

Session Program

13-17 Sept 2021

**EUROPEAN CONGRESS AND EXHIBITION ON
ADVANCED MATERIALS AND PROCESSES -
EUROMAT 2021**

***A4_Materials for catalysis and porous
materials***

Virtual

Wednesday 15 September

09:50

A4_Materials for catalysis and porous materials: A4_1_Electrocatalysis

Session | Location: Room 1

09:50–10:30

Ni(OH)₂ modified Cu(111): interfacial water structure and electrocatalysis (Keynote)

Speaker

Prof. Julia Kunze-Liebhäuser

10:30–10:50

Insertion of Cu and Ni in ordered mesoporous Co-based electrocatalysts to facilitate the oxygen evolution reaction

Speaker

Tatiana Priamushko

10:50–11:10

The electroreduction of small organic acids as important reaction pathway during the CO₂ reduction towards alcohols

Speaker

Mr Daniel Winkler

11:10

11:50

A4_Materials for catalysis and porous materials: A4_2_Photocatalysis

Session | Location: Room 1

11:50–12:30

Towards a rational combination of heterogeneous and homogeneous photocatalysis (Highlight)

Speaker

Alexey Cherevan

12:30–12:50

Effective construction of a 2D/2D CuAl-LDH/g-C₃N₄ heterostructure for photocatalytic H₂ and O₂ generation

Speaker

Dr Hanane Bouverame

12:50–13:10

Nanoporous silicon loaded with gold particles for powerful photocatalytic performance

Speaker

Mr Sajjad Husain-Mir

13:10

15:30

A4_Materials for catalysis and porous materials: A4_3_Single-site catalysis/Co-catalysts

Session | Location: Room 1

15:30–15:50

Reversible exsolution of Ni from LaFe_{0.8}Ni_{0.2}O₃ for catalytic CO₂ methanation

Speaker

Davide Ferri

15:50–16:10

Elucidating the active state and formation of Cu co-catalyst for photocatalytic hydrogen evolution

Speaker

Jasmin Schubert

16:10–16:30

Atomically dispersed Pd on few-layer polymeric carbon nitride for Suzuki coupling

Speaker

Mr Junhao Huang

16:30–16:50

Isolation strategy towards earth-abundant single-site co-catalysts for photocatalytic hydrogen evolution reaction

Speaker

Pablo Ayala

16:50

17:30

A4_Materials for catalysis and porous materials: A4_4_CO₂ conversion

Session | Location: Room 1

17:30–17:50

Mesoporous and modified titania for efficient CO₂ photoreduction under high-purity conditions

Speaker

Dr Nikolaos G. Moustakas

17:50–18:10

Hypercrosslinked polymers for visible-light-driven CO₂ photoreduction

Speaker

Dr Robert Woodward

18:10–18:30

Nature of mesoporous metal oxide support in ambient pressure CO₂ methanation

Speaker

Anastasiia Efremova

18:30

Thursday 16 September

09:50

A4_Materials for catalysis and porous materials: A4_5_From intermetallics to defects

Session | Location: Room 1

09:50-10:10

Melt spun intermetallics as novel monolithic catalysts for selective hydrogenation reactions

Speaker

Paweł Czaja

10:10-10:30

Exsolution of Ni nanoparticles from nanostructured perovskite oxides for biogas reforming

Speaker

Mr Benjamin Rudolph

10:30-10:50

Conjugated porous polymers based on BODIPY and BOPHY dyes in hybrid heterojunctions for artificial photosynthesis

Speaker

Marta Liras

10:50-11:10

Effect of the A-site non-stoichiometry on the exsolution of NiFe alloy nanoparticles from mesoporous perovskite oxides and their activity for CO₂ reforming of ethane

Speaker

Prof. Maria Goula

11:10-11:30

Extraction of lithium from geothermal brines of the Upper Rhine Valley using manganese oxide sorbents

Speaker

Klemens Slunitschek

11:30

11:50

A4_Materials for catalysis and porous materials: A4_6_Porous materials

Session | Location: Room 1

11:50-12:20

Exploiting chemistry at interfaces for MOF manipulation (Highlight)

Speaker

Dr Jia Min Chin

12:20-12:40

Nitrogen-containing mesoporous carbons via nanocasting for CO₂ capture and energy storage applications

Speaker

Ms Elisa Maruccia

13:00

12:40–13:00

Rational Design and Scalable Fabrication of Three-Dimensional Porous Superstructures for High-Performance Self-Powered Electromechanical Devices and Water Purification Systems**Speaker**

Mr Yifei Liu

14:40

A4_Materials for catalysis and porous materials: A4_7_Nano/Mesostructuring**Session** | **Location:** Room 1

14:40–15:00

The role of nanoconfinement of iron and copper nanoparticles in carbon nanotubes applied in Fischer-Tropsch synthesis**Speaker**

Mrs Ana Fellenberg

15:00–15:20

Synthesis of porous turbostratic boron nitride with enhanced water stability**Speaker**

Tim Jähnichen

15:20–15:40

Guideline for the Preparation of Porous Core-Shell Metal Oxide Thin Films on Plastic Substrates via Sol-Gel Method and Atomic Layer Deposition**Speaker**

Felix Boll

16:00

15:40–16:00

Nanostructured endo/exo particle materials for energy conversion**Speaker**

Dr Kalliopi Kousi