

AIZ 2023

XVI Italian Congress of Zeolites Science and Technology

21 – 23 September 2023
Salerno (Italy)

International Symposium on Porous Materials

*Challenges and Opportunities in sustainable energy
applications and environmental remediation*

PROGRAMME



Welcome

The Italian Zeolite Association (AIZ) together with the Interdivisional Group of Catalysis (GIC) of the Italian Chemical Society (SCI) are pleased to welcome the participants of the XVI Italian Congress of Zeolites Science and Technology.

We believe the event will represent an excellent way to promote knowledge and to share and discuss the recent progresses and future trends on

Porous Materials: Challenges and Opportunities in sustainable energy applications and environmental remediation

Focusing on:

- Synthesis of zeolites, MOFs, mesoporous, hybrid and layered materials
- Natural zeolites
- Advanced characterisation
- Modelling and theoretical studies
- Adsorption, separation and diffusion
- Catalysis investigation and applications
- Energy conversion and storage
- Environmental remediation
- Novel technological applications

Have a nice conference and enjoy your stay in Salerno!

Salerno, 21 September 2023

The Organizing Committee of AIZ 2023

Committees

COMMITTEE OF HONOR

(AIZ Founders and Former Presidents)

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Paolo Aprea (Chair)

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Christopher Luciano

Assunta Campanile

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WEB DESIGN AND MASTERING

Francesco Fimiani

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GRAPHIC PROJECT

Lorenza Damiano

Invited Speakers

Chiara Bisio, Dipartimento di Scienze e Innovazione Tecnologica, Università del Piemonte Orientale

Piergiulio Cappelletti, Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse, Università di Napoli Federico II

General Information

Conference Venue

Conference Room: Vietri

Grand Hotel Salerno, Lungomare Clemente Tafuri, 1, Salerno

Website: www.grandhotelsalerno.com

Registration Desk

The Registration Desk will be located at Vietri Conference Room and open as follow:

Thursday, September 21st, from h. 14:00 to h. 16:00

Registration Fees

Full Delegate	€ 250
Student	€ 150
Accompanying person	€ 50

Regular participant and student fee includes:

- welcome reception
- coffee breaks
- light lunch
- social dinner at "La Conchiglia", Via Lungomare Clemente Tafuri, 2, Salerno
- access to the plenary session
- book of abstracts
- delegate's kit
- visit to Museo della Torre, Corso Umberto 1 – 2, Cetara, Costa d'Amalfi, Salerno
- workshop on "*Colatura di Alici*"

Accompanying person fee includes:

- welcome reception
 - coffee breaks
 - social dinner at "La Conchiglia", Via Lungomare Clemente Tafuri 2, Salerno
 - visit to Museo della Torre, Corso Umberto 1 – 2, Cetara, Costa d'Amalfi, Salerno
 - workshop on "*Colatura di Alici*"
-

Instruction for Contributors

Time for Oral Presentations

Depending on your contribution, different times will be allocated for your lecture:

- Plenary Lecture (PL): 45 min (including questions)
- Oral (O): 15 min (including questions)

The chairman will advise the lecturer 5 minutes (for plenary) or 3 minutes (for orals) before the end of the available time and will stop the presentation in any case when the time will exceed the maximum available (question time included).

Slides Preparation

Please prepare your oral presentation in English using Microsoft Office PowerPoint template available on website www.aizeta.it

Save your presentation in a pptx file.

All contributions will be presented using our PCs, so ensure to bring your pptx file on a USB stick to the Conference Room before the beginning of your session, to copy it on the PC and to check if everything works fine.

Poster Presentation

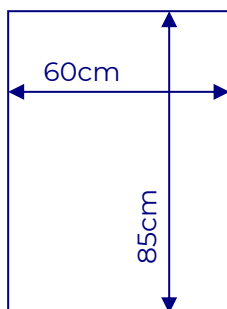
Authors should guarantee their presence at the poster during the session. Please refer to the "Posters" Section of this document for the board assigned to your poster.

The poster sessions will be located in the Conference Room, during the coffee breaks.

Ensure to place your poster before the beginning of the Opening Ceremony.

Please prepare your poster in English using Microsoft Office PowerPoint template available on website www.aizeta.it

The dimensions of the poster should not exceed 60 cm (width) x 85 cm (height).



Double-sided tape to hang your poster will be supplied.

