

2nd SkyPro Conference

Clean air research at the University of Oulu

November 12th, 2013, Place: IT116, Registration by November 7th to skypro@oulu.fi

8.30 - 9.00 Registration and coffee

9.00 -10.00 **Opening of the conference**

9.00 Welcome notes from Prof. Riitta L. Keiski

9.15 Plenary Lecture: Air quality concerns and technologies for improvement
Dr. Toni Kinnunen, Dinex Ecocat Oy

10.00 - 11.30 **Session 1: Pollution prevention and control** Chair: Doc. Mika Huuhtanen

10.00 **Keynote 1:** Catalytic emission control studies in the Mass and Heat Transfer Process Laboratory at the University of Oulu Prof. Riitta L. Keiski

10.30 New knowledge for the industrial CVOC emission abatement Satu Pitkäaho

10.50 The chemical composition and alveolar deposition of particles from an off-road diesel engine Kati Oravisjärvi

11.10 Renewable hydrogen from ethanol: Reforming at low temperatures over Ni supported catalysts Prem Kumar Seelam

11.30- 13.00 **Lunch and poster session**

13.00-14.30 **Session 2: CO₂ minimization and utilization** Chair: Lic.Sc. (Tech.) Ritva Isomäki

13.00 **Keynote 2:** Switchable ionic liquids in biorefining and acid gas capture Prof. Jyri-Pekka Mikkola

13.30 Decarbonization of Europe by 2050: Motivation for Smart Energy Network development Eva Pongrácz

13.50 Via CO₂ photoreduction over nanocrystalline TiO₂ towards valuable products Lenka Matějová

14.10 CO₂ emission mitigation in ironmaking with biomass – Replacement of coal with biomass in coke production Hannu Suopajarvi

14.30 – 15.00 **Coffee and poster session**

15.00- 17.00 **Session 3: Advanced materials research** Chair: Dr. Tanja Kolli

15.00 **Keynote 3:** Molecular Dynamics Simulation of The Solid-State Topochemical Polymerization of S₂N₂ Prof. Risto Laitinen

15.30 CMOS-based capacitance measurements for cell adhesion sensing applied in evaluating the cotoxicity of nanomaterials Niina Halonen

15.50 The effect of La addition on W-ZrCe oxide catalysts Ari Väliheikki

16.10 Study of atomic oxygen adlayers on Al (100) Giorgio Lanzani

16.30 Field effect sensor devices and packaging for emissions monitoring and air quality control Mike Andersson

16.50 Closing words: Dr. Satu Pitkäaho

17.00 - 19.00 **Evening reception hosted by SkyPro Oulu Clean Air Cluster**