



Antwerp, Belgium

10th EuChemS Chemistry Congress

euchems2026.eu

12 - 16 July 2026



Monday 13th July 2026

Congress theme:

Energy, Environment & Sustainability

Conference room:

Queen Elisabeth Hall

Session	Timing	Presenter	Title
EES - D1 - O01	10:00-10:15	Athira Ravi	Supramolecular Architectures for Hydrogen Generation at Neutral pH Conditions
EES - D1 - O02	10:15-10:30	Prof. Maria Gimenez Lopez	Assembly-driven switching of a POM-carbon nanotube catalyst for acid water splitting
EES - D1 - O03	10:30-10:45	Haider Ali	Laser-Assisted Synthesis of High Entropy Oxide-based Freestanding Electrode for Electrochemical Water Splitting in Alkaline Media
EES - D1 - O04	10:45-11:00	Priya Mukherjee	Surface modified Nafion membrane for improved microbial fuel cell application
EES - D1 - O05	11:00-11:15	Di Bernardino Giovanni	Impact of Stack Architecture on Stability and Lifetime of CO ₂ -to-CO Three Chamber Flow Electrolyzers.
EES - D1 - O06	11:15-11:30	Chiara Reviglio	Design and Performance Rationalization of Blue-Emitting Copper(I) Complexes Bearing Pyridyl-Pyrazole Ligands for Light-Emitting Diodes
EES - D1 - O07	11:30-11:45	Jesús León García	CuO-based Ionanofluids as Advanced Working Fluids for High-Efficiency Solar Collectors

POSTER FLASH 11:45

EES - D1 - F01		Lin Ching_Hsuan	Activated Ester-Functionalized Poly(ethylene terephthalate) for Degradable Epoxy Thermosets and Recyclable Carbon Fibers
EES - D1 - F02		Rigual-Miret Jordi	Photothermal/photocatalytic activation of peroxydisulfate using SrFe ₂ O ₇ @Ni-P core@shell microparticles for energy storage
EES - D1 - F03		María-Iuliana Chirica	Acid-modified MXenes as catalysts for upcycling PET by hydrolysis
EES - D1 - F04		Mata Patrícia	Valorization of Poly(methyl methacrylate) Waste through Pyrolysis
EES - D1 - F05		Vilarinho Pol	Pollen-Based Photothermal Catalysts: A Sustainable Platform for Advanced Removal of Organic Pollutants and Microplastic
EES - D1 - F06		Geng Dongsheng	Achieving Tunable Selectivity and Activity of Electrocatalytic CO ₂ Reduction by Catalysts Design
EES - D1 - F07		Notargiacomo Lorenza	Global Assessment of Anthropogenic Organic Pollutants in Marine Waters

Lunch

EES - D1 - I01	14:00-14:30	Ivan Halasz	In Situ Reaction Monitoring, Molecular Dynamics Simulations and Machine-Learning-Augmented Data Analysis in Deciphering Mechanochemical
EES - D1 - O08	14:30-14:45	Radovan Sebesta	Making asymmetric organocatalysis greener and more efficient through ball-milling
EES - D1 - O09	14:45-15:00	Davor Margetic	The Employment of Mechanochemistry for the Synthesis of Thioureas and Guanidines
EES - D1 - O10	15:00-15:15	Peter Baláz	Advances in sulphide mechanochemistry: From metal extraction to energy materials and anticancer drugs
EES - D1 - O11	15:15-15:30	Zara Cherkezova-Zheleva	Mechanochemical approach for greener and effective recycling of platinum group metals from spent automotive catalysts
EES - D1 - O12	15:30-15:45	Poljanec Leon	Mechanochemistry as a sustainable tool for (de)racemization of biaryl atropisomers
EES - D1 - O13	15:45-16:00	Bilge Baytekin	Chemical insights into triboelectric charging of polymers and organic powders

Coffee break

EES - D1 - O14	16:30-16:45	Yu Zhang	Regulating the Interfacial Electrochemical Behavior of Zinc Anodes for Stable Aqueous Zinc Ion Batteries
EES - D1 - O15	16:45-17:00	Reja Trippaers	Exploring Prussian blue as a safe-and-sustainable-by-design cathode material for sodium-ion batteries
EES - D1 - O16	17:00-17:15	Máté Benedek	Preparation and investigation of cross-linked polyacrylic acid-based hydrogel electrolytes in Zn-air batteries
EES - D1 - O17	17:15-17:30	Cataldo Valentini	Ambipolar donor-acceptor 2D covalent organic frameworks as cathode material for aluminum energy storage device
EES - D1 - O18	17:30-17:45	Philippe Lainé	Designing electrophoric covalent assemblies for molecular-level multielectron accumulation (charge pooling) and storage
EES - D1 - O19	17:45-18:00	Arindam Mal	Polyimide-linked Hexaazatriphenylene-based Porous Organic Polymer with Multiple Redox-Active Sites as a High-Capacity

Additional parallel session another meeting room

APC - D1 - O15	16:30-16:45	Lucia Ferrazzano	Greener Peptide and PNA Synthesis for High-Value Pharmaceuticals: From Sustainable Methodologies to Industrially Relevant
APC - D1 - O16	16:45-17:00	Stefan Hahn	Applying the SSbD concept in the development of biobased biodegradable polymers
APC - D1 - O17	17:00-17:15	Keikhosro Karimi	Integrated Biorefinery Design and Sustainability Assessment for Butyric Acid Production and Separation from Municipal Sewage
APC - D1 - O18	17:15-17:30	Andrei Ungureanu	Toward More Sustainable Silver Based Antimicrobial Materials: Life cycle Assessment (LCA) of Silver Nanoparticle Composites
APC - D1 - O19	17:30-17:45	Laura Fuentes Rodriguez	Rapid synthesis of nickel iron layered double hydroxide nanosheets for efficient oxygen evolution
APC - D1 - O20	17:45-18:00	Stijn Cosemans	An In-Depth Study of the Thermodynamics and Kinetics of the Structural Phase Transition of Hydrothermally Synthesized

