

POSTER SESSION II

Monday 22/09/2025

- | | |
|----|---|
| 1 | Julia Knapp
DYNAMIC BREATHING BEHAVIOUR OF THE TITANIUM-BASED METAL-ORGANIC FRAMEWORK NTU-9 UPON ADSORPTION OF WATER AND ORGANIC SOLVENTS |
| 2 | Timo Manitz
ELUDICATING THE IMPACT OF THE SYNTHESIS METHODE ON THE STRUCTURAL FLEXIBILITY OF MIL-88 A (FE) DURING WATER HARVESTING |
| 3 | Giacomo Provinciali
LIGHTWEIGHT INORGANIC HYDRIDES CONFINED WITHIN ZIRCONIUM AND BERYLLIUM METAL-ORGANIC FRAMEWORKS AS HYDROGEN STORAGE MATERIALS |
| 4 | Edoardo Bracciotti
MOF-SUPPORTED METAL COMPLEXES FOR CO ₂ CONVERSION IN E-FUELS |
| 5 | Sahra Ahmed
SUPPORTED PD SINGLE-ATOM CATALYSTS ON UIO-66 FOR CO ₂ HYDROGENATION TO METHANOL |
| 6 | Sara Talebi Deylamani
OPTIMIZING MOF MORPHOLOGY FOR ENZYME ENCAPSULATION: INSIGHTS FROM NANOSCALE CHARACTERIZATION |
| 7 | Zheao Huang
HOW POWERFUL IS LIGAND ENGINEERING IN ENHANCING MOF PERFORMANCE? |
| 8 | Eunji Jin
ENGINEERING PHOTOSWITCHING DYNAMICS IN 3D PHOTOCHROMIC METAL-ORGANIC FRAMEWORKS THROUGH METAL-ORGANIC POLYHEDRON DESIGN |
| 9 | Kanchana Sotho
CONVERSION OF CO ₂ INTO POROUS METAL-ORGANIC FRAMEWORK MONOLITHS |
| 10 | Karnjana Atthawilai
BINARY PHASE DIAGRAM OF COORDINATION POLYMER WITH EUTECTIC MELTING BEHAVIORS |
| 11 | Rinku Kushwaha
TOWARDS CONDUCTIVE RU-BASED COORDINATION POLYMERS |
| 12 | Lukas Steinbach
OPTIMIZATION OF SOD-TYPE ZIF THIN-FILMS FOR OPTICAL APPLICATIONS THROUGH TARGETED LAYER FORMATION AND ADSORPTION CONTROL |
| 13 | William Reinholdsson
EXPLORING THE WORLD OF DYNAMIC LN AND MN MOFS AND THE ROLE OF THE METAL SBU IN THE GATE-OPENING EFFECT |
| 14 | Yeonwoo Park
DIMENSIONAL ENGINEERING OF PORPHYRIN-BASED COVALENT ORGANIC FRAMEWORKS FOR TUNABLE PHOTOPHYSICAL PROPERTIES |
| 15 | Guillaume Bertrand
FLUORESCENT MOF EMISSION TUNING AND APPLICATION TOWARD RADIOACTIVE GAS DETECTION |

