

PAST PRESENT FUTURE

July 8th-12th 2013
TOULOUSE - FRANCE



SEGH 2013

Contamination and Health Spatial and Temporal Scales

FINAL PROGRAMME

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International Organizing Committee

Name	Surname	Affiliation	Country
De Vleeschouwer	François	EcoLab, Toulouse	France
Albouy	Marie-Ange	Cellule Congrès, UPS Toulouse	France
Le Roux	Gaël	EcoLab, Toulouse	France
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We are very grateful to the following sponsors which generously contributed to our conference

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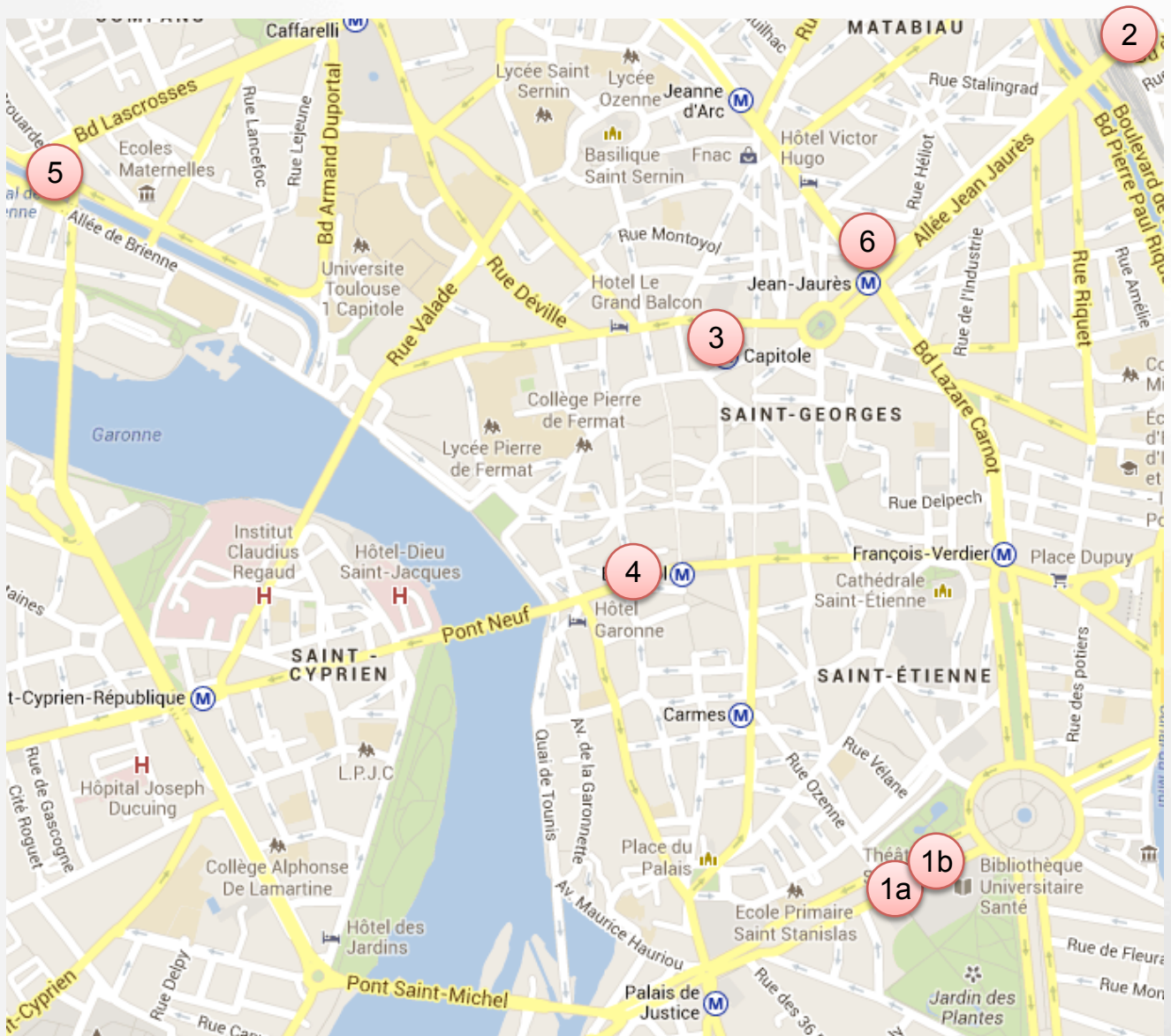
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Location

