



# IAP2018 - Interfaces Against Pollution

## La Grande Motte, 10-13 June 2018

### TENTATIVE PROGRAMME OF THE CONFERENCE

#### Sunday 10 June 2018

18:00 – 20:00 Welcome cocktail and Registration

#### Monday 11 June 2018

08:00 – 18:00 Registration

8:30 – 8:45	Welcome and Opening Remarks	
8:45 – 9:30	Plenary lecture N° 1: Irene M. C. Lo, <i>Removal of Ibuprofen in Wastewater using Recyclable Visible light driven Superparamagnetic Bismuth Oxybromide</i>	
9:30 – 10:00	Coffee break	
10:00 – 10:30	KN1: J. Pena, <i>Redox reactivity of manganese oxide nanoparticles: Sustaining water and soil resources</i>	KN2: C. Grison, <i>Ecocatalysis: an unusual combination of Ecology and Bio-inspired Chemistry for tomorrow's chemistry</i>
10:30 – 10:50	OM1: S. Benkaddour, <i>Influence of vacancy sites and Mn(III) atoms on MnOx photoreduction</i>	OM7: A. Tiraferri, <i>Tuning the injection and immobilization of reactive nanoparticles in the aquifer for an effective site remediation</i>
10:50 – 11:10	OM2: G. Farinelli, <i>Oxidation mechanism and efficacy of iron(II) complexes to be applied in the heterogeneous degradation of organic contaminants</i>	OM8: T. Serra, <i>Daphnia magna filtration efficiency and mobility in sheared flows</i>
11:10 – 11:30	OM3: E. Subdiaga, <i>Electron Exchange Capacities of Humic Acid Sorbed to Redox Active Clays</i>	OM9: M. Rivallin, <i>TiOx reactive electrochemical membranes for the removal of organic pollutants from water: process and material optimization</i>
11:30 – 11:50	OM4: J. Hou, <i>Morphology-dependent enhancement of arsenite oxidation to arsenate on birnessite-type manganese oxide</i>	OM10: I. Lakehal, <i>Fast elaboration of chitosan porous beads and selective adsorption of heavy metals by complexation</i>
11:50 – 12:10	OM5: G. Carrasco, <i>Zinc and Zinc-complexing ligands from rivers and anthropogenic activity in coastal South East Asia and around Singapore</i>	OM11: T.-H. Chou, <i>Treatments to Degrade Polybrominated Diphenyl Ethers in Water and Their Feasibility to Contaminated Soil</i>
12:10 – 12:30	OM6: D. Hausladen, <i>Stability and reactivity of biogenic Mn oxides in the presence of natural organic matter</i>	OM12: J. Salvé, <i>Design of hybrid chitosan-montmorillonite materials for drinking water production: structure-reactivity relationship</i>
12:30 – 14:00	Lunch	