16	Sonila Xhafa CHEMIREISTIVE SENSORS FOR ETHYLENE DETERMINATION BASED ON SILVER(I) BIPYRAZOLATES
17	Ciara Byrne EXAMINING THE IMPACT OF SYNTHESIS METHOD ON THE ADSORPTION OF ETHANOL IN ZIF-71 & ZIF-93
18	Danylo Merzhyievskyi DEFEROXAMINE NANOCOMPOSITES FOR METAL BINDING
19	Leonid Shupletsov SUSTAINABLE DYNAMIC SOLVENT SYSTEM (DSS) UNRAVELING FLEXIBILITY OF PYRAZOLATE MOFS WITH WINERACK TOPOLOGY
20	Letizia Trovarelli SYNTHESIS AND ADVANCED CHARACTERIZATION OF ZR BASED METAL-ORGANIC FRAMEWORKS FOR CO ₂ SEPARATION IN MIXED MATRIX MEMBRANES
21	Hristina Lazarova STUDY OF TITANIUM SILICATE 1 (TS-1) FOR TREATMENT OF DIFFERENT DYES IN WASTEWATER
22	Rusi Rusew STRUCTURAL CHARACTERIZATION, ADSORPTION BEHAVIOR, AND PHOTOCATALYTIC PERFORMANCE OF A ZINC-BASED MOF INCORPORATING 2,4,6-TRIS-(4-CARBOXYPHENOXY)-1,3,5-TRIAZINE
23	Isaac Negrín-Santamaría IMPROVED PREPARATION OF THIN-FILM MOF-COATED BLADES
24	Klara Klemenčič DIAMINOTRIAZOLE-BASED MOF FOR CO ₂ ADSORPTION AT LOW CONCENTRATIONS
25	Raluca-Ana Kessler EXPLORING RENEWABLE REGENERATION TECHNIQUES FOR EFFICIENT CO ₂ DESORPTION
26	Theresa Bloehs RESOURCE RECOVERY USING POROUS COMPOSITE MATERIALS
27	Yujin Choi TRANSITION METAL-SILOXANE CLUSTER-BASED METAL-ORGANIC FRAMEWORKS FOR GREENHOUSE GAS CAPTURE
28	Guo-ying Han UNRAVELING THE RELATIONSHIP BETWEEN DEFECT TYPE AND CATALYSIS IN UIO-66
29	Henrike von Wedel CATALYTIC TANDEM REACTIONS IN MESOPOROUS METAL-ORGANIC FRAMEWORKS
30	Pablo Ayala MODULATED SYNTHESIS OF A NEW TITANIUM-BASED METAL-ORGANIC FRAMEWORK WITH PHOTOCATALYTIC ACTIVITY UNDER RED LIGHT
31	Thanakorn Tiawarakul H ⁺ CONDUCTIVE COORDINATION POLYMER GLASS AS A MATERIAL FOR MEMBRANE ELECTRODE ASSEMBLY FOR CO ₂ REDUCTION
32	Viktorija Mironova CE-MOFS - FAST SYNTHESIS AND CHARACTERIZATION

33	Yasmin Okhassova WEAKLY COORDINATING ANIONIC NETWORKS AS A PLATFORM FOR CATALYSIS
34	Orysia Zaremba CRUDE ENZYME EXTRACTS FOR BIOCATALYST ENTRAPMENT IN METAL-ORGANIC FRAMEWORKS
35	Yao Tong ACCELERATED DEVELOPMENT OF CAT@MOF CATALYST FOR INDUSTRIALLY RELEVANT HYDROGENATIONS
36	Vandana Vishwakarma STRUCTURAL RECONSTRUCTION OF A COBALT-BASED METAL-ORGANIC FRAMEWORK DURING THE ELECTROCHEMICAL HYDROGEN EVOLUTION REACTION
37	Afranur Pendar STRUCTURAL ELUCIDATION OF A NEW POLYMORPH OF Cd(II) MOF FEATURING HEXAKIS(4-CARBOXYLATOPHENOXY)CYCLOTRIPHOSPHAZENE: TOWARD MULTIFUNCTIONAL ENVIRONMENTAL APPLICATIONS
38	Elif Özcan MULTIFUNCTIONAL ZN(II) MOF BASED ON A ROBUST CYCLOPHOSPHAZENE LINKER: SENSING AND PHOTOCATALYTIC APPLICATIONS
39	Hanwen Luan DEFECT ENGINEERING IN UIO-66-NH ₂ FRAMEWORKS VIA GREEN SOLVENTS: ENHANCED PHOTOCATALYTIC DEGRADATION OF ORGANIC POLLUTANTS
40	Yunus Zorlu A 3D CU(II) METAL-ORGANIC FRAMEWORK FEATURING A CYCLOPHOSPHAZENE LIGAND FOR VISIBLE-LIGHT-DRIVEN DYE DEGRADATION AND SELECTIVE CO ₂ CAPTURE
41	Robin Petersson THE USE OF HALF-SALEN METALLO COMPLEXES IN MIL-125(TI)-NH ₂ FOR HYDROGEN EVOLUTION REACTIONS (HER)
42	Satyapriya Nath COVALENT ORGANIC FRAMEWORKS AS NANO-RESERVOIR FOR ROOM TEMPERATURE RNA STORAGE
43	Valentina Di Matteo RATIONAL FUNCTIONALIZATION OF A ZR-BASED MOF WITH THE SUGAR MANNOSE FOR ENHANCED STABILITY AND TARGETED DELIVERY
44	Alessio Zuliani STRUCTURE-GUIDED DESIGN OF SMART HYBRID GLYCOMOF NANOPLATFORMS VIA SCALABLE MULTIGRAM SYNTHESIS FOR BIOMEDICAL APPLICATIONS
45	Guillermo Gómez-Tenés CLICK-ENABLED RECOGNITION OF CHIRAL DRUGS IN RETICULAR FRAMEWORKS
46	Zirui Song IMPACT OF PROCESSING CONDITIONS ON METAL-ORGANIC FRAMEWORKS FOR CHEMIREISISTIVE GAS SENSORS
47	MCarmen Contreras METAL-ORGANIC FRAMEWORKS IN SUSTAINABLE APPLICATIONS
48	Nikos Panagiotou SYNTHESIS, MODIFICATIONS AND SENSING APPLICATIONS OF RARE EARTH METAL-ORGANIC FRAMEWORKS BASED ON [RE ₆ (μ ₃ -OH) ₈] ¹⁰⁺ SECONDARY BUILDING UNITS AND ANGULAR DICARBOXYLATES

