	POSTER SESSION IV
	Tuesday 23/09/2025
1	Francesca Nerli SWITCHABLE COOPERATIVE CO <sub>2</sub> ADSORPTION MECHANISM IN MULTIVARIATE MIL-140A(CE) MOFS
2	$\begin{tabular}{ll} \textbf{Georgios Karanikolos} \\ \textbf{STRUCTURED MOF-BASED HYBRID ADSORBENTS FOR POST-COMBUSTION CO}_2 \begin{tabular}{ll} \textbf{CAPTURE BY VACUUM/PRESSURE SWING ADSORPTION} \\ \end{tabular}$
3	<b>Jérémy Audevard</b> DIRECT GROWTH OF METAL-ORGANIC FRAMEWORKS ON GEOPOLYMERS: A NOVEL APPROACH FOR THE SHAPING OF POROUS MATERIALS
4	<b>Jiaqi Li</b> AN ADAPTIVE METAL-ORGANIC FRAMEWORK DISCRIMINATES XYLENE ISOMERS BY SHAPE-RESPONSIVE DEFORMATION
5	<b>Jie Dai</b> TOPOTACTIC CONVERSION OF TITANIUM-OXO CLUSTERS (TOCS) TO A STABLE TOC-BASED METAL-ORGANIC FRAMEWORK WITH SELECTIVE ADSORPTION OF CATIONIC DYES
6	Johannes Güllich MICROPOROUS POLYIMIDE AEROGELS: MULTISCALE POROSITY FOR EFFICIENT CO <sub>2</sub> SEPARATION
7	Judit Farrando-Perez THERMAL MANAGEMENT IN MOFS THROUGH HIGH-CONDUCTIVITY GRAPHITE INCORPORATION
8	Kavosh Karami INVERSE GAS CHROMATOGRAPHY STUDY OF N- AND BRANCHED ALKANE ADSORPTION ON CAU-10-CH <sub>3</sub>
9	Konstantinos Papadopoulos ADSORPTIVE SEPARATION OF WATER-ALCOHOL MIXTURES USING POROUS COORDINATION POLYMER
10	<b>Kyu-Min Ryoum</b> BOOSTING ETHANE/ETHYLENE SELECTIVITY AND ETHANE UPTAKE THROUGH CF₃-ENGINEERED UIO-66 FRAMEWORKS
11	Ladawan Pukdeejorhor SELECTION AND CHARACTERIZATION OF SOLID SORBENTS FOR APPLICATION IN POST-COMBUSTION CARBON DIOXIDE CAPTURE
12	Masaki Wadaguchi TUNING PORE SIZE OF MIL-101 AND ITS INFLUENCE ON WATER ADSORPTION KINETICS
13	Prantik Sarkar THOROUGH CHARACTERISATION OF A SERIES OF ULTRA-MICROPOROUS MOFS FOR HYDROGEN STORAGE AND ISOTOPE SEPARATION
14	<b>Rahul Sinha</b> PORE SIZE ENGINEERING OF $\mathrm{NH_2}\text{-}UIO\text{-}66$ VIA MODULATING AGENTS: IMPLICATIONS FOR ENHANCED $\mathrm{CO_2}$ ADSORPTION

15	Rodrigo Gil San Millan TUNING GATE-OPENING PRESSURE IN FLEXIBLE ZEOLITIC IMIDAZOLATE FRAMEWORKS FOR INVERSE OLEFIN/PARAFFIN SEPARATION
16	Runze Chen NANOSTRUCTURED METAL-ORGANIC FRAMEWORK PERCOLATION NETWORKS FOR CHEMIRESISTIVE GAS SENSING VIA POLYSTYRENE NANOPARTICLES
17	Saeed Saadat BINARY SEPARATION OF CIS AND TRANS-2-BUTENE ON NBOFFIVE-1-NI AND ALFFIVE-1-NI
18	Szymon Sobczak 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	Guy De Weireld $CO_2$ CAPTURE VPSA PILOT UNIT USING MIL-160(AL) AND MIL-120(AL): EXPERIMENTAL AND SIMULATION STUDY
21	Ping Song ZINC-TRIAZOLATE-CARBOXYLATE METAL ORGANIC FRAMEWORKS FOR CO2 CAPTURE
