



9th CONFERENCE OF THE FEDERATION OF
THE EUROPEAN ZEOLITE ASSOCIATIONS
Portorož-Portorose, Slovenia
2-6 July 2023



	03 JULY 2023, MONDAY		
08:45 – 09:00	Main Hall: Opening Ceremony		
09:00 – 10:00	Main Hall: EUROPA A + B Chair: Jean-Pierre Gilson Valentin Valchev Recent Advances and Future Challenges in Zeolitic Materials		
	Main Hall -EUROPA A + B	Parallel Session-EMERALD I	Parallel Session-EMERALD II
10:00 – 11:00	<div>ORAL SESSION 1</div> <div>Chairs: Cristopher Jones and Sibeles Pergher Elena Brozzi Interzeolite conversion for fast and continuous zeolite synthesis O1 (1180)</div> <div>Javier García-Martínez Partial Interzeolite Transformation for the Fabrication of Superior Catalysts for the Conversion of Bulky Molecules O4 (1250)</div> <div>Kenta Iyoki Stabilization effects of pore fillers in post-synthetic, liquid-mediated modification of zeolites O7 (1169)</div> <div>Maksym Opanasenko Structural transformation of IVW into new zeolite O10 (1063)</div>		
	<div>ORAL SESSION 2</div> <div>Chairs: Dirk de Vos and Tom Willhammar German Sastre Organic and Inorganic Structure Directing Agents in the Synthesis of Zeolites O2 (1253)</div> <div>Reisel Millan Dynamics of [Cu(NH3)2]+ species in Cu-CHA catalysts from machine learning driven atomistic simulations O5 (1281)</div> <div>Arthur Millet Relation between a zeolite microstructure and its silver loading for an optimized xenon adsorption O8 (1049)</div> <div>Bruno Alonso Host-Guest MFI assemblies: correlated disorder and phase transition inhibition by a small guest modification O11 (1184)</div>		
	<div>ORAL SESSION 3</div> <div>Chairs: Monique van der Veen and Valentina Crocella Rémy Guillet-Nicolas Impact of pore structure of CHA and GIS zeolites on gas adsorption/separation O3 (1085)</div> <div>Hailing Guo Si-O-C Cross-Linking between zeolite Nanoparticles and GO in Composite Membranes to Trigger High Permeance, Selectivity, and Stability in Gas/Liquid Separation O6 (1087)</div> <div>Hannes Richter Scaling-up of zeolite membrane manufacturing for natural gas treatment in industrial scale O9 (1346)</div> <div>Justyna Florek Organo-functionalized silicas for selective solid-phase extraction of critical materials O11 (1083)</div>		
11:00 – 11:30	Coffee break		
11:30 – 13:00	<div>KEYNOTE LECTURE & ORAL SESSION 4</div> <div>Krunoslav Užarević Green and rational synthesis of porous metal-organic frameworks and their non-conventional forms via mechanochemistry</div> <div>Chairs: Cristopher Jones and Sibeles Pergher Amirhossein Javdani Developing reactor-based solutions for monitoring and controlling of Zeolite synthesis O17 (1175)</div> <div>Ana Palčić In situ investigation of zeolite synthesis while milling at elevated temperatures O20 (1196)</div> <div>Eddidiong Asuquo Chemical Recycling of Polyolefins using Nickel Bi-functional Catalyst via Hydrocracking- A Single -Source Precursor Approach O23 (1219)</div> <div>Susana Valencia Synthesis, Structure Determination and Adsorption Properties of the Zeolitic Germanosilicate ITQ-69 O25 (1228)</div>		
