



The Geoscience paradigm:
resources, risks and future perspectives

Potenza 19-21 Settembre 2023

Dear Colleagues,

We would like to invite you to attend the Joint Conference of the Italian Society of Mineralogy and Petrology (SIMP), the Italian Geological Society (SGI), the Italian Society of Geochemistry (SOGEI) and the Italian Association of Volcanology (AIV), entitled: "The Geoscience paradigm: Resources, Risks and future perspectives", that will be held in Potenza from the 19th to 21th of September 2023.

Session P68. Contamination and climate change on groundwater: challenges and opportunities

It is our pleasure to introduce the "Session P68. Contamination and climate change on groundwater: challenges and opportunities" <https://www.geoscienze.org/N180/p68-contamination-and-climate-change-on-groundwater-challenges-and-opportunities.html>. This session will explore the different challenges related to the quality, quantity and climate change on groundwater, and will provide insights into the latest scientific research and technological innovations aimed at addressing these challenges. Groundwater is the worldwide most valuable freshwater resource, extensively used as the main source of drinking water. These resources are significantly affected by global factors like population growth, anthropogenic activities, and modifications in land use and by climate change both in quantity and quality. For these reasons, groundwater is strongly subjected to water stress and contamination processes and, therefore, requires opportune protection, sustainable use, and proper management tools. In this context, the present session intends to analyze different concerns connected to groundwater preservation from quali-quantitative degradation (over-exploitation, pollution) and climate change effects. The aim is to discuss the several aspects of groundwater issues and face new challenges in a changing environment for appropriate management, protection, and sustainable use of water resources for the future. We invite contributions about laboratory and field studies, hydrogeological and hydrogeochemical aquifers characterization, innovative modeling methods, and contamination vulnerability and risk approaches, related to groundwater quantity and quality changes and finalized to preventing, controlling, and mitigating environmental impacts on groundwater. We hope that this session solicits papers concerning multidisciplinary researches aiming to consider the different aspects related to the challenges and the opportunities for future sustainable groundwater management, climate change mitigation measures, stakeholder and population involvement, and new decision support systems.

Keywords: Groundwater, contamination, climate change, sustainability, management

Deadline for abstract submission: 6 May 2023

Convener:

Prof. Filomena Canora - University of Basilicata
filomena.canora@unibas.it

Co-conveners:

Prof. Francesco Sdao - University of Basilicata
Dr. Rosalba Muzzillo - University of Basilicata