22	Alexey Cherevan HARNESSING TI-BASED MOF FOR TARGETED ADSORPTION AND VISIBLE-LIGHT DEGRADATION OF ORGANIC POLLUTANTS
23	Anargiros-Martin Sakellariou FLUORENONE-CONTAINING FLEXIBLE ZR-/HF-BASED MOF FOR SELECTIVE KETONE ADSORPTION
24	Katharina Volz METAL-ORGANIC FRAMEWORKS FOR DIRECT AIR CAPTURE: BENCHMARKING AGAINST INDUSTRIAL STANDARDS
25	Namju Kim HIGH PERFROMANCE METHANE STORAGE VIA A FLEXIBLE COVALENT-ORGANIC FRAMEWORK WITH MULTI- STEP ISOTHERM
26	Nazanin Taheri LEAD, LOCKED AWAY: POROUS ZR-BASED COORDINATION POLYMER FOR RAPID AND SELECTIVE REMOVAL OF PB <sup>2+</sup> FROM WATER
27	Norberto Medina TAILORING ALUMINUM MOFS FOR ENHANCED WATER POLLUTANTS ADSORPTION
28	Timo M.O Felder UNPRECEDENTED SELECTIVITY FOR AS3+ IN A THIOL-BASED ZR-MOF: THE ROLE OF DEFECTS AND DISORDER
29	Connor Hewson INFLUENCE OF HUMIDITY ON THE SORPTION OF CO <sub>2</sub> IN MOFS: STABILITY AND SELECTIVITY
30	Katie Everden EVALUATION OF MOF MATERIALS FOR CO <sub>2</sub> -CAPTURE
31	Akhil Chandran P SYNTHESIS AND DESIGN OF ZIRCONIUM METAL ORGANIC FRAMEWORK FOR EFFICIENT PHOTOREDUCTION OF $\mathrm{CO}_2$

32	Angela Matarín Serrano ANTHRACENE-BASED POROUS POLYMERS FOR CHEMICAL SENSING AND PHOTOCATALYTIC GOLD RECOVERY
33	Anastasiia Kultaeva PHOTOINDUCED SPIN CENTERS IN PHOTOCATALYTIC METAL-ORGANIC FRAMEWORK UIO-66
34	Beatriz Fuerte Diez THREE-COMPONENT COUPLING OF CO₂ FOR THE SYNTHESIS OF CARBAMATES AND CARBONATES USING METAL-SUPPORTED HYPERCROSSLINKED N HETEROCYCLIC CARBENE POLYMER CATALYSTS
35	Cheng-Yu Wang MULTIMETALLIC ZIF-DERIVED HIGH-ENTROPY ALLOY CATALYST FOR P-NITROPHENOL HYDROGENATION
36	Chung-Wei Kung SULFONATE-FUNCTIONALIZED IONIC METAL-ORGANIC FRAMEWORK FOR MODULATING THE SELECTIVITY OF ELECTROCHEMICAL SENSORS AND ELECTROCATALYTIC AMMONIA PRODUCTION
37	David Helminger TUNABLE ISOMETRIC DONOR-ACCEPTOR WURSTER-TYPE COVALENT ORGANIC FRAMEWORK PHOTOCATHODES
38	Hongmei Chen PHOTOTHERMAL EFFECT IN MOF-BASED CATALYSTS TO BOOST CO <sub>2</sub> CONVERSION
39	Jing Ouyang MODULATOR ENGINEERING TO BIFUNCTIONAL METAL-ORGANIC FRAMEWORK FOR SYNERGISTIC CATALYSIS
40	Navaneeth Narayan Gowda DESIGN OF CHIRAL POROUS BIO-HYBRID MATERIALS AS CATALYSTS FOR ${\rm CO_2}$ CONVERSION
41	Paige Hawkins UIO-67 AS A HETEROGENOUS CATALYST FOR THE HYDROBORATION OF CARBONYL COMPOUNDS
42	Ryuji Takada EFFICIENT STRATEGY TO CREATE HIGH-DENSITY INTRINSIC CARBON DEFECTS IN METAL-FREE CARBON ELECTROCATALYSTS FOR $\mathrm{CO}_2$ ELECTROREDUCTION INTO $\mathrm{CO}$
43	Seyed Soroush Mousavi Khadem POST-SYNTHETIC METALATION OF AL-PMOF FOR ENHANCED VISIBLE-LIGHT CO <sub>2</sub> PHOTOCONVERSION