Posters

EES - D1 - P001	Anna Leo	Mechanistic insights into charge and energy transfer from first-principles calculations
EES - D1 - P002	Muhammad Aurang	Ultrafast Laser-Driven Fabrication of NiCoFe Carbides for Exceptional Oxygen Evolution Reaction
EES - D1 - P003	Vinicius Sarracini	Fluorescent nanolignin for coupled sensing-reduction of hexavalent chromium in aqueous matrices
EES - D1 - P004	Dong Jin Suh	Dimethyl Ether (DME): From sustainable production to green applications in the low-carbon economy
EES - D1 - P005	Jonathan Smelzer	The new HRAC Herbicide Mode of Action Classification 2026 - An Essential Contribution to sustainable Agrochemistry
EES - D1 - P006	Muhammad Zeeshan	Hydrophilic Bipyridine-Sulfonate Polymeric Colloids as Stable Redox Electrolytes for Aqueous Organic Flow Batteries
EES - D1 - P007	Hyun Young Jung	Overcoming trade-offs in thick sulfur cathodes for lean Li-S batteries
EES - D1 - P008	Yong Joon Park	Boosting Electrochemical Performance of LiFePO ₄ Through Carbon layer Control
EES - D1 - P009	Oumaima Aqil	Upcycling Industrial Solid Waste into a High-Efficiency Adsorbent for Sustainable Water Treatment
EES - D1 - P010	Andrii Kostyniuk	CO ₂ hydrogenation to ethanol over alkali-promoted trimetallic catalysts in a packed-bed reactor
EES - D1 - P011	Robert Guiu Sans	Development of plant growth-promoting bacteria with artificial humic acids capsules for enhanced agricultural sustainability
EES - D1 - P012	Aasif Khan	Engineering nitrogen-enriched covalent organic framework for carbon capture
EES - D1 - P013	Jordi Rigual-Miret	Synthesis of nickel-based catalysts for the (photo)thermocatalytic production of γ -valerolactone
EES - D1 - P014	Britt Segers	Entropy management of PLA: Novel state-based screening method for decision-support from feedstock to end-of-life treatment
EES - D1 - P015	Imam Hidayat Nurva	An integrated biorefinery approach for sustainable fuel production via low-pressure flow-through organosolv fractionation and catalytic lignin upgrading
EES - D1 - P016	Allan Niidu	Mechanically aided synthesis and application of catalyst for hydrogen generation
EES - D1 - P017	Mohd Shafiq Nasir	Toward selective detection of polycyclic aromatic hydrocarbons using microfluidics paper analytical devices
EES - D1 - P018	Nuria Martín	Pd-Imidate@SBA-15: A Multifunctional Heterogeneous Catalyst for the Aqueous Room Temperature Hydrogenation of CO ₂ to Formic Acid
EES - D1 - P019	Luca Mastroianni	Post-combustion CO ₂ capture using washcoated structured sorbents
EES - D1 - P020	Regina Silva	Development of 3D-Printed Composites of PLA Reinforced with Biomass
EES - D1 - P021	Hugo Vallet	Combining microwave-induced CO ₂ plasma with a carbon bed: optimizing conversion and energy cost
EES - D1 - P022	Sajjad Hussain	First-Principles Insights into CO ₂ Reduction and the Competing HER on Transition Metal-Loaded Zr ₁₂ O ₁₂ Nanocages
EES - D1 - P023	Imelda Octa Tampu	Rapid mechanosynthesis of carbon-doped nickel sulfides for efficient evolution of hydrogen via water splitting
EES - D1 - P024	Hifsa Khurshid	Optimization of the polycyclic aromatic hydrocarbons (PAHs) removal process in wastewater using MXene-supported activated carbon (MX-AC) material
EES - D1 - P025	Lucas Elvira	Silica coating of PEM fuel cell Pt/carbon electrocatalysts to enhance durability upon operation
EES - D1 - P026	Changjoon Park	Improved Chemical Recycling of PET Derivatives: Enhanced Glycolysis via Morphology Control and Catalysis
EES - D1 - P027	Tayebeh Sharifi	Co-Doped BiVO ₄ Isotype Homojunctions for Enhanced Photocatalytic Water Treatment
EES - D1 - P028	Adriana Vulcu	Slurry Electrolysis for Sustainable Copper Recovery from Electronic Waste
EES - D1 - P029	Angela Kasza	Direct Electrochemical Processing of E-Waste for Sustainable Copper Recovery
EES - D1 - P030	Julia De Oliveira Pr	Antiviral Co-Doped ZnO Pigments: Solution Combustion Synthesis Using Aloe Vera Extract as an Alternative Green Fuel
EES - D1 - P031	Robert Pietrzak	Sustainable chitin carbons from <i>Hermetia illucens</i> pupal waste for ethylparaben removal
EES - D1 - P032	Emanuele Bassani	Influence Of The Grinding Conditions On The Particle Size Of Foam Powder
EES - D1 - P033	Robert Pietrzak	Carbon Adsorbents from Fennel and Caraway Seeds via Chemical Activation for Dexketoprofen Removal
EES - D1 - P034	Radka Guldanova	Supporting Environmental Remediation through the NanoEnviCZ Infrastructure: Development of Cyclodextrin-Modified Nanofibrous Membranes
EES - D1 - P035	Fileto Rodriguez	Establishing Raman spectral references for Climate- and Energy-Relevant Materials through ab initio dynamics and experimental tools

EES - D1 - P036	Benni Zou	Insights into Electro-oxidative Dehydrogenation of Aldehydes on Copper Foam
EES - D1 - P037	Albert Serrà	BiOI/SnO ₂ nanofibers for robust visible-light/PMS-driven multipollutant mineralization
EES - D1 - P038	Ali Haider	Development of hollow bimetallic catalysts supported on nanostructured carbons for sustainable PEM fuel cell electrodes
EES - D1 - P039	Arleth Gualle	Green synthesis of silver nanoparticles using plant extract for water disinfection
EES - D1 - P040	Norbert Janowicz	Lumifilm: Luminescent downshifting films for improving photosynthetic efficiency of photobioreactors
EES - D1 - P041	Wouter Marchal	Assessment of biochar derived from Urena lobata fibers for use in PHA-based films
EES - D1 - P042	Hafiz Adil Qayyum	Ti ₄ C ₃ and Ti ₄ N ₃ MXenes for Next-generation sodium ion battery anodes



