

GEOCHEMISTRY APPLIED TO MINING EXPLORATION: PORPHYRY AND EPITHERMAL SYSTEMS



Saturday 27
March, 2021



From 9:00 am.
to 4:00 pm.



Language: Spanish
(simultaneous interpreting)

ABSTRACT

This course is aimed at professionals and students interested in the interpretation of geochemistry (mineralogy) of hydrothermal systems, and the practical application of geochemistry to mineral exploration.

I) Introduction to the subject

- a) Geochemical reactions - reflections of mineral associations and balance (or not) of the hydrothermal system.
- b) Use (and abuse) of activity diagrams

II) Examples of geochemistry applied to alteration-mineralization

- a) Cu-Mo +/- Au porphyry
 - i) The deep environment - "late-magmatic" and constructive alteration (K, Ca-Na)
 - ii) Overlapping of alteration associations: destructive alteration and reorganization (redistribution) of minerals.
 - iii) Late effects and geochemical surprises
- b) Low and High Sulfidation Epithermal Systems
 - i) Transition: porphyry environments - epithermal - "Cordilleran" type veins
 - ii) Destructive alteration - advanced argillic and mineral paragenesis
 - iii) Low sulfidation systems - geochemical changes
 - iv) "Cordilleran" veins - transition to epithermal veins?

III) Conclusions and Discussion

INSTRUCTOR

Dr. William Chávez Jr.



William X. Chavez, Jr. is Professor of Geological Engineering at the New Mexico School of Mines, U.S.A. He received degrees in Geology (1976) and Mining Engineering (1977) from this same institution; he continued his education with a Master's degree (Geology, 1980) and Ph.D. (1984) from the University of California at Berkeley.

Since 1985, he has been teaching at Socorro, focusing on hydrothermal and supergene processes applied to mineral exploration, and studies in mining remediation geochemistry. He is an advisor to mining companies and has worked in several countries applying geochemistry to the evaluation of mining prospects. He has taught field courses and workshops organized by the Society of Economic Geologists (SEG), and is an "Honorary Lecturer" of the SEG.

COSTS

CATEGORIES	RATES
Non-Associates	USD 120.00
Associates	USD 100.00
Teachers / Students	USD 80.00
Student associates	USD 60.00

Cost include Peruvian taxes / Associates must be up to date in their 2020 payments / Includes digital certificate

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