

Report on the XXVII edition of the UNESCO-SEG-SGA Latin American Metallogeny Course La Paz, Bolivia, August 18–29, 2008

Fernando Barra, International coordinator of the 2008 edition

Department of Geosciences, The University of Arizona, Tucson, AZ, USA

The UNESCO-SEG-SGA Latin America Metallogeny Course was held in La Paz, Bolivia from 18-29 August, 2008. This year the course was hosted by the Universidad Privada Boliviana and organized by Osvaldo Arce (EMUSA) and Fernando Barra (University of Arizona, USA) as International Coordinator. The purpose of these Latin America courses is to provide an opportunity for young geologists working on academia or in the mining industry to update their skills and knowledge on mineral deposits with leading researchers in the field.

The 2008 course comprised two parts: a series of lectures which provided participants with a review on the geochemistry of hydrothermal processes (Mark Reed, University of Oregon), an update on the use of fluid inclusions (Larry Diamond, University of Bern) and new applications of radiogenic isotopes and geochronology in the study of mineral deposits (Fernando Barra, University of Arizona). Following lectures focused on the geology and genesis of Sn/W and diamond deposits (Bernd Lehmann, Technical University of Clausthal), skarns and IOCG (Fernando Tornos, Instituto Geológico Minero de España), epithermal (Antonio Arribas, Newmont Mining Corp.) and orogenic gold deposits (Larry Diamond). A full day of lectures was devoted to mineral deposits in Bolivia and entirely presented by local instructors (Michael Biste, consultant; James McNamee consultant; Oscar Ballivián, Universidad Mayor de San Andrés; Ramiro Mattos, Universidad Mayor de San Andrés; Eddy Escalante, consultant; and Osvaldo Arce, Empresa Minera Unificada S.A.). The theory part was followed by a week-long 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 stratabound Coro Coro deposit, the Kori Chaca gold deposit, the polymetallic Bolivar mine, the epithermal deposit of San Cristobal, the

Salar de Uyuni world’s largest salt flat with more than 10,500 km² and last but not least the world’s largest silver deposit, Cerro Rico de Potosi. Potosi, located at 4090 m above sea level is probably the highest city on Earth and was declared by Unesco as a World Heritage Site in 1987.

We received over 150 applications but the theory course was limited to 75 participants and the field trip to 35. Of the 75 participants 21 were granted scholarships. Course participants were from Argentina, Peru, Colombia, Mexico, Brasil, Costa Rica and Bolivia. About 80% of participants were from mining companies, which reflects the high interest of young geologists working in the mining industry in updating their knowledge of mineral deposits. On the other hand, the lower participation of geologists working in academia reflects the current status of the field, with fewer young geologists pursuing graduate studies or a career in academia.

The course is the most prestigious and important in the field of Economic Geology that is offered in Latin America. 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, and the support of Unesco, SGA, SEG 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), and Fernando Tornos as International Coordinator. Further information can be found at <<http://www.unige.ch/sciences/terre/mineral/seminars/latinometal.html>>



International instructors of the 2008 edition of the course with typical Bolivian hats. From left to right: Larry Diamond, Fernando Barra, Fernando Tornos, Bernd Lehmann, Mark Reed, Antonio Arribas.



Course participants pose for a group photo at the Universidad Privada Boliviana.



A group of participants to the field trip prepare to enter the Bolivar mine.