Tuesday 14th July 2026
 Congress theme:
 Conference room:
 Queen Elisabeth Hall

Session	Timing	Presenter	Title
EES - D2 - O01	10:00-10:15	Mohsen Gholami	Electrified Carbon Capture by Adsorption: Linking Adsorbent Formulation, Structure, and Regeneration Behavior
EES - D2 - O02	10:15-10:30	Gabriela Rodríguez Almaguer	Hierarchical porous silicas with tunable porosity for CO ₂ capture and separation
EES - D2 - O03	10:30-10:45	Deeksha Jaiswal	Zr-doped Ti ₃ C ₂ Tx MXene for enhanced CO ₂ capture and efficient catalytic conversion to value-added products
EES - D2 - O04	10:45-11:00	Adel Ismail	Resol Resin-Derived Carbon embedded in Mesoporous Magnesia Nanocrystalline Sorbents for Highly Efficient CO ₂ Capture and Multiple Regeneration Performances
EES - D2 - O05	11:00-11:15	Ali Abdel-Mageed	Porphyrin Molecular Mediators Enhancing the Hydrogenation of CO ₂ at the Liquid-Solid interface for Cu _x Au _y /ZnO Catalysts
EES - D2 - O06	11:15-11:30	Fabricio Molinari	Engineering graphene-based platforms for efficient CO ₂ capture
EES - D2 - O07	11:30-11:45	Suraj Kumar	Environmentally Sustainable CO ₂ Sequestration via Gas Hydrates in Marine Clay Sediments

All cancelled poster/flash presentations can be removed from program, not problem to have less flashes; #245 has been changed to oral presentation (11:00 slot); #259 replaces #193 as Poster/Flash. Please inform authors of #245 and #259 of these changes.

POSTER FLASH	11:45		
EES - D2 - F01		Meseguer Ramon	CO ₂ Valorization via Ionic Liquids: A Tandem Process for the Synthesis of Cyclic Carbonates and Urethanes
EES - D2 - F02		Vantomme Christine	Shining Light on Plasma Catalysis: Transparent DBD Reactors for CO ₂ Conversion
EES - D2 - F03		Matos Renata	Towards Greener Energy: Bio-Based Alternatives for Sodium-Ion Battery Components
EES - D2 - F04		Baláz Matej	Rapid combustive mechanochemical synthesis of metal chalcogenides for energy conversion applications
EES - D2 - F05		Basak HIRAK	Enhancing the Valence Band Charge Localization via Zinc Doping into MnWO ₄ to Promote Selective Ammonia Electrooxidation
EES - D2 - F06		Da Silva Jaques João Pedro	Pt-Ru based nanomaterials enabling coupled cathodic hydrogen evolution and anodic formaldehyde oxidation in fuel cell systems
EES - D2 - F07		Nan Lan	Enhancing photosynthetic light utilisation with wavelength-shifting polymer films
EES - D2 - F08		Yu Yi-Chi	Sustainable Air Filtration Media from Post-Consumer Plastic Waste via High-Temperature Centrifugal Fiber-Drawing

POSTER FLASH	12:00		
EES - D2 - F09		Giri Sudatta	Role of B/N Co-doping and Varied Coordination on the Activity of Graphene Supported SACs for CO ₂ Hydrogenation to CH ₄
EES - D2 - F10		Kumar Upadhyay Rajesh	Comparative study of Washcoated copper foam and traditional catalyst for Methanol Steam Reforming Targeting Membrane Reformer
EES - D2 - F11		Postole Georgeta	New insights in the tricky reaction of isopropanol dehydration to propylene
EES - D2 - F12		Templ Johanna	Decoding Mechanochemical Drivers: Experimental Isolation of Single Impact, Cumulative Energy, Aging and Liquid-Assisted Grinding Effects in Organic Mechanochemistry
EES - D2 - F13		Helal Aasif	Design of Functionalized Metal-Organic Frameworks for Efficient CO ₂ Fixation into Cyclic Carbonates under Mild Conditions
EES - D2 - F14		Pawar Kanchan	Z-Scheme Charge Transfer in BiVO ₄ /Boron-Doped g-C ₃ N ₄ Heterostructures for Photoelectrocatalytic Hydrogen Production
EES - D2 - F15		Gao Shuyan	Synergistic effects of copper-based multi-principal-element alloys on electrocatalytic nitrate reduction to ammonia
EES - D2 - F16		Xue Xiaopan	Liquid-Solid Phase Separation-Assisted Direct CO ₂ Capture from Air with A New System

Lunch

EES - D2 - I01	14:00-14:30	Xenia Trier	Risk governance of chemicals of concern in a resilient Europe – insights from PFAS
EES - D2 - O08	14:30-14:45	Manuel Alejandro Andino Enriquez	From Atmospheric Deposition to Photochemical Transformation: Untargeted Detection and Phase-Dependent Fate of Acetophenone in Snow and Water
EES - D2 - O09	14:45-15:00	Gerhard Lammel	Air-soil exchange of PFAS – observations in rural central Europe and boreal forest
EES - D2 - O10	15:00-15:15	Oliver Salangad	Comprehensive PFAS characterization in contaminated soils by integrated target, suspect, and non-target analysis combined with dTOP assay
EES - D2 - O11	15:15-15:30	Michela Tramontini	From soil adsorption to bioavailability: environmental fate of a plant-derived biostimulant
EES - D2 - O12	15:30-15:45	Delphine Vandeputte	The influence of Cu and Cd additions on their bioavailability in uncontaminated soils
EES - D2 - O13	15:45-16:00	Adrian Covaci	Dynamics of emerging PFAS in a contaminated terrestrial ecosystem