Coffee Breaks and Light Lunch

Coffee breaks and light lunch will be served at buffets located at the Conference room

Social Events

Opening Ceremony

September 21st, Thursday, h. 15:00 at the Conference Room

Social Dinner

September 21st, Thursday, h. 20:30 at “La Conchiglia”, Via Lungomare Clemente Tafuri, 2, Salerno

The restaurant is a few minutes' walk from the congress venue (Grand Hotel Salerno, Lungomare Clemente Tafuri, 1, Salerno)

Excursion

Visit to Cetara: Museo della Torre and Workshop on the “Colatura di Alici” preparation, September 23rd, Saturday, h. 9:30

Meeting Point for transfer: Travelmar Ferry Port, Porto Masuccio Salernitano Piazza della Concordia

Ferry departures for return in Salerno form Cetara: 13.45, 15.05, 17.15

Official Language

The official language is: English

Transfer Information

The city of Salerno can be reached in several ways:

By plane

The nearest international airport is Naples Capodichino.

Napoli International Airport web site for info: www.aeroportoedinapoli.it

From Naples Capodichino Airport it is possible to reach the center of Salerno by bus.

The service is offered by the SITA company.

By train

Salerno train station is located very close to the city's historic center. The Grand Hotel Salerno is few minutes walking from the Central Station. Arriving by train in Salerno is very easy from wherever you come from. For Train Connections info:

www.trenitalia.com

www.italotreno.it

In general, Salerno is well connected to Naples, where you will find high-speed and regional train connections that will take you to major Italian cities. To get to Salerno from Naples Central Station or Piazza Garibaldi Station, trains are very frequent.

By bus

It is possible to reach Salerno by bus from other Italian cities. There are numerous companies that operate a regular service connecting Salerno to major cities, such as: Milan, Rome and Florence. For Bus Connections info:

www.flixbus.it

www.marinobus.it

www.autolineeliscio.it

September 21st, Thursday

14:00 – 16:00	Registration
15:00 – 15:30	Opening Ceremony
15:30 – 16:45	Session 1 – Chair: Maria Sarno
15:30 – 16:15	PL1 – <i>Porous and layered materials as active allies for environmental depollution and decontamination processes</i> Chiara Bisio
16:15 – 16:30	O1 – <i>Limonene recovery from VOCs: zeolite-catalysed selective ethoxylation</i> <u>Paolo Bruno</u> , Enrico Catizzone, Raffaella Mancuso, Girolamo Giordano, Massimo Migliori
16:30 – 16:45	O2 – <i>Pd/SSZ-13 low-T adsorbers: effect of the preparation method and Pd dispersion on NOx adsorption and stability</i> <u>Lidia Castoldi</u> , Roberto Matarrese, Sara Morandi, Yusra Hamid, Luca Lietti
16:45 – 17:15	Coffee Break & Poster Session
17:15 – 18:30	AIZ Business
20:30	Social Dinner

September 22nd, Friday

9:30 – 12:30

Session 2 – Chair: Barbara Liguori

09:30 – 10:15

PL2 – *Natural zeolites: are they still "la roca magica"?*

Piergiulio Cappelletti

10:15 – 10:30

O3 – *Zeolite Formation in the 50-year old tuff from Surtsey (Iceland)*

Giovanna Montesano, Concetta Rispoli, Paola Petrosino, Piergiulio Cappelletti

10:30 – 10:45

O4 – *SnO₂/ZIF-67 for electrocatalysis and nonenzymatic detection of glucose*

Mariagrazia Iuliano, Claudia Cirillo, Francesca Fierro, Luca Gallucci, Christopher Luciano, Maria Sarno

10:45 – 11:00

O5 – *Zeolite-based foams produced by geopolymer gel conversion for insulating applications*

Assunta Campanile, Paolo Aprea, Claudio Ferone, Rosa De Michele, Domenico Caputo, Barbara Liguori

11:00 – 11:45

Coffee Break & **Poster Session**

11:45 – 12:00

O6 – *Exploitation of 13X zeolite for the recovery of rees from spent fluorescent lamps: evaluation of the exchange selectivity and of the cation exchange capacity*

Francesco Colombo, Francesco Di Renzo, Giorgia Confalonieri, Gianluca Malavasi, Daniele Malferrari, Rossella Arletti

12:00 – 12:15

O7 – *Synthesis of microporous zeolite templated carbons for hydrogen and methane storage*

Daniela Cozza, Alfonso Policicchio, Giuseppe Conte, Carlo Poselle Bonaventura, Raffaele Giuseppe Agostino, Enrico Catizzone, Girolamo Giordano, Massimo Migliori

12:15 – 12:30

O8 – *Exchanged zeolite Y with rare earth metals for heat transformation*

Lucio Bonaccorsi, Angela Malara, Angelo Freni

13:00 – 14:00

Light Lunch

14:30 – 15:45

Session 3 – Chair: Paolo Aprea

14:30 – 14:45

O9 – *Tailoring the catalytic features of 3D hybrid systems for one-pot CO₂-to-DME hydrogenation by direct ink writing*