14:00 – 14:30	<b>KN3: Y. Shih</b> , <i>The effect of humic colloids on the fate of organic contaminants and engineering nanoparticles in the environment</i>	<b>KN4: T. Hiemstra</b> , <i>Surface structure of Ferrihydrite in relation to surface energetics, chemical stability, and competitive oxyanion adsorption</i>
14:30 – 14:50	<b>OM13: Y. Adachi</b> , <i>Effects of Mixing Intensity on the Flocculation Kinetics of Colloidal Particles</i>	<b>OM18: A. Voegelin</b> , <i>Arsenate uptake by fresh and aged Fe oxidation products</i>
14:50 – 15:10	<b>OM14: O. Diat</b> , <i>Ion and particle foam flotation for aqueous phase remediation</i>	<b>OM19: L. Castro</b> , <i>Heavy metals sorption from industrial effluents using biogenic iron compounds</i>
15:10 – 15:30	<b>OM15: A S. Le Crom</b> , <i>Simulation of unsaturated clay pores at the microscopic scale</i>	<b>OM20: E. Rotureau</b> , <i>Structural effects on thermodynamics of metal binding with responsive core-shell nanoparticles</i>
15:30 – 15:50	<b>OM16: M. Špadina</b> , <i>Charge properties of TiO<sub>2</sub> nanotubes in NaNO<sub>3</sub> aqueous solution</i>	<b>OM21: J. Antelo</b> , <i>Mechanistic study of the ion binding behaviour of iron oxides and organo-mineral composites</i>
15:50 – 16:10	<b>OM17: J. Saab</b> , <i>Vapor pressure and Aqueous solubility measurements of phthalates and phenols contained in recycled food packages</i>	<b>OM22: J. Groenenberg</b> , <i>Solid-solution partitioning of Rare Earth Elements in mine-tailings and soils in China: experimental results and multi-surface modelling</i>
16:10 – 16:30	<b>Coffee break</b>	
16:30 – 16:50	<b>OM23: S. Aidarova</b> , <i>Interfacial tension of TPM in the presence of nanoparticles of silicon dioxide</i>	<b>OM28: A.V. Delgado</b> , <i>Blue energy by Capmix methods: combination of polyelectrolyte- and membrane-coated electrodes</i>
16:50 – 17:10	<b>OM24: S. Bkhait</b> , <i>Antibiofouling surface modifications using bioactive molecules</i>	<b>OM29: V. Marry</b> , <i>Multi-scale modeling of dynamics in clay/water systems</i>
17:10 – 17:30	<b>OM25: C. Lomenech</b> , <i>Adsorption and magnetic filtration of pollutants by a biochar-based composite</i>	<b>OM30: S. Ahualli</b> , <i>Ensemble of Soft Electrodes and Ionic Exchange Membranes for Capacitive Deionization</i>
17:30 – 17:50	<b>OM26: R. Ossola</b> , <i>Dissolved organic sulfur photomineralization in aquatic systems</i>	<b>OM31: N. Malikova</b> , <i>Flocculation of plate-like colloids induced by polyelectrolytes</i>
17:50 – 18:10	<b>OM27: Y. Bogawat</b> , <i>Bio-functionalized MCM-41 Silica for Heavy Metal Treatment of Water</i>	<b>OM32: D. Amoura</b> , <i>Energy storage supercapacitors based on doped montmorillonite conducting polymers</i>
18:15 – 20:15	<b>International Advisory Board meeting</b>	

## Tuesday 12 June 2018

08:00 – 12:00

Registration

8:45 – 9:30	Plenary lecture N°2: T. B. Hofstetter, <i>New Challenges for the Stable Isotope Analysis of Organic Contaminant Biodegradation</i>	
9:30 – 10:00	<i>Coffee break</i>	
10:00 – 10:30	KN5: J.F.L. Duval, <i>How does the response of whole-cell metal-sensing bioreporters reflect the dynamics of metal biouptake?</i>	KN6: G. Lefèvre, <i>Probing ternary surface complexes by in situ infrared spectroscopy</i>
10:30 – 10:50	OT1: Q. Albert, <i>Screening of fungal isolates collected from soils in the bioremediation of Trace Metals (Cd, Cu, and Pb)</i>	OT7: R. Le Parc, <i>Investigation of retention mechanisms of dye by lamellar materials through vibrational spectroscopy</i>
10:50 – 11:10	OT2: N. Goykhman, <i>Transport of Oxaliplatin and Carboplatin in Natural Soil-Water Environments</i>	OT8: M. Avena, <i>Surface species of phosphate on goethite. Distribution as a function of pH and surface coverage</i>
11:10 – 11:30	OT3: N. Pous, <i>Assessment of zooplankton for domestic wastewater treatment</i>	OT9: A. Beaussart, <i>Nanoparticle (NP) interactions with (bio)surfaces probed by single-NP force spectroscopy</i>
11:30 – 11:50	OT4: R.V.H. Dagnelie, <i>Transport of Organic Molecules in environment: insights from retardation in sedimentary rocks</i>	OT10: A. Coste, <i>Role of alkali cation in early stage of oligomerization in silicate fluids: a molecular dynamics study</i>
11:50 – 12:10	OT5: C. Catrouillet, <i>As removal in Mn-contain groundwater matrices</i>	OT11: A. Radian, <i>Quinone Interactions with Iron Bearing Clays and Oxides</i>
12:10 – 12:30	OT6: M. Sander, <i>Biodegradation of aliphatic polyesters in soils: using stable carbon isotope labeling to track polyester-derived carbon</i>	OT12: K. Bohinc, <i>Interactions between charged macroions mediated by nanoparticles with spatially distributed charges</i>
12:30 – 15:00	<i>Lunch + Poster Session</i>	
15:30 – 23:40	<i>Tourist tour + Gala Dinner (Pont du Gard)</i>	