49	Kabir Otun DESIGN OF BIMETALLIC MIL-53(Fe,Ni) MOFs FOR ENHANCED ELECTROCHEMICAL ENERGY STORAGE WITH INSIGHTS INTO CHARGE STORAGE MECHANISM
50	Chuzhan Jin ELECTROCHEMICAL DEPOSITION OF HKUST-1 POLYCRYSTALLINE FILMS AS TRIBO-POSITIVE MATERIAL FOR ROBUST TRIBOELECTRIC ENERGY HARVESTERS
51	Da Lei FUNCTIONALIZED COVALENT ORGANIC FRAMEWORKS FOR MODULATING THE DEPOSITION BEHAVIOR OF ZINC ANODES
52	Davide Caporale EXPERIMENTAL EVIDENCE OF "LOW TEMPERATURE" SUPERCRITICAL TRANSITION OF NANOCONFINED WATER USING ZIF-8
53	Fanni Fekecs TRIOXOAZATRIANGULENE-BASED COVALENT ORGANIC FRAMEWORKS AS ORGANIC CATHODES FOR LITHIUM-ION BATTERIES
54	Harikrishnan Raghavan DEVELOPMENT OF DEFECT-FREE METAL-ORGANIC FRAMEWORK (MOF) MEMBRANES FOR ENHANCED GAS SEPARATION PERFORMANCE
55	Maria Metaxa UNVEILING THE SYNERGISTIC EFFECT OF CO(OH) ₂ -CDIN ₂ S ₄ NANOHETEROSTRUCTURES FOR ENHANCED ELECTROCHEMICAL WATER OXIDATION
56	Pablo Salcedo ROOM TEMPERATURE AND GREEN SYNTHESIS OF A NOVEL K-BASED METAL-ORGANIC FRAMEWORK WITH HIGH PROTON CONDUCTIVITY
57	Paula Sara Escamilla Berenguer A TRIOXOTRIANGULENE NEUTRAL RADICAL-BASED COVALENT ORGANIC FRAMEWORK
58	Premkumar Murugesan 3D STEREOLITHOGRAPHY-PRINTED MICRO-LATTICES FOR Fe-MOF-DERIVED ARCHITECTURES AS A PLATFORM FOR HIGH-PERFORMANCE SELF-STANDING PSEUDOCAPACITIVE AND SUPERCAPATTERY ELECTRODES
59	Qin-Yu Zhu A TETRATHIAFULVALENE-BASED BIMETAL-ORGANIC FRAMEWORK FOR A HYBRID LITHIUM-ION CAPACITOR: THE ROLE OF BIMETALLIC CENTERS IN CHARGE STORAGE AND STABILITY
60	Yingming Yao A REDOX-ACTIVE 2D TTF-Cu MOF WITH PROMOTED PERFORMANCES FOR SUPERCAPATTERY
61	Niko Hilmi ZIF-7/POLYETHERIMIDE MIXED MATRIX MEMBRANES (MMMS) FOR HYDROGEN PURIFICATION
62	Georgia Rowe NOVEL FLOW REACTOR SYNTHESIS OF HKUST-1 WITH PRECISELY CONTROLLED PHYSICAL PROPERTIES
63	Jiun-Jen Chen WET GRANULATION OF MOFS: PROCESS DEVELOPMENT AND EVALUATION OF SHAPED SORBENTS
64	Kenji Sumida INTRODUCING MOFGRAPHY: DEVELOPING ADVANCED SEPARATION MATERIALS FOR CHEMICAL PURIFICATION APPLICATIONS

