

YOURHETCAT 2022**PROGRAM****11ST OF JULY, 2022 – 1ST DAY**

- 13:30 -14:00 Opening
József Pap, András Sápi, Video presentations
- 14:00 – 14:40 **Plenary Talk**
Hans-Peter Steinrück
Fundamental aspects of ionic liquid interfaces
- 14:40 – 15:20 **Plenary Talk**
Sameer Sapra
MoSe₂ – a versatile transition metal dichalcogenide and heterostructures thereof for applications in catalysis and optoelectronics
- 15:20 – 15:50 Coffee Break
- 15:50 – 17:35 Lectures of Young researchers**
- 15:50 – 16:05 Imre Szent
The behavior of clean metallic nanoparticles in catalytic reactions on boron nitride supports
- 16:05 – 16:20 Nnamdi Madubuko
Supported catalytically active liquid metal solutions (SCALMS) as novel materials for dynamic single atom catalysis – material development and high temperature applications
- 16:20 – 16:35 Laura Gueci
Platinum modified Beta zeolite catalysts: a DFT study on metal sites formation and energetics
- 16:35 – 16:50 Turczel Gábor
Supported CAAC- and BiCAAC-ruthenium complexes on Amberlyst-15
- 16:50 – 17:05 Dániel Karajz
Preparation of inverse opals with different wall thickness by atomic layer deposition
- 17:05 – 17:20 Selin Karahan
Effect of Particle Size on Resistance to Chloride for Hydrodechlorination of Trichloroethylene in Water

- 17:20 – 17:35 Altantuya Ochirkhuyag
Preparation of porous silica nanoparticles from natural minerals and its application in the catalytic synthesis of carbon nanotubes
- 18:30 Icebreaker – Dinner and Wine
- 19:30 Icebreaker – PubQuiz and Wine

12ND OF JULY, 2022 – 2ND DAY

- 9:00 – 9:40 **Plenary Talk**
Günther Rupprechter
Operando Studies of Catalytic Surface Reaction
- 9:40 – 10:40 **Lectures of Young researchers**
- 9:40 – 9:55 Ákos Szamosvölgyi
Behaviour of PtCo alloy nanoparticles catalyzing reverse water-gas shift reaction
- 9:55 – 10:10 Márton Szabados
Nickel-poor layered double hydroxides, synthesis and application in methanation of CO₂ and reverse water gas shift reaction
- 10:10 – 10:25 Sara Najari
Insights into the role of Fe-based active phases in CO₂ hydrogenation over Na-Fe₃O₄-Fe₅C₂
- 10:25 – 10:40 Oana Grad
Synthesis of MIL-53(Al)-based catalysts for the methanation of CO₂
- 10:40 – 11:10 Coffee Break
- 11:10 – 12:40 **Lectures of Young researchers**
- 11:10 – 11:25 Vivien Szabó
Transformation of hydroquinone with various M(III) metal ion containing Mn(II)-based layered double hydroxides (LDHs)
- 11:25 – 11:40 Krisztina Karádi
Modified layered double hydroxides for glucose-to-fructose selective isomerization
- 11:40 – 11:55 Sándor Balázs Nagy
Mn/Co containing perovskite catalyzed synthesis of pyrimidine compounds
- 11:55 – 12:10 Yvette Szabó
Base catalysed transesterification of glycerol with dialkyl carbonates using tricalcium aluminate as catalyst

