

Scientific Programme

Shanghai Sessions

Tuesday, November 4

16:00 – 19:00 Registration (YiFu Hotel, ECNU Campus)
 18:00 – 23:00 Welcome Mixer (YiFu Hotel, ECNU Campus)

Wednesday, November 5

8:30 – 9:30 Registration (YiFu Hotel, ECNU Campus)

Chair: Laurent BONNEVIOT

9:30 – 10:15 Opening Ceremony

Welcome address given by Pr Mingyuan HE (East China Normal University)

Speeches given by:

Pr Shijun TONG, Chairman of University Council, ECNU

Dr Frédéric BRETAR, Attaché for Science and Technology, French General Consulate in Shanghai

Mr Antoine MYNARD, Director, CNRS office, French Embassy, Beijing

Pr Jean-François TASSIN, Scientific adjunct director of Institut National de Chimie, CNRS, Paris

Chair: Xinhe BAO and Patrick MAESTRO

10:15 – 11:00 **PL-S-1 Christian AMATORE** (Ecole Normale Supérieure, Paris)
Palladium Catalyzed Cross-Coupling Reactions: A Few Mechanistic Truths beyond a Nobel Prize

11:00 – 11:45 **PL-S-2 Yang TIAN** (East China Normal University, Shanghai)
A Bioimaging and Biosensing of Reactive Oxygen Species and Related Biological Species

11:45 group picture

12:00 – 14:30 Poster session (hall of GCCP Lab) and lunch

Chair: Michel CHE and Jihong YU

14:30 – 15 :45 **PL-S-3 Avelino CORMA** (Instituto de Tecnología Química- Polytechnical University of Valencia, Spain)
Design of Solid Catalysts for greener chemical process

SIL-S-1 Xin XU (Fudan University, Shanghai)
NOx Storage Mechanism on NSR Catalysts

15:45 – 15:55 **Alexis De Canck**, representative of the University of Lyon, Shanghai office

Université de Lyon: a University dedicated to renewable ideas

15:55– 16:10 Coffee break

Chair: Philippe SAUTET and Chen ZHAO

16:10– 17:40 **PL-S-4 Xinhe BAO** (Dalian Institute of Physical Chemistry, CAS, Dalian)

Methane Non-Oxidative Activation and Natural Gas Efficient Conversion

PL-S-5 Gadi ROTHENBERG (University of Amsterdam, The Netherlands)

A catalytic toolbox for practical biomass conversion

18:30 – 21:30 FC2Gchem Gala dinner

Thursday, November 6

Chair: Peng WU and Claude DE BELLEFON

- 8:30 – 9:45 **PL-S-6 Dongyuan ZHAO** (Fudan University, Shanghai)
Interfacial Assembly and Engineering of Ordered Mesoporous Materials for Applications
SIL-S-2 Belen ALBELA (Ecole Normale Supérieure de Lyon)
Surface Molecular Engineering in Confined Space of Surfactant-Templated Silica

9:45 – 10:00 Coffee break

Chair: Séverine JEULIN and Haibo YANG

- 10:00 – 12:00 **SIL-S-3 Yanlong GU** (Huazhong University of Science and Technology, Wuhan)
Eco-efficient Synthesis and Catalysis Using Green Solvent: A Journey from Water and Ionic Liquid to Bio-based Solvent
SIL-S-4 Catherine PINEL (IRCE Lyon, University of Lyon)
Catalytic Valorization of Polyoxygenated Substrates
SIL-S-5 Bruno ANDRIOLETTI (University Lyon 1)
Towards more sustainable polycondensation reactions
SIL-S-6 Micheline DRAYE (Université de Savoie, Chambéry)
Ionic liquids and ultrasound for oxidation reactions

12:00 – 13:30 Lunch

Chair: Jian ZHOU and Catherine PINEL

- 13:30 – 15:15 **PL-S-7 Guy BERTRAND** (University of California, San Diego, USA)
Stable carbenes and related species: Powerful tools in organic, inorganic and organometallic chemistry
SIL-S-7 Haibo YANG (East China Normal University, Shanghai)
Construction of Stimuli-Responsive Smart Soft Materials Based on Organometallic Macrocycles via Hierarchical Self-Assembly
SIL-S-8a Florence POWYCZ (INSA Lyon)
Two stories of opportunities for catalysis in green chemistry
SIL-S-8b Nicolas DUGUET (University Lyon 1)
A direct synthesis of paracetamol (acetaminophen) by amidation of hydroquinone
15:15 – 15:25 **Jade LIN** (representative of Axelera, Shanghai)
Axelera, the French Chemical and Environment Competitive Cluster

