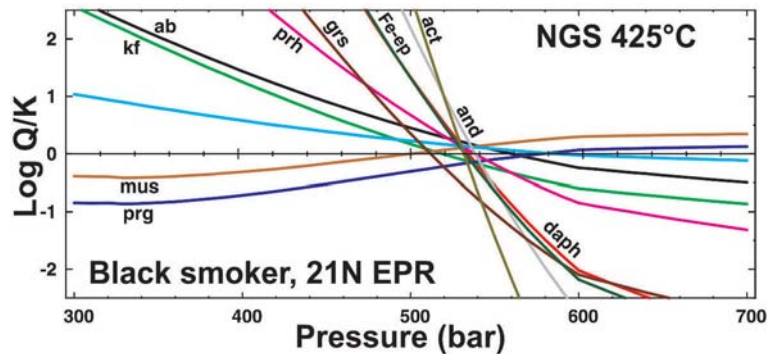


From magma to hot springs: Geochemical modeling of hydrothermal processes

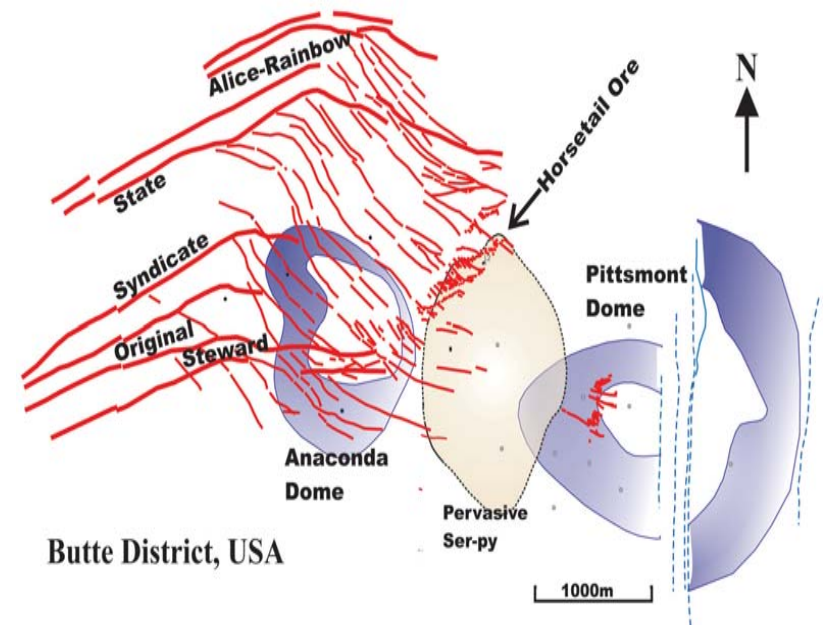
One-day short course given by Prof. Mark H. Reed (University of Oregon, USA)



10 June 2015 (9h00-12h00 / 13h30 - 16h30)

University of Geneva, Department of Earth Sciences
Geneva, rue des Maraîchers 13, room 001

1. Concepts of simultaneous geochemical equilibrium modeling and how it is useful for understanding hydrothermal systems.
2. Equations and methods
3. How do we know equilibrium modeling applies to the real world?: geothermal systems, diagenesis, reproducibility of mineral assemblages
4. Hydrothermal alteration and adiabatic decompression in magmatic-hydrothermal systems, e.g. Butte, Montana
5. Seawater-basalt reaction and the origin of black smoker fluids
6. Boiling and mixing of waters in geothermal and epithermal systems and consequent precipitation of scale, which clogs pipes, or precipitation of gold ore, which clogs fractures.



People interested in participating should send an email to Kalin Kouzmanov
(kalin.kouzmanov@unige.ch) and register via the DPMS web site (<http://mineral.cuso.ch/>)