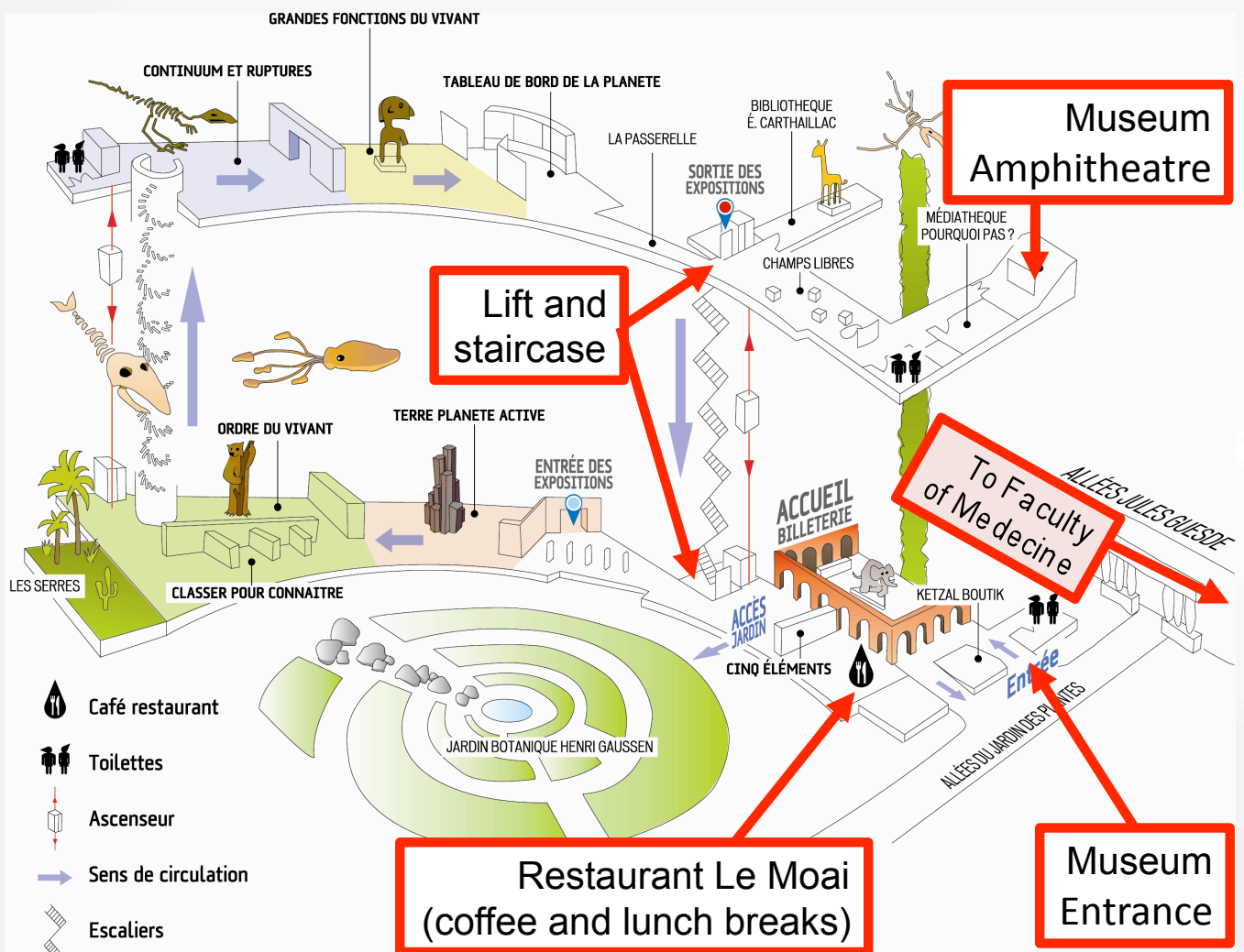
1. **Conference Venue:** Museum of Natural History (oral sessions, 1a) and Faculty of Medicine (oral + poster sessions, 1b) (35 and 37, Allée Jules Guesde)
2. **Icebreaker:** Arche Marengo (Arche Marengo - 1 Allée Chaban Delmas), left wing, top floor (Espace Vanel)
3. **Welcome Ceremony:** Capitole Town Hall (Place du Capitole), Main building, below the central passage, follow "Salle des illustres"
4. **Conference Diner:** Hôtel d'Assezat (Place d'Assezat)
5. **Off Event:** Péniche "Le Cri de la Mouette" (78, Allée de Barcelone)
6. **Departure for Excursion:** corner of Allées Jean Jaures and Boulevard Lazar Carnot



Detailed Map: Museum of Natural History

The amphitheatre of the Natural History museum is situated at the first floor of the museum. It is accessible by lift or staircase.

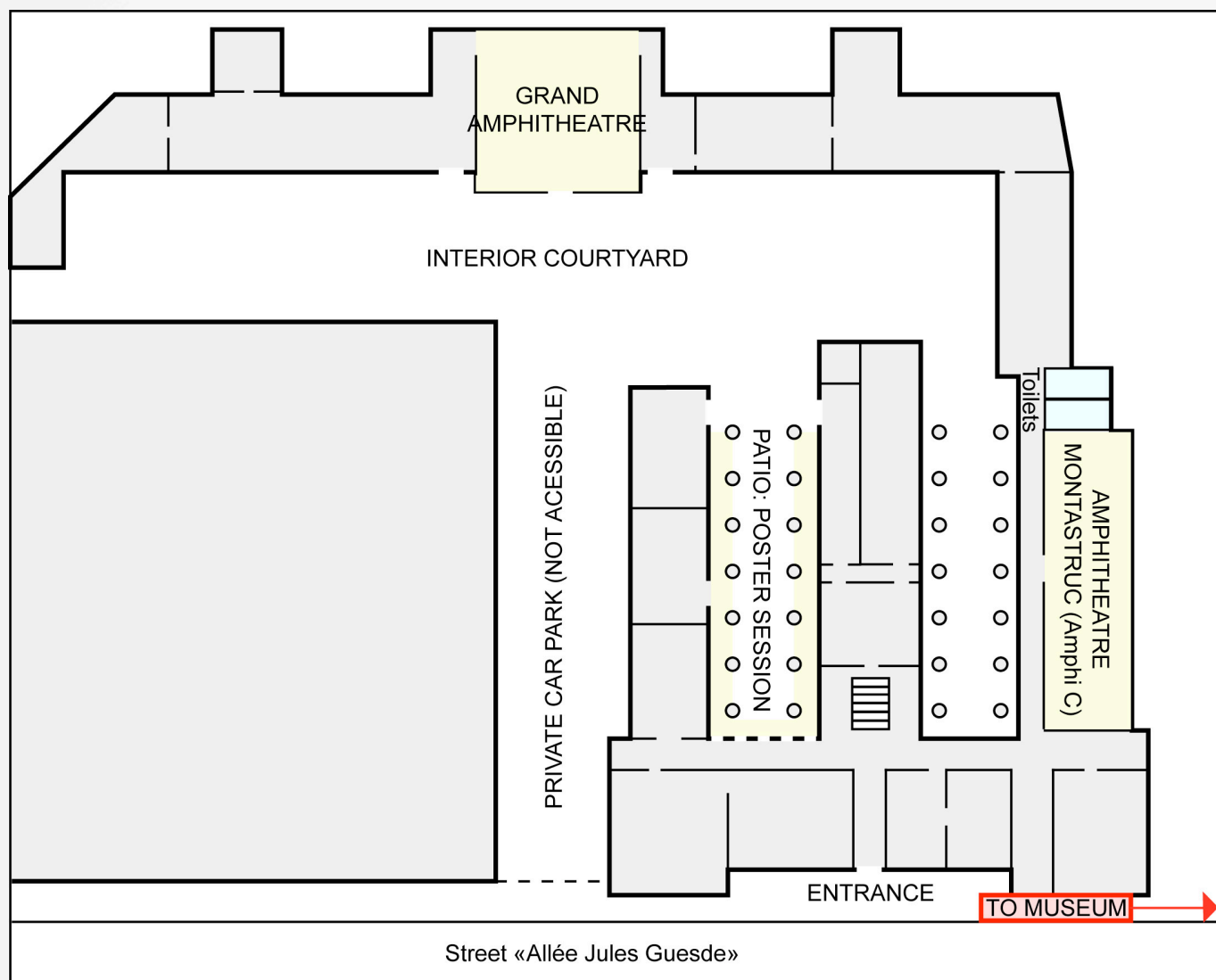
All the lunches and coffee breaks will be held at the Museum's restaurant "Le Moai" on the Museum's ground level. The entrance of the restaurant is inside the museum's hall



