Mid-Atlantic Ridge: *Newsletter of the US RIDGE Initiative*, v. 11, no. 2, p. 3-9.
- Riggs, N.R., Hurlbert, J.S., Schroeder, T.J., and Ward, S.A., 1996, The interactions of volcanism and sedimentation in the proximal areas of a mid-Tertiary small-volume dome field, Central Arizona, U.S.A.: *Journal of Sedimentary Research*, v. 67, p. 142-153

**Maps**

- Drzewiecki P. Schroeder T., \*DePan M., \*Dwyer A.R., \*Bieler, K., \*Milardo, J., Thomas M.A., and Steinen R.P., 2012, Geological map the Hartford South quadrangle, Connecticut: Connecticut Department of Environmental Protection
- Kirkham, Robert M., Streufert, Randall K., Schroeder, Timothy II., and Widmann, Beth L., 1997, Geologic Map of the Cottonwood Pass Quadrangle: Colorado Geologic Survey: Open File Report 97-4, scale 1:24,000
- Streufert, Randall K., Kirkham, Robert M., Widmann, Beth L., and Schroeder, Timothy II., 1997, Geologic Map of the Dotsero Quadrangle: Colorado Geologic Survey: Open File Report 97-2, scale 1:24,000
- Schroeder, T.J., 1996, Geologic Map of the Enebro Mountain Rhyolite, Arizona Geological Survey Contributed Map Series, Contributed Map CM-96-1

**Abstracts**

- Schroeder T., Bach, W., Joens, N., Rausch, S., Monien, P., and Kluegel, A., 2014, Olivine Carbonation and Multiple Episodes of Carbonate Veining during Basement Rock Denudation in an Oceanic Core Complex, ODP Site 1275, Mid-Atlantic Ridge: A Natural Analog for Engineered Carbon Sequestration: Abstract V23A-4770, presented at 2014 Fall Meeting
- Heger, S.E., Riggs, N., and Schroeder, T., 2013, Thermobarometry and geochronology of mid-Tertiary alkalic lavas, Chino Valley, Arizona: Relation to metamorphic core complexes, *Geological Society of America Abstracts with Programs*. Vol. 45, No. 7, p.609
- Schroeder, T, Riggs, N., Ort, M., and Tinnin, B., 2011, Nature of the mid-Tertiary lower crust in the Transition Zone of Arizona as suggested by xenoliths and their host lava; UHP metamorphism followed by retrogression and melt interaction: Abstract to Geological Society of America Annual Meeting.
- Schroeder, T, Riggs, N., and Ort, M., 2010, Retrograded eclogite xenoliths from mid-Tertiary potassic lavas along the southwest margin of the Colorado Plateau: Abstract to the 2010 American Geophysical Union Fall Meeting.