44	Yahong Li ONE $\beta$ -DIKETIMINATE ZINC MOF WITH CATALYTIC ACTIVITIES TOWARDS RING-OPENING POLYMERIZATION AND CROSS-COUPLING REACTIONS
45	Yakoub Smati UNDERSTANDING THE ROLE OF CLUSTER DIMENSIONALITY IN NI-BASED METAL-ORGANIC FRAMEWORKS ON THEIR ACTIVITY IN OXYGEN EVOLUTION REACTION
46	Yu Hin Leung OXIDATIVE DEGRADATION OF POLYETHYLENE GLYCOL PROMOTED BY META—ORGANIC FRAMEWORKS
47	Yu-Chi Wang HALOGEN-DRIVEN MODULATION OF IRIDIUM-FUNCTIONALIZED WATER-STABLE METAL-ORGANIC FRAMEWORKS FOR EFFECTIVE OXYGEN EVOLUTION REACTION
48	Yuzelfy Paola Mendoza Gamero LIGAND FUNCTIONALIZATION AND MOFS SYNTHESIS FOR THEIR USE IN TUNEABLE GREEN CATALYSIS AND GAS SENSING

49	Mir F. Mousavi 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	Jana Bischoff FE-BASED METAL-ORGANIC FRAMEWORKS FOR PHOTOCATALYTIC AMMONIA SYNTHESIS
52	Himanshu Kumar Bhatt FACILE SYNTHESIS OF NANOPARTICLE@POLYMER@ZR-MOF CORE-SHELL NANOHYBRIDS FOR ELECTROCHEMICAL SENSING OF PB(II) IONS
53	Amit Nagar ISOMERIC CYANO-VINYLENE-LINKED COVALENT ORGANIC FRAMEWORKS AND THEIR IMPACT ON PHOTOCATALYTIC HYDROGEN EVOLUTION
54	Roberto Boada SYNERGISTIC ADSORPTION AND PHOTOCATALYTIC DEGRADATION OF METHYLENE BLUE BY MN-DOPEDZIF- 67@ZEOLITE-X HYBRID MATERIALS
55	Mateusz Adam Baluk EFFECT OF COPPER MODIFICATION ON PCN-222 PROPERTIES
56	Sneha Raj Vannante Parambil HETEROSTRUCTURE NANOCATALYST BASED ON CE-MOF AND ${\rm MOS_2}$ FOR VISIBLE-LIGHT-DRIVEN ${\rm CO_2}$ REDUCTION TO ETHANOL
57	Sanjay Singh A NOVEL BIOCOMPTATIBLE IRON-N-ACETYLASPARTIC ACID MOF FOR PHOSPHATE SEQUESTRATION: TOWARD ORAL THERAPIES FOR CKD PATIENTS
58	Shahad Alotaiby POST-SYNTHETIC IMMOBILIZATION OF ENZYMES INTO ZIF-8 PRESERVES STABILITY AND ACTIVITY
59	Enrique Lima COPPER RELEASE BY MOF-74(CU) IN PHYSIOLOGICAL MEDIA, AN IN VITRO AND IN VIVO STUDY
60	Sarah Dummert STRUCTURING FUNCTION: MOF-POLYMER COMPOSITES FOR CUSTOMIZABLE THERAPEUTIC APPLICATIONS
61	Alessia Tombesi PURIFYING AIR FROM PATHOGENIC FUNGAL SPORES USING METAL-ORGANIC FRAMEWORKS@POLYSOLFUNE BEADS IN FOOD STORAGE
62	Ayumi Ohashi NUMERICAL ANALYSIS OF KEY FACTORS IN DRUG ENCAPSULATION OF CYCLODEXTRIN-BASED METAL-ORGANIC FRAMEWORKS WITH AMPHIPHILIC NANOPORES
63	Haruki Kanai ROLE OF STRUCTURAL DEFECTS IN MOF ON DRUG LOADING
64	llona Juvonen ENVIRONMENTAL HAZARD TESTING OF METAL-PHENOLIC NETWORKS USING AQUATIC ORGANISMS

65	Joanna Goscianska FROM STRUCTURE TO FUNCTION: TUNING MIL-101(FE) PLATFORMS FOR ANTI-INFLAMMATORY AGENTS DELIVERY
66	Jon Pascual-Colino STUDY OF A FLEXIBLE SMOF HOST FOR DUAL DRUG ENCAPSULATION: STRUCTURAL INSIGHTS AND HIS DRUG CAPTURE AND DELIVERY
