

5th Czech-Polish doctoral seminar

November 27, 2015 from 8:00 to 21:30

Meeting room 3.04, Institute of Environmental Technology, VŠB-Technical
University of Ostrava

Program

8:00 – 8:20 – Registration

8:20 – 8:30 – Petr Praus (VŠB- Technical University of Ostrava)

vice-rector for Science and Research

Opening speech

1. Section

Chairman: Piotr Kustrowski (Jagiellonian University in Krakow)

8:30 – 8:45 – Sylwia Basąg (Jagiellonian University in Krakow)

Selective catalytic oxidation of ammonia to nitrogen over Cu(Mn)-Mg-Al mixed metal oxides obtained from hydrotalcite-like materials

8:45 – 9:00 – Wojciech Kaspera (Jagiellonian University in Krakow)

Oxygen and potassium diffusion in potassium tungsten bronze catalysts

9:00 – 9:15 – Piotr Natkański (Jagiellonian University in Krakow)

New type of oxide catalysts based on clay/polymer nanocomposites modified with Cu(II) cations

9:15 – 9:30 – Žaneta Chromčáková (VŠB-Technical University of Ostrava)

Optimization of Cs content in Co-Mn-Al mixed oxide as catalyst for N₂O decomposition

9:30 – 9:45 – Klaudia Ciura (Jagiellonian University in Krakow)

Synthesis of oxide nanomaterials in supercritical conditions for catalytic applications

9:45 – 10:00 – Sebastian Jarczewski (Jagiellonian University in Krakow)

CMK-type carbon replicas with ordered mesoporous structure as promising catalysts of oxidative dehydrogenation of ethylbenzene

10:00 – 10:15 – Coffee break

2. Section

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

10:15 – 10:30 – Malgorzata Rutkowska (Jagiellonian University in Krakow)

Catalytic activity of hierarchically structured ZSM-5 synthesized by meso template-free method in methanol to DME conversion

10:30 – 10:45 – Tomasz Jakubek (Jagiellonian University in Krakow)

The effect of the alkali cation on the catalytic properties of cryptomelane in soot combustion

10:45 – 11:00 – Anna Rokicińska (Jagiellonian University in Krakow)

Structural and catalytic properties of Co-containing exfoliated montmorillonite

11:00 – 11:15 – Ladislav Svoboda (VŠB-Technical University of Ostrava)

Preparation of small luminescent ZnO nanoparticles by controlled photocorrosion

11:15 – 11:30 – Marcin Cichy (University of Maria Curie-Skłodowska in Lublin)

Aqueous Phase Reforming - novel method for hydrogen generation

11:30 – 11:45 – Kamil Machowski (Jagiellonian University in Krakow)

Synthesis and characterization of spherical carbon/silica composites and carbon replicas for removal of volatile organic compounds

11:45 – 13:00 – Lunch

3. Section

Chairman: Lucjan Chmielarz (Jagiellonian University in Krakow)

13:00 – 13:15 – Daniel Macina (Jagiellonian University in Krakow)

Mesoporous silica materials modified with metal oxide aggregates in the role of catalysts for selected environmental processes

13:15 – 13:30 – Joanna Duch (Jagiellonian University in Krakow)

Alkali on the surfaces of carbon materials

13:30 – 13:45 – Tomasz Kondratowicz (Jagiellonian University in Krakow)

Total oxidation of toluene catalyzed by zirconia shells doped with copper oxide

13:45 – 14:00 – Pengwei Huo (Jiangsu University, China, VŠB-Technical University of Ostrava,)

Photocatalytic reduction of carbon dioxide over thin film (Ce/TiO₂)

14:00 – 14:15 – Tomasz Olejnik (University of Maria Curie-Skłodowska in Lublin)

Photochemical degradation of triclosan using TiO₂/SBA-15 catalysts

14:15 – 14:30 – Jaroslav Kocík (University of Pardubice)

Potential mixed oxides, preparation, properties and catalytic activity in aldol condensation

14:30 – 15:00 – Coffee break

4. Section

Chairman: Andrzej Kotarba (Jagiellonian University in Krakow)

15:00 – 15:15 – Marcin Kobielski (Jagiellonian University in Krakow)

Anatase-TiO₂ versus rutile-TiO₂ – to understand the difference in photocatalytic activation of oxygen

15:15 – 15:30 – Sylwia Gudyka (Jagiellonian University in Krakow)

Dispersion of cobalt active phase over oxide support. From pellets to monoliths

15:30 – 15:45 – Anna Wach (Jagiellonian University in Krakow)

Controlled surface modification of mesoporous SBA-15 silica with amino-functionalized polymer for base-catalyzed Knoevenagel condensation

15:45 – 16:00 – Federico Salvadores (National University of Littoral, Argentina, VŠB-Technical University of Ostrava)

Photocatalytic paint for indoor environments use

16:00 – 16:15 – Grzegorz Slowik (University of Maria Curie-Skłodowska in Lublin)

Promoted and unpromoted potassium cobalt-nickel catalysts with CeO₂ support for steam reforming of ethanol

16:15 – 16:30 – Martin Kout (University of Pardubice)

Potential of NiCe-alumina catalysts in the oxidative dehydrogenation of ethane and in the dry reforming of methane

16:30 – 17:00 – Presentation of IET laboratories

17:00 – 21:30 – Discussion and closing ceremony

Acknowledgement

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