**Merritt Review**

**Erich U. Petersen**

**2014**

Teaching

S14 GEO 3080 Earth Materials I, Redesigned course for Spring offering

GEO 5450 Introduction to Mineral Deposits and Exploration

GEO 5900 Geological Internships

F14 GEO 1000 Natural Disasters

GEO 3030 Earthquakes and Volcanoes

GEO 5900 Geological Internships

S15 GEO 3080 Earth Materials I, Redesigned course for new Spring calendar

GEO 5900 Geological Internships

Student Supervision

Scott Hill, M.S., Geology of Uranium Deposits, Chair

Sherie Harding, Ph.D. Committee Member, 2014 Completed

L. Zhu, Ph.D., Committee member

Lin Wei, M.S., Committee Member, 2014 Completed

Patti Garcia, M.S., Committee Member

Michael Jorgensen, M.S., Committee Member

Thomas Etzel, M.S., Committee Member

Carl Beno, M.S., Committee Member

Feng Shihang, M.S., Committee Member

Daeung Yoon, M.S. Committee Member

Yue Zhu, M.S., Committee Member

Hongzhu Cai, M.S., Committee Member

General Advising

Earth Science Composite Teaching Major

Geoscience Major

Publications

Safarzadeh, M.S. Miller, J.D. and Petersen, E.U., 2014, Effects of sulfuric acid dosage on the baking of an enargite concentrate. Minerals & Metallurgical Processing, Vol. 31, No. 4, pp. 193-199.

Harding, S.C., B. P. Nash, E. U. Petersen, A. A. Ekdale, and M. D. Dyar, 2014, Mineralogy and geochemistry of the main glauconite bed in the middle eocene of Texas: paleoenvironmental implications for the verdine facies. PLoS ONE (Impact Factor: 3.53). 02/2014; 9(2):e87656.

Petersen, E.U. and S.C. Harding, 2015, VNIR Spectra of Glauconite and associated minerals, (in preparation)

Petersen, E.U. and Chávez, W.X., Jr., 2014, SEG Student Field Trip 12 Guidebook – Major Copper – Molybenum Porphyry Systems, Southwestern, USA, *in* J.A. Thoms, and B.R. Putnam, Eds., 52 p.

Chávez, W.X., Jr. and Petersen, E.U., 2014, SEG Foundation Student Dedicated Field Course – Major Porphyry Copper and Molybdenum Deposits of the Southwestern U.S. SEG Newsletter 97.

Petersen, E.U. and Chávez, W.X., Jr., 2015, SEG Student Field Trip 14 Guidebook –Copper – Gold – Silver – Molybdenum Metallogeny of Northern Chile, *in* J.A. Thoms, and B.R. Putnam, Eds., ~50 p. (In preparation).

Abstracts

Harding, S. C., A. A. Ekdale, E. U. Petersen, B. P. Nash, and M. D. Dyar, 2013, Ichnology and mineralogy of the Main Glauconite Bed, Claiborne Group, Middle Eocene, Texas: Paleoenvironmental implications: Gulf Coast Association of Geological Societies Transactions, v. 63, p. 549–554.

Afe Lange, 2014, Hydrothermal Alteration Associated with the Sunbeam Vein System, Silver City, UT, UROP Symposium

Otgonbayar Orchibat, 2014, Hydrothermal Alteration in Silver Pass, Area. Eureka, UT, UROP Symposium

Invited

UROP Projects

Langi, Afe, 2013, Hydrothermal Alteration Associated with the Sunbeam Vein System, Silver City, UT, Funded 11/2013.

Ochirbat, Otgonbayar, 2013, Geothermal Alteration in the Silver Pass Area, Eureka, UT, Funded 11/2013.

Schraidt, Claire, 2014, Geothermal Alteration in the Treasure Mountain Area, Eureka, UT, Funded Summer 2014

Schraidt, Claire, 2015, Quantitative Assessment of Alteration in the Treasure Mountain Area, Eureka, UT, Funded Fall 2014.

Melquist, Evan, 2014, Geothermal Alteration in Government Canyon, Eureka, UT, Funded Summer 2014.

Melquist, Evan, 2014, Paleo Geothermal Alteration in Government Canyon, Elberta, UT, Fall 2014.

Proposals

Petersen, E.U., 2014, Roll-Front Uranium Potential in the San Rafael Mining District, Emery County, Utah, Uranium UGS, $24,700, not funded.

Miller, J.M., Nelson, M.G., and E.U. Petersen, 2014, Newmont-University of Utah Partnership. $50,000. Scholarships, Outreach Coordinator, Student activity fund. Funded, year 4 of 5.

University Service

Teaching Committee

College Service

UCATE (College of Education)

Departmental Service

Distinguished Lecture Series Coordinator (Fall 2014)

Undergraduate Affairs

Collection Committee

SEG Student Chapter (Faculty Advisor)

Undergraduate Internships

Collaborators

V. Burtman, M. Zhdanov, A.A. Ekdale, D.A. Dinter, Stuart Simmons (EGI), William X. Chávez, Jr. (NMT)

Qemscan Project Supervision

Tyler Huth

Vlad Burtman

Pattie Garcia

Sanja Miscovic

Joshua Werner

Sato

Mark Gorenc

Olivia Miller

Outreach

Science Day at the U Presenter: “Zapping Crystals with Lasers”, November, 2014

MSSST Presenter: February, 2014

Invited Lectures

Peru

Local, National, International Field Trips

GEO 3080, Tintic District, UT, October

GEO 3260, Geothermal history of the Tintic Caldera, October

*SEG Chapter*

Tinitc District Geology with Dr. Stuart Simmons May, 2014

Tintic District Hydrothermal alteration field trip, 2 trips. Spring, Fall

University of Montreal – Geology of the Tintic District, May 7, 2014

Porphyry Copper Deposits of Northern Chile, February, 2015, 6 students, 7 days

*SEG Foundation* (*Society of Economic Geologists*)

Leader: 12th International Student Field Course, Major Porphyry Copper and Molybdenum Deposits of the Southwestern U.S., March 9-16, 7 days, 20 participants from 9countries, 5 continents 14 universities.

Future

27th IAGS Workshop 2015 Program Short course on Geochemistry, April 2014

SEGF 14 Copper – Gold – Silver – Molybdenum Metallogeny of Northern Chile, March 6-14, 7 days, 21 participants from 10 countries, 5 continents 13 universities.