Detailed Map: Faculty of Medicine

The Faculty of Medicine is the building next to the Natural History Museum. Both Amphitheatres and the museum patio are located on the ground floor.

All the poster sessions will be held in the patio of the Faculty of Medicine (ground floor)



Programme Summary

	Monday July 8 th	Tuesday July 9 th	Wednesday July 10 th	Thursday July 11 th	Friday July 12 th
7:00-7:30					GATHERING AND DEPARTURE FOR FIELD EXCURSION
8:00-8:30	REGISTRATION Natural History Museum				FIELD EXCURSION PYRENEES MOUNTAINS
8:30-9:00	OPENING CEREMONY				
9:00-9:45	OPENING LECTURE PLENARY LECTURE PLENARY LECTURE				
9:45-10:30	PLENARY LECTURE PARRALEL SESSIONS PARRALEL SESSIONS				
10:30-11:00	Coffee Break/posters Coffee Break/posters Coffee Break/posters				
11:00-12:30	PARRALEL SESSIONS PARRALEL SESSIONS PARRALEL SESSIONS				
12:30-14:00	Lunch Break Lunch Break Lunch Break				
14:00-15:30	PARRALEL SESSIONS PARRALEL SESSIONS PARRALEL SESSIONS				
15:30-16:00	Coffee Break/posters Coffee Break/posters Coffee Break/posters				
16:00-17:30	PARRALEL SESSIONS PARRALEL SESSIONS PARRALEL SESSIONS CLOSING CEREMONY				
17:30-18:30	POSTER SESSION POSTER SESSION POSTER SESSION				
18:30-19:00	REGISTRATION Arche Marengo				
19:00-20:00	Icebreaker Arche Marengo, Espace Vanel	Welcome Reception Toulouse Capitole Town Hall			
20:00-23:00			CONFERENCE DINER Hôtel d'Assezat	OFF EVENT Péniche « Le Cri de la Mouette »	

Oral Presentations

OPENING AND PLENARY LECTURES

Natural History Museum Amphitheatre

OPENING - Tuesday 9th July, 9:00

Chair: F. De Vleeschouwer

***GREEN REVOLUTION AND GLOBAL CYCLING OF
METALS IN THE ENVIRONMENT***

by Jerome Nriagu

PLENARY - Tuesday 9th July, 9:45

Chair: J. Sonke, L.-E. Heimbürger, L. Maurice, C. Dufour

***METHYLATION OF MERCURY IN THE OCEAN:
INSIGHTS FROM MEASUREMENTS AND MODELS***

by Robert Mason

OPENING AND PLENARY LECTURES

Natural History Museum Amphitheatre

PLENARY - Wednesday 10th July, 9:00

Chair: K. Francesconi

***ARSENIC REMOVAL FROM GROUNDWATER BY
HOUSEHOLD SAND FILTERS IN VIETNAM***

by Andreas Kappler

PLENARY - Thursday 11th July, 9:00

Chair: C. Dumat

***DEVELOPMENTS IN THE ESTIMATION OF HUMAN
EXPOSURE TO POTENTIALLY HARMFUL SUBSTANCES
IN SOIL USING BIOACCESSIBILITY MEASUREMENTS***

by Mark Cave

Topic 1: Biogeochemistry and Health (including cross topics 1-2 and 1-3)

Chairs: A. Hursthouse, Reis Marinho P.A. and Le C.

