

# POSTER SESSION IV

**Tuesday 23/09/2025**

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| 1  | <b>Francesca Nerli</b><br>SWITCHABLE COOPERATIVE CO <sub>2</sub> ADSORPTION MECHANISM IN MULTIVARIATE MIL-140A(CE) MOFS  |
| 2  | <b>Georgios Karanikolos</b><br>STRUCTURED MOF-BASED HYBRID ADSORBENTS FOR POST-COMBUSTION CO <sub>2</sub> CAPTURE BY VACUUM/PRESSURE SWING ADSORPTION            |
| 3  | <b>Jérémy Audevard</b><br>DIRECT GROWTH OF METAL-ORGANIC FRAMEWORKS ON GEOPOLYMERS: A NOVEL APPROACH FOR THE SHAPING OF POROUS MATERIALS                         |
| 4  | <b>Jiaqi Li</b><br>AN ADAPTIVE METAL-ORGANIC FRAMEWORK DISCRIMINATES XYLENE ISOMERS BY SHAPE-RESPONSIVE DEFORMATION  |
| 5  | <b>Jie Dai</b><br>TOPOTACTIC CONVERSION OF TITANIUM-OXO CLUSTERS (TOCS) TO A STABLE TOC-BASED METAL-ORGANIC FRAMEWORK WITH SELECTIVE ADSORPTION OF CATIONIC DYES |
| 6  | <b>Johannes Gülich</b><br>MICROPOROUS POLYIMIDE AEROGELS: MULTISCALE POROSITY FOR EFFICIENT CO <sub>2</sub> SEPARATION   |
| 7  | <b>Judit Farrando-Perez</b><br>THERMAL MANAGEMENT IN MOFS THROUGH HIGH-CONDUCTIVITY GRAPHITE INCORPORATION   |
| 8  | <b>Kavosh Karami</b><br>INVERSE GAS CHROMATOGRAPHY STUDY OF N- AND BRANCHED ALKANE ADSORPTION ON CAU-10-CH <sub>3</sub>  |
| 9  | <b>Konstantinos Papadopoulos</b><br>ADSORPTIVE SEPARATION OF WATER-ALCOHOL MIXTURES USING POROUS COORDINATION POLYMER  |
| 10 | <b>Kyu-Min Ryoum</b><br>BOOSTING ETHANE/ETHYLENE SELECTIVITY AND ETHANE UPTAKE THROUGH CF <sub>3</sub> -ENGINEERED UIO-66 FRAMEWORKS                             |
| 11 | <b>Ladawan Pukdeejorhor</b><br>SELECTION AND CHARACTERIZATION OF SOLID SORBENTS FOR APPLICATION IN POST-COMBUSTION CARBON DIOXIDE CAPTURE                        |
| 12 | <b>Masaki Wadaguchi</b><br>TUNING PORE SIZE OF MIL-101 AND ITS INFLUENCE ON WATER ADSORPTION KINETICS  |
| 13 | <b>Prantik Sarkar</b><br>THOROUGH CHARACTERISATION OF A SERIES OF ULTRA-MICROPOROUS MOFS FOR HYDROGEN STORAGE AND ISOTOPE SEPARATION                             |
| 14 | <b>Rahul Sinha</b><br>PORE SIZE ENGINEERING OF NH <sub>2</sub> -UIO-66 VIA MODULATING AGENTS: IMPLICATIONS FOR ENHANCED CO <sub>2</sub> ADSORPTION               |

15	<b>Rodrigo Gil San Millan</b> TUNING GATE-OPENING PRESSURE IN FLEXIBLE ZEOLITIC IMIDAZOLATE FRAMEWORKS FOR INVERSE OLEFIN/PARAFFIN SEPARATION
