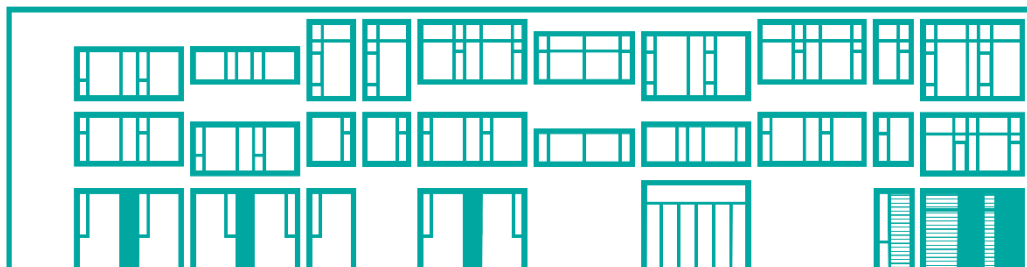# VSB TECHNICAL UNIVERSITY OF OSTRAVA | INSTITUTE OF ENVIRONMENTAL TECHNOLOGY

CzePoCat

9th Czech-Polish Catalytic Symposium

February 7, 2020 from 8:00 to 21:30

Meeting room NA 4, Aula VŠB-Technical University of Ostrava

<u>**Program**</u>

8:00 – 8:20 – **Registration**

8:20 – 8:30 – **Lucie Obalová** (VŠB- Technical University of Ostrava)

Opening speech

1. <u>Section</u>

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

8:30 – 8:45 – **Karol Sidor** (Jagiellonian University in Krakow)

Liquid-phase adsorption of phenol on resorcinol-formaldehyde resin-derived spherical carbon materials

8:45 – 9:00 – **Adam Czyżewski** (West Pomeranian University of Technology, Szczecin)

Preliminary findigs on NO photocatalytic oxidation and NO_2 adsorption on $AgNPs/TiO_2/ACF$ cloths

9:00 – 9:15 – **Hector De paz Carmona** (Unipetrol - Centre for Research and Education, a.s.)

Sulfur-free supported carbide and nitride catalysts for co-processing of atmospheric gasoil with rapeseed oil

9:15 – 9:30 – **Sylwia Wójcik** (Jagiellonian University in Krakow)

Power of doping: the case study of Co_3O_4-based catalyst

9:30 – 9:45 – **Emil Kowalewski** (Polish Academy of Sciences)

Selective catalytic hydrogenation of nitrocyclohexane in flow conditions

9:45 – 10:00 – **Agnieszka Wanag** (West Pomeranian University of Technology, Szczecin)

TiO_2/reduced graphene oxide photocatalysts obtained by a two-step solvothermal and calcination synthesis for the photocatalytic removal of water contamination

10:00 – 10:15 – Martyna Przydacz (Lodz University of Technology)

The role of TiO_2 support in Ni/TiO_2 catalysts for hydroxymethylfurfural hydrodeoxygenation

10:15 – 10:30 – Jáchym Mück (University of Pardubice)

Transformation of ethanol to higher alcohols by heterogeneous catalysts

10:30 – 10:45 – Coffee break

2. <u>Section</u>

Chairman: Lucjan Chmielarz (Jagiellonian University in Krakow)

10:45 – 11:00 – Aleksandra Borcuch (Jagiellonian University in Krakow)

Conversion of nitrogen pollutants over transition metal modified porous silica materials

11:00 – 11:15 – Grzegorz Słowik (University of Maria Curie-Sklodowska in Lublin)

The influence of active phase composition and reaction temperature on the catalytic properties of Co-Ni catalysts in the steam reforming of ethanol

11:15 – 11:30 – Marek Inger (Łukasiewicz Research Network – New Chemical Syntheses Institute)

The scope of activity of the Nitric Acid Technology Department in ŁUKASIEWICZ-INS

11:30 – 11:45 – Paulina Rokicka-Konieczna (West Pomeranian University of Technology, Szczecin)

Photocatalytic water disinfection under artificial solar light by TiO_2 nanoparticles modified with APTES.

