

# Thursday, May 18

Room Megas Alexandros  
Keynote Chair: Konstantinos Triantafyllidis

09:00-09:30

## Keynote Speaker

**Prof. Mercouri G. Kanatzidis**

Designing exotic sorbents for capturing uranium, technetium, and heavy metals

Room: Megas Alexandros  
Session A3 - Chair: Angiolina Comotti

Room: Achilles  
Session B3 - Chair: Georgia Charalampopoulou

09:30-09:50

### Yolanda Pérez

Lead-free halide perovskite@metal-organic framework composites as visible light-active photocatalysts

### Invited Speaker

**Prof. Martin Hartmann**

Ultrasonic monitoring for In situ diagnostics of zeolite and MOF crystallization

09:50-10:10

### Nusik Gedikoğlu

Building new metal-organic frameworks from Iron-Thiolate Layers

### Dieter Plessers

Spectroscopic investigation of  $[\text{Cu-O-Cu}]^{2+}$  and  $[\text{CuOH}]^+$  sites in copper exchanged zeolites for selective oxidation of methane to methanol

10:10-10:30

### Emmanouil Manos

MOFs for removal of oxoanions from aqueous media

### Joao Rocha

Exploring the pore space: Applications of transition metal and lanthanide silicates and organic-inorganic hybrid materials

10:30-10:50

### Sachin Maruti Chavan

MOFSORBMET: MOFs for critical metals recovery and separation

### Niels De Witte

Zero-coverage adsorption of n-alkanes and 1-alkenes in all-silica small-pore zeolites

10:50-11:15

Coffee break

Chair: Alexandros Katsoulidis

Chair: Giasemi Angeli

11:15-11:35

### Nuno Gonçalves

3D-printed bauxite-based inorganic polymers for the removal of multiple heavy metals and neutralization of acid mine drainage

### Matjaž Mazaj

Zeolites embedded in carbon foam monoliths as a high-performance  $\text{CO}_2$  capture adsorbent

11:35-11:55	<p><b>Vassilios Binas</b> Highly Porous Thin-Layer g-C<sub>3</sub>N<sub>4</sub> Nanosheets and composites with Enhanced photocatalytic properties</p>	<p><b>Alexios Plessas</b> Synthesis and characterisation of MOF-COOHs for water remediation: Pre- and post-synthetic modification approach of amide ligands</p>
11:55-12:15	<p><b>Timur Ashirov</b> Porous functional organic Polymers for advanced separation applications</p>	<p><b>Husam Almassad</b> Environmentally adaptive MOF-based atmospheric water harvesting</p>
12:15-12:35	<p><b>Idan Hod</b> Molecular manipulation of heterogeneous electrocatalytic CO<sub>2</sub> reduction using metal-organic frameworks</p>	<p><b>Samir El Hankari</b> Metal-organic frameworks (MOFs)-based adsorption technology for phosphate recovery from water</p>
12:35-15:00	Lunch break*	
Parallel event	<b>Bruker - Gold Sponsor</b> On-site demonstration of the D8 Venture SC-XRD instrument at the University of Crete in Heraklion*	
	Keynote Chair: Kyle Cordova	
15:00-15:30	<b>Keynote Speaker:</b> <b>Prof. Mircea Dinca</b> Strange electronic and photophysical effects in MOFs	
	Room: Megas Alexandros Session A4 - Chair: Kyle Cordova	Room: Achilles Session B4 - Chair: Volodymyr Bon
15:30-15:50	<p><b>Teresa J Badosz</b> Beyond adsorption: A big role of small pores in electrochemical processes</p>	<p><b>Rachele Castaldo</b> Tuning the adsorption capacities of porous materials with hyper-crosslinked resins</p>
15:50-16:10	<p><b>Catalina Biglione</b> Novel bismuth phosphonate IMDEA-Energy framework for proton conductivity</p>	<p><b>Marina Ilkaeva</b> Solid-state NMR-assisted adsorption techniques for CO<sub>2</sub> capture assessment in porous sorbents</p>
16:10-16:30	<p><b>José María Pedrosa</b> Enhancement of the intrinsic fluorescence of ZIF-8 via Post-synthetic cation exchange with Cd<sup>2+</sup> and its use as optical sensor</p>	<p><b>Thomas Glover</b> Diffusion of water in metal-organic frameworks</p>
16:30-16:55	Coffee break	
	Chair: Thomas Glover	Chair: Georgios Karanikolos

16:55-17:15	<p><b>Helene Brault</b></p> <p>The versatility of MOFs as a powerful tool to design luminescent thermometers</p>	<p><b>Conor Cleeton</b></p> <p>A process-level perspective on the impact of molecular force fields on the computational screening of MOFs for carbon capture</p>
17:15-17:35	<p><b>Francisco García Moscoso</b></p> <p>A luminescent terbium MOF embedded in PMMA transparent films for sensitive and selective detection of nitroaromatic explosives vapours</p>	<p><b>Emily Bloch</b></p> <p>Designing the functions grafted onto nanoporous silica for specific gas recovery: in silico molecular screening compared and contrasted with experimentation</p>
17:35-17:55	<p><b>Pascal Van Der Voort</b></p> <p>Covalent organic frameworks as metal-free photocatalysts</p>	<p><b>Angelos Polyzoidis</b></p> <p>Thermal switch based on an adsorption material in a heat pipe</p>
Keynote Chair: Karim Adil		
17:55-18:25	<p><b>Keynote Speaker</b></p> <p><b>Prof. Christian Serre</b></p> <p>Green synthesis of robust but defective MOFs</p>	
18:25-20:00	Poster Session 2	
20:00	Gala Dinner	

Reference:

\* Free of charge booking is required. Please send email to [maria@mitos.com.gr](mailto:maria@mitos.com.gr) or visit the registration desk at the conference site, between May 16th-17th.

#### Lunch\*

(\*Available only for those having selected the all-inclusive package (accommodation and meals) of Aquila Rithymna Beach)