	<div>KEYNOTE LECTURE & ORAL SESSION 5</div> <div>Chairs: Dirk de Vos and Tom Willhammar</div> <div>Dankun Yang Dependency of frameworks and cations on the functionality of trapdoor zeolite O13 (1053)</div> <div>Tommaso Battiston P-induced crystal-fluid interaction in 6-membered ring zeolites: the case of ERI, OFF and EAB topologies O15 (1031)</div> <div>Peidong Hu Revealing the Amorphous-to-Crystalline Transformation in Zeolite Synthesis Using In Situ High-Energy X-ray Total Scattering Measurement O18 (1191)</div> <div>Loïc Benariac-Doumail Investigation of CO2 adsorption on a selection of zeolites by in-situ high-resolution powder X-ray diffraction, isotherm modeling and simulation O21 (1068)</div> <div>Diego Giacomo Gatta Channels vs. cages: How cavities geometry govern the pressure-mediated crystal-fluid interaction</div>		
13:00 - 14:30	Lunch		
	Main Hall -EUROPA A + B	Parallel Session-EMERALD I	Parallel Session-EMERALD II
14:30 – 16:15	<div>KEYNOTE LECTURE & ORAL SESSION 7</div> <div>Dana Medina On-surface Molecular Frameworks - Synthesis Properties and Function</div> <div>Chairs: Michiel Dusselier and Miao Yang</div> <div>Christopher Jones Single-Walled Zeolite Nanotubes O31 (1013)</div> <div>Nikola Kostkova Nitrogen surface modifications for increased interactions between metal clusters and surface of 3D graphene-like zeolite-templated carbon O34 (1312)</div> <div>Alexander Sachse Advances in Zeolite-Templated Carbon Synthesis: Investigating the Effect of Temperature and Zeolite Acidity O37 (1259)</div> <div>Peng Bai Engineering highly porous alumina materials for catalysis and adsorption O40 (1086)</div> <div>Abdurrahman Bilican Superfast Synthesis of Carbon Xerogels O42 (1278)</div>		
	<div>KEYNOTE LECTURE & ORAL SESSION 8</div> <div>Chairs: Konstantin Hadjiivanov and German Sastre Christoph Buttersack Unifying Sorption Isotherm for Micro-, Meso-, and Macroporous Materials O27 (1051)</div> <div>Coasne Benoit Adsorption and Transport in Zeolitic Materials O29 (1057)</div> <div>Jürgen Adolphs Analysis of Sorption Isotherms of Zeolites with the Excess Surface Work – Thermodynamical and Quantum Mechanical Description O32 (1127)</div> <div>Michael Fischer Atomistic modelling approaches to study the adsorption of emerging organic contaminants in hydrophobic zeolites O35 (1042)</div> <div>Pieter Cnudde Tracking light olefin diffusion in zeolite MFI via machine learning techniques O38 (1145)</div> <div>Tina Düren Cation meets guests – how cations can be exploited for gas-phase separations in flexible zeolites and metal-organic frameworks</div>		
