

Wednesday, 6 July 2016

**Theme 2 - Isotopes and Chemical Speciation: Tracing Transfer Processes in the Critical Zone**

**Special session 2 :Nanoparticles in the environment: Fate and effects (SS2)**

Time	Authors		Scientific field
<b>8:30-9:15</b>	<b>Petersen E.</b>	<b>Keynote</b>	<b>Strategies for improving the reliability of nanoecotoxicology measurements</b>
9:15-9:30	Garacci M. et al	SS2 - Oral 1	Assessment of Graphene toxicity on a benthic freshwater diatom <i>Nitzschia palea</i>
9:30-9:45	Lagier L. et al	SS2 - Oral 2	Interaction of carbon nanoparticles with algal biofilm
9:45-10:00	Mottier A. et al	SS2 - Oral 3	Does oxidation degree influence the toxicity of multi-layer graphene in <i>Xenopus laevis</i> larvae?
10:00-10:15	Larue C. et al.	SS2 - Oral 4	Ecotoxicity of nano-carbon allotropes in <i>X. laevis</i> larvae, the choice of the right dose-metric
10:15-10:30	Izyan Supiandi N. et al.	SS2 - Oral 5	Influence of soil texture on TiO <sub>2</sub> nanoparticle fate in wheat crop
<b>10:30-11:00</b>	<b>Coffe Break</b>		
11:00-11:15	Laycock A., Rehkemper M. et al	SS2 - Oral 6	Tracing multi-isotopically labelled CdSe/ZnS quantum dots in the environment: an assessment of the method's strengths and limits
11:15-11:30	Junk T. et al.	SS2 - Oral 7	A new dual isotope approach to investigate the effects of ageing on ZnO nanoparticles in soils at field relevant concentrations
11:30-11:45	Mehennaoui K. et al.	SS2 - Oral 8	Silver Nanoparticle Tracing Using Stable Isotope Labelling and Multiple Collector ICP MS (MC-ICP-MS)
11:45-12:00	Kumar Sarkar S. et al.	SS2 - Oral 9	Influence of size and surface coating on silver nanoparticles uptake by <i>Gammarus fossarum</i>
12:00-12:15	Donard A. and Shaw Ph.	SS2 - Oral 10	Impact of silver nanoparticles on benthic prokaryotes in heavy metal-contaminated estuarine sediments in a tropical environment
<b>12:15-12:45</b>	<b>Montserrat F.</b>	<b>T2 - Oral 1</b>	Nano-particle analysis using data acquisition dwell times between 10 $\mu$ s and 50 $\mu$ s with a dynamic range equivalent to more than 1E9cps <b>A new opportunity to do things 'right': consider chemical speciation from scratch when studying TCEs</b>
<b>12:45-14:00</b>	<b>Lunch Break</b>		
14:00-14:15	Lesven L. et al.	T2 - Oral 2	Redox behavior of arsenic in surface sediments of Marque River (Northern France)
14:15-14:30	Gil-Diaz T. et al.	T2 - Oral 3	A preliminary approach to multiple radionuclide NPP accidental release and dispersion in the Gironde Estuary (France)
14:30-14:45	Desaulty A. et al.	T2 - Oral 4	Cu-Zn-Pb multi isotopic characterization of a small watershed (Loire river basin, France)
14:45-15:00	Abdou M. et al.	T2 - Oral 5	Diel cycles of arsenic (As) speciation and partitioning: High resolution monitoring in a coastal system
15:00-15:15	Van De Velde S. et al.	T2 - Oral 6	Electrogenic sulfur oxidation drives biogeochemical cycling of As and Co in the coastal seafloor

15:15-15:30	Cobelo-Garcia A. et al.	T2 - Oral 7	Time-Series (1991-2014) Trends of Technology-Critical Elements Accumulation in Mussels from a Urban Coastal Area (Vigo Ria, NW Iberian Peninsula)
15:30-15:45	Ratié G. et al.	T2 - Oral 9	Nickel isotope fractionation during laterite Ni ore smelting and refining: Implications for tracing the sources of Ni in smelter-affected soils
15:45-16:00	Korobova E. and Romanov S.	T2 - Oral 10	The concept of a two-layer geochemical structure of modern biogeochemical provinces as a theoretic basis and a tool in spatial eco-geochemical health risk assessments
<b>16:00-16:30</b>	<b>Coffe Break</b>		
16:30-16:45	Guinoiseau D. et al.	T2 - Oral 11	Zn Isotope Fractionation during Sorption onto Kaolinite
16:45-17:00	Bolaños V. et al.	T2 - Oral 12	Understanding of chromium speciation, availability and release in mining areas: the Barro Alto and Cromin'ia systems (Goi'as state, Brazil).
17:00-17:15	Cappuyns V.	T2 - Oral 13	Barium concentrations and availability in soil
<b>17:15-18:30</b>	<b>Poster Session</b>		
	Ratié G. et al.	T2 - Poster 1	Ni mobility in a Brazilian lateritic regolith (Barro Alto, Goi'as Sate) : what can we learn from Ni isotopes and quantitative solid speciation
	Blotevogel S. et al.	T2 - Poster 2	$\delta^{65}\text{Cu}$ isotope analysis to trace copper-based fungicides in contrasting vineyard soils
	Dumoulin D., Lesven L. et al.	T2 - Poster 3	Impact of a zinc processing factory on surrounding surficial soil contamination
	Watts M. et al.	T2 - Poster 4	Soil type influences crop mineral composition in Kilimanjaro, Tanzania
	Gu Ch.	T2 - Poster 5	Complete Defluorination of Perfluorinated Compounds by Hydrated Electrons Generated from 3-Indole-acetic-acid in Organomodified Montmorillonite
	Modabberi S. et al.	T2 - Poster 6	Urban geochemistry of heavy metals in soils of Hamedan City, Iran.
	Jarosikova A. et al.	T2 - Poster 7	Arsenic-rich smelter dust transformation in contrasting soils: a long-term in situ study
	Bourliva A. et al.	T2 - Poster 8	Mineralogical and morphological characterization of technogenix magnetic particles (TMPs) in heavily contaminated industrial soils
	Torrance K.	T2 - Poster 9	Contaminant mobilization in a warming Arctic; melting permafrost, erosion and characterization studies in Barrow, Alaska.
	Galanopoulos E. et al.	T2 - Poster 10	Environmental impact of the weathering of Cu-pyrite mineralization and mining waste at the Mathiatis abandoned mine (Cyprus): neutralization tests of acid mine waters
	Gatou M-A. et al.	T2 - Poster 11	Raw and thermally modified diasporic bauxite as an effective binder of Pb in aqueous solutions.
	Pougnnet F. et al.	T2 - Poster 12	Organotin speciation and distribution along the fluvial-estuarine continuum of the Gironde Estuary (France)
	Gardes Th., Gil-Díaz T. et al.	T2 - Poster 13	Behaviour of inorganic tin along the Gironde fluvial-estuarine continuum: implications for dispersion and fate scenarios of accidental radionuclide release

Lerat A. et al.

T2 - Poster 14

Deciphering anthropogenic trace metal sources and physicochemical processes affecting the Urban Area of Taipei on the Danshui System (NE Taiwan)

Alfakhoury A. and  
Leermakers M.

T2 - Poster 15

Evaluating the diffusive gradients in thin-films technique (DGT) for the measurement of platinum group elements Rh, Pd & Pt in natural waters

Desprez A.

T2 - Poster 16

Single Particle ICP-MS : How to use MassHunter nanoparticle module for method creation and data processing.

**19:30**

**Banquet at the Royal  
Belgian Institute of  
Natural Sciences**