

# University of Geneva - Department of Mineralogy

## PhD Research Positions in Economic Geology - Polymetallic and Precious Metal Mineralization in the Miocene Morococha District, Central Peru

Applications are invited for two fully funded Ph.D. research positions in Economic Geology to commence in May 2006. The projects will be focused on the Miocene Morococha district in Central Peru where different styles of mineralization (porphyry, skarn, polymetallic and precious metals veins and mantos) occur. The highly mineralized historical district of Morococha is situated about 140 km east of Lima at an altitude between 4700 and 4900m and lies within one of the world's most prolific mineral belts for polymetallic ore deposits. The two parallel projects will be coordinated with and in part supported by the Pan American Silver Corporation, operating in the area, and present an excellent opportunity to investigate the origin of different genetical types of ore bodies in a porphyry-related setting, and their relationship with the coeval magmatism and host sedimentary rocks. Two MSc projects will run in parallel.

**The first project** is mainly sponsored by the Pan American Silver Corporation and will be field-oriented seeking to elaborate a comprehensive model for the geological setting in which the ore bodies formed, based on a detailed geological mapping (surface and underground) and structural analysis, as well on magmatic geochemistry and geochronology.

*Requirements:* Candidates should have a good background in Geology. Preferences will be given to candidates with relevant experience in geological mapping, ore deposits geology, structural geology and magmatic petrology and geochemistry. Spoken Spanish for the field work is of advance.

**The second project** is mainly sponsored by the Swiss National Science Foundation and shall investigate the mineralogical and geochemical characteristics of the different types of ore bodies, their relationship and evolution in space and time, and the origin and chemistry of mineralizing fluids. Stable and radiogenic isotope geochemistry and simple modelling will be used in order to constrain the fluid source(s).

*Requirements:* Applications are welcome from people with education in Geology, Geochemistry or related fields. Analytical skills in isotope geochemistry, fluid inclusion analyses and different microscopic and spectroscopic methods, as well as good field experience, will be considered as an advance.

In addition, good computational, writing, and communicational skills are essential for these projects, which involve close interaction between the university and the industry. The positions are for 3 years. Interested candidates should send a detailed CV (including details on all third level university courses and grades), with covering letter, two references, (expected) date and abstract of MSc thesis and full contact details. Positions will be filled as soon as suitable candidates are found.

### Contact and further details from:

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