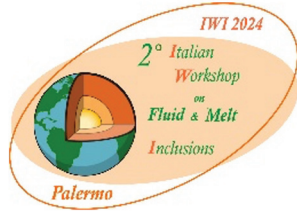


SECOND ITALIAN WORKSHOP ON FLUID AND MELT INCLUSIONS, IWI 2024

The Second Italian Workshop on Fluid and Melt Inclusions took place in the beautiful Botanical Garden of Palermo, Sicily, Italy, from November 12th to 14th, 2024. Organized by Francesco Maria Lo Forte (University of Palermo), Andrea Maffei (University of Milano-Bicocca), Simone Costa (National Institute of Geophysics and Volcanology – INGV Pisa), and Pierangelo Romano (INGV Palermo), the workshop was mainly supported by the Department of Earth and Marine Sciences (DiStEM) at the University of Palermo. It also received substantial sponsorship from the Italian Society of Mineralogy and Petrology (SIMP), University of Milano-Bicocca (UNIMIB), INGV, the Italian Association of Volcanology (AIV), the Italian Geochemical Society (So.Ge.I.), and the Italian Gemological Review (IGR). These organizations served as both financial backers and media partners.



Group photo of the participants.

The event attracted a diverse range of participants, including researchers, PhD candidates, and undergraduate and masters students from national and international universities, research institutions, and the INGV. The primary goal of the workshop was to foster discussion on the approaches, methodologies, advantages, and challenges associated with fluid and melt inclusions in the geosciences. In particular, it sought to strengthen collaboration between academic research and commercial gemology. Notably, the integration of expert gemologists highlighted the commercial perspective, providing a valuable bridge between industry and academia.



Attendees during one of the scientific themes.



Coffee break outdoor.



Welcome greeting.

The workshop was structured into three thematic sessions over three days, each introduced by keynote talks. These were followed by oral presentations that stimulated lively and insightful scientific debates. The session *“Fluid and Melt Inclusions: Tracers of Geodynamic Processes”* focused on the role of metamorphic and mantle fluids and melts in critical petrological processes related to deep chemical cycling. The session *“Fluid and Melt Inclusions as Tracers of Deep and Superficial Magmatic Processes”* emphasized magmatic plumbing systems, volatile outgassing, and their climatic implications. Finally, the session *“Fluid Inclusions in Gemological and Cultural Heritage”* explored academic and commercial applications of fluid and melt inclusions to the gemological world and related cultural heritage materials.

Building upon the success of the inaugural edition held in May 2023, this second workshop further increased interest and enthusiasm within the Italian scientific community. The organizers aim to continue this initiative, possibly holding it biennially and in different locations, to broaden participation and engagement among researchers interested in fluid and melt inclusion studies.

The organizers,
Francesco Maria Lo Forte, Andrea Maffei, Simone Costa,
and **Pierangelo Romano**