

October 12th

Thematic School

Transmission Electron Microscopy for Catalysis

Dr Bénédicte WAROT-FONROSE

14:00-15:15

Centre d'Elaboration des Matériaux et d'Etudes Structurales (CEMES),
Toulouse

15:15-15:30

Coffee break

XPS Spectroscopy: Principle and Fundamentals of the Technique, Application Examples

Dr Delphine FLAHAUT

15:30-16:45

Institut des Sciences Analytiques et de Physicochimie pour l'Environnement
et les Matériaux (IPREM), Pau

16:45-17:00

Break

Characterization of Organometallic Nanoparticles: Synergy between Theory and Experiments

Prof. Romuald POTEAU,

17:00-18:15

Laboratoire de Physique et Chimie des NanoObjets (LPCNO), Toulouse

October 13th TraPCat1

8:30-9:00	Registration	
9:00-9:15	Welcoming	
9:15-10:15	Invited lecture Graham HUTCHINGS Catalysis using supported gold and palladium nanoalloy catalysts	Chairman B. Chaudret
10:15-10:35	Pd-catalyzed Suzuki–Miyaura cross-coupling using a PdNPs-based catalytic membrane - M. Lopez	
10:35-10:55	Measuring Which Ligand Does Best in Difficult C–C Couplings - E. Gioria	
10:55-11-25	Coffee Break	
11:25-11:45	Activation of BH ₃ by Phosphorus-Stabilized Geminal Dianions and Catalytic Reduction of CO ₂ - A. Pujol	Chairman C. Claver
11:45-12:05	Iron based nanoparticles for the magnetically induced hydrogenation of carbon dioxide to methane - A. Bordet	
12:05-12:25	Investigating the surface sites active in nucleophilic addition on CO ₂ from structure-activity relationships on pure ZrO ₂ catalysts - H. Petitjean	
12:25-12:45	Efficient conversion of CO ₂ to oxazolidinones with Indenediide Palladium Pincer Complexes - J. Monot	
12:45-14:15	Lunch	
14:15 - 15:15	Invited lecture Stuart MACREGOR Adventures in C-H activation: from pentane to biphenylpyridine and back again	Chairman S. Sabo- Etienne
15:15-15:35	Synthesis of Ru-based nanoparticles as catalysts for energy related transformations - J. Creus Casanovas	
15:35-15:55	Selective catalytic hydrogenation of nitrobenzene over Ru@C ₆₀ nanocatalyst - R. Axet	
15:55-16:15	Influence of the Stabilizing Ligands in Ruthenium Nanoparticle Catalysis - L. M. Martinez-Prieto	
16:15-17:30	Coffee break + poster session	
17:30 - 18:30	Invited lecture Hermenegildo GARCIA GOMEZ Metal nanoparticles on few layers graphene as catalysts	Chairman N. Homs

October 14th TraPCat1

8:30-9:30	Invited lecture Nicolas TURNER Biocatalytic cascade reactions enabled by synthetic biology	Chairman M. Remaud Simeon
9:30-9:50	Supported lanthanide catalysts: Role of the grafting on the stereochemical outcome of different polymerization reactions. - I. Del Rosal	
9:50-10:10	Water oxidation catalysts based on earth abundant metals - S. Drouet	
10:10-10:30	Development of a novel catalytic monolith reactor for three-phase hydrogenation reactions: from catalyst formulation to pilot scale reactor experimentation & modelling – C.Julcour-Lebigue	
10:30-11:00	Coffee break	
11:00-11:20	Iron(II) Catalyzed Hydrophosphination of Isocyanates - A. Geer	Chairman L. Oro
11:20-11:40	C-H functionalization of benzylthioethers catalyzed by Ru/Cu derivatives: synthetic scope and mechanistic possibilities - E.P. Urriolabeitia	
11:40-12:00	Terminal Ni(II) Azolate Complexes with Frustrated Lewis Pair-Type Reactivity: Some Applications in Catalysis - J. Campora	
12:00-12:20	Assessing structure property relationships of biosourced dextrans. - F. Grimaud	
12:20-14:00	Lunch	
14:00 - 14:20	A trip toward light-switchable catalysis - Z. Freixa	Chairman P. van Leeuwen
14:20 - 14:40	Buttressing Effect in N-Heterocyclic Carbenes: Formation of Highly Efficient Pd-Catalysts for the Buchwald-Hartwig Amination - V. César	
14:40 - 15:00	Palladium-Catalyzed Asymmetric Heck Reaction Using Chiral P,N-Ligand Library. - Z. Mazloomi	
15:00 - 15:20	Catalytically Active Water-Soluble Palladium Nanoparticles Stabilized by Coordination of N-Heterocyclic Carbene Ligands to Their Surface, Evidenced by Knight Shift in Solid State NMR - J. M. Asensio	
15:20 - 16:20	Invited lecture Franck GLORIUS On discovery in catalysis	Chairman K. Philippot
16:20 - 17:00	Coffee + prizes	

