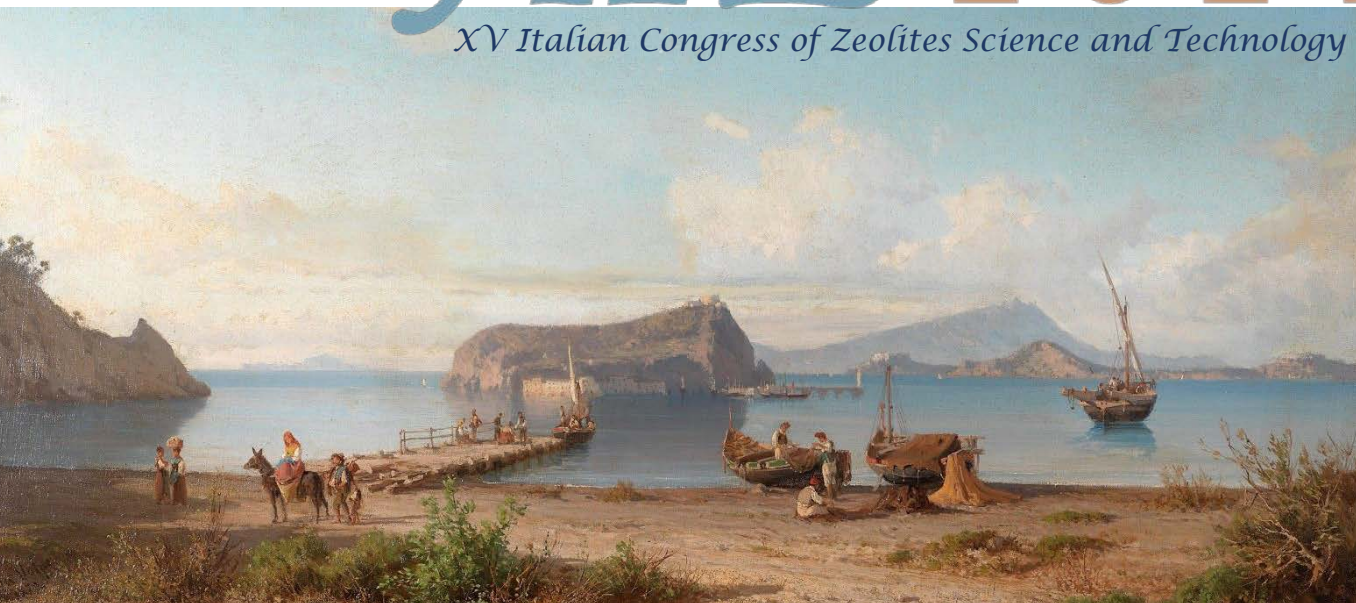




AIZ 2021

XV Italian Congress of Zeolites Science and Technology



Celebration Event

*International Symposium on Future Challenges in
Zeolites Science and Technology*

and

*Centenary of the birth of Professor Riccardo Sersale
30th Anniversary of the Italian Zeolite Association*

9th - 11th of December 2021, Napoli (Italy)

The Italian Zeolite Association (AIZ) and the University of Napoli Federico II extend to the zeolites community a cordial invitation to attend the International Symposium on Future Challenges in Zeolite Science and Technology, which will be held in Napoli (Italy) in the occasion of the 15th AIZ Congress celebrating the Centenary of the birth of Prof. Riccardo Sersale, one of the pioneers of research on zeolites in Italy, and the 30th Anniversary of the Italian Zeolite Association.

Venue

First Day. Aula Magna Ingegneria (first floor), Università di Napoli Federico II, Piazzale Tecchio 80, Fuorigrotta, Napoli.

Second Day. Biblioteca Storica Ingegneria (second floor), Università di Napoli Federico II, Piazzale Tecchio 80, Fuorigrotta, Napoli.

