

Sunday, 20 September 2015				
Leipziger KUBUS   Hall 1 A	Leipziger KUBUS   Hall 1 B	Leipziger KUBUS   Hall 1 CD	Leipziger KUBUS   Hall 2	
09:00				Satellite Event: The Environmental and health challenges of E-Waste and its management: an emerging 21st century global concern
13:00 -16:15	Satellite Event: Combining strategies and tools to identify priority chemicals in the environment	Satellite Event: Recent advancements in wastewater based epidemiology	Satellite Event: Unconventional gas and oil production employing hydraulic fracturing: Challenges for environmental and analytical chemistry	
16:30	Shuttle bus from Leipziger KUBUS to the University Leipzig			
University Leipzig   AUDIMAX				
Opening Ceremony				
17:00	David Cole-Hamilton, EuCheMS   Walter Giger, DCE   Prof. Beate Schücking, Rector University of Leipzig   Thorsten Reemtsma, Conference Chairman			
17:30	Plenary Keynote Avner Vengosh: An overview of the risks to water resources from unconventional energy exploration and hydraulic fracturing			
18:15	Welcome Reception			
Monday, 21 September 2015 at the University Leipzig				
University Leipzig   AUDIMAX				
Welcome				
09:00	Prof. Georg Teutsch, Scientific Director UFZ   Andreas Müller, City of Leipzig, First Deputy Mayor			
09:45	Plenary Keynote Janet Hering: Water quality and the urban water cycle: Moving towards sustainable solutions			
10:30	Coffee, Poster & Exhibition			
University   Hall 1	University   Hall 2	University   Hall 8		
11:00	Emerging contaminants - 1	Metals, metalloids and elemental speciation	Chemical risk and regulatory issues	
12:50	Lunch, Poster & Exhibition			
14:00	Emerging contaminants - 2	Nanomaterials: from characterization to risk assessment - 1	Multimedia partitioning, transport and modeling   Predicting compound properties and effects - 1	
15:50	Coffee, Poster & Exhibition			
16:15	Analytical methods for trace analysis - 1	Nanomaterials: from characterization to risk assessment - 2	Multimedia partitioning, transport and modeling   Predicting compound properties and effects - 2	
17:15 -19:15	Poster Social (1 <sup>st</sup> Session)			18:45 Mitgliederversammlung der Fachgruppe Umweltchemie und Ökotoxikologie der GDCh
Tuesday, 22 September 2015				
University Leipzig   Hall 3				
09:00	Plenary Keynote Jerald Schnoor: Water sustainability and climate change			
09:45	Award Ceremony: Prof. Karlheinz Ballschmiter (DCE-Award)   Sebastian Scheinhardt (Paul-Crutzen-Award)			
10:30	Coffee, Poster & Exhibition			
University   Hall 1	University   Hall 2	University   Hall 8	Hall 7	
11:00	Analytical methods for trace analysis - 2	Open Topic	Isotope techniques and application - 1	Soils and bound residues
12:50	Lunch, Poster & Exhibition			
14:00	Fate and behavior of contaminants of emerging concern in the agricultural environment - 1	Current advances in environmental risk assessment of ionic organic chemicals - 1	Isotope techniques and application - 2	Biological effects of chemicals & Human exposure and toxicity - 1
15:50	Poster Coffee (2 <sup>nd</sup> Session)			
17:40 -18:45	Fate and behavior of contaminants of emerging concern in the agricultural environment - 2	Current advances in environmental risk assessment of ionic organic chemicals - 2	Atmosphere 1 Tropospheric multiphase and heterogeneous chemistry / 1	Biological effects of chemicals & Human exposure and toxicity - 2
20:00	Conference Dinner at the Moritzbastei			
Wednesday, 23 September 2015				
University Leipzig   Hall 3				
09:00	Plenary Keynote Hartmut Herrmann: Atmospheric chemistry: Recent findings in gas phase, aerosol and multiphase studies			
09:45	Coffee, Poster & Exhibition			
University   Hall 1	University   Hall 2	University   Hall 8		
10:20			Atmosphere 1 Tropospheric multiphase and heterogeneous chemistry / 2	
10:30	Water quality, wastewater treatment and reuse, drinking water 1	Microplastic		
12:10	Lunch, Poster & Exhibition			
13:30	Water quality, wastewater treatment and reuse, drinking water 2	Biodegradation of chemicals in natural and man-made ecosystems - 1	Publishing Session Atmosphere 2 Air pollution chemistry / 1	
15:20	Coffee, Poster & Exhibition			
15:45	Water quality, wastewater treatment and reuse, drinking water 3	Biodegradation of chemicals in natural and man-made ecosystems - 2	Atmosphere 2 Air pollution chemistry / 2	
University Leipzig   Hall 3				
17:15	Closing   Roland Kallenborn: Announcement of ICCE 2017 in Oslo			
Thursday, 24 September 2015				
Leipziger KUBUS   Hall 1 A	from Leipziger KUBUS	Meeting point: Leipziger KUBUS	from Leipzig Central Station	
09:00 - appr. 17:00	Satellite Event 3: High-resolution imaging and correlative analyses in life sciences down to sub nanometre scale	09:00-14:00 Technical Tour to Bitterfeld / Wolfen	10:00-11:00 Guided Tour of the Helmholtz Center for Environmental Research – UFZ	09:00-18:00 Excursion Dresden / Meissen