## Wednesday 13 June 2018

8:45 – 9:30	<b>Plenary lecture N°3: J. Gardea-Torresdey</b> , <i>From Searching for Friendly Mining Technologies to Studies on the Chemical Fate of Nanoparticles in Terrestrial Plants: How Gold Mining Changed My Life</i>	
9:30 – 10:00	<b>Coffee break</b>	
10:00 – 10:30	<b>KN7: J. Galceran</b> , <i>AGNES: a tool for studying the thermodynamic and kinetic behaviour of nanoparticles</i>	<b>KN8: R.M. Town</b> , <i>The lability of nanoparticulate metal complexes at a macroscopic interface: the reaction layer concept revisited</i>
10:30 – 10:50	<b>OW1: P. Trens</b> , <i>Tuning the hydrophilic-hydrophobic balance of Prussian Blue analogues for the removal of toxic gases in humid atmosphere</i>	<b>OW7: M. Aeppli</b> , <i>Coupled analyses of changes in iron oxide mineralogy and reducibility during ferrous iron catalysed transformation of ferrihydrite to goethite and magnetite</i>
10:50 – 11:10	<b>OW2: M. Jardat</b> , <i>Coarse-grained model of sodium polyacrylate in montmorillonite</i>	<b>OW8: W. Tan</b> , <i>Contribution of Soil Active Components to the Control of Heavy Metal Speciation and Modeling</i>
11:10 – 11:30	<b>OW3: L. Duclaux</b> , <i>Fenton treatment using iron nanoparticles supported on activated carbon from banana spike: Rhodamine B removal and treatment of dyeing wastewater</i>	<b>OW9: J. Korchowiec</b> , <i>Modeling lung surfactant interactions with benzo[a]pyrene</i>
11:30 – 11:50	<b>OW4: S. Wick</b> , <i>Importance of illite for TI uptake in soils</i>	<b>OW10: Ch. Ligoure</b> , <i>Bursting mechanism of emulsion based liquid sheets: anti-drift application for agricultural sprays</i>
11:50 – 12:10	<b>OW5: Y. Mishael</b> , <i>Polycyclodextrin-Clay Composites: Regenerable Dual-Site Sorbents for Bisphenol A Removal from Treated Wastewater</i>	<b>OW11: E. Belut</b> , <i>Aerosol scavenging by droplets: impact of rear capture for low inertia aerosol and moderate to transitional Reynolds number</i>
12:10 – 12:30	<b>OW6: R. Marsac</b> , <i>Influence of magnetite stoichiometry on the binding of emerging organic contaminants</i>	<b>OW12: L. Ramos</b> , <i>Interfacial behaviour of plant proteins</i>
12:30 – 14:00	<b>Lunch</b>	
14:00 – 14:30	<b>KN9: T. Saito</b> , <i>Cadmium binding and formation of nano-sized particles with humic acid extracted from deep sedimentary groundwater</i>	<b>KN10: V. Ogurtsov</b> , <i>Electrochemical sensing system for environmental applications</i>
14:30 – 14:50	<b>OW13: C. Chia</b> , <i>Zinc, Zinc-complexing ligands and humics in corals: developing a method to assess historical records of metal bioavailability</i>	<b>OW17: P.M. Gassin</b> , <i>Second Harmonic Scattering: a tool to study at the nanometer-scale the molecular adsorption at materials interfaces</i>
14:50 – 15:10	<b>OW14: L. Wang</b> , <i>Adsorptive Fractionation of Humic and Fulvic Acid</i>	<b>OW18: M. Bley</b> , <i>Activity Coefficients from Liquid-Vapor Interfaces: A Molecular Dynamics Approach for Separation Chemistry</i>
15:10 – 15:30	<b>OW15: A. Otero-Fariña</b> , <i>NICA-Donnan Modelling of Rare Earth Element binding to humic substances</i>	<b>OW19: J.P. Pinheiro</b> , <i>Development of a Flux DMT with integrated Adsorptive Stripping Voltammetry for free metal ions detection in solution</i>
15:30 – 15:50	<b>OW16: P. Picot</b> , <i>Methyl-imogolite: a new hybrid nanotube for water remediation</i>	<b>OW20: M. Gledhill</b> , <i>Release, and fate of explosive compounds (TNT, RDX, HMX) from discarded munitions in the Baltic Sea</i>
16:00	<b>Closing Ceremony</b>	