16	<b>Runze Chen</b> NANOSTRUCTURED METAL-ORGANIC FRAMEWORK PERCOLATION NETWORKS FOR CHEMIREISISTIVE GAS SENSING VIA POLYSTYRENE NANOPARTICLES
17	<b>Saeed Saadat</b> BINARY SEPARATION OF CIS AND TRANS-2-BUTENE ON NBOFFIVE-1-NI AND ALFFIVE-1-NI
18	<b>Szymon Sobczak</b> THIAZOLO-THIAZOLATE FLEXMOFS FOR EFFICIENT N-BUTANE STORAGE
19	<b>Tobias Hennig</b> NOVEL PCL-UIO-66-UREA MOF FOR THE SELECTIVE ADSORPTION AND DETECTION OF NITRO COMPOUNDS IN SPLIT-RING RESONATOR-BASED SENSORS
20	<b>Guy De Weireld</b> CO <sub>2</sub> CAPTURE VPSA PILOT UNIT USING MIL-160(AL) AND MIL-120(AL): EXPERIMENTAL AND SIMULATION STUDY
21	<b>Ping Song</b> ZINC-TRIAZOLATE-CARBOXYLATE METAL ORGANIC FRAMEWORKS FOR CO <sub>2</sub> CAPTURE
22	<b>Alexey Cherevan</b> HARNESSING TI-BASED MOF FOR TARGETED ADSORPTION AND VISIBLE-LIGHT DEGRADATION OF ORGANIC POLLUTANTS
23	<b>Anargiros-Martin Sakellariou</b> FLUORENONE-CONTAINING FLEXIBLE ZR-/HF-BASED MOF FOR SELECTIVE KETONE ADSORPTION
24	<b>Katharina Volz</b> METAL-ORGANIC FRAMEWORKS FOR DIRECT AIR CAPTURE: BENCHMARKING AGAINST INDUSTRIAL STANDARDS
25	<b>Namju Kim</b> HIGH PERFROMANCE METHANE STORAGE VIA A FLEXIBLE COVALENT-ORGANIC FRAMEWORK WITH MULTI-STEP ISOTHERM
26	<b>Nazanin Taheri</b> LEAD, LOCKED AWAY: POROUS ZR-BASED COORDINATION POLYMER FOR RAPID AND SELECTIVE REMOVAL OF PB <sup>2+</sup> FROM WATER
27	<b>Norberto Medina</b> TAILORING ALUMINUM MOFS FOR ENHANCED WATER POLLUTANTS ADSORPTION
28	<b>Timo M.O Felder</b> UNPRECEDENTED SELECTIVITY FOR AS <sup>3+</sup> IN A THIOL-BASED ZR-MOF: THE ROLE OF DEFECTS AND DISORDER
29	<b>Connor Hewson</b> INFLUENCE OF HUMIDITY ON THE SORPTION OF CO <sub>2</sub> IN MOFS: STABILITY AND SELECTIVITY
30	<b>Katie Everden</b> EVALUATION OF MOF MATERIALS FOR CO <sub>2</sub> -CAPTURE
31	<b>Akhil Chandran P</b> SYNTHESIS AND DESIGN OF ZIRCONIUM METAL ORGANIC FRAMEWORK FOR EFFICIENT PHOTOREDUCTION OF CO <sub>2</sub>

32	<b>Angela Matarín Serrano</b> ANTHRACENE-BASED POROUS POLYMERS FOR CHEMICAL SENSING AND PHOTOCATALYTIC GOLD RECOVERY
33	<b>Anastasiia Kuldaeva</b> PHOTOINDUCED SPIN CENTERS IN PHOTOCATALYTIC METAL-ORGANIC FRAMEWORK UIO-66
34	<b>Beatriz Fuerte Diez</b> THREE-COMPONENT COUPLING OF CO <sub>2</sub> FOR THE SYNTHESIS OF CARBAMATES AND CARBONATES USING METAL-SUPPORTED HYPERCROSSLINKED N HETEROCYCLIC CARBENE POLYMER CATALYSTS
