**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.