Posters

Poster No	Title	Author
1	Acidic and metal –doped zeolites –Green catalysts for Organic synthesis	S. Chassaing
2	P,X chiral ferrocenyl ligands grafted on inorganic supports: synthesis, characterization and preliminary catalytic results	E. Deydier
3	Study of model cobalt catalysts for Fischer Tropsch	J. Harmel
4	Photocatalytic H ₂ production from ethanol(aq) solutions over Pt/anatase TiO ₂ : the effect of by-products in the H ₂ production rate	A. C. Sola
5	Multicomponent CuZnO-based catalysts for H ₂ production from methanol steam reforming. The effect of Ga ₂ O ₃ , Al ₂ O ₃ and ZrO ₂	X. Liu
6	Ethylene to propylene by one-pot catalytic cascade reactions	V. Hulea
7	Few layer graphene/carbon nanotube hybrids produced using oxide spinel catalysts	B. F. Machado
8	Regeneration of coked catalysts by an oxidation process using ozone	R. Richard
9	N-heterocyclic Carbenes for Stabilisation of nanoparticles and their application in catalysis	L. Rakers
10	Base-free oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid over graphenic materials supported Rucatalysts	C. Ramirez-Barria
11	Influence of support carbonaceous doped nitrogen materials in catalysis hydro-treatment	C. Ruiz-García
12	Apatitic calcium phosphates with grafted aminopropyltriethoxysilane: Synthesis, characterization and preliminary catalytic results	S. Sarda
13	Catalytic Conversion of Carbon Dioxide using new Immobilized N-Heterocyclic Carbene based Catalysts	M. Y. Souleymanou
14	Anionic N-Heterocyclic Carbene Complexes of Gold(I) as Precatalysts for Silver-Free Cycloisomerization of Enynes	S. Bastin
15	Reduction and functionalization of CO ₂ through a bis(boryl)acetal intermediate	A. Béthegnies

Posters

16	Dendritic phosphine complexes for redox-switchable catalysis	A.M. Caminade
17	Synthesis of γ -aminobutyric esters via rhodium catalyzed hydroaminomethylation of acrylates	A. Cunillera
18	Platinum-Catalysed Intermolecular Addition of Carbonyl Compounds to 1,6-Enynes: Investigation of a new reaction pathway	O. Dechy-Cabaret
19	[N,P]-pyrrole PdCl ₂ complexes catalyzed the formation of dibenzo- α -pyrone and lactam analogues	M. Gouyguou
20	Influence of the Second Coordination Sphere in Oxidation Catalysis	P. Guillo
21	Oxocyclohexadienyl piano stool complexes for sustainable catalysis	A. Igau
22	Design of chiral phosphorus containing Calix[4]arenes and their use in asymmetric catalysis	A. Karpus
23	The use of Dendritic Phosphoramidite Ligands for Enantioselective Rh-catalyzed [2+2+2] Cycloaddition Reactions.	R. Laurent
24	Oxidation-Promoted Activation of a Ferrocene C-H by a Rhodium Complex	A. Labande
25	Core-shell Phosphine-Containing Polymers As Nanoreactors for Biphasic Catalysis	A. E. Manoury
26	Selective catalytic polymerization of difunctional monomers	M. E. G. Mosquera
27	Activation of CO ₂ with bidentate nickel complexes	A. Ohleier
28	Isoprene polymerization mediated by Vanadium-[ONNO] complexes	C. Lorber
29	Palladium-catalyzed C(sp ³)-H γ -carbonylation of aminoalcohols	D. Pla
30	Zn complexes with N ₄ -donor ligands as catalysts for the cycloaddition of CO ₂ to epoxides	A. M. Masdeu-Bultó

Posters

31	The Nickel-Catalyzed Heck Reaction: Mechanistic Studies using Hybrid Phosphine-Imine Ligands	Tomás G. Santiago
32	Metal-oxo catalyzed epoxidation of olefins under organic-solvent-free conditions : experimental and theoretical considerations	D. Agustin
33	Simple and versatile approach for Pd immobilized nanocatalysts Application in alkynes semi-hydrogenation	C. Claver
34	Eco-friendly catalyst based on copper nanoparticles in glycerol	T. Dang-Bao
35	The PDF technique for a better structural characterization of nanocatalysts	P. Lecante
36	Synthesis of bimetallic catalysts supported on carbon nanotubes for fuel cell application	S. Louisia
37	Design, preparation and applications of recyclable nano-catalysts	A. Ouali
38	Platinum nanoparticle shape control to tune the selectivity in catalytic hydrogenation of α,β unsaturated aldehydes	L. Peres
39	Copper and nickel nanoparticles supported on carbon nanotubes for CO ₂ hydrogenation	S. Pérez-Rodríguez
40	Palladium nanoparticles in glycerol stabilised by alkaloids: design of green-catalysts	A. Reina
41	Molecular and Metal Oxide (Nano)catalysts for the Oxidation of Water to Dioxygen	X.Sala
42	Bio-sourced ionic solvents and supercritical CO ₂ : design of catalytic systems for sustainable processes	S. Foltran
43	Towards New Auto-assembling Artificial Metalloenzymes	M. Hoarau
44	Dry reforming of methane over transition metals-based catalysts	D. Pham Minh
45	Cobalt aluminate nanoparticles synthesized by nanocasting: Effect of Co/Al ratio on glycerol APR	A.J. Reynoso