**Sunday, 20 September 2015**

Leipziger KUBUS   Hall 1A		Leipziger KUBUS   Hall 1B		Leipziger KUBUS   Hall 1CD		Leipziger KUBUS   Hall 2	
Satellite Event 4: Combining strategies and tools to identify priority chemicals in the environment		Satellite Event 1: Recent advancements in wastewater based epidemiology		SE 5: Unconventional gas and oil production employing hydraulic fracturing: Challenges for environmental and analytical chemistry		SE 2: The environmental and health challenges of E-Waste and its management: an emerging 21st century global concern	
13:00	Welcome and scope of the Satellite Event	13:30	Introduction to wastewater based epidemiology: novelty and advancements of the approach <i>Adrian Covaci, University of Antwerp, Belgium on behalf of Sara Castiglioni, Mario Negri Institute, Italy</i>	13:00	Welcome <i>Hans Hermann Richnow</i>	09:00	Welcome
13:10	Early identification of organic chemicals with a potential for long-term environmental contamination <i>Martin Scheringer</i>			13:05	Hydraulic Fracturing Chemicals Reported in Unconventional Gas Exploitation <i>Martin Elsner</i>	09:10	Keynote Speech: E-Waste; an opportunity for digital industry <i>Erkki Ormala</i>
13:30	Prioritizing chemicals of emerging concern (CEC): some approaches being used in Canada and the USA <i>Phillip H. Howard</i>	13:30	Flushing out Europe's drug habits over the past 5-years <i>Pim de Voogt, KWR, Netherlands</i>	13:30	Indications of Transformation Products from Hydraulic Fracturing Additives in Shale Gas Wastewater <i>Kathrin Hoelzer</i>	09:50	E-waste: Current Indian status and future prospective <i>Debashish Chatterjee</i>
13:50	The NORMAN prioritisation concept: achievements and future goals <i>Valeria Dulio</i>			13:50	Groundwater microbial communities response to simulated spills of hydraulic fracturing-related fluids <i>Nuri Jimenez</i>	10:15	The Environmental and Health effects of Electronic Waste generation and Management in Lagos, Nigeria <i>Seun Popoola</i>
14:10	Coffee break	14:00	Sewage-based epidemiology to track down the use of new psychoactive substances: challenges and pitfalls <i>Adrian Covaci, University of Antwerp, Belgium</i>	14:10	Evaluating fluid-rock interactions in black shales by using autoclave experiments <i>Andrea Vieth-Hillebrand</i>	10:40	Coffee Break
14:40	Effect-directed analysis with TLC in combination with non-target screening using HPLC-HRMS – A promising concept in environmental analysis to prioritize and identify contaminants			14:30	Coffee break	11:15	E-waste as a challenge for environmental governance. A criminological analysis <i>Lieselot Bisschop</i>
15:00	Using REACH registration data for the identification of persistent, mobile and toxic substances to protect raw water resources <i>Lena Vierke</i>			15:00	Fingerprinting and marker identification of fracking fluids in contaminated natural waters with ultra-high resolution mass spectrometry <i>Oliver Lechtenfeld</i>	11:40	Summary of morning session
15:20	Leg stretcher	14:50	Community Sensors for Monitoring Public Health using Wastewater-Based Epidemiology <i>Zhugen Yang, University of Bath, UK</i>	15:15	Groundwater monitoring during hydraulic fracturing: what can stable isotopes do? <i>Carsten Vogt</i>	12:00	Lunch
15:30	Round Table discussion	15:20	Wastewater-based epidemiology and future perspectives: testing urban water for community-wide public health assessment <i>Barbara Kasprzyk-Hordern, University of Bath, UK</i>	15:30	Coffee break	13:00	Roundtable Discussion/Q&A session
16:10	Concluding remarks			15:45	The Water Chemistry Society's Comment on the Draft Law What are the most prevalent scientific research gaps in addressing environmental impacts of hydraulic fracturing? <i>Martin Elsner</i>		
16:30	Shuttle bus from Leipziger KUBUS to University Leipzig	15:40	Roundtable Discussion	15:55	Is hydraulic fracturing a real ground water thread? Various opinions on shale gas explorations <i>Podium Discussion with Avner Vengosh, Martin Krüger / Nuria Jimenez / Hans H Richnow, xx</i>	14:00 -16:00	IUPAC task group inaugural meeting (for project team members)
		-16:10					
<b>University Leipzig   Neues Augusteum &amp; Audimax</b>							
17:00	<b>Opening Ceremony</b> <i>David Cole-Hamilton, President EuCheMS   Walter Giger, Past President DCE   Prof. Beate Schücking, Rector of University of Leipzig   Thorsten Reemtsma, Conference Chairman</i>						
17:30	<b>Plenary lecture</b> <b>An overview of the risks to water resources from unconventional energy exploration and hydraulic fracturing</b> <i>Avner Vengosh</i>						
18:15 -19:30	<b>Welcome Reception</b>						

