



AIZ Day 2022



24th - 25th of November 2022, Torino (Italy)

*International Workshop on
Zeolites Science and Technology*

***PRELIMINARY
PROGRAMME***

November 24th, Thursday

- 13:30-16:00** **Registration**
- 14:00-14:20** **Opening Ceremony**
- 14:20-16:25** **Session 1**
- 14:20-15:05** **IL1 – Beyond TS-1: Synthesis of Ti-containing zeolites, Dr. Roberto Millini**
- 15:05** **01 - Surface modification in zeolite-templated carbons: a promising electrocatalyst for CO₂ reduction**
G. PAPANIKOLAOU, D. CHILLÈ, S. PERATHONER, G. CENTI, D. COZZA, M. MIGLIORI, G. GIORDANO, P. LANZAFAME
- 15:25** **02 - p-induced crystal-fluid interaction in natural zeolites with eri and off topologies**
TOMMASO BATTISTON, DAVIDE COMBONI, PAOLO LOTTI, G. DIEGO GATTA
- 15:45** **03 - Complete engineering of the administration of a drug: mesoporous silica-based nanodevices for smart chemotherapy**
MARZIA DE SANTO, CATIA MORELLI, ANTONELLA LEGGIO, LUIGI PASQUA
- 16:05** **SO1 – Dual Function Materials for CO₂ capture and conversion**
ANDREA RIZZETTO, RAFFAELE PIRONE, SAMIR BENSALD, MARCO PIUMETTI
- 16:15** **SO2 - Mesoporous silica used as support for lactate dehydrogenase enzyme: a strategy to obtain a prototype biosensor**
CLARISSA COCUZZA, VALENTINA CAUDA, CARMINNA OTTONE, MARCO PIUMETTI
- 16:25-17:30** **Coffee Break and Poster Session**
- 17:30-19:00** **AIZ Business**
- 20:00** **Social Dinner – Ristorante La Capannina**

9:00-10:45

Session 2

9:00-9:45

IL2 - Zeolite as Sustainable Energy Materials, Prof. Giuseppe Cruciani

9:45

04 – From powder to 3D shaped LTA zeolite for carbon dioxide capture

MARGHERITA CAVALLO, MARCO D'AGOSTINI, NATALE G. PORCARO, MARCO PIUMETTI, GIORGIA FRANCHIN, PAOLO COLOMBO, FRANCESCA BONINO, VALENTINA CROCELLÀ

10:05

05 – Insight on MWW silicates: from the 2D precursors to the 3D calcined zeolites

FRANCESCA ROSSO, ALESSIA AIRI, MATTEO SIGNORILE, EDDY DIB, SILVIA BORDIGA, SVETLANA MINTOVA, VALENTINA CROCELLÀ, FRANCESCA BONINO

10:25

S03 - Design of 13X zeolite-based materials for 3D printing by direct ink writing

ENRICA LUZZI, MARTINA SALZANO DE LUNA, GIOVANNI FILIPPONE, DOMENICO CAPUTO, PAOLO APREA

10:35

S04 - Study on the oxygen content of BEA and BEA@SIL zeolite templated carbon reduction

PAOLO BRUNO, GIORGIA FERRARELLI, DANIELA COZZA, ENRICO CATIZZONE, MASSIMO MIGLIORI, GIROLAMO GIORDANO

10:45-11:20

Coffee Break

11:20-13:00

Session 3

11:20

06 – Moving towards circular economy: REE recovery from spent fluorescent lamps exploiting NH4-13X zeolite cation exchange properties

FRANCESCO COLOMBO, GIORGIA CONFALONIERI, MATTIA SISTI, GIANLUCA MALAVASI, ROSSELLA ARLETTI

11:40

07 – Exploring the possibility to use Li-exchanged zeolite as catalyst for CO₂ hydrogenation

ELISABETTA M. CEPOLLARO, STEFANO CIMINO, LUCIANA LISI

12:00

08 – ZSM-5 surface modification via secondary SIL-1 synthesis and chemical etching

GIORGIA FERRARELLI, ENRICO CATIZZONE, MASSIMO MIGLIORI, GIROLAMO GIORDANO

- 12:20** **09 - Zeolitic pigments in Capodimonte porcelain production,**
ASSUNTA CAMPANILE, BARBARA LIGUORI, DOMENICO CAPUTO, PAOLO APREA
- 12:40** **S05 – Self-standing nanoporous zeolite/cellulose deposits prepared with ultrafiltration
for energy storage applications**
LORENZO METILLI, HÉLOÏSE UGO, CYRIL PICARD, WILLIAM CHÈVREMONT, AND FRÉDÉRIC PIGNON
- 12:50** **S06 – Intensification effect on catalytic CO₂ hydrogenation to DME prompted by water-
adsorbent systems**
SERENA TODARO, FRANCESCO FRUSTERI, VESNA MIDDELKOOP, YORAN DE VOS, ERIK ABBENHUIS,
GIJSBERT GERRITSEN, CATIA CANNILLA, GIUSEPPE BONURA

13:00-14:00 **Light lunch & Posters Session**

Poster

P1 – Role of acid concentration in the chemical condensation of 2D MCM-22(P) precursor to 3D MWW zeolite

MARCO FABBIANI, AMINE MORSLI, GIORGIA CONFALONIERI, THOMAS CACCIAGUERRA, FRANÇOIS FAJULA, JULIEN HAINES,
ABDELKADER BENGUEDDACH, ROSSELLA ARLETTI, FRANCESCO DI RENZO

P2 – Structural and computational study of zeolite-encapsulated UV filters

RICCARDO FANTINI, LORENZO MINO, MATTIA SISTI, MICHAEL FISCHER

P3 – Zeolite-rich composites for chromium removal from water

CARLO GRAVINO, BARBARA GALZERANO, ANTONIO PELUSO, DOMENICO CAPUTO, PAOLO APREA, BRUNO DE GENNARO

P4 – Electronic properties of neurotransmitters in a hybrid system with zeolite L

CRISTIANO INVERNIZZI, L. GRIMM, F. BIEDERMANN, G. TABACCHI, E. FOIS

P5 – From zeolite precursor to the moon: toxicological studies of simulated moon agglutinates

OLIMPIA TAMMARO, ANTONELLO MAROCCO, MICHELE PANSINI, GABRIELE BARRERA, PAOLA TIBERTO, PAOLO ALLIA,
CHIARA BELLOMO, CRISTINA PAVANA, FRANCESCO TURCI, ROSSELLA ARLETTI, SERENA ESPOSITO