Serena Todaro, Alessandro Cajumi, Catia Cannilla, Francesco Frusteri, Giuseppe Bonura

14:45 – 15:00

O10 – *New insights about the effect of acidity of ZSM-5 zeolite on dehydration of methanol and ethanol*

Giorgia Ferrarelli, Paolo Bruno, Enrico Catizzone, Massimo Migliori, Girolamo Giordano

15:00 – 15:15

O11 – *3D-printed monoliths based on Cu-exchanged SSZ-13 as catalyst for SCR of NO_x*

Elisabetta Maria Cepollaro, Stefano Cimino, Luciana Lisi, Milena Pazzi, Marco D'Agostini, Giorgia Franchin, Paolo Colombo

15:15 – 15:30

O12 – *Characterization of Ti Active Sites in Siliceous Zeolites for Epoxidation of Bulky Alkenes*

Francesca Rosso, Alessia Airi, Matteo Signorile, Silvia Bordiga, Valentina Crocellà, Francesca Bonino

15:30 – 15:45

O13 – *Epoxidation of light olefins with hydrogen peroxide over TS-1 in a trickle bed reactor*

Federica Orabona, Michele Emanuele Fortunato, Vincenzo Russo, Tapio Salmi, Martino Di Serio

15:45 – 16:30

Poster Session

16:30 – 17:00

Discussion & Closing Remarks

September 23rd, Saturday

9:30 – 13:30

Tour/ Excursion

Visit to Cetara: Museo della Torre and Workshop on the “Colatura di Alici” preparation

Poster

P1 – *Ruthenium-Ceria composite materials for CO₂ capture and CH₄ production at high temperature*

Andrea Rizzetto, Marco Piumetti, Raffaele Pirone, Enrico Sartoretti, Samir Bensaid

P2 – *Composites fibers of polyvinylpyrrolidone /SAPO-34 for functional coatings*

Lucio Bonaccorsi, Antonio Fotia, Angela Malara, C.Nunnari, Patrizia Frontera

P3 – *Enhancing biodegradable polymers by zeolites*

Mattia Fornaro

P4 – *3D printed 13X zeolite monoliths for carbon capture*

Enrica Luzzi, Martina Salzano de Luna, Giovanni Filippone, Domenico Caputo, Paolo Aprea

P5 – *CuZSM-5@HMS composite for conversion of biomass derived sugars to levulinic acid*

Elena Ghedini, Somayeh Taghavi, Michela Signoretto

P6 – *Clinoptilolite as sustainable material for wastewater treatment*

Nadia Grifasi, Melodj Dosa, Camilla Galletti, Debora Fino, Marco Piumetti

P7 – *Magnetic Fe₃O₄/SnO₂ @ZIF-67 composite as an effective and recyclable adsorbent for methylene blue adsorption from wastewater*

Claudia Cirillo, Mariagrazia Iuliano, Francesca Fierro, Luca Gallucci, Christopher Luciano, Maria Sarno

P8 – *Preliminary evaluation of Li-zeolitic foam production strategies for carbon dioxide methanation*

Carlo Gravino, Assunta Campanile, Barbara Liguori, Paolo Aprea, Domenico Caputo

P9 – *Effect of Zeolite A in bio-based polyurethane foams for application in cultural heritage*

Annachiara Pascarella, Giuseppe C. Lama, Federica Recupido, Barbara Liguori, Roberta Marzella, Assunta Campanile, Marino Lavorgna, Letizia Verdolotti

P10 – *Suitability of alkali activated materials using tuff for cultural heritage applications: preliminary study*

Ilaria Capasso, Gigliola D'Angelo, Alessia Verniero, Roberto Castelluccio, Barbara Liguori

P11 – *Preliminary study on possible use of zeolites for the removal of radionuclides from wastewaters of the former Garigliano nuclear power plant (Italy)*

Fabrizio Ambrosino, Carlo Gravino, Francesco Pisciotta, Salvatore Esposito, Gaetano Gagliardo, Giuseppe La Verde, Mariagabriella Pugliese, Domenico Caputo

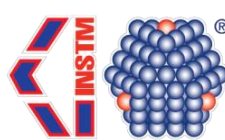
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Under the auspices of:



With the support of:



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Ma
PI

Dipartimento
di Ingegneria Chimica,
dei Materiali e della
Produzione Industriale
Università degli Studi
di Napoli Federico II



DIPARTIMENTO DI HSCA "E.R. CAIANIELLO"