67	Monika Mortimer APPLICATION OF BIOASSAYS FOR GUIDING THE DESIGN OF EFFICIENT AND SAFE METAL PHENOLIC NETWORK NANOCOMPOSITES
68	Preeti Rathi SURFACE FUNCTIONALITY IN NANOCOFS DRIVES ENHANCED CELLULAR UPTAKE IN LUNG CANCER CELLS
69	Santiago Daniel Cabrera González METAL-ORGANIC FRAMEWORK-COATED GLASS VIALS AS NOVEL ANALYTICAL DEVICE FOR MINIATURIZED BIOANALYSIS OF HUMAN URINE
70	Se Na Kim A SELF-ACTIVATING MOF-BASED CANCER VACCINE (ARK-CAN002) INDUCES DENDRITIC CELL ACTIVATION AND PREVENTS RECURRENCE OF COLORECTAL CANCER IN PRECLINICAL MODELS
71	Sebastian Kursawa DUAL-TARGETING UIO-MOFS: FUNCTIONALIZATION WITH CYTOTOXIC TUMOR-TARGETING LIGANDS AND CONTROLLED FLUOROURACIL RELEASE
72	Soma Omura ELUCIDATION OF DRUG ADSORPTION MECHANISM OF METAL-ORGANIC FRAMEWORKS BY ELECTRIC FIELD APPLICATION AND DFT SIMULATION
73	Tim Wagner DESIGN AND OTIMIZATION OF UIO-66 COATED GOLD NANOPARTICLES FOR DRUG DELIVERY
74	Milad Mousavi BIOCOMPATIBILITY AND STABILITY OF MFM-300(AL) IN CYANOBACTERIAL CULTURES
75	Osama Shekhah IN SITU ELECTROCHEMICAL DEPOSITION OF COMPACT METAL-ORGANIC FRAMEWORK THIN FILMS FOR HIGH-RESOLUTION X-RAY IMAGING
76	Meet Chaudhary ZINC-BASED HIGHLY POROUS MOF FOR HIGHLY SENSITIVE AND SELECTIVE SENSING OF FE <sup>3+</sup> IONS AND ORGANOARSENIC IN ENVIRONMENTAL WATER, FOOD, AND VEGETABLE SAMPLES IN AQUEOUS MEDIUM WITH THEORETICAL REVELATION
77	Samraj Mollick METAL-ORGANIC FRAMEWORK (MOF) GLASS COMPOSITE FOR SELECTIVE MINERAL RECOVERY FROM SEAWATER
78	<b>Eleni Hadjikyprianou</b> ZR-MOF / BIOCHAR OR / CLAY COMPOSITE MATERIALS FOR THE REMOVAL OF PHARMACEUTICALS FROM AQUEOUS MEDIA
79	Ignasi Fort Grandas IMPACT OF THE CRYSTAL STRUCTURE OF M-CAT-1 MOFS ON THEIR CHEMORESISTIVE GAS SENSING PROPERTIES

80	<b>Núria Portolés Gil</b> FUNCTIONALIZATION OF NANOFIBERS WITH METAL-ORGANIC FRAMEWORKS FOR CBRNS PROTECTION; NANO-SHIELD PROJECT
81	Alejandro M. Fracaroli DEGRADATION OF GLYPHOSATE TO BENIGN N-FORMYL GLYCINE USING MOF-808 NANOCRYSTALS
82	Aleksander Ejsmont SHAPING Co-BTC: STRUCTURE-FUNCTION INSIGHTS INTO TETRACYCLINE REMOVAL FROM WATER
83	Andres Fernando Lancheros Sanchez ENHANCED CO <sub>2</sub> ADSORPTION EFFICIENCY IN AMINE-MODIFIED MIL-101(CR)
84	Anna Mauri GREENHOUSE GASES CAPTURE BY MICRO/MESOPOROUS MOFS: AN IN SITU POWDER X-RAY DIFFRACTION INVESTIGATION
85	Chia-Hui Chuang EFFICIENT SEPARATION OF SMALL GAS MOLECULES USING CAU-23 MEMBRANES
86	Denitsa Elenkova LANTHANOID METAL-ORGANIC FRAMEWORKS AS SENSORS FOR POLLUTANTS IN WATER
