

2011

Mini-Symposium on Rare Earth Element (REE) Geology

Colorado School of Mines and the CSM
Society of Economic Geologists Student
Chapter

December 2, 2011

10:00 AM – 2:45 PM



COLORADOSCHOOLOFMINES
EARTH • ENERGY • ENVIRONMENT





**CSM – SEG Student Chapter Mini-Symposium on
Rare Earth Element Geology**

December 2, 2011

10:00 AM – 2:45 PM

Ben Parker Student Center, Ballroom A

Colorado School of Mines

Golden, Colorado USA

Presenters:

Yasushi Watanabe, Geological
Survey of Japan – AIST

Brad Van Gosen, USGS

Philip Verplanck, USGS

Mandi Reinshagen, Colorado
School of Mines, Rare Element
Resources

Michael Lee Berger, University
of Colorado, Molycorp

Dick Grauch, former USGS

Roderick Eggert, Colorado
School of Mines



Symposium description:

Given recent decreases in Rare Earth Element exports from China and the growing demand for these energy critical elements, REE supplies are at the forefront of energy concerns. Rare earth elements are used in a number of products, including high-strength magnets, lanthanum bearing batteries and other hybrid car technologies, photovoltaic cells, fluorescent light bulbs, disk drives, and a number of other widely used technologies – the demand for which continues to grow. China currently leads the world in REE production though other countries (USA, Australia) expect near term production.

This symposium will examine the geology and economics of rare earth elements. While the focus is on US resources and deposits, it will also examine the important ion absorption clay deposits of southern China. The CSM Department of Geology and Geological Engineering in association with the CSM Society of Economic Geologists Student Chapter invite you to attend this mini-symposium on rare earth element geology with talks and discussion from rare earth element experts from around the world.

RSVP: Please reserve your spot for the Mini-Symposium on Rare Earth Element Geology by contacting Wesley Hall (whall@mines.edu). Seating will be limited, so please RSVP today.

Schedule

10:00 – 10:05 AM	Welcome and Introduction Murray Hitzman and Wesley Hall - CSM
10:05 – 11:45 AM	<i>“Rare earth deposits: From where we can get them?”</i> Yasushi Watanabe – Geological Survey of Japan – AIST
11:45 – 12:05 PM	<i>“The Principal Rare Earth Deposits of the United States”</i> Brad Van Gosen – USGS
12:05 – 12:25 PM	<i>“Carbonatite and Alkaline Igneous Rock-hosted REE”</i> Philip Verplanck – USGS
12:25 – 12:55 PM	Lunch and Discussion
12:55 – 1:15 PM	<i>“REE in Supergene and Hypogene Altered Carbonatite, Bear Lodge, WY”</i> Mandi Reinshagen – CSM, Rare Element Resources
1:15 – 1:30 PM	<i>“Geology and Progress at the Mountain Pass, CA REE Property”</i> Michael Berger – CU, Molycorp
1:30 – 1:55 PM	<i>“Ion-clay REE deposits of southern China”</i> Dick Grauch – former USGS
1:55 – 2:35 PM	<i>“Economic and policy dimensions of critical elements and materials”</i> Roderick Eggert – CSM
2:35 – 2:45 PM	Discussion