

Friday, May 19

Room Megas Alexandros
Keynote Chair: Theodore Steriotis

09:00-09:30

Keynote Speaker

Prof. Stefan Kaskel

In situ methodologies for responsive Metal-Organic Frameworks

Room: Megas Alexandros
Session A4 - Chair:

Room: Achilles
Session B4 - Chair:

09:30-09:50

Michael Hirscher

Flexible metal-organic frameworks for hydrogen isotope separation

Satoshi Watanabe

Mechanism of CO₂ capacity reduction of layered MOF (ELM-11) caused by water adsorption

09:50-10:10

Homare Arima

Shaping of flexible metal-organic frameworks and less distinct gate adsorption caused by restricted volume expansion

Nataliia Smyk

Sorption-spectroscopic determination of chromium (VI) and chromium (III) in waters

10:10-10:30

Volodymyr Bon

Mechanistic understanding of guest-induced framework flexibility by in situ PXRD

Wacław Makowski

Recent advances in characterization of porous materials using quasi-equilibrated thermodesorption of volatile compounds

10:30-10:50

Mariana Sardo

Assessing the dynamics of adsorbed CO₂ species in Covalent Organic Frameworks via solid-state NMR methods

Panagiotis Krokidas

An evolutionary algorithm for the design of functionalized materials for separation membranes

10:50-11:15

Coffee break

Chair:

Chair:

11:15-11:35

Yue-Biao Zhang

Dynamic covalent organic frameworks

Dylan Sherman

Illuminating metal-organic nanosheet functionality by guest intercalation

11:35-11:55

Anita Justin

Post-synthetic Impregnation of amines in MOF pores for Post-combustion carbon capture

Helen Paola Toledo Jaldin

Zn-MOF doped with La(III) and Tb(III) for fluorescent sensing of parathion by luminescence sensing

11:55-12:15

Sabine Devautour-Vinot

MOFs for indoor contaminant capture and detection: a hybrid experimental-computational strategy

Abigail Lister

New metal-organic framework synthesis methods for optimised chemiresistive gas sensors

12:15-12:35

Mahmoud Abdelnaby

Covalent functionalization of UiO-66 analog metal-organic framework with aliphatic amine for the direct air capture

Theodore Lazarides

Synthesis and study of luminescent metal-organic frameworks: Sensing and white-light emission

12:35-12:55	<p>Ribooga Chang Structural tuning of fluorinated hybrid ultramicroporous materials for low-concentration CO₂ capture</p>	<p>Alexandre Narcizo da Silva Production of residual activated carbon and their application in the adsorption of phenol and gallic acid</p>
12:55-14:30	Lunch break	
	Keynote Chair: Youssef Belmabkhout	
14:30-15:00	<p>Keynote Speaker Prof. Wendy Queen Strategies for post-synthetic MOF modification to enhance their performance in gas and liquid separations</p>	
	Room: Megas Alexandros Session A6 - Chair:	Room: Achilles Session B3 - Chair:
15:00-15:20	<p>Laurent Perrier Innovative hybrid materials for hydrogen storage</p>	<p>EL Mehdi Moumen Synthesis of stable and environmentally friendly MOF for phosphate adsorption from water</p>
15:20-15:40	<p>Georgios Karanikolos Unraveling the potential of metal- and MOF-doped carbonaceous adsorbents for selective hydrogen storage at ambient temperature</p>	<p>Bogdan Protsenko Vibrational spectra supported by machine learning algorithms as a quantitative tool for zeolite structures</p>
15:40-16:00	<p>Moneer Alenezi Assessment of weak hydrogen intermolecular force against strong chemical association as promising hydrogen storage techniques for automotive applications</p>	<p>Bartosz Mazur Use of the NVT + ghost swap method for efficient prediction of water adsorption isotherm</p>
16:00-16:20	<p>Ioannis Tsimpanogiannis Hydrogen storage in clathrate hydrates: Recent advances and future prospects</p>	<p>Anastasios Gkatzias Free energy simulations of carbon nanoparticles crossing immiscible solvents</p>
16:20-16:45	Coffee break	
	Chair:	Chair:
16:45-17:05	<p>Agata Łamacz Methanol synthesis over metal-organic frameworks</p>	
17:05-17:25	<p>Utku Burgun The effect of pyrolysis temperature and plasma treatment on ZIF-67 based catalysts for Fischer-Tropsch synthesis</p>	
17:25-17:45	<p>Khaled Hassanein Sayed Ahmed Immobilization of metallated porphyrin as molecular catalyst in UiO-66 type MOFs for selective carbon dioxide electroreduction</p>	
17:45-18:05	<p>Sridhar Palla Unravelling the structural and functional group effects of Cadmium based metal-organic framework on the CO₂/N₂ and CO₂/CH₄ separation</p>	
18:05-18:30	Awards & Concluding remarks of MEDPore23	