Coffee break

EES - D2 - O14	16:30-16:45	Christine Khoury	Studying the Synergistic Effect between LDH and P25 for Dyes Removal from Water
EES - D2 - O15	16:45-17:00	Bruno Henriques	Kraft lignin for efficient and sustainable mercury removal from aqueous systems
EES - D2 - O16	17:00-17:15	Zulakha Rasheed	Diurnal Fouling Fingerprints as a New Framework for Mechanistic Assessment of Microplastics in Drinking Water Premise Plumbing
EES - D2 - O17	17:15-17:30	Alexandra-Ana Csavdari	Assessment of red mud slurry pH values remediation by means of aquatic plants

Posters

EES - D2 - P001	Anthony Sanderse	From materials development to system integration: photoanode surface activation and validation of a continuous-flow PEC device for efficient solar hydrogen production
EES - D2 - P002	Abdeldjalil Aimen Kaidi	Comparative study on the inhibitory effectiveness of plant extracts against corrosion of a metal alloy

EES - D2 - P003	Keikhosro Karimi	Electrified Adsorptive Separation of Fermentative Iso-Butyric Acid
EES - D2 - P006	Sofia Caldas	Optimization of TPU Recycling Processes used in the Ceramic Industry
EES - D2 - P009	Pavína Konopáčová	Functionalized Cyclodextrin Materials for Advanced PFAS Removal
EES - D2 - P010	Albert Serrà	Pollen-Templated Cu and Ni@Cu (Photo)Catalysts for Sustainable Degradation of Pharmaceutical Pollutants
EES - D2 - P011	Evelina Colacino	Impactive: european mechanochemists develop greener pharmaceuticals
EES - D2 - P013	Alexandra Iacoban	Enhancing Hydrogen Production and CO2 Photoreduction Efficiency Using 1D TiO2 based Materials
EES - D2 - P014	Valerie Theuns	Novel BaTiO3- and BaFeO3-Based Electrode Materials for SOFCs
EES - D2 - P015	Andrea Casagrande	Mechanochemical Amidation for Sustainable Agrochemical Synthesis
EES - D2 - P017	Antonio Monopoli	Photocatalytic homocoupling of benzylamines under ambient and green conditions using naturally derived photocatalyst and solvent
EES - D2 - P020	Yakubu Wudil	Metallic Cu-Ni nano-inclusions for simultaneous electrical enhancement and thermal suppression in Bi ₂ Te ₂₋₇ Se ₀₋₃ thermoelectric thin films
EES - D2 - P022	Mzamo Shoji	The influence of incorporating alkaline metals on alumina for xylitol hydrogenolysis over Ni catalysts
EES - D2 - P031	Xingyu Li	Tailoring the Interfacial Microenvironment: Hydrophilic/Hydrophobic and Cationic Effects on CO2 Reduction Selectivity
EES - D2 - P034	Ahsan Ali	Ni/LaMnO3 Perovskite Catalysts Promoted by Alkali and Alkaline Earth Metals for Green Hydrogen Generation via NH3 Decomposition
EES - D2 - P036	Hyun Young Jung	3D Laminated Graphene Photodetectors for Non-Contact Monitoring of Greenhouse Gases
EES - D2 - P038	Davin Cronly	Continuous flow electrochemical oxidation of NaBr for the in-situ generation and telescoped utilisation of Br2
EES - D2 - P039	Penny Govender	A first principles study of heterostructure Ru/CIF for potential use as anode in Li ion batteries
EES - D2 - P042	Yasmin Edañol	Alkalinity-Dependent Structural Features and Cr(VI) Adsorption of One-Pot Synthesized Ca-Al Layered Double Hydroxides
EES - D2 - P044	Helder Van Poyer	Repurposing a commercial plasma spraying torch: quenching by turbulence, for efficient CO2 conversion
EES - D2 - P049	Eva Mueller	Strategies for Environmentally Friendly Solvent Media
EES - D2 - P051	Robbe Bryssinck	Plasma-based CO2 conversion: scaling from lab to industry towards continuous CO production
EES - D2 - P052	Lole Jurado	Highly Dispersed Cu on CeO2-Al2O3 via a Novel Synthesis Route for Efficient Selective Hydrogenation of HMF
EES - D2 - P053	Khianne Ed Miguel Orteza	Fouling-resistant metal-organic framework monoliths for pharmaceutical water treatment
EES - D2 - P058	Sue-Faye Ng	Carbon nitride allotropes for Photo(electro)catalytic reactions
EES - D2 - P059	Oriana Calderón	Effect of Ni Loading and Fe Promotion in NiFe-N-C Catalysts for CO2 Electrolysis
EES - D2 - P060	Lutz Burow	Recyclable plastics from bio-based monomers
EES - D2 - P062	Marco Taddei	A water-based synthetic route to the metal-organic framework UiO-66 starting from PET derived terephthalate esters
EES - D2 - P063	Daniel Modafferi	Electrical characterization of a microbially produced, highly conductive MOF material
EES - D2 - P064	Miren Ugarriza	Ni-based catalyst deactivation in the dry reforming of HDPE pyrolysis volatiles
EES - D2 - P065	Jin Hyung Lee	Efficient and sustainable production of calcium carbonate from oyster shell waste: A carboxylic acid-mediated green processing approach
EES - D2 - P066	Kevin Keller	Reactivity of Dioxygen and Hydrogen Peroxide with Macrocyclic Iron Complexes
EES - D2 - P068	Rocco Cancelliere	Diverse Recycling Pathways of Graphitic Anode Materials for Advancing Sustainable Battery Technology
EES - D2 - P070	Katrin Santin	Valorisation of HDPE by pyrolysis and in-line catalytic cracking with metal-modified ZSM5 zeolite
EES - D2 - P071	Miren Ugarriza	Thermodynamic assessment of the joint valorization of CO2 and waste plastics by pyrolysis and in line combined reforming for syngas production
EES - D2 - P072	Zara Cherkezova-Zheleva	Sustainable Protocol for Direct Reuse of Platinum Group Metals from Spent Automotive Catalysts
EES - D2 - P073	Joseph Parkinson	Sustainable mechanochemical synthesis of Molybdenum and Tungsten dichalcogenides for the Hydrogen Evolution Reaction
EES - D2 - P074	David Barker	Preparation of cellulose-based adsorbents for eradication of pollutants in water



