

CAMURE 8 & ISMR-7

Programme

Sunday 22.5.2011

16.00-19.00
Registration

19.00-20.30
Conference opening
Representatives of Scientific committee, Åbo Akademi and City of Naantali

Historical lecture
Naantali area, from the monastery to the oil refinery

Plenary lecture
PL-1. Prof. F. Larachi (Université Laval, Quebec), *Recent advances in the CO₂ capture*

20.30-22.30
Welcome reception



Monday 23.5.2011

8.30-9.30

PL-2. Prof. A. Rodrigues (University of Porto, Portugal), Chromatographic reactors

9.30-10.30

PL-3. Prof. E. Drioli (University of Calabria, Italy), Catalytic membrane reactors

10.30-11.00 **Coffee break**

	Hall 1	Hall 2
11.00-11.30	O1. <i>M. Abdollahi, J.Hu, H.T. Hwang, R. Ciora, P.K.T. Liu, M. Sahimi, T.T. Tsotsis</i> , Membrane reactors for renewable energy production	O7. <i>E. V. Rebrov, T. Duisters, P. Löb, J. Meuldijk, V.Hessel</i> , Enhancement of the liquid-sided mass transfer in a falling film catalytic microreactor by in-channel mixing structures
11.30-12.00	O2. <i>F.R. García-García, Kai Man Kerry Yu, Wei Yi Tong, S.C. Tsang, K. Li</i> , On board CO _x free H ₂ production using a catalytic hollow fibre membrane reactor by methanol steam reforming	O8. <i>D.B. Thakur, R.M. Tiggelaar, J.G.E. Gardeniers, L. Lefferts, K. Seshan</i> , Novel microreactors for heterogeneously catalyzed aqueous phase reactions: carbon nanofibers (CNFs) as catalyst support
12.00-12.30	O3. <i>P. Patidar, S. M. Mahajani</i> , Entrainer based reactive distillation for 2-ethylhexyl acetate synthesis	O9. <i>C. Nikitine, M.-L. Zanota, F. Bornette, V. Meille, I. Pitault</i> , SiC structured reactor for continuous production of silicone oils

12.30-13.30 **Lunch**

	Hall 1	Hall 2
13.30-14.00	O4. <i>N. Krou, C. Julcour-Lebigue, C. Andriantsiferana, H. Delmas, A.M. Wilhelm</i> , Assessment and modeling of a sequential process for water treatment - adsorption and batch WCAO regeneration of activated carbon	O10. <i>L. Kallinikos, N. Papayannakos</i> , The effect of gas to liquid ratio on HDS performance of a string bed spiral reactor
14.00-14.30	O5. <i>Z.-M. Cheng, J.-L. Tan, J. Jin, Y.-M. Yu, P. Liu, Z.-M. Zhou</i> , Regulation of catalytic reaction via vapor phase condensation, II. Operational realization in a two-stage reactor	O11. <i>B. Patankar, V. V. Ranade</i> , Gas disengagement and mixing in internal airlift loop reactor
14.30-15.00	O6. <i>C.S.M. Pereira, V.M.T.M. Silva, A. E. Rodrigues</i> , Process intensification for green fuels production	O12. <i>S. D. Pollington, L. D. Dingwall, P. J. Collier, E. H. Stitt</i> , Comparison of reactors for 2-hydroxy benzyl alcohol oxidation over Pt/Bi/Al ₂ O ₃ fixed catalyst

15.00-18.00 **Excursion to Naantali**

19.00-22.00 **Poster session with reception (for all poster presentations)**

Tuesday 24.5.2011

8.30-9.30

PL-4. Dr. B. Zong (Research Institute of Petroleum Processing, China) Amorphous Ni Catalysts and Magnetically Stabilized Bed Reaction Technology and their Commercialized Integration

	Hall 1	Hall 2
9.30-10.00	O13. <i>A. S. Chaudhari, T. P. Tiemersma, F. Gallucci, M. van Sint Annaland</i> , Modeling of autothermal reactor concept for combined oxidative coupling and steam reforming of methane using dual function catalyst particle	O23. <i>F. Cárdenas-Lizana, I. Yuranov, P. Raspail, L. Kiwi-Minsker</i> , Metal structured catalysts for the solvent-free hydrogenation of ψ -pseudoionone
10.00-10.30	O14. <i>P. Djinović, I. G. Osojnik Črnivec, J. Levec, A. Pintar</i> , Catalytic conversion of model biogas to syngas using supported noble metal catalysts	O24. <i>E. Sulman, A. Ivanov, V. Chernyavsky, V. Matveeva, M. Sulman, Yu. Kosivtsov, A. Kharitonov</i> , Kinetics particularity of phenol hydrogenation over Pd catalysts in fixed bed reactor