	<div>ORAL SESSION 9</div> <div>Chairs: Rafael Garcia-Munoz and Masaro Ogura</div> <div>Noemi Linares Surfactant-templated zeolites as basic catalysts for multicomponent synthesis O28 (1246)</div> <div>Nathan Pichot Catalytic fast pyrolysis on zeolites: activity and stability of different structures and acidic catalysts for anisole transformation O30 (1054)</div> <div>Manami Matsuo Catalytic Activity of YFI-type Zeolite for Methylation and Isomerization of Naphthalene Derivatives O33 (1167)</div> <div>Keigo Tashiro Effective Proton Conduction over the Zeolite for Hydrogen Production through Water Electrolysis at Neutral Condition O36 (1158)</div> <div>Paolo Pescarmona Macroscopic zeolitic beads with hierarchical porosity as versatile heterogeneous catalysts and CO2-adsorbents O39 (1233)</div> <div>Tamás Koranyi Catalytic Decomposition of Methane for Producing Hydrogen Gas and Carbon Nanotubes O41 (1262)</div> <div>Tina Nenoff Carbon Capture in Fully Hydrated Mordenite O43 (1165)</div>		
16:15 – 16:45	Coffee break		
16:45 – 18:00	<div>Poster Session & Short Oral Presentations</div> <div>Chairs for short oral: Alenka Ristić and Paolo Lotti Emmanuel Ren SO 1 (1052) The Synthesis of Ultra-Thin BPH Nanosheets with Exceptional Adsorption Properties Edwin Clatworthy SO 2 (1311) Synthesis of FAU and CHA Type Zeolites from Class C Fly Ash: Effect of Alkaline Agent and Synthesis Conditions Selin Cansu Gölboyulu SO 3 (1035) Direct Interzeolite Transformation of Borosilicate MWW to Metallosilicate BEA-Type Zeolites and Their Application as Lewis Acid Catalysts Sungjoon Kwon SO 4 (1151) Development of Silanol-defect-free Titanium-silicalite-1 with Advanced Catalytic Performance via Defect-healing Treatment Boqing Li SO 5 (1159) Stabilization of platinum clusters on monolayers of MWW zeolite from liquid dispersion Michal Mazur SO 6 (1284) Zeolite-Templated Carbon Metal-Supported Catalysts for Heterogeneous Reactions Petr Sazama SO 7 (1269) Hydrated Silicate Ionic Liquids as a platform for ordered and non-ordered silicates Dries Vandenberghe SO 8 (1286) Seed-directed Syntheses of Zeolites in a Versatile Borosilicate System with the Presence of Octyltrimethylammonium Chloride Zhendong Wang SO 9 (1121) Defect modification on metal-organic framework UiO-66 via modulated synthesis for aldol condensation reaction Ruixue Zhao SO 10 (1109) Differences of selectivity in converting carbohydrates with Lewis-acidic zeolites Yacine Boudjema SO 11 (1296) Methane dehydroaromatization on Mo-ZSM-5 “donut”-like catalysts Hugo Cruchade SO 12 (1104) Activation of molecular oxygen over binuclear iron sites in CHA Agnieszka Kornas SO 13 (1268) Dual functional porous solid acids with enhanced activity and stability for transformation of glucose to 5-hydroxymethylfurfural Shih-Yuan Chen SO 14 (1084) Synthesis of bio jet-fuel precursors through furfural and cyclopentanone aldol condensation using metal oxides deposited over n-ZSM-5 zeolite Jennifer Cueto SO 15 (1272) How ammonia, water or oxygen affect at adsorbed N2O on different Fe species in ZSM-5? DFT study for deN2O process. Izabela Kurzydym SO 16 (1226) Dynamic Adsorption of CO2/N2 and CO2/CH4 on cation-exchanged Gismondine:</div>		
16:45 – 18:01	Welcome Reception		