Room: Grand Amphithéâtre, Faculty of Medecine

Date: Tuesday 9th July 2013

- 11h00 New regional geochemical data from Ireland: investigating trace element distributions in topsoil and potential agricultural impacts.
Knights K. et al.
- 11h15 Geochemical mapping of soil in Athens, Greece.
Argyraki et al.
- 11h30 Investigating the difference between anthropogenic and geogenic contamination - identifying domains and calculating Normal Background Concentrations in Northern Ireland.
Mcilwaine R. et al.
- 11h45 Urban Soil Dust for Assessing Environmental Pollution and Human Exposure.
Li X. et al.
- 12h00 Concentrations and Bioaccessibility of Trace Elements in Different Granulometric Fractions of Smelting and Mining Impacted Dusts: Influence on Exposure Assessment.
Goix S. et al.
- 12h15 Empirical and IEUBK derived model simulations of blood Pb levels in children exposed to Pb-smelter contaminated soil/dust at Mitrovica, Kosovo.
Boisa et al.
- 12h30-14h00 *Lunch Break*
- 14h00 Environmental and sanitary risk assessment and management in associative gardens: vegetable quality in relation with practices and context.
Dumat
- 14h15 Is it possible to sustainably manage lead soil contamination at allotment and domestic gardens?
Mcintosh R. et al.
- 14h30 Spatial Assessment of the potential impact of Black & Grey Shales on human exposure to potentially toxic elements in S.E. Nigeria.
Nganje T. and Hursthouse A.
- 14h45 A tiered approach for the assessment of human health risks due to the consumption of vegetables from cadmium contaminated land.
Swartjes F.

Topic 1: Biogeochemistry and Health (including cross topics 1-2 and 1-3)

Chairs: A. Hursthouse, Reis Marinho P.A. and Le C.

Room: Grand Amphithéâtre, Faculty of Medecine

Date: Tuesday 9th July 2013

15h00 Geochemical tools to assess human methyl-mercury exposure crossing Hg speciation and stable isotope fractionation.
Laffont L. et al.

15h15 Mad, bad or sad? Mental health and the environment.
Stewart A. and Bradley M.

15h30-16h00 *Coffee Break*

Topic 2: Biogeochemistry and ecotoxicology (water, living organisms) (including cross topic 2-3)

Chairs: A. Probst and E. Pinelli

Room: Grand Amphithéâtre, Faculty of Medecine

Date: Wednesday 10th July 2013

- | | |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11h00 | Assessment of three fluvial sediment sampling methods for understanding the evolution of heavy metals and their toxicity in Oka River catchment (Northern Spain).
Martinez-Santos M. et al. |
| 11h15 | Trace elements bioavailability in saline terrestrial environment
Matijević et al. |
| 11h30 | Assessment of metal lability in freshwater sediments by passive sampling in response to bioturbation.
Dabrin A. et al. |
| 11h45 | The influence of Mobile forms of PTEs on oak forest stands along an urban-rural gradient in Sofia region, Bulgaria.
Doichinova V. et al. |
| 12h00 | Caged gammarids for the characterization of contamination levels in continental waters.
Besse J.-P. et al. |
| 12h15 | Use of the "Comet" assay on higher plants and earthworms to assess the genotoxicity of anthropic contaminated soils.
Lemière S. et al. |
| 12h30-14h00 | <i>Lunch Break</i> |
| 14h00 | Linking chemical availability of trace elements with toxicological effects in earthworms exposed to moderately contaminated soils.
Beaumelle L. et al. |
| 14h15 | Metal species in water from metalliferous black shales and their implications for faunal uptake, N. Sweden.
Jacks G. and Sundbald B. |
| 14h30 | Marine sponges as indicators of PAH concentration and sources in coastal waters.
Wagener A. et al. |
| 14h45 | Mollusks as sensitive indicator for monitoring heavy metals pollution in Khanh Hoa Coastal, Viet Nam.
Phuong T.T.M. et al. |
| 15h00 | Effects of short-term exposure of <i>Xenopus laevis</i> tadpoles to multi walled carbon nanotubes on antioxidant enzymes activities and DNA damages.
Saria R. et al. |

Topic 2: Biogeochemistry and ecotoxicology (water, living organisms) (including cross topic 2-3)

Chairs: A. Probst and E. Pinelli

Room: Grand Amphithéâtre, Faculty of Medecine

Date: Wednesday 10th July 2013

15h15 Carbon nanotubes and diatoms: a sticky story.
Verneuil L. et al.

15h30-16h00 *Coffee Break*

16h00 Ecotoxicology of systemic pesticides: detection and behavior in the environment for risk assessment.
Bonmatin J.-M.

16h15 The Inhibition effect of heavy metals on COD removal in UASB reactor.
Cebeci M.S. and Bisgin T.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

Chairs: G. Le Roux, F. De Vleeschouwer, A. Martinez Cortizas and C. Zhang

Room: Amphithéâtre Montastruc , Faculty of Medecine

Date: Wednesday 10th July 2013

- 11h00 Isotopic Zn and Cd mutitracing study of metal transfer processes in soils and lichens from an old mining area (São Domingos Mine, Portugal).
Mattielli N. et al.
- 11h15 An historical investigation of atmospheric pollution in France using lichens herbaria.
Agnan Y. et al.
- 11h30 Biomonitoring of trace metal atmospheric deposition in forest ecosystems by mosses and lichens. Relative influence of local environment.
Gandois L. et al.
- 11h45 Identifying controls on Normal Background Concentration variations of contaminants in English soil.
Ander L. et al.
- 12h00 Anthropogenic lead records in buried and modern soils.
Pampura T. et al.
- 12h15 Geochemical investigation of heavy metals distribution in the Musina area, Limpopo Province, South Africa.
Ogola J. and Mundalamo R.
- 12h30-14h00 *Lunch Break*
- 14h00 Long-term Dynamics of Urban Soil Pollution with Heavy Metals (Moscow).
Kosheleva N. and Nikiforova E.
- 14h15 Anthropogenic enrichment of trace metals in a peat profile from southern Greenland.
Mighall T. et al.
- 14h30 Atmospheric metal pollution due to early mining and metallurgy in N Spain.
Martinez Cortizas A. et al.
- 14h45 Improvement in the understanding of mining legacy in the Pyrenees mountains using environmental archives.
Claustres A. et al.
- 15h00 Acidic peat chemistry and interactions with radionuclides (²³⁸U and ²²⁶Ra) in a former mining area.
Bordelet G. et al.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

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Date: Wednesday 10th July 2013

15h15 Characterization of dissolved organic matter released from a Pyrenean peatland.
Le Dantec T. et al.