10.30-11.00 **Coffee break**

	Hall 1	Hall 2
11.00-11.30	O15. <i>M. Ye, Z. Liu</i> , Scale-up of methanol to olefins (MTO) fluidized bed reactor	O25. <i>N. Wörz, P. Claus</i> , Modeling of the catalytic hydrogenation of citral in a trickle-bed reactor
11.30-12.00	O16. <i>F. Gallucci, S. Noorman, M. van Sint Annaland, J.A.M. Kuipers</i> , Packed-bed chemical-looping combustion: theoretical investigation and experimental validation	O26. <i>R. Güttel, C. Eisenbeis, J. Diedenhoven, U. Kunz, T. Turek</i> , Hydrogenation of glucose in a batch-operated monolith loop reactor
12.00-12.30	O17. <i>Z. B. Liu, K. Jessen, T. T. Tsotsis</i> , Oil production by in-situ combustion: a unique example of a large-scale, multi-phase, multi-functional, heterogeneous reactor	O27. <i>M. Al Herz, A. N. Tsoligkas, M. J.H. Simmons, J. Wood</i> , Selective hydrogenation of 1-heptyne over Pd/Al ₂ O ₃ catalyst in a fixed-bed reactor: effect of operating parameters and choice of solvent
12.30- 13.00	O18. <i>A. Sarvaramini, M.P. Dudukovic, F. Larachi</i> , Chrysotile for catalytic cracking in biomass steam gasification – kinetics and catalyst characterization of (benzene) model-tar compound	O28. <i>N. Sedaie Bonab, J. Wood, M.J.H. Simmons</i> , Solvent and mass transport effects in the catalytic hydrogenation of phenyl-butan-2-one in a three-phase stirred reactor.

13.00-14.00 **Lunch & Scientific Committee meeting**

	Hall 1	Hall 2
14.00-14.30	O19. <i>L.A. Correia, R. Sumbharaju, D.F. Meyer, Y.C. van Delft, A. de Groot</i> , Oxidation of ethylbenzene in a G-L Taylor Flow reactor	O29. <i>H. G. Manyar, J. M. Thompson, D. W. Rooney, J. D. Holbrey, J. McGregor, L. F. Gladden, E. H. Stitt, C. Hardacre</i> , Insights into the influence of solvent structure in the hydrogenation of butan-2-one: an experimental and theoretical study
14.30-15.00	O20. <i>T. Bauer, R. Lange</i> , Structured catalysts for gas/liquid/solid reactions	O30. <i>L. Lefferts, K. Chinthaginjala</i> , How catalyst supports influence performance of Pd catalysts for hydrogenation of nitrite
15.00-15.30	O21. <i>P. K. Plucinski, H. Smugowski, U. Laska, C. G. Frost, G. J. Price</i> , Continuous processing with the magnetic nano-composite catalysts	O31. <i>M. Bernardi, M. Le Du, I. Dodouche, C. Descorme, S. Deleris, E. Blanchet, M. Besson</i> , Selective wet air oxidation of ammonium acetate aqueous solutions over titania and zirconia supported Pt catalysts
15.30-16.00	O22. <i>E. Santacesaria, R. Turco, M. Tortorelli, V. Russo, M. Di Serio, R. Tesser</i> , Biodiesel process intensification by using static mixers tubular reactors	O32. <i>R. Kralchevska, T. Tišler, M. Milanova, D. Todorovsky, A. Pintar</i> , Development of novel titania-based catalysts modified with neodymium and nitrogen to promote visible-light assisted photocatalytic oxidation of organics in wastewaters

17.00-19.30 **Poster session** (for all poster presentations)

20.30-24.00 **Conference Dinner** at restaurant 'Naantalin Kaivohuone'