15:25 – 15:40 Coffee break

Chair: Guy BERTRAND and Jianping GE

- 15:40 – 17:40 **PL-S-8 Buxing HAN** (Chinese Academy of Sciences, Beijing)
Properties of Green Solvents and Applications in Green Chemistry
PL-S-9 Michel PHILIPPE (L'Oréal, Paris)
Eco-design of green chemistry ingredients for sustainable innovation
SIL-S-9 Jian ZHOU (East China Normal University, Shanghai)
How far can waste-utilized tandem reactions go?

Friday, November 7

Chair: *Buxing HAN and Denis BORTZMEYER*

8:30 – 9:45

PL-S-10 Jihong YU (Jilin University)

Toward Rational Synthesis of Zeolitic Nanoporous Materials: Structure Prediction, Synthesis and Applications

SIL-S-10a Chloé THIEULEUX (CPE Lyon)

Synthesis of efficient CO₂ dry reforming catalysts using original nickel silicide colloids

SIL-S-10b Anne GIROIR-FENDLER (IRCELyon, University of Lyon)

Advanced Researches on Catalytic Processing for Air Pollutant Abatement

9:45 – 10:00

Coffee break

Chair: *Etienne FLEURY and Yanlong GU*

10:00 – 12:00

SIL-S-11 Jianping GE (East China Normal University, Shanghai)

Large Scale Fabrication of Colloidal Crystal Film and Its Application in Photocatalysis

SIL-S-12 Julien BERNARD (INSA Lyon)

Viable Methodologies for the Engineering of Functional Nanocapsules by Nanoprecipitation

SIL-S-13 Yanglong GUO (East China University of Science and Technology, Shanghai)

Catalytic Oxidation of Vinyl Chloride Emission over LaMnO₃-Based Catalysts

SIL-S-14 Claude DE BELLEFON (CPE Lyon)

Structured catalytic reactors for green processes

12:00 – 13:15

Lunch

Chair: *Junliang ZHANG and Marc LEMAIRE*

13:15 – 15:15

PL-S-11 Pascal MÉTIVIER (Solvay, Shanghai)

Key challenges for development of new polymers based on renewable materials

PL-S-12 Peng WU (East China Normal University, Shanghai)

Beyond TS-1: Clean Synthesis of Oximes and Amides Over Titanosilicate Catalysts

SIL-S-15 Huanfeng JIANG (South China University of Science and Technology, Guangzhou)

Transition Metal-Catalyzed Reactions of Haloalkynes

15:15 – 15:30

Coffee break

Chair: *Christian AMATORE and Yang TIAN*

15:30 – 17:30

PL-S-13 Philippe SAUTET (Ecole Normale Supérieure de Lyon)

Formation of acrylates from ethylene and CO₂ on Ni complexes: A mechanistic viewpoint

SIL-S-16 Chen ZHAO (East China Normal University, Shanghai)

Production of hydrocarbons from hydrodeoxygenation of lignin

PL-S-14 Junliang ZHANG (East China Normal University, Shanghai)

Gold-Catalysis: Diversity Synthesis and Selectivity Control

17:30 – 17:40

Yves QUENEAU and Laurent BONNEVIOT: concluding remarks and Presentation of the next FC2GChem meeting in 2016