35	<b>Cheng-Yu Wang</b> MULTIMETALLIC ZIF-DERIVED HIGH-ENTROPY ALLOY CATALYST FOR P-NITROPHENOL HYDROGENATION
36	<b>Chung-Wei Kung</b> SULFONATE-FUNCTIONALIZED IONIC METAL-ORGANIC FRAMEWORK FOR MODULATING THE SELECTIVITY OF ELECTROCHEMICAL SENSORS AND ELECTROCATALYTIC AMMONIA PRODUCTION
37	<b>David Helminger</b> TUNABLE ISOMETRIC DONOR-ACCEPTOR WURSTER-TYPE COVALENT ORGANIC FRAMEWORK PHOTOCATHODES
38	<b>Hongmei Chen</b> PHOTOTHERMAL EFFECT IN MOF-BASED CATALYSTS TO BOOST CO <sub>2</sub> CONVERSION
39	<b>Jing Ouyang</b> MODULATOR ENGINEERING TO BIFUNCTIONAL METAL-ORGANIC FRAMEWORK FOR SYNERGISTIC CATALYSIS
40	<b>Navaneeth Narayan Gowda</b> DESIGN OF CHIRAL POROUS BIO-HYBRID MATERIALS AS CATALYSTS FOR CO <sub>2</sub> CONVERSION
41	<b>Paige Hawkins</b> UIO-67 AS A HETEROGENOUS CATALYST FOR THE HYDROBORATION OF CARBONYL COMPOUNDS
42	<b>Ryuji Takada</b> EFFICIENT STRATEGY TO CREATE HIGH-DENSITY INTRINSIC CARBON DEFECTS IN METAL-FREE CARBON ELECTROCATALYSTS FOR CO <sub>2</sub> ELECTROREDUCTION INTO CO
43	<b>Seyed Soroush Mousavi Khadem</b> POST-SYNTHETIC METALATION OF AL-PMOF FOR ENHANCED VISIBLE-LIGHT CO <sub>2</sub> PHOTOCONVERSION
44	<b>Yahong Li</b> ONE β-DIKETIMINATE ZINC MOF WITH CATALYTIC ACTIVITIES TOWARDS RING-OPENING POLYMERIZATION AND CROSS-COUPLED REACTIONS
45	<b>Yakoub Smati</b> UNDERSTANDING THE ROLE OF CLUSTER DIMENSIONALITY IN NI-BASED METAL-ORGANIC FRAMEWORKS ON THEIR ACTIVITY IN OXYGEN EVOLUTION REACTION
46	<b>Yu Hin Leung</b> OXIDATIVE DEGRADATION OF POLYETHYLENE GLYCOL PROMOTED BY META-ORGANIC FRAMEWORKS
47	<b>Yu-Chi Wang</b> HALOGEN-DRIVEN MODULATION OF IRIIDIUM-FUNCTIONALIZED WATER-STABLE METAL-ORGANIC FRAMEWORKS FOR EFFECTIVE OXYGEN EVOLUTION REACTION
48	<b>Yuzelfy Paola Mendoza Gamero</b> LIGAND FUNCTIONALIZATION AND MOFS SYNTHESIS FOR THEIR USE IN TUNEABLE GREEN CATALYSIS AND GAS SENSING

49	<b>Mir F. Mousavi</b> TAILORED METAL-ORGANIC FRAMEWORK AND DERIVED MATERIALS FOR ADVANCED ENERGY CONVERSION AND STORAGE
50	<b>Vivekanand Sharma</b> SHAPING OF METAL-ORGANIC FRAMEWORK BASED COATINGS FOR HYDROGEN PRODUCTION BY PHOTOCATALYTIC OVERALL WATER SPLITTING
51	<b>Jana Bischoff</b> FE-BASED METAL-ORGANIC FRAMEWORKS FOR PHOTOCATALYTIC AMMONIA SYNTHESIS
52	<b>Himanshu Kumar Bhatt</b> FACILE SYNTHESIS OF NANOPARTICLE@POLYMER@ZR-MOF CORE-SHELL NANOHYBRIDS FOR ELECTROCHEMICAL SENSING OF PB(II) IONS