Wednesday 25.5.2011

	Hall 1	Hall 2
8.30-9.00	O33. <i>N. Gemo, P. Biasi, J. R. Hernandez Carucci, P. Canu, T. Salmi</i> , Hydrogen peroxide direct synthesis: batch reaction data, hydrogen solubility and modelling	O43. <i>M. N. An tSaoir, D. L. Abreu Fernandes, J. Sá, M. McMaster, C. Hardacre, K. Kitagawa, F. Aiouache</i> , Near-infrared diffused transmittance tomography for 3D distributions of temperature and concentrations in packed beds
9.00-9.30	O34. <i>I. Huerta, T. Moreno, J. García Serna, M. J. Cocero</i> , Direct synthesis of hydrogen peroxide in a slurry bubble column reactor in water with and without a supercritical CO ₂ gas phase. Process and reactor design considerations.	O44. <i>D. Dalle Nogare, P. Canu</i> , Plug flow vs. CFD modeling of catalytic partial oxidation of methane on Pt catalyst supported on honeycomb monolith
9.30-10.00	O35. <i>M.-Ali Al Sawah, D. Richard, C. de Bellefon</i> , A coupled oxidative reductive process using photocatalytic oxidation and - catalytic hydrogenation for nit-rates-to-nitrogen transformation.	O45. <i>P. Renze</i> , CFD modeling of multiphase flows in chemical engineering: current status and challenges
10.00-10.30	O36. <i>M. Bistan, T. Tişler, A. Pınar</i> , Efficient removal of organic pollutants and detoxification of wastewaters by means of catalytic wet-air oxidation	O46. <i>Q. Huand, C. Yang, Z.-S. Mao</i> , CFD simulation of hydrodynamics, mass and heat transfer in a pilot airlift loop reactor for coal direct liquefaction

10.30-11.00 **Coffee break**



	Hall 1	Hall 2
11.00-11.30	O37. <i>A.-L. Dessimoz, A. Renken, L. Kiwi-Minsker</i> , New operating window for intensification of carboxylation reaction	O47. <i>R. J.G. Lopes, Rosa M. Quinta-Ferreira</i> , Euler-Lagrange CFD simulation of a gas-liquid fluidized bed reactor for the detoxification of high-strength phenolic wastewaters
11.30-12.00	O38. <i>R. Tesser, E. Santacesaria, M. Di Serio, R. Turco, V. Russo</i> , Epoxidation of soybean oil: kinetic study and modelling in fed-batch and continuous reactors.	O48. <i>C. Juez, D. Gonzalez, E. Cueto, H. Herguido, M. Menendez</i> , CFD modelling in a two zone fluidized bed reactor for methane aromatization
12.00-12.30	O39. <i>S. Leveneur, A. Ledoux, L. Estel, T. Salmi</i> , Epoxidation of vegetable oils under microwave irradiation	O49. <i>H. Yamada, Y. Ohashi, T. Tagawa</i> , Mass transfer effect in gas-liquid liquid-solid four phase reaction

12.30-13.30 Lunch

	Hall 1	Hall 2
13.30-14.00	O40. <i>N. Ozbay, N. Oktar, G. Dogu, T. Dogu</i> , Effect of phase change on etherification rate of glycerol with tert-butyl-alcohol	O50. <i>S. Haase, T. Bauer, R. Lange</i> , New method for simultaneous measurement of hydrodynamics and mass transfer in a mini-channel reactor with Taylor flow
14.00-14.30	O41. <i>G. Hilpmann, B. T. Kusema, T. Salmi, D. Yu. Murzin, R. Lange</i> , Experimental studies on arabino-galactans towards new routes of processing hemicelluloses	O51. <i>R.Sh. Abiev, I.V. Lavretsov</i> , Mass transfer enhancement in bubble-chain flow by Taylor vortices in mini- and microchannels: influence of circulation and by-pass modes
14.30-15.00	O42. <i>Yu. Demidova, I. Simakova, S. Reshetnikov, I. Prosvirin, O. Simakova, M. Estrada, A. Simakov, D. Murzin</i> , Dynamics of Au/Al ₂ O ₃ deactivation during α -pinene to camphene isomerization in hydrogen atmosphere	O52. <i>D. Semeynov, I. Turunen</i> , Hydrodynamic modeling of a microstructured plate reactor

15.00-16.00

Plenary lecture and announcement of next CAMURE&ISMR

PL-5. Prof. C. De Bellefon (CPE-Lyon, France), Multiphase microstructured reactors