The workshop is carried out as part of the MUR PRIN 2022 project GEA-GEopolymer based Adsorbents for effective adsorption and selective separation of  $\rm CO_2$  and eutrophication pollutants (grant No 20229THRM2) funded by the European Union – Next Generation EU.

The workshop is organized by the Institute of Science, Technology and Sustainability for Ceramics (CNR-ISSMC) and the Department of Civil, Chemical, Environmental and Materials Engineering - DICAM of the University of Bologna.





The Workshop is in the frame of the one-daymeeting organized since 2008 by the Group of Study on Geopolymers of the Italian Ceramic Society.



#### **SCIENTIFIC COMMITTEE**

Valentina Medri Francesco Miccio Elettra Papa CNR-ISSMC, Italy

Dario Frascari Matteo Minelli Davide Pinelli DICAM-University of Bologna, Italy

Angelo Vaccari "Toso Montanari" University of Bologna, Italy

Participation is free of charge, registration is mandatory **before January 15**<sup>th</sup>.

For info, registration and poster submission:

https://www.issmc.cnr.it/en/workshop-gea/ Valentina Medri

> valentina.medri@issmc.cnr.it Tel + 39 0546699751

### 2<sup>nd</sup> Announcement & Call for Posters

#### Workshop

February 14<sup>th</sup> 2025 Faenza, Italy

### Geopolymer for Environmental Remediation









# GEOPOLYMER THECNOLOGY

Geopolymerization is an aqueous based process able produce to chemically consolidated inorganic materials with a porosity that could be tailored depending on the process conditions: the pores size can be varied from few tenth of nanometres to few millimetres, while total porosity can range from 30% up to 90 vol %. Furthermore, geopolymers can be easily formed in complex shapes granules, monoliths. (beads, honeycombs, etc.) and geopolymer matrices can act as binders for functionalizing fillers in composites.

Since geopolymers have ion exchange properties and they can be regarded as both the amorphous counterpart and the precursor of crystalline zeolites, they are suitable materials for depollution of gas streams and wastewaters.

#### THE WORKSHOP

The aim of the workshop is to review the key results of the research in the design and development of environmentally friendly geopolymer based adsorbents as a stimulating approach to contribute towards cleaner production.

Keynote lectures will be given by experts on depolluting techniques, while invited talks will examine the innovative use of geopolymers as filters, membranes and sorbents, as well as the tailoring of compositions and textural properties.

Research posters will be displayed and discussed. The Best Poster Award will be assigned at the end of the workshop.

# HOPE TO SEE YOU IN FAENZA!





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Viale Baccarini 19 Faenza https://www.micfaenza.org/