87	Diana Catalina Verduzco Flores EFFICIENT AND EFFECTIVE REMOVAL OF TOLUENE FROM AQUEOUS SOLUTION USING MIL-100(FE)
88	Hyejin Yoo COLORIMETRIC IDENTIFICATION OF COLORLESS ACID VAPORS USING A METAL-ORGANIC FRAMEWORK- BASED SENSOR
89	Irène Mangialomini DEVELOPMENT OF MOFS BASED ADSORBENTS FOR THE SELECTIVE CAPTURE OF VOLATILE ORGANIC COMPOUNDS EMITTED BY EGYPTIAN MUMMIES' BALMS
90	Joerg R. Jinschek HIGHLY EFFICIENT REMOVAL OF PERFLUOROOCTANOIC ACID (PFOA) FROM WATER USING ZIRCONIUM TEREPHTHALATE (UIO-66) GEL
91	Julia Torres MOF-IMPRINTED POLYMERS FOR WATER DECONTAMINATION OF DYE POLLUTANTS
92	Li-Tang Chi MIXED-LIGAND STRATEGY FOR PREPARATION OF MOF MEMBRANE FOR GAS SEPARATION
93	Miguel Roselló González LANTHANIDE-DECORATED METAL-ORGANIC FRAMEWORKS WITH ENHANCED OPTICAL PROPERTIES FOR SENSING ORGANIC POLLUTANT
94	Niamh Yates DETECTING NITRITE IN WATER USING RH6G@UIO-66-NH $_2$ AND UIO-66-NH $_2$ MICROFLUIDIC PAPER-BASED ANALYTICAL DEVICES.
95	Pedro Brântuas METAL-ORGANIC FRAMEWORKS FOR THE CAPTURE OF CHLORINATED VOLATILE ORGANIC COMPOUNDS: A CASE STUDY ON PERCHLOROETHYLENE

96	Pei Shan Hsu MOF-808 MEMBRANES FOR APPLICATIONS IN MOLECULAR SEPARATIONS
97	<b>Po-Chun Wu</b> DEFECT ENGINEERING OF MOF-808 INCORPORATED IN MIXED MATRIX MEMBRANES FOR CO <sub>2</sub> CAPTURE
98	Roxana Paz García EXPLORING IMINE-BASED COVALENT ORGANIC FRAMEWORKS (COFS) FOR ENHANCED BISPHENOL A ULTRASONIC REMOVAL: A COMPARATIVE STUDY
99	Sachin Tatyasaheb Navale CHEMIRESISTIVE SENSING CAPABILITIES OF 2D Π-CONJUGATED COBALT-BASED METAL-ORGANIC FRAMEWORKS
100	Valeria B. López-Cervantes INTERACTION OF $\rm H_2S$ WITH A BI(III)-BASED MOF: POLYSULPHIDE FORMATION AND THE EFFECT ON THE FLUORESCENCE
101	WooYeon Moon SELECTIVE TRACE BROMIDE ION REMOVAL FROM CHLORIDE ION-DOMINATED SOLUTIONS USING DEFECTIVE ZR-BASED METAL-ORGANIC FRAMEWORKS
102	<b>Yi-Hsuan Lin</b> SYNERGISTIC INTEGRATION OF MXENE, BENTONITE, AND MOF-303 FOR HIGH-PERFORMANCE INTERFACIAL SOLAR STEAM GENERATION
103	Yunchuan Pu CONSTRUCTING POLYCRYSTALLINE MOF MEMBRANES WITH SOLUTION-DIFFUSION MASS TRANSFER VIA DEFECT FILLING
104	Irina Guerra-Martín MOFs AND TIO2-BASED COMPOSITES FOR ADSORPTION AND PHOTODEGRADATION OF EMERGING POLLUTANTS
105	Christos Tampaxis NOVEL HIERARCHICAL MOFS FOR BALANCED VOLUMETRIC AND GRAVIMETRIC H₂ AND CH₄ STORAGE
106	Maram Bakiro MOLECULAR LAYER DEPOSITION OF AIF-MOF FOR SELECTIVE CO2 CAPTURE: A MOLECULAR LAYER DEPOSITION STUDY
107	Joshua Morris OVERCOMING SIZE LIMITATIONS IN MOF RESEARCH: STRUCTURAL ELUCIDATION BY ELECTRON DIFFRACTION