Dear Colleagues:

We are opening registration for the 13th offering of our *Short Course on Ore Deposits Mapping*, which will take place **Thursday, August 29 through Saturday, September 7, 2019**. A tentative outline is given below.

**Course Details:**

As has been tradition in the U of A’s advanced ore deposits curriculum over the last 14 years, **Mark Barton and Eric Seedorff** will again be leading the extended field trip and mapping course through the Great Basin. It will be an opportunity to see ore deposits of various types and ages, set in the context of the structural and magmatic evolution of the region. The trip is designed for graduate students taking an advanced ore deposits class, but we will make available approximately 25 seats for members of industry.

The trip will include a focused multi-day introduction to the “Anaconda-style” of detailed mapping in the Yerington district, Nevada. The district contains porphyry copper and skarn mineralization, but the mapping method is adaptable to any type of deposit. As part of this, we highlight how mapping can be used to understand zoning, the time-space evolution of mineralizing systems, and the relationships to the fundamental phase equilibria of hydrothermal alteration. In addition to numerous other geologic stops, the trip also anticipates to include overviews and/or tours of the following districts and deposits:

- **Tonopah, Nevada** [low-sulfidation epithermal Ag-Au],
- **Goldfield, Nevada** [high-sulfidation epithermal Au],
- **Birch Creek, California** [F-Be-W-(Zn) greisen/skarn],
- **Humboldt, Nevada** [IOCG occurrences],
- **Eureka district, Nevada** [partially superimposed systems, with Carlin-type Au mines at Windfall, Rustler and Archimedes, a porphyry Mo-Cu to replacement Zn-Pb-Ag deposit at Ruby Hill, and the top of a F-W-Zn-Be-(Mo-Sn) system at McCullough Butte]
- **Robinson district, Nevada** [porphyry Cu-(Mo-Au) and related skarn and distal Au-Ag deposits].
The trip is 10 days round trip from Las Vegas, covering about 2500 miles in 4WD vehicles. Industry participants should plan to arrive in Las Vegas no later than Wednesday evening August 28, as the trip leaves early on Thursday morning August 29. Industry participants should also plan to depart from Las Vegas no earlier than Saturday night September 7, 2019.

The early registration cost of the trip (before July/12/2019) for non-university participants is US $3,500.00 which includes ground transportation, all lunches in the field, double-occupancy accommodations in motels each night during the trip, and course materials. Breakfasts and most dinners are the responsibility of participants. Industry participants also will need to provide their own transportation to and from Las Vegas as well as their accommodations the night preceding and following the trip. Please respond via e-mail to brambila@email.arizona.edu for registration or questions. Register soon! This course sells out quickly.

Please find attached to this letter all registration materials (registration for as well as the documentation required for foreign nationals (non-US citizens) so that you can forward this information to your co-workers and friends.

We also take the opportunity to inform you that our Short Course on Porphyry Cu, Mo, and Au Deposits will take place again December 3-12, 2019. This 9-day short course has a focus on exploration geology that includes 3½ days of lectures and 2 days of labs in Tucson, and 3½ days of field trips to representative ore systems in Arizona. Visit our webpages: http://lpeg.geo.arizona.edu/ to register for this short course and learn more about our program. Also visit Dr. Mark Barton’s and Dr. Eric Seedorff’s webpages, where you can find some additional background, maps, and photos related to our short courses.

Sincerely,

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Your $3,500 registration fee includes:

- ground transportation during field trips
- all lunches in the field
- double-occupancy accommodations in motels each night during the trip
- course Materials and handbook

You will need to pay:

- Most Breakfasts (some hotels have free continental breakfast) and dinners are responsibility of participants
- Participants will need to provide their own transportation to and from Las Vegas as well as their accommodations the night preceding and following the trip.

The Short Course on Ore Deposits Mapping consists of exercises that require that you have with you the following personal equipment:

- Hand lens, pencil magnet (± carbide scribe)( we have some extras in case you don’t have one)
- Rock hammer, compass (i.e., Brunton), acid bottle*
  *we will have additional 10% HCl, as well as some Bruntons and acid bottles that can be checked out
- Clipboard, field notebook (we will provide it) , pencils
- Colored pencil ( we will provide them)
- Field pack, ≥ 2 liters water bottles
- Good field shoes
- Steel toed boots
- Appropriate field clothing:
  ✓ sun and eye protection, hiking footwear
  ✓ you must have hard boots and long sleeves/pants for mines (Yerington, Eureka; steel toed boots are required for the Robinson mine tour)
  ✓ we provide safety glasses, hard hats, vests