Monday, 21 September 2015

University Leipzig | AUDIMAX

Welcome

09:00

Prof. Georg Teutsch, Scientific Director UFZ | Andreas Müller, City of Leipzig, First Deputy Mayor | Walter Giger, DCE

09:45

Plenary lecture: Water quality and the urban water cycle: Moving towards sustainable solutions  
Janet Hering - Eawag: Swiss Federal Institute of Aquatic Science and Technology, Duebendorf, Switzerland  
Chair: Martin Jekel

University Leipzig | Lecture Building

10:30 Coffee, Poster & Exhibition

	Lecture Building   Hall 1	Lecture Building   Hall 2	Lecture Building   Hall 8
	<b>Emerging contaminants - 1</b> Chairs: Ester Heath, Walter Giger	<b>Metals, metalloids and elemental speciation</b> Chairs: Heinz Rüdell, Sirpa H. Herve	<b>Chemical risk and regulatory issues</b> Chair: Adolf Eisenträger
11:00	Keynote lecture: Analysis of emerging organic substances in water, fish, and suspended particulate matter (SPM) in the Joint Danube Survey using solid-phase extraction followed by UHPLC-MS-MS and GC-MS analysis <u>Robert Loos</u> , Simona Tavazzi, Giulio Mariani, Gert Suurkuusk, Bruno Paracchini, Gunther Umlauf	Recommended analytical methods for global Mercury monitoring in marine environment <u>Emilia Vasileva-Veleva</u> , Sabine Azemard, Luis Carasco, Petko Mandjukov	Authorisation of chemicals under REACH: A multimedia stock-pollution approach to inform the socio-economic analysis of PBT/vPvB chemicals <u>Silke Gabbert</u> , Monika Nendza
11:30	Surfactants homologues profiling by non-target screening in sediment and Cladophora extract from freshwater river <u>Harry Byers</u> , Lisa Krauskopf, Martin Krauss, Mechthild Schmitt-Jansen, Werner Brack	Assessment of surface water monitoring data: application of biotic ligand model-based software applications to address the bioavailability of metals Heinz Ruedel	Screening and prioritization of chemicals for REACH: the Cumulative PBT index model in QSARINS <u>Paola Gramatica</u> , Stefano Cassani, Alessandro Sangion, Ester Papa
11:50	Simultaneous determination of BMAA, 2,4-DAB, Saxitoxin and neoSaxitoxin in water, using SPE HILIC-LC-MS/MS <u>Korina Manolidi</u> , Sevasti-Kyriaki Zervou, <u>Christophoros Christophoridis</u> , Triantafyllas Kaloudis, Theodoros Triantis, Anastasia Hiskia	Dynamic extraction using rotating coiled columns for studies on the fractionation and bioaccessibility of trace metals/metalloids in environmental solids <u>Elena Savonina</u> , Petr Fedotov	Pesticide field concentrations exceed FOCUS surface water predictions <u>Anja Knaebel</u> , Sebastian Stehle, Ralf B. Schäfer, Karsten Meyer, Jörg Rapp, Ralf Schulz
12:10	Contamination levels of selected emerging halogenated organic contaminants in marine shellfish along French coasts <u>Celine Tixier</u> , Nathalie Olivier, Karine Héas-Moisan, Charles Pollono, Bruno Veyrand, Philippe Marchand, Catherine Munsch	Development of a sequential extraction method to assess bioavailability of rare earth elements <u>Birgit Daus</u> , Marc Mittermüller, <u>Jessica Saatz</u>	Bridging across OECD 308 and 309 data in search of a robust transformation indicator <u>Mark Honti</u> , Kathrin Fenner, Thomas Junker, Dieter Hennecke, Stefan Hahn
12:30	Keynote lecture: Are nanopesticides a new class of emerging contaminants? <u>Thilo Hofmann</u> , Mélanie Kah	An innovative approach based on polymer inclusion membranes for the assessment of Zn bioavailability <u>Enriqueta Antico</u> , Clàudia Fontàs, Olga Serra, Ruben Vera, Gemma Mostazo	Biocidal active substances in households – all covered by the Biocidal Products Regulation? <u>Stefanie Wiek</u> , Oliver Olsson, Klaus Kümmerer

