Special Issue

The "Green Earths" Glauconite and Celadonite: From Genesis to Application

Message from the Guest Editors

Authigenic "green earths" show a broad compositional spectrum, including potassic green clay with mica-like structures such as celadonite and glauconite and ferric illite, ferrous green clays and other phases. Celadonite and glauconite are comparable in physical, chemical and mineralogical characteristics. The microenvironment where these minerals form requires slightly oxygen-depleted conditions, facilitating the uptake of Fe into the structure so that alauconite is ubiquitous in marine deposits while celadonite forms in both marine and non-marine environments, more commonly by altering intermediate to mafic rocks. Recent studies show that there are subtle differences in their structure so different techniques can be applied to distinguish them. This is also important due to their application as pigments in creating artworks since antiquity. The aim of this Issue is to bring together researchers from different fields (sedimentology, mineralogy, petrology, and archaeometry) to acquire new knowledge on their geological history and successive transformation as well as a more precise classification of the green pigments in heterogeneous samples.

Guest Editors

Dr. Davide Lenaz

Department of Mathematics, Informatics and Geosciences, Università degli Studi di Trieste, 34128 Trieste, Italy

Dr. Filippo Parisi

Centre for Vibrodiagnostics, Equipment Testing and Automation (CVDTEA), Department of Engineering Science, Babeş-Bolyai University, Str. Mihail Kogălniceanu, nr. 1, 400084 Cluj-Napoca, Romania

Deadline for manuscript submissions

closed (25 April 2025)



Minerals

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.4



mdpi.com/si/194994

Minerals Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 minerals@mdpi.com

mdpi.com/journal/ minerals





Minerals

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.4



minerals



About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).