Contributions to the Symposium

All interested authors are invited to submit a 1-page abstract regarding zeolite and related materials, prepared in accordance with the template file available on AIZ web site (www.aizeta.it).

www.aizeta.it



Committee of Honor

(AIZ Founders and Former Presidents)

Carmine Colella *(President Emeritus of the AIZ)*
Rosario Aiello
Maurizio de' Gennaro
Paolo Ciambelli
Aldo Gamba
Roberto Millini
Girolamo Giordano
Giuseppe Cruciani

Local Organizing Committee

Domenico Caputo *(Chair)*
Paolo Aprea
Bruno De Gennaro
Fabio Iucolano
Barbara Liguori
Ottavio Marino

Invited Speakers

Martin Hartmann, *IZA President*
Svetlana Mintova, *FEZA President*
Giuseppe Bellussi, *Former Eni Senior Vice-President*
Mario Collepardi, *ENCO – Engineering Concrete*

Secretariat

Paola Desidery
Assunta Campanile
Enrica Luzzi
Antonio Peluso
Phone: +39 (0)81 768 2392
Fax: +39 (0)81 768 2394
E-mail: aiz2021congress@gmail.com

Scientific Committee

(AIZ Board)

Domenico Caputo *(President)*
Paola Lanzafame *(Secretary-Treasurer)*
Paolo Lotti
Raffaele Pirone
Stefano Zanardi

Registration and Payment

All information regarding Registration and Payment will be available soon on AIZ web site (www.aizeta.it).

Registration fees:

Full Delegates	130 euro (including Social Dinner Ticket and AIZ Membership Fee 2021)
Students	80 euro (including Social Dinner Ticket and AIZ Membership Fee 2021)
Accompanying persons	40 euro (including Social Dinner Ticket)

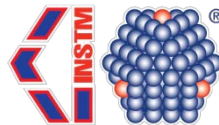
Accommodation

Details for accommodation will be available soon on AIZ web site (www.aizeta.it) together with a list of the hotels located in the neighborhoods of Conference venue.

Key-dates

03/11/2021	Call for Abstracts and Preliminary Programme
15/11/2021	Deadline for Abstract submission (Extended to 22/11/2021)
20/11/2021	Acceptance of contributions (Extended to 26/11/2021)
26/11/2021	Deadline for Payment of Registration Fee (Extended to 30/11/2021)
01/12/2021	Final Programme

Under the auspices of



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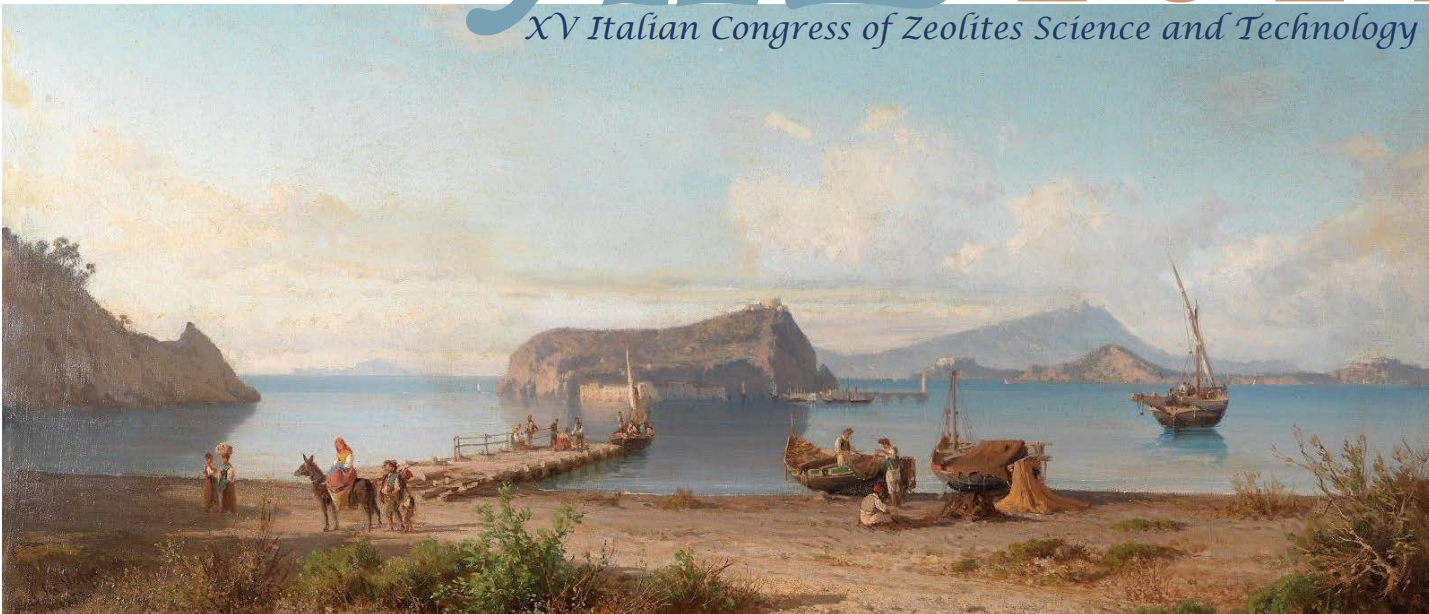
Dipartimento
di Ingegneria Chimica,
dei Materiali e della
Produzione Industriale
Università degli Studi
di Napoli Federico II