15h30-16h00 *Coffee Break*

16h00 Mercury contamination and mitigation during the Permian-Triassic Extinction; Present and
Future Lessons.
Sanei H. et al.

16h15 Evaluation of the forest ecosystems influence on the drinking water quality from surface
sources in representative watersheds of the Struma river basin (Bulgaria) through statistical
and GIS tools.

16h30 Velizarova E. et al.

16h45 Particulate contaminant fluxes in the Upper Rhône River.
Launay M. et al.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

Chairs: G. Le Roux, F. De Vleeschouwer, A. Martinez Cortizas and C. Zhang

Room: Amphithéâtre Montastruc , Faculty of Medecine

Date: Thursday 11th July 2013

- 11h00 Influence of the landfill site on the lake sediments of Vransko Lake, Croatia.
Fajković H. et al.
- 11h15 The rise of a city; urban lake deposits and pollution transport pathways in Bergen, Norway.
Andersson M. et al.
- 11h30 Improving the knowledge of pesticide transfer into groundwater: constraints by a coupled
geochemical and pesticide monitoring approach.
Baran N. and Petelet-Giraud
- 11h45 Impact of a storm event on the transfer of particulate trace metals to the deep sea (NW
Mediterranean Sea, Gulf of Lion).
Dumas C. et al.
- 12h00 Inorganic contaminants inputs to the sea from a large urbanized Mediterranean city under
various weather conditions.
Oursel B. et al.
- 12h15 Identification of sensitive parameters in the modeling of SVOCs reemission processes from
soil to atmosphere.
Loizeau V. et al.
- 12h30-14h00 *Lunch Break*
- 14h00 Tracer based source apportionment of polycyclic aromatic hydrocarbons in PM2.5 in
Guangzhou, southern China.
Guo H. and Gao B.
- 14h15 Effect of natural aging on sewage sludge ash characteristics and acid extraction efficiency.
Couto N. et al.

Special Session 1: Frontiers in Mercury Biogeochemistry

Chairs: J. Sonke, L.-E. Heimbürger, L. Maurice and C. Dufour

Room: Amphithéâtre Muséum d'Histoire Naturelle

Date: Tuesday 9th July 2013

- 9h45 **PLENARY LECTURE: Methylation of mercury in the ocean: Insights from measurements and models.**
Mason R.
- 11h00 How do bacteria methylate mercury?
Johns A. et al.
- 11h30 Marine methylmercury production and marine boundary exchange - results of the 2012 GEOTRACES West Pacific PANDORA cruise.
Heimbürger L.-E. et al.
- 11h45 Archived open sea dolphins tell us about the fate of Hg in North Pacific Ocean.
Itai et al.
- 12h00 Mercury Stable Isotope Fractionation in Alaskan Marine Top Predators.
Masbou et al.
- 12h15 Species specific mercury isotopic composition during chemical and biological methylation pathways.
Amouroux et al.
- 12h30-14h00 *Lunch Break*
- 14h00 Climate controls the fluctuations of fish mercury levels in Québec lakes.
Lucotte et al.
- 14h15 Methylmercury and total mercury in boreal stream waters: Highly variable yet fairly predictable from climatic variables.
Meili et al.
- 14h30 Effects of organic ligands on photolytic redox transformation of mercury.
Liang et al.
- 14h45 Methylmercury production in urban wastewater and fluxes into the fluvial Gironde Estuary (France).
Deycard et al.
- 15h00 In-situ analysis of mercury traces in water by electrochemical sensor using gold nanoparticles.
Laffont et al.

Special Session 2: Bioaccessibility of pollutants in soils and vegetables

Chairs: C. Dumat

Room: Amphithéâtre Muséum d'Histoire Naturelle

Date: Thursday 11th July 2013

- 9h00 **PLENARY LECTURE: Developments in the estimation of human exposure to potentially harmful substances in soil using bioaccessibility measurements.**
Cave M.
- 9h45 Soil mineralogy and its effect on oral bioaccessibility of Ni and Cr in soils overlying basalt lavas, Northern Ireland.
Cox S. et al.
- 10h00 Earthworm: a multifunction tool for biomonitoring and refunctionalization of polluted soils.
Lévêque T. et al.
- 10h15 Development and application of an in-vitro tracheobronchial bioaccessibility protocol for lead in the < 10 um (PM10) size fraction.
Boisa N. et al.
- 10h30-11h00 *Coffee Break*
- 11h00 Influence of the epicuticular wax on the foliar metal uptake in the case of Brassica oleracea exposed to industrial atmosphere particles fallouts.
Sobanska S. et al.
- 11h15 Exposure assessment of sequestered organic compounds in polluted sites and soils: use of a juvenile animal model to estimate their relative bioavailability.
Delannoy M. et al.
- 11h30 Mineralogy, solid-phase distribution and human oral bioaccessibility of Pb in outdoor dusts of Estarreja, Portugal.
Patinha C. et al.
- 11h45 The importance of incorporating human bioaccessibility of potentially harmful elements in the solid-phase in health risk assessment studies: the case of lead in urban soils of Lisbon, Portugal.
Reis A. et al.
- 12h00 Speciation and bioaccessibility of Pb, As and Sb from soccer fields and sediments river near old mining environment.
Pascaud G. et al.
- 12h15 POLLUSOL 2 project: large scale investigation of soil-to-plant and soil-to-human exposition pathways in urban areas nearby industrial area in Wallonia.
Leclerq J. et al.
- 12h30-14h00 *Lunch Break*