53	<b>Amit Nagar</b> ISOMERIC CYANO-VINYLENE-LINKED COVALENT ORGANIC FRAMEWORKS AND THEIR IMPACT ON PHOTOCATALYTIC HYDROGEN EVOLUTION
54	<b>Roberto Boada</b> SYNERGISTIC ADSORPTION AND PHOTOCATALYTIC DEGRADATION OF METHYLENE BLUE BY MN-DOPED ZIF-67@ZEOLITE-X HYBRID MATERIALS
55	<b>Mateusz Adam Baluk</b> EFFECT OF COPPER MODIFICATION ON PCN-222 PROPERTIES
56	<b>Sneha Raj Vannante Parambil</b> HETEROSTRUCTURE NANOCATALYST BASED ON CE-MOF AND MOS <sub>2</sub> FOR VISIBLE-LIGHT-DRIVEN CO <sub>2</sub> REDUCTION TO ETHANOL
57	<b>Sanjay Singh</b> A NOVEL BIOCOMPATIBLE IRON-N-ACETYLASPARTIC ACID MOF FOR PHOSPHATE SEQUESTRATION: TOWARD ORAL THERAPIES FOR CKD PATIENTS
58	<b>Shahad Alotaiby</b> POST-SYNTHETIC IMMOBILIZATION OF ENZYMES INTO ZIF-8 PRESERVES STABILITY AND ACTIVITY
59	<b>Enrique Lima</b> COPPER RELEASE BY MOF-74(CU) IN PHYSIOLOGICAL MEDIA, AN IN VITRO AND IN VIVO STUDY
60	<b>Sarah Dummert</b> STRUCTURING FUNCTION: MOF-POLYMER COMPOSITES FOR CUSTOMIZABLE THERAPEUTIC APPLICATIONS
61	<b>Alessia Tombesi</b> PURIFYING AIR FROM PATHOGENIC FUNGAL SPORES USING METAL-ORGANIC FRAMEWORKS@POLYSOLFUNE BEADS IN FOOD STORAGE
62	<b>Ayumi Ohashi</b> NUMERICAL ANALYSIS OF KEY FACTORS IN DRUG ENCAPSULATION OF CYCLODEXTRIN-BASED METAL-ORGANIC FRAMEWORKS WITH AMPHIPHILIC NANOPORES
63	<b>Haruki Kanai</b> ROLE OF STRUCTURAL DEFECTS IN MOF ON DRUG LOADING
64	<b>Ilona Juvonen</b> ENVIRONMENTAL HAZARD TESTING OF METAL-PHENOLIC NETWORKS USING AQUATIC ORGANISMS

65	<b>Joanna Goscianska</b> FROM STRUCTURE TO FUNCTION: TUNING MIL-101(Fe) PLATFORMS FOR ANTI-INFLAMMATORY AGENTS DELIVERY
66	<b>Jon Pascual-Colino</b> STUDY OF A FLEXIBLE SMOF HOST FOR DUAL DRUG ENCAPSULATION: STRUCTURAL INSIGHTS AND HIS DRUG CAPTURE AND DELIVERY
67	<b>Monika Mortimer</b> APPLICATION OF BIOASSAYS FOR GUIDING THE DESIGN OF EFFICIENT AND SAFE METAL PHENOLIC NETWORK NANOCOMPOSITES
68	<b>Preeti Rathi</b> SURFACE FUNCTIONALITY IN NANOCOS DRIVES ENHANCED CELLULAR UPTAKE IN LUNG CANCER CELLS
69	<b>S. Zahra Bathaie</b> TARGETED DRUG DELIVERY USING MOFS TO TREAT BREAST CANCER
70	<b>Santiago Daniel Cabrera González</b> METAL-ORGANIC FRAMEWORK-COATED GLASS VIALS AS NOVEL ANALYTICAL DEVICE FOR MINIATURIZED BIOANALYSIS OF HUMAN URINE