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XV Italian Congress of Zeolites Science and Technology



PROGRAMME



December 9th, Thursday

13:30-16:00 **Registration**

14:30-14:50 **Opening Ceremony**

- **Prof. Luigi Carrino**, Chair of the Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale, Università di Napoli Federico II
- **Dr. Svetlana Mintova**, President of the FEZA - Federation of European Zeolite Associations
- **Prof. Diego Gatta**, Vice- President of the INZA - International Natural Zeolite Association
- **Prof. Domenico Caputo**, President of the AIZ – Associazione Italiana Zeoliti

14:50-16:00 **Centenary of the birth of Professor Riccardo Sersale**

- **Memories - Prof. Carmine Colella, Prof. Raffaele Cioffi**
- **Invited lecture** – Calcestruzzo per un progresso sostenibile, **Prof. Mario Collepardi**

16:00-17:10 **30th Anniversary of the Italian Zeolite Association**

- **Memories – Prof. Domenico Caputo**
- **Invited lecture** - Climate change: the potential contribution of zeolites and zeolite-like materials to the energy transition, **Dr. Giuseppe Bellussi**

17:10-17:30 **Coffee Break**

17:30-19:00 **AIZ Business**

20:00 **Social Dinner** – Typical traditional Neapolitan cuisine at “Trattoria dell’Oca”, Via Santa Teresa a Chiaia, Napoli

December 10th, Friday

International Symposium on Future Challenges in Zeolites Science and Technology

9:00-10:45 **Session 1 - Chair: Girolamo Giordano**

9:00 **PL1 – Synthesis and catalytic properties of hierarchical zeolites**
MARTIN HARTMANN

9:40 **01 – Pressure-driven crystal-fluid interaction in natural Erionite-K**
T. BATTISTON, D. COMBONI, F. PAGLIARO, P. LOTTI, G. D. GATTA

9:55 **02 – Effect of hierarchical porosity of 3D-printed geopolymer/ZSM-5 on the catalytic performance in SCR of NO_x**
E. M. CEPOLLARO, S. CIMINO, L. LISI, R. BOTTI, G. FRANCHIN, P. COLOMBO

10:10 **03 – Rationalization of TS-1 synthesis through the design of experiments approach**
F. ROSSO, A. RIZZETTO, A. AIRI, K. KHOMA, M. SIGNORILE, V. CROCELLÀ, S. BORDIGA, S. GALLIANO, C. BAROLO, E. ALLADIO, F. BONINO

10:25 **S01 – Production of liquid fuels from multifunctional Fe-based catalysts**
E. CORRAO, F. SALOMONE, R. PIRONE, S. BENSALD

10:35 **S02 – Zeolite-based hybrid UV filters: Shielding health and environment**
R. FANTINI, A. ZAMBON, M. FABBIANI, F. DI RENZO, L. MINO, R. CAVALLI, M. ARGENZIANO, G. VEZZALINI, R. ARLETTI