Special Session 2: Bioaccessibility of pollutants in soils and vegetables

Chairs: C. Dumat

Room: Amphithéâtre Muséum d'Histoire Naturelle

Date: Thursday 11th July 2013

- | | |
|-------|------------------------------------------------------------------------------------------------------------------------------------|
| 14h00 | Bioaccessibility of metals/metalloids from soils and waste materials from mining and smelting areas in Africa.
Ettler V. et al. |
| 14h15 | Relative bioavailability of soil-bound chlordecone in growing lambs.
Jurjanz S. et al. |
| 14h30 | Soil to plant transfer of uranium series radionuclides.
Carvalho F. et al. |

Special Session 3: Arsenic: Current issues of Speciation, Environmental behavior, and Human Health impacts

Chairs: K. Francesconi

Room: Amphithéâtre Muséum d'Histoire Naturelle

Date: Wednesday 10th July 2013

- 9h00 **PLENARY LECTURE: Arsenic removal from groundwater by household sand filters in Vietnam**
Kappler A. et al.
- 9h45 How do mine waters affect the natural arsenic geochemistry in glacial till and bedrock? - A case study of Kittilä Suurikuusikko gold mine in Finland.
Backnäs S. et al.
- 10h00 Arsenic concentrations in aggregate resources and constructions sites in arsenic rich areas in Finland.
Tarvainen T. et al.
- 10h15 Arsenic behaviour in coastal sediments - an analytical and modelling approach.
Duc Huy D. et al.
- 10h30-11h00 *Coffee Break*
- 11h00 Comparison of arsenic geochemistry and ecological risks at two geologically different mine sites in Finland.
Turunen K. et al.
- 11h15 Health risk estimate for groundwater and soil contamination in the Slovak Republic - a convenient tool for identification of risk areas.
Fajcikova K. et al.
- 11h30 Experimental assessment for release of As in sediments of the Shinaki Dam receiving neutralized sulfate-rich acidic river water in Kusatsu, central Japan: Roles of organic acids and bacterial sulfate reduction.
Yamaguchi K. et al.
- 11h45 Statistical tools for assessing the potential risk of elevated geogenic arsenic in groundwaters.
Rodriguez-Lado L. et al.
- 12h00 As fractionation and distribution in mine wastes and stream sediments in the Asturias Hg mining district (Northwestern Spain).
Loredo J. et al.
- 12h15 Determination of arsenic bioavailability in contaminated soils.
Bradham K. et al.
- 12h30-14h00 *Lunch Break*

Special Session 3: Arsenic: Current issues of Speciation, Environmental behavior, and Human Health impacts

Chairs: K. Francesconi

Room: Amphithéâtre Muséum d'Histoire Naturelle

Date: Wednesday 10th July 2013

- 14h00 Fate of arsenic during microbial reduction of arsenic-bearing biogenic and abiogenic Fe(III) oxyhydroxides.
Muehe E.M. et al.
- 14h15 Fate and Mobilization of Arsenic on Nano-TiO₂ in Soil Columns with Sulfate-Reducing Bacteria.
Jing C. et al.
- 14h30 Manganese and arsenic release induced by progressive hypoxia in Lake Biwa, Japan.
Itai T. et al.
- 14h45 Natural arsenic behaviour in the Alpine/Mediterranean Var River watershed.
Barats A. et al.
- 15h00 Arsenate sorption onto episammic biofilms developed on streambed sediments. Influence of phosphate presence.
Martiñá Prieto D. et al.
- 15h15 Bacterial Oxidation of Arsenopyrite.
Balci N.C. et al.

Poster Presentations

Topic 1: Biogeochemistry and Health (including cross topics 1-2 and 1-3)

Chairs: A. Hursthouse, Reis Marinho P.A. and Le C.

Location: Patio, Faculty of Medicine

Date: Tuesday 9th July 2013

Individual particle characterization to evaluate their potential human health impact.

Sobanska S. et al.

Human exposure to fluoride from drinking water - a pilot study in the East Midlands region, UK.

Mehra A. et al.

Adaptative strategy of *S. vulgaris* metallophyte plant to soils polluted by metals.

Austruy. et al.

Environment Health and Society, a cross-disciplinary approach at the Midi-Pyrénées Observatory (Toulouse, France).

Becerra S. et al.

Relating global iodine distribution to IDD: questions for multi-professional research.

Stewart A. and Worsley A.

Particle size analysis of metallurgical waste dump for pollutants transport characterization.

Houecande O. et al.

Release of the mobile forms of hazardous elements from the glass-works fly ash into soils.

Udatný M. and Mihaljevič M.

An application of X-ray absorption spectroscopy for the transformation of trace metal speciation through open burning of electronic waste.

Itai T. et al.

Assessing the efficiency of fractionation protocols in evaluating the environmental impact of potentially toxic elements in steel production by-products.

Rodgers K. et al.

Antibiotics in Livestock Wastewater and Its Control by Radiation.

Tak Hyun K. et al.

Release of antimony and other heavy metals in antimony ores during acid leaching.

He M. et al.

GIS as a tool to identify potential associations between environmental and health data.

Zhang C.

Application of factor analysis and geostatistics to identify processes controlling the distribution and bioaccessibility of trace elements in Northern Ireland soils.

Palmer S. et al.

Assessment of Heavy Metals Concentration (Cd, Cr, Cu, Fe, Mn, Pb and Zn) in water samples of Cahora Bassa Dam in Mozambique and the environmental effect.

Gulamussen N.

Topic 1: Biogeochemistry and Health (including cross topics 1-2 and 1-3)

Chairs: A. Hursthouse, Reis Marinho P.A. and Le C.

Location: Patio, Faculty of Medicine

Date: Tuesday 9th July 2013

Geochemical background and health status of inhabitants of the Slovak Republic.
Rapant S. et al.