Wednesday 15th July 2026

Congress theme:
Conference room:
Queen Elisabeth Hall

Session	Timing	Presenter	Title
EES - D3 - O01	10:00-10:15	Pol Vilarinho	Control of Electrocatalytic Levulinic Acid Valorization: Synergistic Tuning of Catalysts, Solvents, and Temperature
EES - D3 - O02	10:15-10:30	Teresa Andreu	Influence of Catalyst Composition and Temperature on Glycerol Electrooxidation in Continuous Flow Electrolysis
EES - D3 - O03	10:30-10:45	Justyna Luczak	Oxygen defected NiCo spinel structures for ammonia electrooxidation reaction: An experimental and theoretical approach
EES - D3 - O04	10:45-11:00	Matthias Vandichel	Modelling Metal Electrocatalysts as Cathodes: The Urgent Need to Look Beneath the Surface
EES - D3 - O05	11:00-11:15	Kavin Teenakul	Enhancing Performance of Electrochemical Reactors through Pulsatile Electrolyte Flow and 3D-Printed Electrodes
EES - D3 - O06	11:15-11:30	Irene Motta	High performance LSCs based on PMMA/oligothiophene thin films: a slot die coating approach
EES - D3 - O07	11:30-11:45	Soichi Kikkawa	Non-equilibrium electrochemical synthesis of metastable Cu-In intermetallic compounds for CO ₂ electroreduction
POSTER FLASH	11:45		
EES - D3 - F01		Markowski Robert	Amorphous Coordination Polymers for Versatile Mg ²⁺ , Ca ²⁺ , Sr ²⁺ , Ba ²⁺ , and Zn ²⁺ Cation Storage
EES - D3 - F02		Chambara	Microwave-Assisted Calcination of Spodumene Ore: A Pathway to Reduced Carbon Emissions in Lithium Extraction
EES - D3 - F03		Lee Jaewon	Electrophilic Additive-Mediated Chemical Recycling of Trithiocarbonate-Terminated PMMA at High Polymer Concentrations
EES - D3 - F04		Baytekin Bilge	Chemical insights into triboelectric charging of polymers and organic powders
EES - D3 - F05		Peeters Ward	Assessment of CO ₂ Quality Across Capture, Liquefaction, and Storage in a Cement CCS Pilot Plant
EES - D3 - F06		Xu Yifan	MOF-based composites as Li solid-like ionic conductors
EES - D3 - F07		Brandi Francesco	Catalytic depolymerization of commercial grade polyurethane sponge using Ru- supported heterogeneous catalysts
EES - D3 - F08		Itri Giulia Maria	Waste Meets Waste: Upcycling Spent Li-Ion Battery-Derived Materials into Pd-Based Catalysts for Biomass Valorization
POSTER FLASH	12:00		
EES - D3 - F09		León García Jesús	Synergistic Thermal and Stability Effects of Al ₂ O ₃ -ZnO Hybrid Nanofluids in Solar Thermal Collectors
EES - D3 - F10		Tayyebi Ahmad	Photoelectrochemical Solar Ammonia Production
EES - D3 - F11		Sajid Muhammad	Tailored Organic Electrodes for Next-Generation Aqueous Zinc-Organic Batteries
EES - D3 - F12		Salierno Giuseppe	Lignin acidolysis via a βO ₄ model compound: an improvement based on heterogeneous superacid catalysis
EES - D3 - F13		Van Leuven	Hydrothermal pretreatment improving in-situ catalytic pyrolysis of plastic waste feedstocks
EES - D3 - F14		Barbagallo Claudia	Innovative heterobimetallic precursors for multifunctional fluoride materials
EES - D3 - F15		Casadevall Serrano Carla	Novel molecular and polymersome-based systems for photocatalytic CO ₂ reduction, towards compartmentalized artificial photosynthesis
EES - D3 - F16		Zhang Weizhe	Single-Layer Graphene as an Atomically Thin, Proton-Conductive Membrane for Energy and Chemical Conversion
Lunch			
EES - D3 - I01	14:00-14:30	Audrey Moores	Green and sustainable nanomaterials chemistry
EES - D3 - O08	14:30-14:45	Ruey-An Doong	MoS ₂ -supported nickel single-atom catalysts for the enhanced photoelectrocatalytic hydrogen production from water splitting

EES - D3 - O09	14:45-15:00	Simone Galliano	Maltodextrin-based electrolytes at work in safe aqueous dye-sensitized solar cells for ambient light harvesting
EES - D3 - O10	15:00-15:15	Christian Mark Pelic	Boosting the Quantum Efficiency of Ionic Carbon Nitrides for Solar-Driven Fuel Synthesis
EES - D3 - O11	15:15-15-30	Lorenza Romagnoli	Substituting selenium for sulfur for efficient tuning of properties in BaZrS3 perovskite for photovoltaic applications
EES - D3 - O12	15:30-15:45	Abraham Solomon	Precursor-Driven Reconfiguration of Bulk and Interface Enhances the Solar-Driven Water-Splitting Performance of Carbon Nitride Photoanode
EES - D3 - O13	15:45-16:00	Giulia Forghieri	An operando AP-NEXAFS study on CO2 photoreduction with Cu-NPs supported by photoactive materials
Coffee break			
EES - D3 - O14	16:30-16:45	Thainara Viana Ferr	A Green Chemistry Strategy for Rare Earth Element Recovery from Acid Mine Drainage Using Living Biomass
EES - D3 - O15	16:45-17:00	Giorgio Grillo	Integrated Subcritical Water Extraction and Membrane/Resin Fractionation for Circular Valorization: Chestnut Wood Residues into Tannin-Based Biopolymers
EES - D3 - O16	17:00-17:15	Lisa Royer	From Industrial Waste to Smart Windows: Circular Recovery and Upcycling of Vanadium for Advanced Thermochromic Coatings
EES - D3 - O17	17:15-17:30	Roy Maas	Impact of Mixed Polymer Streams and Contaminants on Radical-Initiated Polymer Degradation
EES - D3 - O18	17:30-17:45	Attila Kovacs	Statistical entropy analysis for the evaluation of polymer complexity and circularity
EES - D3 - O19	17:45-18:00	Mustapha Idris	Sustainable graphene anodes from palm kernel shell waste for waste-to-energy microbial fuel cells
EES - D3 - O20	16:30-16:45	Debora Fabbri	Cross-regional LC-HRMS suspect and non-target screening of contaminants in rivers and aquaculture waters
EES - D3 - O21	16:45-17:00	Michele Forza	Improved hydrophobicity of ZIF-90 Metal-Organic Frameworks for the removal of fluorinated pollutants from water
EES - D3 - O22	17:00-17:15	Amila Hajdarević	Simultaneous Determination of Thirteen Antidiabetic Drugs in Wastewater Using a Novel LC-MS/MS Method
EES - D3 - O23	17:15-17:30	Alessandro Bollella	Integrated Analytical Strategies Supporting Risk Assessment of Emerging Contaminants in Marine Ecosystems
EES - D3 - O24	17:30-17:45	Roland Kallenborn	Application and integration of modern trace analytical methods for remediation and pollution emission control in sewage and
EES - D3 - O25	17:45-18:00	Damjan Rajaković	Exploring the use of ceramic passive samplers for urban wastewater monitoring