04 JULY 2023, TUESDAY

09:00 – 10:00	Main Hall: EUROPA A+B Chair: Tina Nenoff Bert Weckhuysen <i>Spectroscopy and Microscopy of Zeolites and Metal-Organic Frameworks at Work</i>
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Main Hall -EUROPA A + B

Parallel Session-EMERALD I

Parallel Session-EMERALD II

	ORAL SESSION 10	ORAL SESSION 11	ORAL SESSION 12
10:00 – 11:00	Chairs: Rob Bell and Javier Garcia Julien Devos <i>Aluminium and Acid Site Evolution during Zeolite Crystallization and Thermal Activation O44(1091)</i> Martin d'Halluin <i>Simultaneous mesoporization and metal incorporation offers synthetic and catalytic benefits O47(1333)</i> Monica J. Mendoza Castro <i>Micelles Formation inside Zeolites: A Combined 13C NMR and Raman Microspectroscopy Study O50(1192)</i> Nataliya Shcherban <i>Hierarchical Al- and Sn-Beta Zeolites as Catalysts for the Conversion of Biomass-Derived Substrates O53(1117)</i>	Chairs: Benoit Coasne and Francesca Bonino Dieter Plessers <i>Operando investigation of [Cu-O-Cu]2+ and [CuOH]+ Sites in Cu-CHA and Cu-MOR Zeolites for Selective Oxidation of Methane to Methanol O45(1019)</i> Jean-Pierre Gilson <i>Operando IR-GC-MS monitoring of the catalytic recycling of polyolefins on embryonic zeolites O48(1152)</i> Nikolay Kosinov <i>Local occupancy in zeolite pores influence the performance of methanol-to-hydrocarbons catalysts O51(1010)</i> Mariya Shamzhy <i>Infrared Spectroscopy for Understanding of Emerging Zeolite O54(1065)</i>	Chairs: Domenico Caputo and Filipa Ribeiro Georgia Papanikolaou <i>Novel ZTC materials for the electrocatalytic upgrading of furfural to high added value products O46(1220)</i> Jennifer Cueto <i>Improving the renewable production of naphthalenes using ZSM-5 zeolite O49(1353)</i> Masaru Ogura <i>Comprehensive Understanding of Base Catalysis Derived from N species in silica and carbon frameworks O52(1234)</i> Ahmed Omran <i>Green Kinetic Promoters for Sustainable Energy Storage in Zeolitic Ice O55(1181)</i>
11:00 – 11:30	<i>Coffee Break</i>		
	KEYNOTE LECTURE & ORAL SESSION 13	ORAL SESSION 14	KEYNOTE LECTURE & ORAL SESSION 15
11:30 – 13:00	Kevin Maik Jablonka <i>Big-data in porous materials: science beyond understanding</i> Chairs: Rob Bell and Javier Garcia MartinezJulien Devos Lukáš Grajciar <i>Reactive neural network potentials for various classes of zeolites O60(1039)</i> Henning Windeck <i>Internal Hydrogen Bonds Of H–Mfi O63(1028)</i> Vekeman Jelle <i>The Role of Alkali Cations in Precursor Liquids for Zeolite Formation, the Case of Hydrated Silicate Ionic Liquids O66(1337)</i> Nicolas Castel <i>Development Of Machine Learnt Potentials For Molecular Dynamics Simulations Of Amorphous Metal–Organic Frameworks O68(1025)</i>	Chairs: Benoit Coasne and Francesca Bonino Gwilherm Nénert <i>In-situ investigation of water harvesting by CAU-10-X (X= OH, CH3) metal organic frameworks: a 2-steps process O56(1227)</i> Mohammad Fahda <i>Investigation of the nature and stability of aluminum sites in ZEO-1 via in situ infra-red spectroscopy and solid-state NMR O84(1065)</i> Jan Přečh <i>Strength of Zr Lewis acid sites decides on terpene reduction selectivity O61(1123)</i> Fernando Rey <i>Interaction of ethene with silver on small pore Ag-zeolites O64(1247)</i> Anton Meden <i>Possible CO2 capture at a nanoconfined LIBH4 in the pores of ZIF-8 O67(1130)</i> Sebastian Ehrling <i>Measuring low amounts of adsorbates - challenges and solutions O69(1066)</i>	Chairs: Domenico Caputo and Filipa Ribeiro Andrey Ryzhikov <i>High pressure intrusion of sodium perchlorate aqueous solutions in pure silica zeolites: structure-dependent negative osmotic effect O57(1141)</i> Emanuele Giglio <i>Light olefins through dimethyl ether conversion over MFI-type zeolites: effect of superficial passivation on catalytic performance and stability O59(1182)</i> Kinga Mlekodaj <i>Activation of molecular oxygen over Fe-FER and Fe-*BEA zeolites O62(1092)</i> Pascual Oña-Burgos <i>2D-Cobalt MOF Nanosheets for Superior Electrocatalytic Water Oxidation in Neutral Media O65(1318)</i> Massimo Migliori <i>An overview on recent application of Zeolite Templated Carbon in light gases adsorption and (electro-)catalysis</i>
13:00 - 14:30	<i>Lunch</i>		

