

# UNESCO-SEG-SGA Latin American Metallogeny Course

La, Paz, Bolivia • August 18–29, 2008

*Fernando Barra, International Coordinator of the 2008 Edition*

In August 2008, 75 young geologists working in academia and the mining industry and representing seven countries of Latin America (Argentina, Peru, Colombia, Mexico, Brasil, Costa Rica, and Bolivia) gathered in the high-altitude city of La Paz, Bolivia, to participate in the XXVII edition of the UNESCO-SEG-SGA Metallogeny Course. This year the course was hosted by the Universidad Privada Boliviana and organized by Osvaldo Arce (EMUSA), with Fernando Barra (University of Arizona, USA) as International Coordinator. The course is designed to provide participants with an update on the current status of research on mineral deposits with leading researchers in the field. Six lecturers from Europe (Bernd Lehmann, Technical University of Clausthal; Fernando Tornos, Instituto Geologico Minero de España; Larryn Diamond, University of Bern) and the United States (Mark Reed, University of Oregon; Antonio Arribas, Newmont Mining Corp.; Fernando Barra, University of Arizona) talked about different tools used in the study of mineral deposits, including geochemical modeling, fluid inclusions, radiogenic isotopes and geochronology, and a variety of mineral deposit types such as Sn-W and diamond deposits, skarns, iron oxide-copper-gold, epithermal, and orogenic gold deposits. A full day of lectures was devoted to mineral deposits in Bolivia

and entirely presented by local instructors: Michael Biste, James McNamee, Oscar Ballivián, Ramiro Mattos, Eddy Escalante, and Osvaldo Arce.

Following the week-long series of lectures, 35 participants embarked on a field trip to some of the most important ore deposits of Bolivia. Sites visited included the Kellhuani tin district in the Cordillera Real, the “red bed” sediment-hosted strata-bound Coro Coro deposit, the Kori Chaca gold deposit, the polymetallic Bolivar mine, the epithermal deposit of San Cristobal, Salar de Uyuni, the world’s largest salt flat, with more than 10,500 km<sup>2</sup>, and, last but not least, the world’s largest silver deposit, Cerro Rico de Potosi. Potosi, located at 4,090 m above sea level, is probably the highest city on Earth and was named by UNESCO as a World Heritage Site in 1987.


The course is possibly the most prestigious and important in the field of economic geology that is offered in Latin America. Previous editions of the course have been held in Mendoza, Argentina; Lima, Peru; Antofagasta, Chile; and Ciudad de Mexico, Mexico, and since the course became itinerant in 2004 more than 300 geologists have participated. Each year the number of geologists that apply to the course increases (for the 2008 course we received over 150 applications!).

Although the number of interested professionals continues to increase, it is

unlikely that the number of participants will get much over 75, mainly because of logistics; the field trip group has already reached a maximum manageable number of about 35 participants. What makes this course so appealing to young (and not so young) Latin American geologists? Course evaluations show that one of the main reasons is the high level of the lectures (the group of instructors varies from year to year), others mentioned the fact that the course has a field component so they can apply what they have learned in the lectures and have the opportunity to visualize and discuss with lecturers and colleagues different styles of mineralization. For many, the main reason is that most of the lectures are given in their native language, Spanish, so it is easier for them to follow the presentations and ask questions.

Although the reasons are diverse, the continued success of the course is based on the increasing number of geologists—from both academia and industry—interested in learning and discussing different aspects of ore formation from leading researchers in the field. This course could not be possible without these researchers, who provide their time and knowledge without asking a penny in return, and the support of UNESCO, SEG, SGA, and mining companies.

The next edition of the course will be held in Belo Horizonte, Minas Gerais,

Brazil, and will be organized by Francisco Javier Rios (CDTN) and Carlos A. Rosiére (IGC-UFGM), with Fernando Tornos as International Coordinator. Further information can be found at <http://www.unige.ch/sciences/terre/mineral/seminars/latinometal.html> > 



Metallogeny course field trip participants gather for a photo.