Posters

EES - D3- P001	Daniela Andrei	Greener Synthetic Approaches to the Synthesis of Quinoxaline Derivatives
EES - D3- P003	Kyungsu Na	CO2 Upcycling to Liquefied Petroleum Gas and Jet Fuel via an Oxide-Zeolite Catalyst Strategy
EES - D3- P007	Niloofer Kamyar Khaleidi	Understanding the effects of cryomilling for some common thermoplastics
EES - D3- P009	Ola Bajjouk	Unraveling the electrocatalytic performances and structural stability of Ag nanowire gas diffusion electrodes for CO2 reduction
EES - D3- P010	Ward Peeters	Pilot-Scale Online Monitoring of CESAR1 Solvent Condition in a Cement CO2 Capture Plant
EES - D3- P011	Paola Calza	Sustainable integrated approach for CECs removal in aquaculture: bench-scale validation of a hybrid membrane-AOP system
EES - D3- P012	Kludwia Jakubowska	Composition and efficacy of essential oils in suppressing potato sprouting
EES - D3- P013	Julia Kamińska	Comparison of the yield and chemical composition of essential oils from the seeds, leaves and straw of Apiaceae plants
EES - D3- P015	Bilge Baytekin	Contact Electrification of Some Organic Powders With Fused Aromatic Ring Structures
EES - D3- P017	Muzammil Hussain	Directional Charge Transport in Donor-Acceptor Covalent Organic Frameworks for enhanced Photocatalytic H2O2 Production
EES - D3- P018	Paweł Gulski	Inhibition of seed germination by selected essential oils: relationship with chemical composition
EES - D3- P019	Lukka Thuyavan Yogarathinam	Predictive Chemometric Modeling of Molecular Transport in Functional Organic Solvent Nanofiltration Membranes
EES - D3- P025	Romy Van Geijn	Sunlight-powered reverse water gas shift reaction catalysed by plasmonic Au/CeO2-x: the impact of size, metal loading and oxygen vacancies on the catalytic performance
EES - D3- P026	Carla Rizzo	Safe and sustainable materials as adsorbents for emerging pollutants
EES - D3- P027	Alyssa Mancini	Understanding structural and electrochemical degradation in Li-rich cathodes
EES - D3- P028	Tauqir Ahmad	Controlled Incorporation of Monoboc-Protected Amines in Polyamide Thin-Film Composite Membranes
EES - D3- P030	Myriam D'alù	Recovery and Regeneration of Cathode Materials via Direct Recycling
EES - D3- P031	Maria Eduarda Pereira	Advanced sorption-based recovery of rare-earth elements from secondary aqueous streams: a contribution to EU strategic autonomy and circular
EES - D3- P032	Gabriela Kuźma	Chemical compositions, stability and insecticidal activities of some essential oil emulsions
EES - D3- P034	Oussama Djorf	Gold "Self-Leaching" in Chloride-Rich Media
EES - D3- P035	Jose Javier Delgado-Marin	High-Temperature Operation of Vacuum Tube Solar Collectors Using Ionic Liquids
EES - D3- P036	Arcangelo Celeste	Synthesis-Route Effects on Competing Phase Formation in Na0.67Mn0.75Ni0.25O2
EES - D3- P038	Manuel Alejandro Andino Enriquez	Matrix Dependent Photochemical Transformation of Sulfamethoxazole in Natural and Managed Waters
EES - D3- P039	Cristiana Margarita	Deep Eutectic Solvents-enabled Closed and Open-loop Wastes Battery Recycling
EES - D3- P041	Marcelo Cámaras	Commercial Anion Exchange Membranes for Alkaline Water Electrolysis: Linking Performance, Stability, and Physicochemical Properties
EES - D3- P042	Vladimir Nikiforov	Is atmospheric half-life time of carbon tetrafluoride the same as it was 33 or 47 years ago?