The impact of geological environment on health status of residents of the Slovak Republic.
Cveckova V. et al.

Challenges in drinking water quality control in South Estonia, Å removal of naturally high iron at water treatment plants.
Karro E. et al.

Topic 2: Biogeochemistry and ecotoxicology (water, living organisms) (including cross topic 2-3)

Chairs: A. Probst and E. Pinelli

Location: Patio, Faculty of Medicine

Date: Wednesday 10th July 2013

Physico-chemical characteristics of waters of the high valley of the Oued Bounamoussa (North East Algeria)
Zaoui L.

Bioaccumulation of PAH in *Hymeniacidon heliophila*: field and bioassay study.
Massoni T. et al.

Toxicity of metal chlorides to *Xenopus* oocytes.
Marin M. et al.

Modelling of chromium sorption behaviour on episammic biofilms developed on streambed sediments.
Martíñá Prieto D. et al.

Available nutrients changes after electrokinetic-assisted phytoremediation in a mine contaminated soil.
Couto N. et al.

New insights on antimony biogeochemistry based on environmental archives, soil studies and toxicity assessments.
Le Roux G. et al.

Biodiversity and adaptation of plants to environmental stress: response to cadmium in the model plant *Medicago truncatula*.
Dumat C. et al.

Ecodynamics of perfluorinated acids in the Gironde estuary.
Munoz G. et al.

Microcystis spp. stational variation and its relation with water quality in an ecoturistic sinkhole from the Yucatan Peninsula.
Nava F. et al.

Toxicity assessment of thallium using plant bioassays.
Crippa L. et al.

Is a symbiotic bivalve a suitable organism to assess metal toxicity in aquatic environments ?
Caro A. et al.

Assessment of cerium dioxide nanoparticles toxicity on four aquatic species at different trophic levels.
Bour A. et al.

The karstic systems and the sustainable eco-tourism in the Mayan Riviera.
Ortega D. et al.

Toxic metals profile of commercially sea foods from Turkey: contamination levels and dietary exposure assessment.
Erkan N.

Topic 2: Biogeochemistry and ecotoxicology (water, living organisms) (including cross topic 2-3)

Chairs: A. Probst and E. Pinelli

Location: Patio, Faculty of Medicine

Date: Wednesday 10th July 2013

Health risks of toxic metals in the commercial fishes from Turkey.

Özkan Ö.

Effects and accumulation of trace metals on the microarthropods community in contaminated soil.

Austruy A. et al.

Thallium accumulation in soils and plants from sites of historical mining of Zn-Pb ores.

Stefanowicz A. et al.

In situ Evaluation of the impact of pesticides on Groundwater Associated ecosystems of the Ariège alluvial plain (France), ELISE project.

Mouchet F. et al.

Review of diffusive gradients in thin films (DGT): A novel technology for measurement of labile forms of chemicals in the environment.

Zhang C. et al.

Study of bioavailability and ecotoxicity of metals and metalloids in polluted soils to assess the efficiency of phytoremediation techniques.

Foucault Y. et al.

Availability of metals in bottom sediments and freshwater bivalve (*Corbicula fluminea* and *Anodontites tenebricosus*) - Ribeira de Iguape River – Brazil.

Rodrigues V. et al.

Metal levels in sediments and aquatic plants (*Avecinnia marina*), Iran.

Pourkhabbaz A. et al.

Evaluation of bioavailable Cu by DGT technique in a contaminated marina and impact on living organisms (*Ruditapes decussatus*).

Briant N. et al.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

Chairs: G. Le Roux, F. De Vleeschouwer, A. Martinez Cortizas and C. Zhang

Location: Patio, Faculty of Medicine

Date: Thursday 11th July 2013

Landfill conflagration as source of Dibenzo-p-dioxins and Dibenzofurans in air and lake sediment from Vransko Lake.

Fajković H. et al.

Multivariate analysis as a tool to evaluate potentially harmful elements (PHE) dispersion in podzols of an industrial area (NW of Portugal)

Inácio M. et al.

Monitoring of nutrient and carbon load to the pre-dams of a drinking water reservoir by automatic probes and water samplers.

Friese et al.

Effect of increased temperature and carbon dioxide concentration in rice volatile emissions in a portuguese paddy field.

Couto N. et al.

Sources and historical record of tin and butyl-tin species in a Mediterranean bay (Toulon Bay; France).

Pougnat F. et al.

Silver in urban wastewater discharged into the fluvial Gironde Estuary: Concentrations, fluxes and potential impact.

Deycard et al.

Heavy Metals Migration Features in Urban Landscapes of Ulaanbaatar City

Sorokina O. et al.

The Emperors mercurial elements - heavy metal pollution in a bog near Hadrian's Wall.

Kuttner A. et al.

Impact of urbanisation on carbon sequestration in forest parks: a comparative assessment between Bulgaria and Scotland.

Zhiyanski M. et al.

New method to assess glyphosate speciation in soils and sediments.

Canton M.

Carbon and Nitrogen Isotope Characterization of the Ayuquila Watershed's Sediment and Macrofauna.

Palomera-Garcia C. et al.

Assessing heavy metal sources by the combined use of geochemical and geophysical data: Application to the Pontaut old mining area at the Garonne river headwaters, Aran Valley, Spain.

Queralt I. et al.

Impact of ancient mining site on air quality under Mediterranean climate : Study case of the Pb-Zn-Cd Jebel Ressay mining site (Tunisia).

Ghorbel M. et al.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

Chairs: G. Le Roux, F. De Vleeschouwer, A. Martinez Cortizas and C. Zhang

Location: Patio, Faculty of Medicine

Date: Thursday 11th July 2013

Spatial and temporal variation of Pt concentration in PM2.5 in the Metropolitan Area of Mexico City.
Morton Bermea O. et al.