Main Hall -EUROPA A + B

Parallel Session-EMERALD I

Parallel Session-EMERALD II

	ORAL SESSION 16	KEYNOTE LECTURE & ORAL SESSION 17	KEYNOTE LECTURE & ORAL SESSION 18
14:30 – 16:00	Chairs: Nevenka Rajić and Wieslaw Roth Adriana Souza de Oliveira <i>Propane dehydrogenation to propylene over Pt and Ga MFI zeolites O70(1173)</i> Chunzheng Wang <i>Pd containing zeolite catalyst for dimethyl carbonate synthesis: Catalytic active sites and reaction mechanism O74(1064)</i> Dirk De Vos <i>Zeolites shift equilibria of transfer hydrocyanations and hydroformylations O77(1326)</i> Dmitry Murzin <i>One-Pot Synthesis of Menthol from Citral over Nickel Containing Extrudates Containing Zeolites and Clay Binders O80(1038)</i> Isabel Santos-Vieira <i>Production of Fuel Additives from Crude Glycerol Using Acid Zeolites O83(1256)</i> Matjaž Mazaj <i>Tuning of CO2 capture and conversion performances by cation exchange in metal-organic framework O73(1183)</i>	Andraz Krajnc <i>NMR as a tool in porous materials investigation</i> Chairs: Jiri Dedecek and Georgi Vayssilov Cindy Ly Tavera Méndez <i>Solid-state NMR spectroscopic investigation of supported fluorinated ionic liquids for interface-enhanced supported ionic liquid phase catalysts O75 (1133)</i> Eddy Dib <i>Symmetry-based recoupling in 29Si NMR to probe heteroatoms in zeolites: A combination of experimental and theoretical approaches O78 (1023)</i> Jiri Dedecek <i>NMR Crystallography of Monovalent Cations in Silicon-rich Zeolites Na+ Siting and the Local Structure of Na+ Sites in Ferrierites O81 (1099)</i> Valentina Crocella <i>From powder to 3d shaped LTA zeolite for carbon dioxide capture O86 (1209)</i>	Chairs: Izabela Czekaj and Dmitry Murzin Henri Schmit <i>Experimental determination of characteristic curves of zeolites with a hydrothermal stability test setup O71(1036)</i> Andrii Kostyniuk <i>One-Step Conversion of Glycerol into Glycidol in a Gas-Phase Packed-Bed Continuous-Flow Reactor over Cesium-Treated ZSM-5 Catalystsies O72(1331)</i> Camille Longue <i>Which species deactivate the catalyst in MDA reaction: molybdenum and/or coke? O79(1137)</i> Patricia Kooyman <i>Tuning hydrocracking process parameters O82(1139)</i> Benoît Louis <i>Are Zeolites Still Key Players for the XXlth Century Energy Roadmap?</i>
16:00 – 16:30	<i>Coffee break</i>		
16:30 – 17:15	Chair: Petar Djinović Talk on Open Science Pedro Mendes		
16:55-18:00	Chairs for short oral: Ana Palčić and Eddy Dip SO 17 (1046) Microscopic Origins of the xenon/krypton separation in MOFs Emmanuel Ren SO 18 (1067) Computational-aided development of MOFs for the capture of polar Volatile Organic Compounds Carla V. Soares SO 19 (1188) Reactant Shape Selectivity for Polyolefin Pyrolysis Catalyzed by Zeolite Hiroki Masuda SO 20 (1032) Evidence for the role of radicals in the synthesis of Zeolite-Templated Carbons: a new approach at the solid state Alain Moissette SO 21 (1255) Structural aspects affecting phase selection in inorganic zeolite synthesis Karel Asselman SO 22 (1201) Insights into Lewis acidic nature of extra-framework aluminum centers incorporated in zeolites by ion-exchange Syeda Rabia Batool SO 23 (1154) Zeolites "local redox potential" by studying photoelectron transfer according to the Marcus theory Matthieu Hureau O 24 (1334) XANES analysis of trimetal Cu-Mn-Fe porous silica supported catalysts for foto-Fenton-like wastewater treatment Ksenija Maver SO 25 (1294) Quantitative locating titanium in the framework of titanium silicalite-1 by exploiting anomalous X-ray powder diffraction at the Ti absorption K-edge Przemysław Rzepka SO 26 (1144) Tuning size and properties of bioNICS-1 framework via acid modulation Tia Kristian Tajn SO 27 (1249) Strategy for structural analysis of disorder within the AlPO4-LTA framework Janez Volavšek SO 28 (1309) Water structure in silica mesopores: effect of pore wall polarity Christian Weinberger SO 29 (1266)Moving electrode electrochemical impedance spectroscopy Nikolaus Doppelhammer for in situ zeolite crystallisation monitoring		
19:19:30:00	Guided Walkin		