- 12:10 – 12:25 Amanda Sfeir
The effect of support nature on the nitridation of MoO₃ and its catalytic activity for ammonia synthesis
- 12:25 – 12:40 Doaa Zamel
Novel Bacteria-Immobilized Cellulose Acetate/Poly(ethylene oxide) Nanofibrous Membrane for Wastewater Treatment
- 12:40 – 14:30 Lunch & **Poster Section at the Hall**
(Posters still available upto 17:00)
- 14:30 – 15:10 **Plenary Talk**
Núria López
Simulations in electrocatalytic reduction of CO₂
- 15:10 – 16:30 **Lectures of Young researchers**
- 15:10 – 15:25 Zhaochun Liu
Promotion of electrochemical reduction of CO₂ over SnO₂ by surface hydroxyls and metal doping
- 15:25 – 15:40 Dávid Lukács
Heterogeneous catalysis with copper(II)-bis-aryliminoisoindoline complexes in borate buffer
- 15:40 – 15:55 Cristina Silva
Effect of reductive treatment of Ti_{1-x}Sn_xO₂ – carbon composite supported Pt electrocatalysts for PEM fuel cell applications
- 15:55 – 16:10 Ilgar Ayyubov
Nitrogen doped carbonaceous materials as platinum free cathode electrocatalysts for oxygen reduction reaction
- 16:10 – 16:25 Mohit Yadav
Sequential Design of Strontium Titanates with Noble Metals (Rh, Ru and Pt) and Nanodiamonds for Enhanced Photocatalytic CO₂ Hydrogenation
- 16:30 – 17:00 Coffee Break
- 17:00 – 18:10 **Pitch Presentations**
3 MIN PITCH + MAX. 7 MIN DISCUSSION
- 17:00 – 17:10 Dalia M. El-Gendy
Black titania nanotubes/spongy graphene nanocomposites for high-performance supercapacitors
- 17:10 – 17:20 Antony Onjwaya
Design, Synthesis, and Characterization of Metal-Organic Frameworks for Selected Heavy Metal Removal from Mining Wastewater

- 17:20 – 17:30 Dina Moussaid
Solution-combustion synthesis of β -Cu₂ V₂O₇ nanoparticles using two different fuels “Urea and Glycine”: photocatalytic degradation of crystal violet under UV illumination
- 17:30 – 17:40 Norbert Német
Chemically programmed synthesis of ZIF-8 and gold nanoparticles with clock reaction
- 17:40 – 17:50 Anastasiia Efremova
Structure-catalytic activity correlations of Pt/m-MnO₂ system in CO₂ hydrogenation
- 17:50 – 18:00 Isaac Njoku
Synthesis and characterization of heterogeneous catalyst suitable for plastic degradation
- 18:00 – 18:10 OmVir Singh
Production of gasoline range hydrocarbon from bio-baphtha (paraffinic rich) oil using hierarchical ZSM-5 catalyst
- 19:00 – 20:00 Walk through Heart of Szeged to Gala Dinner
Gala Dinner at **Beke Tanszek Bistro** (6722 Szeged, Boldogasszony sgt 11.)

13RD OF JULY, 2022 – 3RD DAY

- 9:00 – 9:40 ***Plenary Talk***
Albin Pintar
Photocatalysts for water pollution prevention
- 9:40 – 10:10 ***Intros of EFCATS & YEuCat***
Albin Pintar (EFCATS member) & Vera Truttmann (YEuCat member) presentations
- 10:10 – 11:10 ***Lectures of Young researchers***
- 10:10 – 10:25 Mahsa Abedi
Characterization and evaluation of photocatalytic activity of strontium titanate photocatalyst prepared by different synthesis methods
- 10:25 – 10:40 Harshita Chawla
Fabricating Quercetin arbitrated efficient visible light driven bismuth oxybromide/bismuth oxyiodide [BiOBrp11-p-Q] facilitated by defect Engineering via simple mechanical grinding: An Experimental and DFT insight

- 10:40 – 10:55 Debika Devi Thongam
Fabric Coated with Five Different ZnO Nanoparticles for Efficient Photocatalytic Degradation under Natural Sunlight and UV light
- 10:55 – 11:10 Tomaž Kotnik
 Π -Conjugated PolyHIPE photocatalysts through the organocatalyzed reactions and their applications
- 11:10 – 12:10 Snacks & Coffee Break
- 12:10 – 13:00 ***Closing – Awards for Best Oral, Poster and Pitch Presenter***