EES - D3- P043	Ching-Shiun Chen	Ultra-Small Ru and Ni Clusters for Enhanced CO ₂ Methanation at Ultra-Low Metal Loadings
EES - D3- P045	Sharjeel Waqas	Optimization of Operating Parameters in Single-Stage Membrane Rotating Biological Contactor for Wastewater Treatment
EES - D3- P049	Oliver Salangad	Matrix-specific partitioning of legacy and emerging PFAS in great tit (<i>Parus major</i>) plasma, feathers, and faeces near a fluorochemical hotspot
EES - D3- P050	Hugo Valdes	Electrochemical Dechlorination of PVC for Sustainable Materials Recovery and the Synthesis of Chlorinated Compounds
EES - D3- P051	Petra De Jongh	Using Carbon Model Supports to Understand Particle Size and Promotor Effects in CO ₂ and CH ₄ Conversion
EES - D3- P052	Sharmin Akther Rupa	Rational Design of Amide-Extended Tetrahedral Linkers for the Construction of Porous MOFs Targeting CO ₂ Capture
EES - D3- P053	Yasir Abbas	Functionalized Graphene Oxide Membranes for High Flux Nanofiltration
EES - D3- P055	Fernanda Roman	Oxidative denitrogenation using sustainable carbon nanotubes: reactive oxygen species
EES - D3- P056	Fernanda Roman	Removal of bisphenol-A by catalytic wet peroxide oxidation using sustainable carbon nanotubes
EES - D3- P061	Syed Muhammad Shakib Kazmi	Electrochemical approach towards the Total Synthesis of (-)-Colchicine
EES - D3- P064	Bienvenu Kwizera	Nano calcium driven degradation of dichlorodiphenyltrichloroethane in soil: Efficiency assessment and underlying mechanisms
EES - D3- P065	Dáša Drenčáková	Non-stoichiometric CuAgSe doped with Zn or Fe: mechanochemical synthesis and thermoelectric properties
EES - D3- P066	Anej Blazic	Magnetic heating-assisted methanol synthesis from CO ₂ and H ₂ for Power-to-X applications
EES - D3- P068	Aleksandra Zamljen	Water-Induced Structural Deactivation of Zeolite-Supported Magnesium Chloride and Its Effect on Ammonia Sorption Stability
EES - D3- P069	Hyeseon Park	Redox Electrolyte-Assisted Hybrid Energy Storage with Optimized Cathode/Anode Ratio of Cobalt Hexacyanoferrate and Activated Carbon
EES - D3- P076	Paula Barbosa	Silk Fibroin Solid Electrolyte Membranes for Sustainable Sodium-Ion Batteries
EES - D3- P077	Dora Balen	High-temperature structural and microstructural evolution of Ni- and Mn-doped LaCoO ₃ perovskites
EES - D3- P004	Ajay Sharma	Controlled Autoxidation of Heavy Petroleum Residues as a Low-Cost Route to Synthesize Carbon Nanotubes
EES - D3- P029	Wajahat Waheed Kazmi	Optimizing solvent roles in catalytic lignin liquefaction: Efficient pathways to phenolic monomers and bio-oil
EES - D3- P033	Muhammad Waqas	Solvent-Free upcycling of Plastic Waste to Aromatics with Multi-Shelled Hollow Sphere
EES - D3- P044	Nicole Ferreira	Shrimp Shell Waste as a Green Resource for Rare Earth Element Recovery
EES - D3- P062	Ghulam Asghar	Synthesis and Catalytic Evaluation of NiO-Al ₂ O ₃ Catalyst for Steam Methane Reforming
EES - D3- P072	Aqeel Ahmad	Synthesis and Evaluation of Porous Organic Polymers for CO ₂ Capture
EES - D3- P074	Akinyinka Akinnusotu	Assessment of some Organochlorine Pesticides and Toxic heavy metals in the road dust from A metropolitan City in Nigeria: Akure as a Case Stud



Antwerp, Belgium

10th EuChemS Chemistry Congress

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12 - 16 July 2026



Thursday 16th July 2026

Congress theme:

Energy, Environment & Sustainability

Conference room:

Queen Elisabeth Hall

Session	Timing	Presenter	Title
EES - D4 - O01	10:00-10:15	Bing Bai	Enhancing Low-Temperature CO ₂ Methanation via Nickel Electronic Structure Engineering
EES - D4 - O02	10:15-10:30	Francesc Sastre	Solar-driven CO ₂ to methanol production
EES - D4 - O03	10:30-10:45	Jose Javier Delgado-Marin	Engineering Biopolymeric Adsorbents with Ionic Liquids for Efficient CO ₂ Capture
EES - D4 - O04	10:45-11:00	Sung-Fu Hung	Model Thiophene-Decorated Nickel Porphyrins for Tandem CO ₂ Reduction
EES - D4 - O05	11:00-11:15	Thijs Van Thillo	Microcrack-engineered gas diffusion layers to mitigate flooding in Zero-Gap CO ₂ electrolyse
EES - D4 - O06	11:15-11:30	Natalia Maria Mazur	Benchmarking Commercial Anion Exchange Membranes for CO ₂ Electroreduction to Ethylene
EES - D4 - O07	11:30-11:45	Jiaqi Feng	Research on Electrocatalyst Design and Electrolyzer Scaling for Efficient CO ₂ Electroreduction
POSTER FLASH	11:45		
EES - D4 - F01		Kulagova Alice	Ammonia photooxidation using Ru catalyst anchored on C ₃ N ₄ nanoparticles
EES - D4 - F02		Monir Mohammad	A Systematic Computational Screening for Discovery of Low-Cost, Sustainable Thermochemical
EES - D4 - F03		Rita Veloso	Presodiation as a key strategy for stabilizing sodium-ion batteries
EES - D4 - F04		Vasudevarao Bakuru	A hexaanionic carboxyphenolate framework for high energy alkali cation storage
EES - D4 - F05		Bonitz Lena	Polyhalite Stability in Salt Solutions at 25 °C : A Long-Term Investigation
EES - D4 - F06		Faria Joaquim	Light-matter interactions in carbon nitride-based photocatalysis
EES - D4 - F07		Ghosh Chandrika	Transformation of PET-derived 1,4-benzenedimethanol to make useful alcohols
EES - D4 - F08		Andueza Félix	Heavy metals in soils of the Chilean scientific station Julio Escudero in Antarctica
POSTER FLASH	12:00		
EES - D4 - F09		Wankar Shashwati	Dual Ion-Imprinted Chitosan-PVA-Methyl Cellulose Hydrogel microbeads for selective capture
EES - D4 - F10		Ramackers Augustin	Bimetallic Anionic Organic Frameworks with Solid-State Cation Conduction for Charge Storage

