

Programme

Sunday July 8, 2018

15:00 Registration

18:00 End of registration

Monday July 9, 2018

08:30 **Registration**

09:30 **Welcome**

09:40 **IL01 - When Heterogeneous Catalysis Drives Innovation in Fuel Cell Electrocatalysis**

Prof. Marian CHATENET
(LABORATORY OF ELECTROCHEMISTRY AND PHYSICAL CHEMISTRY OF MATERIALS AND INTERFACES,
LEPMI, GRENOBLE-INP, Grenoble, France)

Session 1 - Design of New Catalytic Materials

Session chairs

Mr Sean BARRADAS (SASOL TECHNOLOGY, Johannesburg, South Africa)
Dr Konrad MOEBUS (EVONIK RESOURCE EFFICIENCY GMBH, Hanau-Wolfgang, Germany)

10:30 **OC01 - Variation of the Proximity Between Active Sites in Bifunctional Catalysts Applied to Dispersed Platinum Nanoparticles Supported on Chlorine Doped Gamma-Alumina**

Ms Ana Teresa FIALHO BATISTA
(IFP ENERGIES NOUVELLES, Solaize, France)

11:00 **Coffee break**

11:30 **OC02 - Preparation of Mesoporous Aluminosilicate Nanofibers with Low Si/Al Ratio as Catalyst for Hydrotreatment of Bio-Oil**

Mr Tommy HAYNES
(UNIVERSITY OF LOUVAIN, Louvain-la-Neuve, Belgium)

12:00 **OC03 - Selective Catalytic Oxidation over Au-Pd/Titanate Nanotubes and the Influence of the Catalyst Preparation Method on the Activity**

Prof. David CHADWICK
(IMPERIAL COLLEGE LONDON, London, United Kingdom)

12:30 **Lunch**

Session chairs

Dr Jurjen MEEUWISSEN (SHELL, Amsterdam, The Netherlands)
Dr Johan HEISZWOLF (LHOIST, Nivelles, Belgium)

14:00 **OC04 - Tailoring Particle Size in Cobalt and Cobalt-Manganese Based Fischer Tropsch Catalysts**

Mr Tobias KIMPEL
(EINDHOVEN UNIVERSITY OF TECHNOLOGY, Eindhoven, The Netherlands)

14:30 **OC05 - A Core-Shell Structured Ni-Fe Bifunctional Nanomaterial For Catalyst-Assisted Chemical Looping**

Mr Jiawei HU
(GHENT UNIVERSITY, Ghent, Belgium)

15:00 **OC06 - Preparation of Transition Metal(Oxide) Nanoparticles Confined in the Second Pore Network of Mesoporous Scaffolds Using Melt Infiltration**

Dr Carmen CIOTONEA
(UNIVERSITY OF LILLE, Villeneuve d'Ascq, France)

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- 15:30** **OC07 - Influence of the Oxygen Storage Capacity of Mesoporous Doped CeO₂ on the Catalytic Activity in the HCl Oxidation**
Mr Pascal COP
(JUSTUS-LIEBIG-UNIVERSITY GIESSEN, Giessen, Germany)
- 16:00** **OC08 - Materials with Oriented Hierarchical Porosity as Catalyst Supports**
Ms Alejandra BUENO
(IRCELYON, Lyon, France)
- 16:30** **Coffee break**
- 17:00** **Poster session 1 (even numbers)**
- 19:00** **Reception and Belgian Beer Party - Socrate Hall**

Tuesday July 10, 2018

Session 2 - Shaping, Upscaling and Reactor Design

Session chairs

Prof. Narendra KUMAR (ABO AKADEMI UNIVERSITY, Turku, Finland)
Dr Robert TERÖRDE (BASF, Maarn, The Netherlands)

- 09:00 KL01 - Preparation Of Pb-Free Pd-Catalysts for Continuous Semi-Hydrogenation of Alkynes in Vitamin Production**
Dr Jonathan MEDLOCK
(DSM NUTRITIONAL PRODUCTS, Basel, Switzerland)
- 09:40 OC09 - Up-Scaling the Production of Nanomaterials with Customized Properties Using Continuous Supercritical Flow Synthesis**
Dr Christian KALLESOE
(DANISH TECHNOLOGICAL INSTITUTE, Taastrup, Denmark)
- 10:10 OC10 - 3D-Printing of Catalytic Structured Materials**
Dr Jasper LEFEVERE
(VITO, Mol, Belgium)
- 10:40 Coffee break**
- 11:10 OC11 - Triggering Catalytic Ignition of Ammonium Dinitramide-Based Monopropellants at Reduced Temperature: From Powdered to 3D-Printed Monolithic Catalysts**
Dr Yann BATONNEAU
(UNIVERSITÉ DE POITIERS, Poitiers, France)
- 11:40 OC12 - The Development of a 3D-Printed Stainless Steel Catalytic Oxidation Reactor**
Dr Jacco HOEKSTRA
(KMWE, Eindhoven, The Netherlands)
- 12:10 OC13 - Advanced Reactors for the Continuous Synthesis of Inorganic Particles**
Dr Philippe ELIAERS
(CERTECH, Seneffe, Belgium)
- 12:40 Lunch**

