



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

Guest Editors:

Dr. Pavel Kepezhinskas

1. Kosygin Institute of Tectonics
and Geophysics, Russian
Academy of Sciences,
Khabarovsk, Russia
2. PNK GeoScience, Tampa, FL,
USA

Dr. Manuel Roda

Dipartimento di Scienze della
Terra, Università degli Studi di
Milano, Via Mangiagalli, 34, 20133
Milano, Italy

Deadline for manuscript
submissions:

closed (15 December 2021)

Message from the Guest Editors

Dear Colleagues,

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.





Editor-in-Chief

Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO
(CSIC-UCM), C/ Del Doctor Severo
Ochoa 7, Edificio
Entrepabellones 7 y 8, 28040
Madrid, Spain

Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based 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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [ESCI \(Web of Science\)](#), [GeoRef](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: CiteScore - Q1 (*General Earth and Planetary Sciences*)

Contact Us

Geosciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/geosciences
geosciences@mdpi.com
[X@Geosciences_OA](#)