- Schroeder, T., Riggs, N., Ort, M., and Tinnin, B., 2009, Xenolith evidence for isothermal decompression in the central Arizona lower crust prior to mid-Tertiary detachment faulting, Geological Society of America Abstracts with Programs, Vol. 41, No. 7, p. 136.
- Jöns, N., Bach, W., Klein, F., and Schroeder, T., 2009, Mineralogical and chemical records of melt-rock and fluid-rock interaction in abyssal peridotites from the Mid-Atlantic Ridge (ODP Leg 209): Geophysical Research Abstracts, Vol. 11.
- Schroeder, T., Jöns, N., Cheadle M., and Bach W., 2008, Non-volcanic seafloor spreading and oceanic core complexes: you can have one without the other: Abstracts with Programs Geological Society of America, v. 40; 6, p. 107
- \*DePan M., \*Dwyer A.R., \*Bieler, K., \*Milardo, J., Schroeder T., Drzewiecki P., Thomas M.A., and Steinen R.P., 2008, New geologic mapping in the structurally complex hartford South quadrangle, Connecticut: Abstracts with Programs Geological Society of America, v. 40
- Schroeder, T., and Cheadle, M.J., 2007, What is an oceanic core complex?, Abstract to 2007 AGU fall meeting
- \*Goyette, J., and Schroeder, T., 2007, Mineralization patterns on the Mesozoic Eastern Border Fault, Hartford Basin, Connecticut and Massachusetts, Abstract to 2007 National GSA meeting
- Schroeder, T., Loxsom, F., and Drzewiecki, P.D., 2007, Integrating Climate Change and Energy Issues into Traditional Earth Science Curriculum at Eastern Connecticut State University, Abstract to 2007 National GSA meeting
- Loxsom, F., Schroeder, T., and Drzewiecki, P.D., 2007, Interfacing renewable energy studies with the traditional Earth Science curriculum at Eastern Connecticut State University, Abstract to 2007 National GSA meeting
- Schroeder, T., Drzewiecki, P., \*Goyette, J., 2007, Deformation history of the Mesozoic Eastern Border Fault, Hartford Basin, Connecticut and Massachusetts: Abstract to 2007 GSA Northeast Section Meeting
- Drzewiecki, P. A., Gierlowski-Kordesch, E., and Schroeder, T., 2007, Origin of multiple orders of cyclicity in lower Jurassic lacustrine strata of the Hartford rift basin, CT: Abstract to 2007 GSA Northeast Section Meeting
- Schroeder, T., and \*DePan, M., 2006, Relations between faulting mechanisms and fluid types at non-volcanic sections of the Mid-Atlantic Ridge: GSA Abstracts with Programs, Vol. 38, No. 7 p. 17
- Schroeder, T., Cheadle, M.J., Dick, H.B.J., and Faul, U., 2006, Fault mechanisms to accommodate shallow lithospheric corner flow and mantle denudation near the 15°20' Fracture Zone, Abstract to the 2006 Ridge Theoretical Institute, Modeling Oceanic Spreading Center Hydrothermal Processes: Magma to Microbe
- Schroeder, T.J., Hyatt, J.A., Drzewiecki, P.A.1, Coron, C.R., and Fleming, T.H., 2006, Integration of on-line field and laboratory multimedia learning tools for high school and undergraduate earth science students, GSA Abstracts with Programs Vol. 38, No. 2
- \*Berger-Debrodt, D.M., and Schroeder, T., 2006, Deformation Textures and Alteration Mineralogy of Deformed Meta-Peridotite from Ocean Drilling Program Site 1271: GSA Abstracts with Programs, Vol. 38, No. 2, p. 26
- Schroeder, T., Cheadle, M.J., Dick, H.B.J., and Faul, U., 2005, Lithospheric "corner flow" via extensional faulting and tectonic rotation at non-volcanic, slow-spreading ridges: Eos Trans. AGU, 86(52), Fall Meet. Suppl., Abstract T41D-1329
- Hyatt, J.A., Coron, C.R., Schroeder, T.J., Fleming, T., and Drzewiecki, P.A., 2005, Improving Geoscience Outreach Through Multimedia Enhanced Web Sites - An Example From Connecticut: Eos Trans. AGU, 86(52), Fall Meet. Suppl., Abstract ED31C-1228
- Drzewiecki, P.A., Schroeder, T.J., McGrath, J.E., and Champion, K.M., 2005, Sedimentological and Structural Interpretation of the Geometry and Timing of the Eastern Border Fault System (Connecticut and Massachusetts): New Methods to Examine Old Problems, abstract to 2005 Geological Society of America national meeting
- Grimes, C.B., John, B.E., Swapp, S., Schwartz, J., Mazdab, F., Schroeder, T., Wooden, J., 2005, U-Pb dating of hydrothermal zircon: Fracturing and fluid flow in mantle peridotite at the MAR, Geochimica et Cosmochimica Acta. v. 69, no. 10, Supp. 1, p A294.
- Hyatt, J., Drzewiecki, P.A., Schroeder, T. J., Coron, C.R., and Fleming, T., 2005, Developing on-line and CD learning tools to assist new K-12 earth science teachers: GSA Abstracts with Programs Vol. 37, No. 1
- \*Rumrill, J.A., Schroeder, T., Dickson, L.D., and Philpotts, A.R., 2005, Determination of compaction during welding of andesitic ignimbrite, Gorley Volcano, Kamchatka Peninsula, Far East Russia: GSA Abstracts with Programs Vol. 37, No. 1
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