65	Yassine Khadiri DIRECT MIXING VS. IN-SITU GROWTH OF MOF-74 AND UIO-66 PROMOTED BY GRAPHENE OXIDE FOR CCUS TECHNOLOGIES AND FRUCTOSE DEHYDRATION
66	Sanjog S. Nagarkar METAL-ORGANIC FRAMEWORK BASED FUNCTIONAL GLASSES AND POROUS LIQUIDS
67	Daniela Cardona-González HYBRID INORGANIC-ORGANIC MULTIFUNCTIONAL MATERIAL UNAM-3: STRUCTURAL FLEXIBILITY, SOLVENT EXCHANGE, AND ELECTRICAL CONDUCTIVITY
68	Aleksander Matavž ZIF-8 THIN FILMS WITH EMBEDDED IONIC LIQUIDS FOR ULTRA-SENSITIVE CAPACITIVE GAS SENSORS
69	Ben Sutens HIERARCHICAL STRUCTURING OF POROUS MOF ADSORBENTS FOR GAS ADSORPTION APPLICATIONS
70	Cathal Kelly GAS EXCLUSION ZONES IN TYPE-II POROUS LIQUIDS
71	Clara Ponte FAST SYNTHESIS OF VINYLENE-LINKED COVALENT ORGANIC FRAMEWORKS VIA FAVORABLE INTERMOLECULAR INTERACTIONS
72	Eunchan Cho UP-DOWN APPROACH FOR EXPANDING THE CHEMICAL SPACE OF 3D COVALENT ORGANIC FRAMEWORKS
73	Eunjie Ju SUPERPROTONIC CONDUCTIVITY IN ZR-BASED METAL-ORGANIC POLYHEDRA
74	Gabriele Stucchi DEFECTIVE CE-DOPED MIXED LIGAND-UIO-66 MOFS WITH CONTROLLED FLUORINATION FOR CO ₂ CONVERSION: SYNTHESIS AND THOROUGH CHARACTERIZATION
75	Hang Qu BOTTOM-UP COMPUTATIONAL DESIGN OF SHAPE-SELECTIVE ORGANIC MACROCYCLES FOR HUMID CO ₂ CAPTURE
76	Huanjing Luo SURFACE-CONFINED NANOPOROUS SUPRAMOLECULAR NETWORKS STABILIZED BY DIPOLE-DIPOLE INTERACTIONS
77	Jacopo Perego ENGINEERING POROSITY MODULATION, MULTI-STIMULI RESPONSIVITY AND ORTHOGONAL ISOMERIZATION IN POROUS SWITCHABLE FRAMEWORKS
78	José Alfredo López Olvera UNDERSTANDING ION EXCHANGE KINETICS IN A FAMILY OF ORGANIC MOLECULAR CAGES
79	Katarina Lisac NOVEL TOPOLOGIES OF ZINC IMIDAZOLATE (ZNIM) ₂ WITH ENCAPSULATED FULLERENES
80	Sara Camorali DOUBLING DOWN ON BISPIDINES: NOVEL TETRATOPIC LIGANDS FOR COORDINATIVE POLYMERIZATION
81	Shuto Tsuda STRUCTURAL ANISOTROPY IN COORDINATION POLYMER GLASS INDUCED BY MACROSCOPIC ELONGATION

