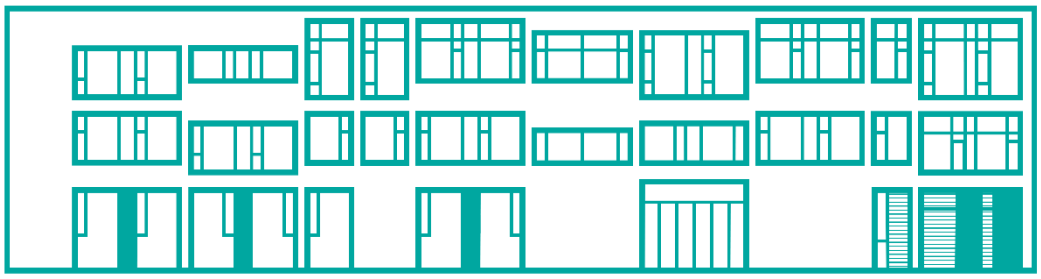
VSB TECHNICAL UNIVERSITY OF OSTRAVA | CENTRE FOR ENERGY AND ENVIRONMENTAL TECHNOLOGIES | INSTITUTE OF ENVIRONMENTAL TECHNOLOGY



CzePoCat 2024

12th Czech-Polish Catalytic Symposium

February 9, 2024 from 8:00 to 22:00

Meeting room UA2, Aula VSB-Technical University of Ostrava

17. listopadu 2172/15
708 00 Ostrava-Poruba
Czech Republic

attendant: +420 597 321 111
ID data mailbox: d3kj88v

IČO: 61989100
VATIN: CZ61989100

email: university@vsb.cz
www.vsb.cz

Program

8:00 – 8:30 – Registration

8:30 – 8:35 – Lucie Obalová, (VSB-Technical University of Ostrava)

Opening speech

1. Section

Chairman: David Kubička (University of Chemistry and Technology)

8:35 – 9:00 – Janusz Ryczkowski (University of Maria Curie-Sklodowska in Lublin)

Green, blue, grey or white hydrogen

9:00 – 9:15 – Sylwia Górecka (VSB-Technical University of Ostrava)

Ammonia oxidation: influence of copper and cerium on catalytic efficiency

9:15 – 9:30 – Krystian Mróz (Jagiellonian University in Krakow)

Cu-doped zinc sulphide materials for photocatalytic CO_2 and water reduction

9:30 – 9:45 – Mewin Vincent (Warsaw University)

In-situ Raman spectroscopy of Li^+ and Na^+ storage in anodic TiO_2 nanotubes

9:45 – 10:00 – Zuzanna Bielan (Jagiellonian University in Krakow)

Copper species@TiO_2 core@shell structures - photocatalytic mechanisms and applications

10:00 – 10:15 – Konrad S. Sobczuk (West Pomeranian University of Technology in Szczecin)

Investigation of the metal doping-type on the activity of titanium dioxide in the CO_2 photoreduction process

10:15 – 10:30 – Karolína Simkovičová (J. Heyrovský Institute of Physical Chemistry, Prague)

Catalytic Oxidative Dehydrogenation of Propane on Nanostructured Catalysts

10:30 – 10:45 – Coffee break

2. Section

Chairman: Agnieszka Ruppert (Lodz University of Technology)

10:45 – 11:00 – Michal Vaštyl (VSB- Technical University of Ostrava)

Microwave-initiated catalytic decomposition of Polyetherimide (PEI) with a focus on hydrogen and high-value hydrocarbons production

11:00 – 11:15 – Marcin Cichy (University of Maria Curie-Sklodowska in Lublin)

Dry reforming of methane on alkaline promoted Ni/HAp catalysts

11:15 – 11:30 – Wiktoria Adamowicz (Jagiellonian University in Krakow)

Exploring the impact of exposed facets of anatase-TiO_2 crystals on photocatalytic reduction of nitroaromatic compounds

11:30 – 11:45 – Klaudia Fidowicz (Jagiellonian University in Krakow)

Effect of textural properties and presence of Ce-cation on NH_3-SCR activity of Cu-exchanged MWW

11:45 – 12:00 – Joanna Olszówka (J. Heyrovský Institute of Physical Chemistry, Prague)

Fluctuations of the Ni oxidation state during dry methane reforming

12:00 – 12:15 – Sylwia Gnyla (Jagiellonian University in Krakow)

Combustion of methanol as a model volatile organic compound in the presence of Cu-modified catalysts

12:15 – 13:30 – Lunch

3. Section

Chairman: Nicolas Keller (University of Strasbourg)

13:30 – 13:45 – Mariia Lemishka (J. Heyrovský Institute of Physical Chemistry, Prague)

Binuclear vanadium centers in ferrierite zeolite

13:45 – 14:00 – Rudolf Ricka (VSB-Technical University of Ostrava)

Titanium-supported layered HUS-7 silicate as a catalyst for photocatalytic CO_2 reduction

14:00 – 14:15 – Fitri Rizki Amalia (Jagiellonian University in Krakow)

The Development of Reliable Colorimetric Analysis without Organic Dyes for Photocatalytic-Activity Evaluation

14:15 – 14:30 – Stanislav Valtera (J. Heyrovský Institute of Physical Chemistry, Prague)

One atom can change it all

14:30 – 14:45 – Preeti (Lodz University of Technology)

Influence of the reaction conditions for selective transformation of biomass-derived 5-hydroxymethylfurfural over Ru/TiO_2

14:45 – 15:00 – Sandra S. Kumar (Warsaw University)

Development of air/oxygen electrode for Li-O_2 battery

15:00 – 15:15 – Coffee break

4. Section

Chairman: . **Janusz Ryczkowski** (University of Maria Curie-Sklodowska in Lublin)

15:15 – 15:30 – Wiktoria Dubiel (Jagiellonian University in Krakow)

Investigation of the catalytic activity of iron and titania containing spherical MCM-41 type in diphenyl sulfide oxidation process

15:30 – 15:45 – Witold Zawadzki (University of Maria Curie-Sklodowska in Lublin)

Cerium modified Ni/Al_2O_3 catalysts for CO_2 methanation reaction

15:45 – 16:00 – Lei Wang (Jagiellonian University in Krakow)

Enhanced Photocatalytic Activity of Titania via Nanoarchitecture Modelling: Inverse Opal Case

16:00 – 16:15 – Abdul Selim (J. Heyrovský Institute of Physical Chemistry, Prague)

Selective oxidation of Biomass to Gluconic acid and Glucaric acid using bimetallic Nanocatalysts

16:15 – 16:30 – Aleksandra Gomułka (Jagiellonian University in Krakow)

Modification of MCM-41 and MCM-48 mesoporous silicas by ADP technique and their catalytic activity in the low-temperature NH_3-SCR process

16:30 – 16:45 – Pavel Izák (Institute of Chemical Process Fundamentals)

Purification of flue gas by membrane processes

16:45 – 22:00 – Discussion and closing ceremony

Acknowledgement: This symposium was financially supported by Metrohm, Czech Chemical Society (ČSCH) and project „Research Infrastructure ENREGAT – Energy Waste Recovery and Gas Treatment, ID: LM2023056“.