11:45 – 12:00 – Susmita Dolai (Institute of Chemical Process Fundamentals, AS CR)

2D materials based carbon nitride for phototcatalysis

12:00 – 12:15 – Daniel Cvejn (VŠB-Technical University of Ostrava)

Curious case of clay catalyst - towards the oxidative couplings catalyzed by modified clays

12:15 – 12:30 – Anna Jakimińska (Jagiellonian University in Krakow)

An unconventional approach to the excitation of TiO_2 based systems with silver nanowires

12:30 – 12:45 – Janusz Ryczkowski (University of Maria Curie-Sklodowska in Lublin)

Pannonian 2020

12:45 – 13:30 – Lunch

3. Section

Chairman: Agnieszka Ruppert (Lodz University of Technology)

13:30 – 13:45 – Mateusz Trochowski (Jagiellonian University in Krakow)

How Insignificant Modifications of Photocatalysts Can Significantly Change their Photocatalytic Activity

13:45 – 14:00 – Aneta Święs (Jagiellonian University in Krakow)

Copper modified derivatives of ferrierite zeolite as catalysts for the DeNOx process

14:00 – 14:15 – Agnieszka Sienkiewicz (West Pomeranian University of Technology, Szczecin)

TiO_2/APTES nanomaterials with enhanced photocatalytic properties.

14:15 – 14:30 – Wojciech Pajerski (Jagiellonian University in Krakow)

Preparation of functional materials with the use of bacteria

14:30 – 14:45 – Sebastian Jarczewski (Jagiellonian University in Krakow)

Catalytic activity and stability of VOx-modified mesoporous MgO replica in oxidative dehydrogenation of ethylbenzene

14:45 – 15:00 – Magdalena Greluk (University of Maria Curie-Sklodowska in Lublin)

The effect of potassium on cobalt- and nickel-based catalysts of steam reforming of ethanol

15:00 – 15:15 – Martyna Murat (Unipetrol - Centre for Research and Education, a.s.)

Methyl Levulinate trans hydrogenation over MOFs Catalysts containing Zr and Ni

15:15 – 15:30 – Jaroslav Aubrecht (University of Chemistry and Technology Prague)

Detailed study of CuZnAl catalysts

15:30 – 15:45 – Coffee break

4. Section

Chairman: . **Anna Srebowata** (Polish Academy of Sciences)

15:45 – 16:00 – Emilia Soszka (Lodz University of Technology)

Synthesis and characterization of Ni-Pd catalysts for biomass -derived levulinic acid hydrogenation

16:00 – 16:15 – Taymaz Tabari (Jagiellonian University in Krakow)

Tuning the catalytic activity of ABO_3 perovskite-type oxides

16:15 – 16:30 – Paulina Chytrosz (Jagiellonian University in Krakow)

Application of cold plasma for functionalization of materials surfaces

16:30 – 16:45 – Amer Inayat (VŠB-Technical University of Ostrava)

Thermal and catalytic degradation of polystyrene

16:45 – 17:00 – Monika Ruszak (Łukasiewicz Research Network – New Chemical Syntheses Institute)

Catalyst for N_2O decomposition in nitric acid plants

17:00 – 17:15 – Bartosz Zawadzki (Polish Academy of Sciences)

Degradation of diclofenac in water by heterogeneous catalytic hydrodechlorination

17:15 – 17:30 – Krystian Mróz (Jagiellonian University in Krakow)

Photocatalytic activity of zinc sulfide

17:30 – 17:45 – Witold Zawadzki (University of Maria Curie-Sklodowska in Lublin)

Nickel based catalysts for CO_2 methanation reaction

17:45 – 22:00 – Discussion and closing ceremony

Acknowledgement