

## 18<sup>th</sup> INTERNATIONAL SYMPOSIUM ON EXPERIMENTAL MINERALOGY, PETROLOGY, AND GEOCHEMISTRY (EMPG 2023)

The 18<sup>th</sup> International Symposium on Experimental Mineralogy, Petrology, and Geochemistry (EMPG 2023), organized by the Department of Earth Science “Ardito Desio,” took place at the historical headquarters of the University of Milan – La Statale, Italy. This in-person conference—marking the first post-pandemic EMPG gathering—saw lively participation from 200 scientists, representing European and non-European regions, with 40% comprising young researchers, showcasing the enduring enthusiasm of the experimental community.

Participation was enhanced through the awarding of seven scholarships to students from distant areas like Australia, the United States, Brazil, and Chile. Further support was provided through the selection of four grants for the best contributions: two oral presentations and two posters.



Patrizia Fumagalli presents the programme of the symposium to the audience.



Max Schmidt (ETH Zürich), speaker of the opening Plenary Lecture.

The symposium covered nine broad themes, encompassing established topics like igneous petrology, element and isotope partitioning, mineral physics, fluids, and methodological development, as well as more novel themes such as ore deposits and environmental geochemistry. The program featured 16 oral sessions and 89 posters that were displayed throughout the full duration of the conference, fostering intense scientific exchange among researchers.

The proceedings opened with a plenary lecture delivered by Max Schmidt (ETH Zürich, Switzerland), who updated the community on incipient magmatism and ignited scientific enthusiasm with the intriguing title “MORB, OIB (+carbonatites), kimberlites: Surface expressions of the same incipient mantle melting?” Four additional plenary events



EMPG 2023 Organizing committee (LEFT TO RIGHT): Arianna Secchiari, Simone Tumiat, Patrizia Fumagalli, Stefano Poli, and Giulio Borghini.

took place, featuring invited keynotes from Roman Botcharnikov (University of Mainz, Germany), Marion Louvel (Earth Science Institute of Orléans, France), Angelika Rosa (ESRF Grenoble, France), and Christopher Beyer (University of Bochum, Germany).

The conference concluded with a concert and dinner held in the elegant courtyard of the university, adding to the overall success of the event. As an optional activity, 25 participants had the opportunity to explore Italy’s geo-cultural heritage by visiting two remarkable geosites in the Verbano–Cusio–Ossola (VCO) Province of the Southern Alps. These included the famous Candoglia marble quarry, renowned for its beautiful pink marble extracted since 1387 for the Milan Cathedral, and the Finero area, where phlogopite- and amphibole-bearing peridotites, representing a pervasively metasomatized mantle unit, are exposed in contact with layered mafic–ultramafic intrusions originating from the mid/lower crust.

During the meeting, a special issue of the *European Journal of Mineralogy (EJM)* was announced, entitled “Probing the Earth: experiments for and on our planet.” Earth scientists are invited to contribute research that shares insights advancing our understanding of Earth’s complexities and potential for life, both on our planet and in exoplanetary systems. Submissions are requested before the deadline on June 30, 2024.

On behalf of the organizing committee:  
**Patrizia Fumagalli** (University of Milan)

