Session Title: Mineralization and mineralizing environments: Exploring mineral paragenesis

Conveners: Morrison, Hazen

Abstract: Mineral speciation, composition, and characteristics are the direct result of the physical and chemical conditions of their formational environments. These conditions are unique to certain time periods of Earth and planetary evolution, to select planetary bodies and regions, and/or to specific geologic or biologic processes. As a result, minerals and their embedded information offer a view into mineralizing environments across space and time – a powerful tool for understanding the processes, events, and materials that govern our complex evolving planetary systems.

This session welcomes contributions related to mineral paragenesis/modes of formation, mineralizing environments, early earth environments, minerals and mineralizing systems on other planetary bodies, mineral and geochemical biosignatures, environmental signatures in minerals, mineral evolution, mineral ecology, and changes in mineralization and mode of mineralization through deep time.