Session 3 - Bimetallic Nanoparticles and Mixed Oxides

Session chairs

Dr Pierre DOURNEL (SOLVAY, Brussels, Belgium)
Dr Ian YORK (LUCITE INTERNATIONAL, Teesside, United Kingdom)

- 14:00 OC14 - Development of Low Nickel Content Powder and Structured Catalysts for Dry Reforming of Methane**
Mr Quan Luu Manh HA
(LEIBNIZ INSTITUTE FOR CATALYSIS, Rostock, Germany)
- 14:30 OC15 - Impact of the Preparation Of V-Modified Hydroxyapatites on the Oxidative Dehydrogenation of Propane Reaction: Synergistic Effects**
Dr Guylène COSTENTIN
(SORBONNE UNIVERSITÉ, LABO. DE RÉACTIVITÉ DE SURFACE ET STRUCTURE, Paris, France)

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- 15:00** **OC16 - Bimetallic Fe-Ni/SiO₂ Catalysts: Identification of the Interplay Between Fe and Ni During the Preparation of Well-Defined Fe-Ni Nanoparticles**
Dr Eric MARCEAU
(UNIVERSITÉ LILLE 1, Villeneuve d'Ascq, France)
- 15:30** **OC17 - Preparation of Calcium Titanate Photocatalysts for Reduction of Carbon Dioxide**
Mr Akihiko ANZAI
(KYOTO UNIVERSITY, Kyoto, Japan)
- 16:00** **OC18 - Preparation of Ni-Ga Bimetallic Catalysts by Water-in-Oil Microemulsions for Methanol Synthesis via CO₂ Hydrogenation**
Ms Paulina MELO BRAVO
(UNIVERSIDAD DE CONCEPCION, Concepcion, Chile)
- 16:30** **Coffee break**

Session 4 - Electron Microscopy Characterization for Synthetic Problems

- 17:00** **OC19 - Why Don't we Follow the Calcination and Reduction Stages of PD Nanocatalysts Supported on Alumina In Situ Directly in an Environmental Transmission Electron Microscope?**
Prof. Thierry EPICIER
(UNIVERSITY OF LYON, Villeurbanne, France)
- 17:30** **KL02 - Advanced Transmission Electron Microscopy for Real-time Studies of Catalyst Preparation**
Dr Jovana ZECEVIC
(UNIVERSITEIT UTRECHT, Utrecht, The Netherlands)

Wednesday July 11, 2018

Session 5 - Heterogeneization and Study of Active Phase/Support Interfaces

Session chairs

Dr Mark FEAVIOUR (JOHNSON MATTHEY, Reading, United Kingdom)
Dr Konrad HERBST (HALDOR TOPSOE A/S, Lyngby, Denmark)

- 09:10 OC20 - The Role of the Metal Complex - Support Interaction in the Formation of Platinum Properties In Pt/Al(Mg)O Catalysts**
Dr Olga BELSKAYA
(IHP SB RAN, Omsk , Russia)
- 09:40 OC21 - The Influence of MAO Loading and Distribution on the Catalytic Performance of the Heterogenized Metallocene Olefin Polymerization Catalyst**
Ms Marjolein VELTHOEN
(UTRECHT UNIVERSITY, Utrecht, The Netherlands)
- 10:10 OC22 - Hydrotreating Catalyst Supported on Alumina Coated with Bio-Inspired Polymers**
Dr Elodie DEVERS
(IFPEN, Solaize, France)
- 10:40 Coffee break**
- 11:10 OC23 - Precision Preparation and Rational Molecular Engineering of Multifunctional Supported Catalysts**
Mr Antony FERNANDES
(UNIVERSITÉ CATHOLIQUE DE LOUVAIN, Louvain-la-Neuve, Belgium)