71	<b>Se Na Kim</b> A SELF-ACTIVATING MOF-BASED CANCER VACCINE (ARK-CAN002) INDUCES DENDRITIC CELL ACTIVATION AND PREVENTS RECURRENCE OF COLORECTAL CANCER IN PRECLINICAL MODELS
72	<b>Sebastian Kursawa</b> DUAL-TARGETING UIO-MOFS: FUNCTIONALIZATION WITH CYTOTOXIC TUMOR-TARGETING LIGANDS AND CONTROLLED FLUOROURACIL RELEASE
73	<b>Soma Omura</b> ELUCIDATION OF DRUG ADSORPTION MECHANISM OF METAL-ORGANIC FRAMEWORKS BY ELECTRIC FIELD APPLICATION AND DFT SIMULATION
74	<b>Tim Wagner</b> DESIGN AND OPTIMIZATION OF UIO-66 COATED GOLD NANOPARTICLES FOR DRUG DELIVERY
75	<b>Milad Mousavi</b> BIOCOMPATIBILITY AND STABILITY OF MFM-300(Al) IN CYANOBACTERIAL CULTURES
76	<b>Osama Shekhah</b> IN SITU ELECTROCHEMICAL DEPOSITION OF COMPACT METAL-ORGANIC FRAMEWORK THIN FILMS FOR HIGH-RESOLUTION X-RAY IMAGING
77	<b>Meet Chaudhary</b> ZINC-BASED HIGHLY POROUS MOF FOR HIGHLY SENSITIVE AND SELECTIVE SENSING OF $Fe^{3+}$ IONS AND ORGANOARSENIC IN ENVIRONMENTAL WATER, FOOD, AND VEGETABLE SAMPLES IN AQUEOUS MEDIUM WITH THEORETICAL REVELATION
78	<b>Samraj Mollick</b> METAL-ORGANIC FRAMEWORK (MOF) GLASS COMPOSITE FOR SELECTIVE MINERAL RECOVERY FROM SEAWATER
79	<b>Eleni Hadjikyprianou</b> Zr-MOF / BIOCHAR OR / CLAY COMPOSITE MATERIALS FOR THE REMOVAL OF PHARMACEUTICALS FROM AQUEOUS MEDIA

80	<b>Ignasi Fort Grandas</b> IMPACT OF THE CRYSTAL STRUCTURE OF M-CAT-1 MOFS ON THEIR CHEMORESISTIVE GAS SENSING PROPERTIES
81	<b>Núria Portolés Gil</b> FUNCTIONALIZATION OF NANOFIBERS WITH METAL-ORGANIC FRAMEWORKS FOR CBRNS PROTECTION; NANO-SHIELD PROJECT
82	<b>Alejandro M. Fracaroli</b> DEGRADATION OF GLYPHOSATE TO BENIGN N-FORMYL GLYCINE USING MOF-808 NANOCRYSTALS
83	<b>Aleksander Ejsmont</b> SHAPING Co-BTC: STRUCTURE–FUNCTION INSIGHTS INTO TETRACYCLINE REMOVAL FROM WATER
84	<b>Andres Fernando Lancheros Sanchez</b> ENHANCED CO <sub>2</sub> ADSORPTION EFFICIENCY IN AMINE-MODIFIED MIL-101(CR)
85	<b>Anna Mauri</b> GREENHOUSE GASES CAPTURE BY MICRO/MESOPOROUS MOFS: AN IN SITU POWDER X-RAY DIFFRACTION INVESTIGATION
86	<b>Chia-Hui Chuang</b> EFFICIENT SEPARATION OF SMALL GAS MOLECULES USING CAU-23 MEMBRANES
87	<b>Denitsa Elenkova</b> LANTHANOID METAL-ORGANIC FRAMEWORKS AS SENSORS FOR POLLUTANTS IN WATER
88	<b>Diana Catalina Verduzco Flores</b> EFFICIENT AND EFFECTIVE REMOVAL OF TOLUENE FROM AQUEOUS SOLUTION USING MIL-100(FE)
