## **FUTURA** building

8:45 Breakfast and a tour at the Department of Chemistry

## **METRIA** building

10:05 Welcoming address (M102)

#### Session 1

Session chair: Niko Heikkinen (VTT)

10:15 KL1 Dr. Teuvo Maunula (Dinex Finland) Emission catalysts and purification systems for future fuels and combustion exhaust gases

10:45 OP1 Dr. Petra Vasko Hydroboration of Alkynes by an FLP: Unexpected Bond Activation and Mechanistic Studies

11:00 OP2 Emma Verkama Supported noble metal catalysts for the simultaneous hydrodeoxygenation and hydrodenitrogenation of amides: influence of the catalyst composition

11:15 OP3 Ramin Majidov Short summary of my MSc thesis work: "Sustainable feedstock to Methyl Lactate using Y zeolites"

11:30 OP4 Luca Mastroianni Comprehensive reverse flow reactor model for fluid-solid systems

11:45 OP5 Blaz Horvat Synthesis of Zeolites from waste combustion fly ash and characterization via SCR

12:00 Lunch at restaurant Pepe (METLA building)

#### Session 2

Session chair: D. Sc. Pasi Tolvanen (Åbo Akademi)

13:00 OP6 Matias Alvear Epoxidation on titanium silicates catalyst: From active site to reactor understanding

13:15 OP7 Tommaso Cogliano 1H NMR-based analytical method: A valid and rapid tool for the epoxidation processes

13:30 OP8 **Ole Reinsdorf** Selective Oxidation of Glucose using Hydrogen Peroxide as an Oxidant: Effect of the Support, Metal and Structure Sensitivity

13:45 OP9 Christoph Schmidt AuPd catalysts for the direct synthesis of hydrogen peroxide in a trickle bed reactor

14:00 OP10 Dr. Francesco Sandri Novel halide-free strategy to promote the direct synthesis of hydrogen peroxide

14:15 KL2 Associate Professor Riikka Puurunen (Aalto University) Discussion on recent progress of scientific publishing forums: What are preprints, where and how to publish open data/open code, etc.

14: 45 Coffee break

## Session 3

Session chair: Dr. Aitor Arandia Gutiérrez (VTT)

15:05 KL3 Associate Professor Anna Lähde (University of Eastern Finland) CO2 capture and utilization (Tentative title)

15:35 OP11 Florian Rathmann Plasmonic-catalytic nanoparticles as enablers for CO2 reductions under visible light excitation and mild conditions

15:50 OP12 Aku Lempelto CO2 Reduction to Methanol at a Cu/Zn–ZrO2 Interface via DFT Calculations

16:05 OP13 Mourad Elkailech CO2 methanation over raw material-based catalysts

16:20 Poster session (see list of poster presentations below)

### **Evening program**

17:00 Annual meeting of the Finnish Catalysis Society (M105)

19:00 Dinner at restaurant Filipof (Torikatu 10, 80100 Joensuu)

# List of posters

| P1  | Niko Heikkinen       | νπ                            | Heterogeneous catalyst modification with atom  | ic layer deposition overcoatings |
|-----|----------------------|-------------------------------|--|----------------------------------|
| P2  | Maryam Hmoudah       | Åbo Akademi University        | Revolutionizing Wastewater Treatment: The Pot<br>Emerging Contaminants.                              | ential of Mxenes in Eliminating  |
| Р3  | Mark Martinez-Klimov | Åbo Akademi University        | Bifunctional Catalysts for the Production of Rend  | ewable Jet Fuel                  |
| P4  | German Araujo        | Åbo Akademi University        | Solid Foam Catalysts For Sugar Hydrogenation: (<br>Study   | Catalyst Development and Kinetic |
| P5  | Pawel Winiarski      | Aalto University              | Methods for AI guided catalyst discovery   |                                  |
| P6  | Dr. Wander Perez     | Åbo Akademi University        | Two-step fatty acid esters conversion to cyclic cocatalyst and semi batch reactor                    | arbonates using heterogeneous    |
| P7  | Jay Pee Oña          | Åbo Akademi University        | Electrocatalytic conversion of glucose and xyloso carbon-supported Au nanocatlysts                   | e on highly dispersed mesoporous |
| P8  | Leoni Klingelhöfer   | Aalto University              | Hydrodenitrogenation of alkyl amines over nobl   | e metal catalysts                |
| P9  | Eerika Olkkonen      | University of Eastern Finland | Supported nickel catalysts for decomposition of  | tetrabromobisphenol A            |
| P10 | Tiina Laitinen       | University of Oulu            | Alternative raw materials for methanol oxidative   | e dehydrogenation catalysts      |
| P11 | Joakim Kattelus      | Aalto University              | Preparation and characterization of promoted s hydrodenitrogenation                                  | upported MoS2 catalysts for      |
| P12 | Ibrahim Abdelsalam   | Helsinki University           | Harvesting plasmonic effects for H2 evolution an   | nd CO2 reduction reactions.      |
| P13 | Mouaud Hacchach      | Åbo Akademi                   | Valorization of Hemicelluloses via Catalytic Selec<br>Gold Catalysts: Process Design and Techno-Econ |                                  |
|     | К                    | L: Keynote lecture            | OP: Oral presentation  | P: Poster                        |