Session 6 - Zeolitic Materials and Alumina-Based Materials

- 11:40 OC24 - Purely Lewis Acidic Aluminosilicates with Well-Defined Single Sites**
Dr Ales STYSKALIK
(UNIVERSITY OF MAZARYK, Louvain-la-Neuve , Belgium)
- 12:10 OC25 - Zeolite Shaping: Control of the Zeolite Acid Properties and Description of the Zeolite/Binder Interface**
Ms Coralie DEMARET
(IFP ENERGIES NOUVELLES, Solaize, France)
- 12:40 Lunch**

Session chairs

Dr Antoine DAUDIN (IFPEN, Solaize, France)
Dr Anne MASSINON (TOTAL, Feluy, Belgium)

- 14:00 OC26 - Preparation of Zeolite-Alumina Nanocomposites by Heterocoagulation and their Application as Support for Bifunctional Acid-Metal Catalysis**
Dr Juliette BLANCHARD
(UNIVERSITÉ PIERRE ET MARIE CURIE, Paris, France)
- 14:30 OC27 - Control of Alumina Textural Properties by Nanorods Morphology and Organization**
Ms Audrey VALETTE
(IFP ENERGIES NOUVELLES, Solaize, France)

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- 15:00** **OC28 - Hydrothermal Stability of Alumina : Role of Inorganic Dopants and Identification of Reactive Sites**
Prof. Xavier CARRIER
(UNIVERSITÉ PIERRE ET MARIE CURIE, Paris, France)
- 15:30** **Coffee break**
- 16:00** **Poster Session 2 (odd numbers)**
- 18:00** **Departure for Conference Dinner**
- 19:00** **Conference Dinner (Faculty Club, Leuven Grand Beguinage)**

Thursday July 12, 2018

Session 7 - New Preparation Methods for Heterogeneous Catalysts

Session chairs

Dr Jonathan MEDLOCK (DSM NUTRITIONAL PRODUCTS, Basel, Switzerland)
Dr Machteld MERTENS (EXXONMOBIL CHEMICAL EUROPE INC., Machelen, Belgium)

- 09:30** **KL03 - Innovative Synthesis of Nanostructured Composite Materials by a Spray-Freeze Drying Process: Efficient Catalysts and Photocatalysts Preparation**
Prof. Stefania ALBONETTI
(UNIVERSITÀ DI BOLOGNA, Bologna, Italy)
- 10:10** **OC29 - Grafting Chemistry as a Tool to Understand Wet Impregnation Synthesis of Supported Metal Oxides**
Ms Alyssa LOVE
(UNIVERSITY OF WISCONSIN-MADISON, Madison, United States)
- 10:40** **Coffee break**
- 11:10** **OC30 - Catalytic Activation of All-Silica COK-14 through Alumination via Atomic Layer Deposition and a Novel Wet Ball Milling Technique**
Ing Michiel DE PRINS
(KU LEUVEN, Heverlee, Belgium)
- 11:40** **OC31 - New Synthesis Route of Heterogeneous Oxide Catalysts Based on the Use of Gliding Arc Atmospheric Plasma Discharge**
Dr Antoine TIYA DJOWÉ
(UNIVERSITY OF YAOUNDÉ (CAMEROON) & UNIVERSITÉ CATHOLIQUE DE LOUVAIN, Louvain-la-Neuve, Belgium)
- 12:10** **OC32 - Synthesis of Platinum Nanoparticles and 3D Porous Nanostructures Using Atomic Layer Deposition**
Dr Jolien DENDOOVEN
(GHENT UNIVERSITY, Gent, Belgium)
- 12:40** **Lunch**
- Session chairs**
Dr Tjostil VLAAR
(ALBEMARLE, Amsterdam, The Netherlands)
- 14:00** **OC33 - Development of Continuous Method of Electroless Deposition for Preparation of Supported Bimetallic Catalysts**
Prof. John MONNIER
(UNIVERSITY OF SOUTH CAROLINA, Columbia, United States)
- 14:30** **OC34 - Cold Plasma for Catalyst Preparation: How Does It Work?**
Prof. Changjun LIU
(TIANJIN UNIVERSITY, Tianjin, China)
- 15:00** **OC35 - Electrostatic Adsorption of Metal Precursors for the Preparation of Highly Dispersed Heterogeneous Catalysts**
Prof. John REGALBUTO
(UNIVERSITY OF SOUTH CAROLINA, Columbia, United States)

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15:30 Awards and Concluding remarks