17:40

farewell – end of the meeting

18:30 – 21:30

Dinner and meeting of the steering committee of the next FC2Chem

Poster session Shanghai

- P-S-1** *Baylis-Hillman reaction of HMF and analogues in bio-based solvent-water mixtures*
Jia-Neng TAN, Mohammed AHMAR, Yves QUENEAU
- P-S-2** *Quantitative UV-visible Investigation of Vanadium Dispersion in Al or Ti modified MCM-41 Silicas*
Yuting ZHENG, Belén ALBELA, Peng WU, Ming-Yuan HE, Laurent BONNEVIOT
- P-S-3** *Efficient C-3 Reductive Alkylation of 4-Hydroxycoumarin by Dehydrogenative Oxidation of Benzylic Alcohols through Ruthenium Catalysis*
Adrien MONTAGUT-ROMANS, Manon BOULVEN, Marc LEMAIRE, Florence POPOWYCZ
- P-S-4** *From isosorbide towards new bio-based organocatalysts ?*
Marine JANVIER, Sylvie MOEBS-SANCHEZ, Florence POPOWYCZ
- P-S-5** *Palladium-based catalysts for the selective amination of alcohols*
Zhen YAN, Jean-Marc CLACENS, Floryan DE CAMPO, Marc PERA-TITUS, Armin LIEBENS
- P-S-6** *Tunable Catalysts for Solvent-free Biphasic Systems – Pickering Interfacial Catalysts over Amphiphilic Silica Nanoparticles*
Wen-Juan ZHOU, Lin FANG, Zhaoyu FAN, Marc PERA-TITUS, Belen ALBELA, Laurent BONNEVIOT, Floryan DE CAMPO, Jean-Marc CLACENS
- P-S-7** *Selective Alcohol Amination: Theoretical study for the design of innovative heterogeneous catalysts*
Alexandre DUMON, Philippe SAUTET, Carine MICHEL, Marc PERA-TITUS
- P-S-8** *Evidence for the Formation of Ti-oxyl Radicals in Cyclohexane Oxidation over Ti-MWW Catalyst through DFT Calculations and EPR Experiments*
Wen-Juan ZHOU, Raphael WISCHERT, Kai XUE, Yu-Ting ZHENG, Belén ALBELA, Laurent BONNEVIOT, Jean-Marc CLACENS, Floryan DE CAMPO, Marc PERA-TITUS, Peng WU
- P-S-9** *Preparation of Bio-based Surfactant from Glycerol and Dodecanol through Direct Etherification*
Zhaoyu FAN, Yan ZHAO, Floryan DE CAMPO, Jean-Marc CLACENS
- P-S-10** *Ultra Fast Microwave Synthesis of Ti and V in MCM-41 Catalysts for Oxidation Reactions*
Xinnan LU, Belén ALBELA, Yong LU, Laurent BONNEVIOT
- P-S-11** *One-Pot “Hand-Glove Replicas” Strategy for Controllable Synthesis of Dendritic Mesoporous Silica/Carbon Nanospheres*
Xiao-Jing MA, Jun-Ling XING, Ye-Jun YU, Tai-Qun YANG, Koon-Fung LAM, En-Hui YUAN, Bélen ALBELA, Laurent BONNEVIOT, Kun ZHANG
- P-S-12** *Photoemission Mechanism of Water-Soluble Silver Nanoclusters: Ligand-to-Metal-Metal Charge Transfer vs. Strong Coupling between Surface Plasmon and Emitters*
Taiqun YANG, Kun ZHANG, Sanjun ZHANG
- P-S-13** *Size Controllable Synthesis of Dendritic Mesoporous Silica Nanoparticles*
Ye-Jun YU, Jun-Ling XING, Jun-Ling PANG, Shu-Hua JIANG, Koon-Fung LAM, Tai-Qun YANG, Xiao-Jing MA, Kun ZHANG, Peng WU

- P-S-14** *Strategies to Promote the Metal-catalyzed C-H Activation/Oxidative Cyclization Reaction of Alkenes*
Yang GAO, Wanqing WU, Huanfeng JIANG
- P-S-15** *High Pressure Rotating Disc Electrochemical Reactor: A Multi-Functional Electrochemical Reactor*
Renate SCHWIEDERNOCH, Mengjia WU, Armin LIEBENS
- P-S-16** *Catalytic Acetoxylation of Lactic Acid to 2-Acetoxypropionic Acid, en route to Acrylic Acid*
Rolf BEERTHUIS, Marta GRANOLLERS, D. Robert BROWN, Horacio J. SALAVAGIONE, Gadi ROTHENBERG, N. Raveendran SHIJU
- P-S-17** *Axelera, the French Chemical and Environment Competitive Cluster*
Jade LIN