EES - D4 - F11		Buchinger Richard	Enhancing Faradaic Efficiency in Electrochemical CO ₂ reduction via Fermentation-derived A
EES - D4 - F12		Agegnehu Segenet Dagmawi	Green and Wearable Energy Storage: Fully Sustainable Solid-State Supercapacitors Using Pectin Derived Laser Induced Graphene and Pectin Electrolyte Systems
EES - D4 - F13		Kumar Sihag Anil	Scalable Electrodeposited Bismuth Gas Diffusion Electrodes for Selective CO ₂ -to-Formate El
EES - D4 - F14		Gaur Ashish	Acid Corrosion Induced Lattice Strain in the Multimetallic LDH Structure for the Electrocataly
EES - D4 - F15		Al Shbib Rayane	Sustainable CeO ₂ /CoFe ₂ O ₄ Catalysts for the Total Oxidation of Mixed VOC-CO Emissions: Fr
EES - D4 - F16		Azizi Jafar	Atomic-scale mechanisms of alkali-metal adsorption and clustering on graphitic surfaces

Lunch

EES - D4 - I01	14:00-14:30	Javier Pérez-Ramírez	Catalysis and sustainability for atom to planet
EES - D4 - O08	14:30-14:45	Michael Reid	Electrochemical Hydrogenation Using Dispersed Catalytic Particles
EES - D4 - O09	14:45-15:00	Haoxiang Yan	Development of Catalyst Systems for Polyethylene Recycling by Hydrogenolysis
EES - D4 - O10	15:15-15:30	Devanshu Sajwan	Establishing Structure-Acidity-Performance Relationships in Zeolite Catalyzed Lignin Pyrolysi
EES - D4 - O11	15:00-15:15	Zhenlei Zhang	Strategic Catalytic Approaches for the Selective Depolymerization and Targeted Defunctioni

Posters

EES - D4- P001	Emilia Kazek	Treatment of poly(vinyl chloride) and study of its pyrolysis outcomes
EES - D4- P002	Safyan Akram Khan	High Performance Steam Methane Reforming via Tuned Metal Support Interactions in NiMg-Yb ₂ O ₃ sesquioxide: Activity, Stability
EES - D4- P003	Hagen Fiebig	Phase Stability and Thermodynamic Properties of Magnesium Carbonates in Salt Solutions
EES - D4- P004	Smain Camilia Nafissa	Removal of metallic fragments from waste generated during photovoltaic cell manufacturing
EES - D4- P005	Tia Ansell	Identifying complexing agents for the selective binding of Pb ²⁺ released during perovskite solar cell degradation
EES - D4- P006	Timothy Vadas	Comparison of hydrogel coated ion selective solid-state electrodes for nitrate measurements in soil
EES - D4- P007	Sharad Kumar Sachan	Monoatomic copper-anchored UiO-66-NH ₂ as a mechanistically defined Lewis acid catalyst for CO ₂ cycloaddition and enantios
EES - D4- P008	Bezayet Tesfaye	Scale-up, shaping, and catalytic performance of MIL-100(Fe) in propane oxidation
EES - D4- P009	Cláudia Lopes	Clay-based platforms for REE recovery: selective adsorption, regeneration and magnetic separation
EES - D4- P010	Jose Luis Diaz De Tue	Activated carbon production from exhaustive olive pomace: simulation process and autothermal pyrolysis
EES - D4- P011	Arda Altan	Synthesis and Characterization of Lithium Metal Phosphates in Various Solvents
EES - D4- P012	Anamika Res. Scholar,	Integrated zeolite membrane and Cu-ZnO-Al ₂ O ₃ catalyst for intensified CO ₂ -to-methanol conversion
EES - D4- P013	William De Rezende Lc	Kinetic Analysis and Multiscale Hydrolysis of Reinforced PET and PBT Plastics: Innovative Process Configurations for Enhanced
EES - D4- P014	Naimat Ullah	Electroreduction of CO ₂ to C1 and C2 products on Dual Active Sites
EES - D4- P015	Nag Abhijit	Efficient Dissolution and Selective Recovery of Gold from Electronic Waste Using a Recyclable Ionic Medium
EES - D4- P016	Jayasekara Neranjan	Comparative Assessment of Microplastic Accumulation in Upper Catena Fisheries of the Kothmale Reservoir, Sri Lanka
EES - D4- P017	Chun Sangeun	Tailored-Shell Hollow TiO ₂ Spheres with Reduced Tortuosity for Fast-Charging Anode
EES - D4- P018	Tayyab Muhammad	Regulating redox sites for photocatalytic phenylcarbinol conversion and H ₂ production on lattice-matched Schottky junction
EES - D4- P019	Holthuijsen Matthijs	Revealing battery interface chemistry with spectroscopy
EES - D4- P020	Bayazit Şahika Sena	Investigation of MOF Derived NASICONs for Capacitive Deionization Application
EES - D4- P021	Nikiforov Vladimir	Proposal for restriction on difluoromethylene substances aka "universal PFAS restriction": chemical analysis
EES - D4- P022	Kim Do Hwan	Electronic Structure Engineering via Atomic W Doping in NiO/Cr ₂ S ₃ Nanotube Heterostructures for Enhanced Overall Water Spli
EES - D4- P023	Kerkez Kuyumcu Özgür	Ti/Fe-Based MOF Photocatalysts for Efficient Solar-Driven Dye Removal
EES - D4- P024	Mihet Maria	Fine-tuning the Supercapacitor's performance with EPR spectroscopy
EES - D4- P025	Aydın Yasar Andelib	Valorisation of waste tea leaves and egg shells in carbon nanodot synthesis
EES - D4- P026	Pigot Corentin	Bioinspired catalysts for photoelectrochemical solar energy conversion

EES - D4- P027	Ferraz Gabriel	Atmospheric microplastics in a Brazilian elementary school and true-to-life PET-associated internalization and mitochondrial d
EES - D4- P028	Napier Rachel	Optimising reaction efficiency with surfactants
EES - D4- P029	Chen Qi	Revealing the Extraction and Coordination Behavior of Novel Cyclohexyl o-oxydiamides ligand toward Pu(IV)
EES - D4- P030	Yan Taihong	Selective Extraction of Plutonium(IV) by Novel Diphenylpyridine Diamide Extractants
EES - D4- P031	Wang Wentao	A Green and Efficient Aqueous LLPS Platform for Metal Ion Separation
EES - D4- P032	Wong Ping Keung	Green Extractive Desalination with Designer Green Solvents for Freshwater Production