



Workshop Schedule (Preliminary)

WS10 - Hydrothermal Alteration Patterns in Iron Oxide Copper- Gold Systems: Recognition, Interpretation and Implications for Exploration

www.seg2019.org/workshops.html#10

Date: Friday, October 11, 2019

Time: 8:30am - TBD

Location: Solace Hotel

Presenter: Roberto Xavier

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Language: Spoken: Spanish

Slides: English



Iron oxide copper-gold (IOCG) systems have become attractive targets to exploration companies due to their polymetallic nature, huge resources, and the general trend to form deposit clusters, rather than single and isolated deposits. In the Andes (e.g., Chile and Peru) and the Amazon Craton (e.g., Carajás Mineral Province, Brazil), these systems form districts that are important base and precious metal producers. The mineralization in these deposits is typically enveloped by zones of hydrothermal alteration which, together with other geological, mineralogical, and geochemical tools, provides fundamental information to ore vectoring during green- and brownfield exploration programs. This workshop intends to focus on ore-forming processes in IOCG systems, with emphasis on the recognition and interpretation of their hydrothermal alteration patterns.



WS10 - Schedule

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- 8:30am - 9:00am: Model- or process-driven mineral exploration targeting? The concept of mineral system
- 9:00am - 10:00am: Definition and classification of IOCG systems; If IOCGs are so diverse, what are their common geological features relevant to exploration?
- 10:00am - 10:30 am: Break
- 10:30am - 12:00pm: Hydrothermal alteration and ore mineral assemblages in IOCGs: Implications of fluid evolution and conditions of ore deposition
- 12:00pm - 1:30pm: Lunch
- 1:30pm - 3:00pm: Transport and deposition of metals by hydrothermal fluids in IOCG systems; IOCG fluid regimes and genetic models
- 3:00pm - 3:30pm: Break
- 3:30pm - 5:00pm: The IOCG systems of the Carajás Mineral Province, Amazonian craton (Brazil): A case of multiple Archean and Paleoproterozoic episodes; comparison with the Andean IOCG systems
- 5:00pm - 5:30pm: Concluding remarks – key parameters and potential footprints for exploration