89	<b>Hyejin Yoo</b> COLORIMETRIC IDENTIFICATION OF COLORLESS ACID VAPORS USING A METAL-ORGANIC FRAMEWORK-BASED SENSOR
90	<b>Irène Mangialomini</b> DEVELOPMENT OF MOFS BASED ADSORBENTS FOR THE SELECTIVE CAPTURE OF VOLATILE ORGANIC COMPOUNDS EMITTED BY EGYPTIAN MUMMIES' BALMS
91	<b>Joerg R. Jinschek</b> HIGHLY EFFICIENT REMOVAL OF PERFLUOROOCTANOIC ACID (PFOA) FROM WATER USING ZIRCONIUM TEREPHTHALATE (UIO-66) GEL
92	<b>Julia Torres</b> MOF-IMPRINTED POLYMERS FOR WATER DECONTAMINATION OF DYE POLLUTANTS
93	<b>Li-Tang Chi</b> MIXED-LIGAND STRATEGY FOR PREPARATION OF MOF MEMBRANE FOR GAS SEPARATION
94	<b>Miguel Roselló González</b> LANTHANIDE-DECORATED METAL–ORGANIC FRAMEWORKS WITH ENHANCED OPTICAL PROPERTIES FOR SENSING ORGANIC POLLUTANT
95	<b>Niamh Yates</b> DETECTING NITRITE IN WATER USING RH6G@UIO-66-NH <sub>2</sub> AND UIO-66-NH <sub>2</sub> MICROFLUIDIC PAPER-BASED ANALYTICAL DEVICES.

96	<b>Pedro Brântuas</b> METAL-ORGANIC FRAMEWORKS FOR THE CAPTURE OF CHLORINATED VOLATILE ORGANIC COMPOUNDS: A CASE STUDY ON PERCHLOROETHYLENE
97	<b>Pei Shan Hsu</b> MOF-808 MEMBRANES FOR APPLICATIONS IN MOLECULAR SEPARATIONS
98	<b>Po-Chun Wu</b> DEFECT ENGINEERING OF MOF-808 INCORPORATED IN MIXED MATRIX MEMBRANES FOR CO <sub>2</sub> CAPTURE
99	<b>Roxana Paz García</b> EXPLORING IMINE-BASED COVALENT ORGANIC FRAMEWORKS (COFS) FOR ENHANCED BISPHENOL A ULTRASONIC REMOVAL: A COMPARATIVE STUDY
100	<b>Sachin Tatyasaheb Navale</b> CHEMIREISTIVE SENSING CAPABILITIES OF 2D $\pi$ -CONJUGATED COBALT-BASED METAL-ORGANIC FRAMEWORKS
101	<b>Valeria B. López-Cervantes</b> INTERACTION OF H <sub>2</sub> S WITH A BI(III)-BASED MOF: POLYSULPHIDE FORMATION AND THE EFFECT ON THE FLUORESCENCE
102	<b>WooYeon Moon</b> SELECTIVE TRACE BROMIDE ION REMOVAL FROM CHLORIDE ION-DOMINATED SOLUTIONS USING DEFECTIVE ZR-BASED METAL-ORGANIC FRAMEWORKS
103	<b>Yi-Hsuan Lin</b> SYNERGISTIC INTEGRATION OF MXENE, BENTONITE, AND MOF-303 FOR HIGH-PERFORMANCE INTERFACIAL SOLAR STEAM GENERATION
104	<b>Yunchuan Pu</b> CONSTRUCTING POLYCRYSTALLINE MOF MEMBRANES WITH SOLUTION-DIFFUSION MASS TRANSFER VIA DEFECT FILLING
105	<b>Irina Guerra-Martín</b> MOFS AND TiO <sub>2</sub> -BASED COMPOSITES FOR ADSORPTION AND PHOTODEGRADATION OF EMERGING POLLUTANTS
106	<b>Christos Tampaxis</b> NOVEL HIERARCHICAL MOFS FOR BALANCED VOLUMETRIC AND GRAVIMETRIC H <sub>2</sub> AND CH <sub>4</sub> STORAGE