

# **DETAILED SCIENTIFIC PROGRAM**

### Tuesday, 26th of June, 2018

13:00-15:00	Registration
15:00-15:20	Opening session
15:20-16:00	<b>KN1</b> "Oxidative dehydrogenation over nanocarbons: Recent mechanistic study" Siglinda Perathoner and Gabriele Centi ( <i>Università degli Studi di Messina, Italy</i> ) Dangsheng Su ( <i>Dalian Institute of Chemical Physics, China</i> )
16:00-16:40	<b>KN2</b> "Going green with black: Oxygen reduction carbon electrocatalysts" Magdalena Titirici ( <i>Queen Mary University of London, United Kingdom</i> )
16:40-17:00	<b>OC1</b> "Involvement of Pd single atoms in Pd/C catalyzed terpene hydrogenation in continuous reactor"  Philippe Serp ( <i>LCC-CNRS</i> , <i>France</i> )
17:00-17:20	OC2 "Carbon-supported Au nanoparticles: Catalytic activity ruled out by carbon support"  Laura Prati ( <i>Università degli Studi di Milano, Italy</i> )
17:20-17:40	<b>OC3</b> "Acid porous carbons involved in the green synthesis of benzodiazepines" Inês Matos ( <i>LAQV/REQUIMTE</i> , <i>Portugal</i> )
17:40-18:00	OC4 "Sustainable carbocatalyst with atomically dispersed Fe-N-P-C complex active sites for superior oxygen reduction"  De Chen (Norwegian University of Science and Technology, Norway)
18:00-20:00	Welcome reception



## Wednesday, 27th of June, 2018

09:00-10:00	PL1 "Catalysis using carbon-based nanomaterials"
	Graham Hutchings (Cardiff Catalysis Institute, United Kingdom)
10:00-10:20	OC5 "Carbon supported metal-carbides and metal-phosphides for biomass-based
	conversions"
	Johannes Hendrik Bitter (Wageningen University, The Netherlands)
10:20-10:40	OC6 "Effect of the nature of carbon support in Pd/C catalysts on the reaction routes of aqueous-phase hydrogenation of furfural"  Perpen Miranaphy (Institute of Hydrogenhaus Processing Processing)
10 40 11 10	Roman Mironenko (Institute of Hydrocarbons Processing, Russia)
10:40-11:10	Coffee break
11:10-11:30	<b>OC7</b> "Aziridine functionalized carbon nanotubes as highly efficient electrocatalysts for the selective CO <sub>2</sub> reduction to CO"
	Giuliano Giambastiani (ICCOM-CNR, Italy)
11:30-11:50	<b>OC8</b> "Palladium-nickel on tin oxide-carbon composite supports for electrocatalytic hydrogen evolution"
	César Sequeira (CeFEMA/IST, Portugal)
11:50-12:10	<b>OC9</b> "Nitrogen-doped carbon materials derived from cellulose for the oxygen reduction reaction"
	Martin Muhler (Laboratory of Industrial Chemistry, Germany)
12:10-12:30	<b>OC10</b> "Cu and Pd nanoparticles supported on a graphitic carbon material as bifunctional HER/ORR electrocatalysts"
	Diana Fernandes (REQUIMTE/LAQV, Portugal)
12:30-12:50	OC11 "Bifunctional oxygen reduction/evolution activity of Fe/Co/Ni mixed oxide
	nanoparticles supported on oxidized carbon nanotubes"
	Mariya Kazakova (Novosibirsk State University, Russia)
12:50-14:00	Lunch break
14:00-14:20	OC12 "Graphene aerogels as catalyst support for nanodiamonds and metal nanoparticles"
	Enrique García-Bordejé (ICB-CSIC, Spain)
14:20-14:40	OC13 "Tomography analysis of Ru supported on micro and mesoporous carbon: A
	correlation between morphology and catalytic activity"
	Marta Stucchi (Università degli Studi di Milano, Italy)
14:40-15:00	OC14 "Cobalt catalysts on graphene nanoflakes and carbon nanotubes in Fischer-
	Tropsch synthesis: effect of the support oxidation and N-doping"
	Sergei Chernyak (Lomonosov Moscow State University, Russia)



15:00-16:00 Short oral communications

**SOC1** "Confinement of iron and promoters in carbon nanotubes for direct selective synthesis of lower olefins from syngas over Bi and Pb promoted iron catalysts"

Bang Gu (University of Lille, France)

**SOC2** "Manganese promoter effects in carbon-supported copper-based ester hydrogenation catalysts"

Rolf Beerthuis (Debye Institute for Nanomaterials Science, The Netherlands)

**SOC3** "Highly selective conversion of methanol to propylene: design of a MFI zeolite with selective-blockage of (010) surfaces"

Dali Cai (Tsinghua University, China)

**SOC4** "Hydrodeoxygenation of vanillin over carbon supported noble metal catalysts"

Jose Santos (Instituto de Ciencia de Materiales de Sevilla, Spain)

**SOC5** "Tracking the paths for the sucrose transformations over bifunctional Ru-POM/AC catalysts"

Nadia Bosch (UNED, Spain)

**SOC6** "Tailoring the catalytic properties of Mo<sub>2</sub>C/CNF catalysts for the HDO of guaiacol:

Influence of carburization time"

Elba Ochoa (ICB-CSIC, Spain)

**SOC7** "Au nanoparticle size control over few layer graphenes"

Valérie Caps (ICPEES, France)

**SOC8** "Development of mesoporous, graphitic carbons as flexible catalyst platform for metal-free oxidative dehydrogenation reactions"

Felix Herold (Technische Universität Darmstadt, Germany)

**SOC9** "Bayer-Villiger oxidation and esterification reaction catalyzed by sawdust biochar" Tiago Duarte (*CQE/IST*, *Portugal*)