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05 JULY 2023, WEDNESDAY

09:00 – 10:00

Main Hall: EUROPA A+B
Chair: Jiri Cejka
David Serrano
Opportunities and challenges of zeolite catalysts for the production of sustainable fuels

Main Hall -EUROPA A + B

Parallel Session-EMERALD I

Parallel Session-EMERALD II

10:00 – 11:00

ORAL SESSION 19	ORAL SESSION 20	ORAL SESSION 21
Chairs: Yoshihiro Kubota and Ljiljana Damjanovic Vasilic Zhengxing Qin The impact of initial gel properties on the inner architecture and catalytic performance of zeolites O87(1120) María del Mar Alonso-Doncel Tuning the properties of dendritic ZSM-5 zeolite synthesized by protozeolitic nanounits functionalization with amphiphilic organosilanes O90(1072) Shadi Al-Nahari Tuning the aluminum distribution and acidity of ZSM-5 zeolites using the mineralizing agents during syntheses O93(1217) Sven Robijns Beyond Interzeolite Conversion: Establishing close Control over Al distributions in SSZ-13 zeolite by Regulation of Crystallization kinetics O96(1131)	Chairs: Rossella Arletti and Michael Fischer Alexander O'Malley Local and nanoscale water behaviour in acidic zeolite catalysts O88(1327) Claire-Louise Woodward Methanol dynamics in methanol-to-hydrocarbon zeolite catalysts – A molecular dynamics and quasielastic neutron scattering study O91(1050) Miroslav Rubes How to determine the intrinsic Brønsted acidity of aluminosilicate zeolites O94(1298) Georgi Vayssilov Computational modeling of acidity and spectra of hydroxyl groups in zeolites O97(1254)	Chairs: Paolo Pescarmona and Maciej Trejda Michiel Dusselier Truly combining the advantages of zeolite and polymeric membranes: SSZ-39/polyimide membranes with unrivalled performance for CO2 removal O89(1279) Ali Abdel-Mageed Direct Air-Capture of CO2 into Modified Zeolitic Frameworks for the Production of Platform Chemicals and Green Fuels O92(1292) Shigeo Satokawa V/Conversion of Rapid Plastic Pyrolysis Gases on Zeolite Catalysts O95(1187) Daniela Spataru Zeolite-supported noble metal catalysts for CO2 methanation: influence of preparation conditions O98(1280)

11:00 – 11:30

Coffee Break

11:30 – 13:00

CRONSTEDT WINNER LECTURE & ORAL SESSION 22	ORAL SESSION 23	KEYNOTE LECTURE & ORAL SESSION 24
Chairs: Yoshihiro Kubota and Ljiljana Damjanović Vasilčić Enrico Catizzone High-silica (B, Fe)-BEA zeolite synthesis and application in HMF etherification O99(1211) Eddiong Asuquo Effects of binders on the performance of morphology HZY/HZM-5 zeolites in hydrocarbons to light olefins O101(1146) Adam Deacon One-pot synthesis of chabazite with homogeneously distributed Fe species using a novel Fe organometallic template O103(1212) Julien Reboul Copper nanoparticles supported on ZIF-8: comparison of two Cu2+ reduction processes and application as alcohol oxidation catalysts O106(1282) Cronstedt Winner Lecture Chair Girolamo Giordano JIRÍ ČEJKA & WIESLAW J. ROTH <i>Two-dimensional zeolites: origin, expansion, and perspectives</i>	Chair: Rossella Arletti and Michael Hristiyan Aleksandrov Hristiyan Aleksandrov DFT modelling of catalytic transformations of adsorbed species in zeolite systems O100 (1140) Izabela Czekaj Theoretical modeling of pathways for the transformation of fructose and xylose to carboxylic acids over Na-BEA zeolite O102 (1276) Etsushi Tsuji Activation Barrier for Benzene Methylation with Methane Lowered by Strong Benzene Adsorption O104 (1157) Etsushi Tsuji MWW Silicates: from the 2D Precursors to the 3D Active Zeo O107(1098) Jenna Mancuso On the nature of extraframework aluminum and Brønsted acid site interactions in a methanol- to-hydrocarbon catalyst O109(1122) Iztok Arčon Insight into the interdependence of Ni and Al in bifunctional Ni/ZSM-5 catalysts by Ni K-edge XAS analysis O111 (1332)	Barbara Gil Zeolite nanosheets in solution - precursors of 'unfeasible' nanoscale materials Chairs: Paolo Pescarmona and Maciej Trejda Xiaolei Fan <i>Zeolites as the flexible platform for developing metal supported catalysts for CO2 valorisation reactions O105 (1258)</i> Giuseppe Bonura <i>Intensification of one-pot CO2 hydrogenation to DME over 3D printed zebra catalytic beds O108 (1341)</i> Petar Djinić <i>CO2 as an oxidant during dehydrogenation of propane to propene over activated carbon based catalysts O110 (1007)</i> Yuna Han Optimizing Porosity and Acidity of Faujasite Zeolites For Sugar Transformation O112(1027)