82	Siddanth Saxena DEVELOPMENT OF CYCLODEXTRIN MOFS FOR FOOD PACKAGING AND STUDY OF ITS ABSORPTION AND RELEASE KINETICS
83	Montse Saura Cayuela METAL-ORGANIC FRAMEWORKS IN MATRIX SOLID-PHASES DISPERSION FOR THE EXTRACTION OF PHYTOCHEMICALS FROM CANNABIS SATIVA L. AERIAL PARTS
84	Takao Fujikawa SELF-ASSEMBLY OF UNCHARTED POLYHEDRA PREDICTED BY GRAPH CONVERSION
85	Tomoki Kitano DEVELOPMENT OF 2.5-DIMENSIONAL COVALENT ORGANIC FRAMEWORKS WITH HIGH CO ₂ CAPTURE AND SEPARATION PERFORMANCE
86	Verena Lipic A MULTIVARIATE LIGAND STRATEGY TO IMPROVE BIOFUNCTIONALITY AND STABILITY IN ENZYME@MAF BIOCOMPOSITES
87	Wonyoung Choe ORIGAMIC METAL-ORGANIC FRAMEWORKS AS PROGRAMMABLE MECHANICAL METAMATERIALS
88	Wonyoung Choe QUASIPERIODICITY IN MOIRÉ METAL-ORGANIC FRAMEWORKS
89	Xiao Feng SPATIALLY ORDERED DEFECTS IN METAL-ORGANIC FRAMEWORKS: TOWARDS PRECISE CONTROL AND PROPERTY OPTIMIZATION
90	Xiaoxuan Su POST-SYNTHETIC MODIFICATION OF LAYERED MOFS CONSTRUCTED FROM TETRAZINE LIGANDS
91	Yu-Lin Lu HIGH-THROUGHPUT DISCOVERY OF POLYMORPHIC POROUS STRUCTURES IN METHYL-SUBSTITUTED AMMONIUM CHLORIDE SALTS
92	Yuto Osugi SELF-EXPANSION OF METAL-ORGANIC CAGES USING A RING-OPENABLE LIGAND
93	Aratrika Chakraborty ELECTRIC FIELD-TRIGGERED DYNAMICS OF 2D COVALENT ORGANIC FRAMEWORK BY IN SITU SPECTROELECTROCHEMISTRY
94	Ariel Guzmán-Vargas ENHANCED ENERGY STORAGE OF A POROUS COORDINATION POLYMER BY INTRODUCING ADDITIONAL TRANSITION METAL
95	Youchang Zhang A PHOTOTAUTOMERIC 3D COVALENT ORGANIC FRAMEWORK FOR RATIOMETRIC FLUORESCENCE HUMIDITY SENSING
96	Joshua Edzards BENCHMARKING SELECTED DENSITY FUNCTIONALS AND DISPERSION CORRECTIONS FOR MOF-5 AND ITS DERIVATIVES
97	Julia Santana Andreo DYNAMIC STABILITY OF MOF-5 AND ITS DERIVATIVES
98	Modan Liu FUNCTIONALIZATION OF MONOLITHIC MOF THIN FILMS WITH HYDROCARBON CHAINS TO ACHIEVE SUPERHYDROPHOBIC SURFACES WITH TUNABLE WATER ADHESION STRENGTH

99	Jayant K Singh LEVERAGING MOFS FOR EFFECTIVE ICE RECRYSTALLIZATION INHIBITION
100	Jelto Neirynck TOWARDS A FUNDAMENTAL UNDERSTANDING OF FORCED LIQUID INTRUSION FOR SHOCK ABSORPTION APPLICATIONS USING MACHINE LEARNING POTENTIALS
101	Wenwen Liu MACHINE LEARNING-ACCELERATED DEVELOPMENT OF METAL-ORGANIC FRAMEWORKS FOR ENHANCED METHANE CAPTURE
102	Angana Borbora FUNCTIONALIZING SURFACE-MOUNTED METAL-ORGANIC FRAMEWORK (SURMOF) FILMS VIA POLYMER CHAIN INSERTION INTO PORE CHANNELS
103	Edouardos Loukopoulos ATOMICALLY PRECISE ENGINEERING OF SYNERGISTIC ADSORPTION SITES IN A ZIRCONIUM MOF FOR THE HIGHLY EFFICIENT ADSORPTION OF PERFLUOROOCTANOIC ACID
104	Sumanta Let ACCESSING CHARGE IN A SERIES OF REDOX-ACTIVE COVALENT ORGANIC FRAMEWORKS (COFs): HARNESSING STRUCTURE-PROPERTY CORRELATION TO PSEUDOBATTERY APPLICATION
105	Stefano Elli MOLECULAR RECOGNITION IN $M_{12}L_8$ INTERLOCKED METAL-ORGANIC CAGES
106	Usama Ehsan RARE EARTH METAL- ORGANIC FRAMEWORKS: STRUCTURAL DIVERSITY, STABILITY, AND LUMINESCENT PROPERTIES
107	María Gelpi Santos CHEMICAL-ENGINEERING OF THE BREATHING-CALORIC EFFECTS IN MOFs: SOLID TRANSITIONS, GAS ADSORPTION AND HYDROGEN-BONDING
108	Fabio Manna A SERIES OF CONDUCTING TETRATHIAFULVALENE-BASED 2D MOFs WITH LANTHANIDES IONS (DyIII, ErIII & YbIII)