10:45	<i>Coffee Break & Posters Session</i>
11:15-13:00	<i>Session 2 - Chair: Raffaele Pirone</i>
11:15	PL2 – Exploration and exploitation of defects in zeolites SVETLANA MINTOVA
11:25	04 – ZSM-5 surface modification via secondary Sil-1 synthesis <u>G. FERRARELLI</u> , D. COZZA, F. DALENA, M. MIGLIORI, G. GIORDANO, E. DIB, S. MINTOVA, V. VALTCHEV, M. DATURI
12:10	05 – Removal of contaminants of emerging concern using surfactant modified Chabazite-rich Tuff from Campanian Ignimbrite: Preliminary results <u>F. IZZO</u> , A. LANGELLA, B. DE GENNARO, P. CAPPELLETTI, C. GERMINARIO, C. GRIFA, C. RISPOLI, M. MERCURIO
12:25	06 – Role of zeolites in the direct CO₂ hydrogenation to DME <u>G. BONURA</u> , S. TODARO, C. CANNILLA, M. MIGLIORI, G. GIORDANO, F. FRUSTERI
12:40	S03 – Magnetic metal-ceramic nanocomposites as adsorbent of agrochemicals and antibiotics from water: Application of smart materials from zeolite precursors <u>O. TAMMARO</u> , F. SANNINO, M. PANSINI, A. MAROCCO, P. ALLIA, P. TIBERTO, G. BARRERA, D. PIROZZI, S. ESPOSITO
12:50	S04 – A promising way for cerium recovery: the ion exchange capacity of LTL zeolite <u>R. ARLETTI</u> , G. CONFALONIERI, G. VEZZALINI, F. DI RENZO
13:00	<i>Light lunch & Posters Session</i>
14:00-15:05	<i>Session 3 - Chair: Bruno de Gennaro</i>
14:00	07 – Surface modification of zeolite-templated carbon: Assessment in electrocatalytic CO₂ reduction <u>D. COZZA</u> , G. PAPANIKOLAOU, P. LANZAFAME, S. PERATHONER, G. CENTI, G. GIORGIANNI, F. DALENA, M. MIGLIORI, G. GIORDANO
14:15	08 – Synthesis of FAU-X porous monoliths by Geopolymer Gel Conversion <u>A. CAMPANILE</u> , B. LIGUORI, D. CAPUTO, C. FERONE, L. GIGLI, P. APREA
14:30	09 – CO₂ capture and storage by natural and synthetic zeolites <u>M. DOSA</u> , M. CAVALLO, N. G. PORCARO, K. KHOMA, F. C. BONINO, V. CROCELLÀ, S. BENSALID, M. PIUMETTI
14:45	S05 – PFAS as emerging pollutants in the environment: a challenge with zeolites for the management of water resources M. MANCINELLI, <u>A. MARTUCCI</u> , M. ARDIT, F. COLOMBO, L. PASTI, G. M. SALANI, G. BIANCHINI
14:55	S06 – Zeolite-chitosan composite aerogels for CO₂ capture <u>E. LUZZI</u> , P. APREA, M. SALZANO DE LUNA, D. CAPUTO, G. FILIPPONE
15:05-15:45	<i>Discussion & Closing Remarks (Chair: Diego Gatta)</i>
<i>December 11th, Saturday</i>	
9:30-12:30	<i>Visit to the Real Museo di Mineralogia dell'Università di Napoli Federico II, Via Mezzocannone 8, Napoli</i>

Poster

P1 – *Production of oxyfuel additives by glycerol etherification over BEA-zeolite catalysts*

C. CANNILLA, S. TODARO, M. MIGLIORI, G. GIORDANO, F. FRUSTERI, G. BONURA

P2 – *Molecular traps based on natural zeolites for environmental rimediation*

R. PAPARO, M. TRIFUOGGI, G. CAROTENUTO, L. NICOLAIS

P3 – *Modification and characterization of Clinoptilolite for the CO-immobilization of formate dehydrogenase and glycerol dehydrogenase enzymes*

C. COCUZZA, G. PIETRICOLA, V. CAUDA, M. DOSA, D. FINO, C. OTTONE, O. ROMERO, T. TOMMASI, M. PIUMETTI

P4 – *Ti-MWW zeolites for partial oxidation of bulky substrates*

F. ROSSO, A. AIRI, M. SIGNORILE, S. BORDIGA, V. CROCELLÀ, F. BONINO