13:00 - 14:30

Lunch

14:30 – 15:30

Main Hall: EUROPA A+B
Chair: Nataša Novak Tušar
Pegie Cool
Porous Ti-based photocatalysts for environmental applications

15:30-16:15

ORAL SESSION 25	ORAL SESSION 26	ORAL SESSION 27
Chairs: Fernando Rey and Wilhelm Schwieger Marco Fabbiani <i>Porous materials for hybrid functional nanocomposites: metal and organic nanowires confined in zeolites and mesoporous silica O113 (1198)</i> Seyed Saïed Hosseini <i>Zeolite-based Hybrid Structured Adsorbents with Tunable Morphology and Architecture through Synergistic Combination with Polyimides O116 (1055)</i> Claudia Belviso <i>Zeolite synthesis from natural bauxite by low-temperature vapor phase treatment O119 (1153)</i>	Chairs: Patricia Kooyman and Anton Meden Hubert Monnier A combined computational and experimental approach to predict NOx and CO adsorption to AgX - application to the diesel engines O121(1213) Mohamed Benamar Understanding the evolution of microporosity during hierarchization treatments of zeolites containing side pockets O117(1108) Niels De Witte Experimental observation of adsorptive cage effects of 1-alkenes in aluminium-paired chabazite zeolites O120(1082)	Chairs: Piotr Kustrowski in Ludovic Pinard Anna Rokicińska Efficient top-down strategy for synthesis of catalytically active Co3O4 nanoparticles trapped in well-communicated mesoporous silica shells O115(1242) Antonio Eduardo Palomares Pt zeolites as active catalysts for the hydrogenation of chlorates in water phase O118(1238) Marie Ollivier Capture of VOCs from forest fires by zeolitic adsorbents O121(1079)

16:15 – 16:45

Coffee Break

16:45 – 17:45

ORAL SESSION 28	ORAL SESSION 29	ORAL SESSION 30
Chairs: Fernando Rey and Wilhelm Schwieger Atsushi Muramatsu Mechanochemical route for synthesis of Fe-substituted zeolites with well-dispersed framework Fe species O122(1293) Yoshihiro Kubota Synthesis of YFI-type Zeolites and Introduction of Hierarchical Structure and Framework Ti for Catalytic Applications O128(1283) Gleb Ivanushkin A generic and functional recipe for heteroatom containing siliceous CHA zeolites synthesis O131(1132) Raquel Simancas A phosphazene based route for synthesis of extra-large pore zeolite UTD-1 O134(1172)	Chairs: Patricia Kooyman and Anton Meden Satoshi Inagaki 6Li solid-state NMR studies on Li+/CHA-type zeolite for N2 and O2 adsorption O123(1155) Zhehao Huang Direct Location of Guest Molecules in Porous Crystalline Materials by Three-Dimensional Electron Diffraction O129(1022) Tom Willhammar Scanning transmission electron microscopy for structure elucidation of low dimensional zeolitic materials O132(1206) Virgile Rouchon Advanced electron microscopy for the investigation of FAU-Y thermal dealumination – structural patterning revealed O135(1330)	Chairs: Piotr Kustrowski in Ludovic Pinard Pedro Andrade Charge transfer complexes between iodine and titanium-based MOFs: MIL-125 and MIL-125(NH2) O127(1348) Tom R.C. Van Assche Removal of low trace ppb level perfluorooctanesulfonic acid (PFOS) with ZIF-8 coatings involving adsorbent degradation O130(1074) Veselina Georgieva Use of Zeolites for Future Automotive Emissions Control O133(1260) Toshiyuki Yokoi Catalytic activation of N2O and CH4 over Metal-exchanged zeolites O136(1216)

