Special Issue

Ancient and Modern Subduction Zones: Tectonic, Petrological and Geochemical Aspects of Ore and Magma Genesis

Message from the Guest Editors

Subduction zones are the loci for generation of continental crust throughout most of the Earth's geologic history. They are associated with prolific volcanism and plutonism, accretionary tectonics and mountain building as well as large-scale recycling of chemical elements between mantle and crustal reservoirs. Ancient and modern subduction zones are associated with a wide range of ore deposits. Deciphering these mineralized systems requires better understanding of possible role of hydrous and halogen-rich fluids, mobility of highly siderophile and chalcophile elements in magmas and hydrothermal brines as well as impact of various tectonic and petrologic factors on ore formation in subduction settings. Subduction zones also play an integral role in recycling volatile elements between the surficial and internal reservoirs of the Earth. This Thematic Issue focuses on interdisciplinary studies in subduction zone processes with emphasis on tectonic, petrological and geochemical controls on mantle and crustal evolution, petrogenesis of arc magmas and formation of subduction-related ore deposits. We welcome contributors from all branches of geosciences.

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Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.
We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Editor-in-Chief

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