Origin of atmospheric trace elements using rare earth elements and lead isotopes: lichens monitoring in a mountain volcanic area (the Puy-de-Dôme, France).
Claustres A. et al.

Is thallium in peat a good indicator of anthropogenic contamination? Examples from Czech sites with contrasting pollution histories.
Ettler V. et al.

A peat bog record of atmospheric heavy metals deposition from the North Shore of the St. Lawrence Estuary, Quebec.
Pratte S. et al.

Assessment of Aquatic Environment of Bhindawas Wetland, Jhajjar Haryana (India).
Kumar S. and Dhankhar R.

Accumulation of radionuclides and trace elements in wetlands near former uranium mines.
Cuvier A. et al.

Reconstructing historical atmospheric mercury deposition in Western Europe: The case study of the ombrotrophic Misten peat bog (Belgium).
Allan M. et al.

Radionuclides from uranium mining tailings in a mountain catchment area, Reboleiro, Portugal.
Carvalho F. et al.

Geochemistry of the major elements and fluorine in the waters of the coastal Ghannouche - Gabes (Gulf of Gabes). Impact of phosphogypsum waste.
Ben Amor R. et al.

Environmental impacts of abandoned coalfields on surface and ground waters in Şile, Istanbul / Turkey.
Yüksel O. et al.

Heavy Metals Accumulation in the Upper Litani Basin Soils.
Korfali S.

Spatial distribution of lead in surface and deep sediments of the semi-enclosed bay influenced by the anthropogenic activity (Kastela Bay, Croatia).
Mikelic I.L. et al.

Determination of U and Pu isotopes in an ombrotrophic peat core and implications for post-depositional migration of fallout radionuclides.
Quinto F. et al.

Topic 3: Spatial and temporal geochemical records of pollution including catchment studies

Chairs: G. Le Roux, F. De Vleeschouwer, A. Martinez Cortizas and C. Zhang

Location: Patio, Faculty of Medicine

Date: Thursday 11th July 2013

Distribution and enrichment of selected elements in sediments of the Ergene River, Turkey.

Halli M. et al.

Interaction of Air Masses between Mountain Summit and Foot.

Guo H.

Impact of Douro vineyards to surface water quality.

Cachada A. et al.

A 6 years survey of trace metals in atmospheric deposition in the Cap Béar (NW Mediterranean, Gulf of Lions).

Aubert D. et al.

Factors controlling the sediment and organic carbon transport during cloud events in the Oka River catchment (Basque Country, Northern Spain).

Montoya-Armenta L. et al.

Special Session 1: Frontiers in Mercury Biogeochemistry

Chairs: J. Sonke, L.-E. Heimbürger, L. Maurice and C. Dufour

Location: Patio, Faculty of Medicine

Date: Tuesday 9th July 2013

Determination of femtomolar levels of methylmercury in sea-water by isotopic dilution gas chromatography sector field inductively coupled plasma mass spectrometry.
Lagane C. et al.

Temporal variations of atmospheric gaseous elemental mercury and its relation with others pollutants and meteorological parameters at a French coastal Mediterranean site.
Maruszczak N. et al.

Main features of Hg distribution in lichens in the Russian (sub-)Arctic.
Shevchenko V. et al.

The Pic du Midi Observatory - A new high altitude site for atmospheric Hg research.
Sonke J. et al.

Relation of fish consumption to biomarkers of mercury, selenium and arsenic exposure from Mediterranean women.
Miklavčič A. et al.

Mercury Biogeochemistry in the Extreme High Altitude Lake Environments of the Bolivian Altiplano.
Alanoca L. et al.

Biomethylation potential of cationic mercury by microbial biofilm versus planctonic cells and surface sediment.
Remy P.-P. et al.

Reactivity of biomineralized versus chemically synthesized FeII-FeIII green rusts with cationic mercury.
Remy P.-P. et al.

Special Session 2: Bioaccessibility of pollutants in soils and vegetables

Chairs: C. Dumat

Location: Patio, Faculty of Medicine

Date: Thursday 11th July 2013

Lead (Pb) Paint Bioaccessibility after Two Years Residence in Soil Columns Spiked with Phosphate.
Hunt A. and Alkandary D.

Lead (Pb) Bioaccessibility measured in Soil Spiked with Pb-based Paint and with Phosphate.
Hunt A.

Innovative environmental applications of attapulgite clay.
Argyaki A. and Zotiadis V.

Bioaccessibility of metals and metalloids in polluted vegetables in relation with exposure conditions: foliar and/or root uptake.
Xiong T.T. et al.

Relative bioavailability of tropical volcanic soil-bound chlordecone in piglets.
Bouveret C. et al.

Special Session 3: Arsenic: Current issues of Speciation, Environmental behavior, and Human Health impacts

Chairs: K. Francesconi

Location: Patio, Faculty of Medicine

Date: Wednesday 10th July 2013

Temporal assessment of as spatial distribution in soils in the vicinity of Panasqueira mining area (Portugal).
Salgueiro A.R. et al.

Geochemical mapping of Arsenic contamination in surface water in the Quadrilátero Ferrífero region, Minas Gerais, Brazil.
Vicq R.

Removal of arsenic from contaminated groundwater by goethite adsorption in the presence of the arsenite-oxidizing bacterium *Aliihoeflea* sp. strain 2WW.
Zaccheo P. et al.

Arsenic and mercury speciation and bioaccessibility in plants and soils from mining sites.
Loredo J. et al.

Heavy metals in agricultural topsoils affected by Trepca mine in the Mitrovica region, Republic of Kosova.
Aliu M.

Intermittent irrigation and arsenic bioavailability in rice cultivation.
Jacks G. et al.

The effect of plants in the arsenic co-occurrence of two sites in Loa River basin.
Bugueño M.