**SOC10** "Nickel nanoparticles decorated nitrogen doped carbon nanotubes as an efficient catalyst for CO<sub>2</sub> methanation"

Wei Wang (ICPEES, France)

**SOC11** "Photocatalytic behaviour of ZnO nanoparticles and their composites with graphene" Sandra Román (*ICB-CSIC*, *Spain*)

**SOC12** "Carbon-supported Cu and Cu<sub>2</sub>O nanoparticles for CO<sub>2</sub> electroreduction" Marisol Rosales (*Debye Institute for Nanomaterials Science, The Netherlands*)

#### 16:00-17:00 Posters & Coffee break

17:00-17:20 **OC15** "Comparative study of CoMo/MWCNT and CoMo/Al<sub>2</sub>O<sub>3</sub> hydrotreating catalysts prepared with citric acid"

Maxim O. Kazakov (Boreskov Institute of Catalysis, Russia)

17:20-17:40 **OC16** "N-decorated carbon nanotubes as a metal-free heterogeneous catalyst for mild CO<sub>2</sub> chemical reduction to methanol"

Tuci Giulia (ICCOM-CNR, Italy)

17:40-18:00 **OC17** "Fine-tuning of metal-carbon complex catalysts: Learning from natural catalysts" Xuezhi Duan (*State Key Laboratory of Chemical Engineering, China*)



## Thursday, 28th of June, 2018

09:00-10:00	<b>PL2</b> "Carbon-supported catalysts – Assembly, characterization and performance" Krijn P. de Jong ( <i>Utrecht University, The Netherlands</i> )
10:00-10:20	OC18 "Direct formation of nanometals and nanooxides within pristine bulk graphitic matrices"  Valérie Caps (ICPEES, France)
10:20-10:40	OC19 "The tunable effects of dopants on the nanostructured carbon on the catalytic property of the supported single metal atom catalysts revealed from first principle calculations"  Bo Li (Institute of Metal Research, China)
10:40-11:10	Coffee break
11:10-11:30	OC20 "Pd nanoparticles supported on functionalized carbon nanotubes for the liquid- phase aerobic oxidation of ethanol"
11:30-11:50	Baoxiang Peng ( <i>Laboratory of Industrial Chemistry, Germany</i> )  OC21 "Surface functionalized carbon nanotubes as molecular oxygen carrier for liquid- phase aerobic oxidation reaction"
11:50-12:10	Yuefeng Liu ( <i>Dalian National Laboratory for Clean Energy, China</i> )  OC22 "Macroscopic oxidized graphite felts containing palladium nanoparticles as an efficient liquid-phase hydrogenation catalyst with easy recovery"  Zhenxin Xu ( <i>ICPEES, France</i> )
12:10-12:30	OC23 "Strong effect of the surface properties of carbon supports in Au-catalyzed reactions" Baira Donoeva ( <i>Debye Institute for Nanomaterials Science, The Netherlands</i> )
12:30-12:50	<b>OC24</b> "Nanocarbons as supports for the gold catalyzed glycerol oxidation" Ana Paula Ribeiro ( <i>CQE/IST</i> , <i>Portugal</i> )
12:50-14:00	Lunch break
14:00-15:00	PL3 "Carbon materials in chemical energy conversion"  Robert Schlögl (Fritz Haber Institute of the Max Planck Society, Germany)
15:00-15:20	OC25 "Metal free oxidation of glycerol over nitrogen containing carbon nanotubes" Alberto Villa ( <i>Università degli Studi di Milano, Italy</i> )
15:20-15:40	OC26 "Tuning properties of ultrafine Pd nanoparticles supported on multiwalled carbon nanotube"  Zinfer Ismagilov (Institute of Coal Chemistry and Materials Science, Russia)
15:40-16:00	OC27 "Au/C catalysts for 2,5-furandicarboxylic acid production" Svetlana Ivanova (Instituto de Ciencia de Materiales de Sevilla, Spain)
16:00-17:00	Posters & Coffee break
17:40-20:30	Social event
20:30-23:30	Conference dinner



## Friday, 29<sup>h</sup> of June, 2018

09:00-09:40	<b>KN3</b> "Nitrogen-doped carbon nanofibres: What are the requirements for application in PEM fuel cells?"  Magnus Rønning ( <i>Norwegian University of Science and Technology, Norway</i> )
09:40-10:00	OC28 "Sulfonated hydrothermal carbons as catalysts for organic reactions"  José Fraile (ISQCH, Spain)
10:00-10:20	OC29 "Carbon materials in cyclohexane catalytic oxidation"  Marta Andrade (CQE/IST, Portugal)
10:20-10:40	OC30 "Effect of carbon support on selective hydrogenation by concave platinum nanocubes"
	Katerina Soulantica (LPCNO, France)
10:40-11:10	Coffee break
11:10-11:30	OC31 "Surface-modified nanocarbons as metal-free catalysts for catalytic oxidation" Shaobin Wang ( <i>Curtin University, Australia</i> )
11:30-11:50	OC32 "Modified carbide-derived carbons used in the catalytic wet peroxide oxidation of oily wastewaters"
	Jose Díaz de Tuesta (Instituto Politécnico de Bragança, Portugal)
11:50-12:10	OC33 "Highly nitrogen-selective Pt-In/C catalysts in the reduction of nitrites in water" Enrique V. Ramos Fernandez ( <i>Universidad de Alicante, Spain</i> )
12:10-12:50	<b>KN4</b> "Catalytic layers of Proton Exchange Membrane fuel cells based on carbon xerogel supports"  Nathalie Job ( <i>University of Liège, Belgium</i> )
12:50-13:10	Closing session
13:10-14:00	Executive lunch