20:00

Gala Dinner



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06 JULY 2023, THURSDAY

09:00 – 10:00

Main Hall: EUROPA A+B
Chair: Wolfgang Kleist
Paolo Falcaro
Metal-Azolate Frameworks Bio-composites

Main Hall -EUROPA A + B

Parallel Session-EMERALD I

Parallel Session-EMERALD II

10:00 – 11:00

ORAL SESSION 31
Chairs: Maksym Opanasenko and Darren Broom

Dirk Volkmer
MFU-4-type Scaffolds Featuring Open Bidentate Bibenzimidazole Coordination Sites O137(**1106**)

Oriyomi Ogunbanjo
Synthesis of carboxylphosphonate MOFs and exploring their potential in CO2RR O139(**1218**)

Ignacio Lemir
A fast an easy microwave recipe to Metal nanoparticles@Metal-Organic-Frameworks with catalytic hydrogenation activity O141(**1193**)

Gabriel Morales
Zr-based metal–organic frameworks as catalysts for the aldol condensation of biomass-derived furfural into bio-jet fuel precursors O144(**1195**)

KEYNOTE LECTURE & ORAL SESSION 32

Moisés Pinto
Gasotransmitters delivery vehicles from nanoporous materials

Chairs: Matjaž Mazaj and Paul Iacomi
Monique van der Veen
Confined water cluster formation in water harvesting by metal organic frameworks: CAU-10-H versus CAU-10-CH3 O142(**1112**)

Rafael García Muñoz
L-arginine-containing MSN (Arg@MSN) embedded in dental adhesive for targeting cariogenic bacteria O145(**1148**)

ORAL SESSION 33
Chairs: Nediljka Vukojević Medvidović and Alessandro Turrina
Alexis Tran
Carboxylate BODIPY functional zinc based metal-organic frameworks: towards solid state luminescence O138(**1194**)

Eva Romani Cubells
Mitoxantrone-derivatives as Drug Structure-Directing Agents for the synthesis of MSNs for Breast Cancer Treatment O140(**1176**)

Łukasz Kuterasiński
Copper-containing faujasite as a modifier of ANFO-type explosives O143(**1060**)

Francesco Colombo
A step towards circular economy: REEs recovery from spent fluorescent lamps exploiting NH4-13X zeolite cation exchange properties O146(**1073**)

11:00 – 11:30

Coffee break

11:30 – 12:00

ORAL SESSION 34
Chairs: Maksym Opanasenko and Darren Broom
Valeryia Kasneryk
ZIF-8@PEO composite as a new generation of conversion coatings: insight into the structure O150(**1012**)

Vera Butova
Probing the Active Sites of Defect-engineered UiO-66 by FTIR Spectroscopy O152(**1113**)

ORAL SESSION 35
Chairs: Matjaž Mazaj and Paul Iacomi
Tina Nenof
Experimental and Computational Mechanisms that govern Long-term Stability of CO2 adsorbed ZIF-8 Based Porous Liquids O147(**1161**)

Konstantin Hadjiivanov
Two and Three CO2 Molecules Bonded to One Cation Exchanged in Faujasite O153(**1080**)

KEYNOTE LECTURE
Chairs: Nediljka Vukojević Medvidović and Alessandro Turrina
Jasna Hrenović
Interactions of bacteria and zeolites

12:00-13:00

Main Hall: EUROPA A+B
Chair/Leading Ceremony: Svetlana Mintova
FEZA Ph.D. Prize Winner Lecture
CLOSING CEREMONY