12:50 Lunch, Poster & Exhibition

	Emerging contaminants - 2	Nanomaterials: from characterization to risk assessment - 1	Multimedia partitioning, transport and modeling - 1
	Chairs: Sirpa Herve, Roland Kallenborn	Chair: Thilo Hofmann	Chair: Kai-Uwe Goss
14:00	Early identification of organic contaminants by a multimedia fate model and high resolution mass spectrometry <u>Aurea Chiaia-Hernandez</u> , Greta Stieger, Martin Scheringer, Thomas D. Bucheli, Armin Keller, Daniel Wächter, Juliane Hollender	The Risks of Manufactured Nanomaterials: A New Research Challenge for Environmental Chemistry <u>Danaïl Hristozov</u> , Elena Semenzin, <u>Antonio Marcomini</u>	Keynote lecture: Mapping toxicodynamic parameters in chemical space <u>Roman Ashauer</u>
14:30	Occurrence and fate of nitrosamines and benzotriazoles in recycled water used for managed aquifer recharge <u>Bradley Patterson</u> , M.D. Alotaibi, M.M. Pitoi, A.J. McKinley, A.Y. Reeder	Comparing fate and behavior of engineered and natural nanomaterials <u>Stephan Wagner</u> , Andreas Gondikas, Elisabeth Neubauer, Frank von der Kammer, Thilo Hofmann	3D-QSAR: a better tool for predicting partition coefficients influenced by molecular steric effects? <u>Lukas Linden</u> , Satoshi Endo, Kai-Uwe Goss
14:50	Monitoring emerging contaminants in wastewaters and the environment: The catchment approach <u>Bruce Petrie</u> , Barbara Kasprzyk-Hordern	Combined effects of nanomaterials and chemicals: interactions with regard to internalization and effects in environmental organisms <u>Dana Kühnel</u> , Steffi Böhme	On the relation between substrate inhibition and bioavailability limitations inside heterogenous environments <u>Mehdi Gharasoo</u> , Florian Centler, Lukas Wick, Martin Thullner
15:10	Bioavailability of anthropogenic gadolinium and other anthropogenic rare earth elements in surface waters <u>Gila Merschel</u> , Michael Bau	Measuring at relevant concentrations - Radiolabelling as a versatile tool for sensitive nanoparticle detection in complex systems <u>Heike Hildebrand</u> , Stefan Schymura, Uwe Holzwarth, Elena Bellido, Isaac Ojea-Jiménez, Matteo Dalmiglio, Giulio Cotogno, Neil Gibson,	Fragment Model to Predict the Rate of Hydrolysis for Organic Compounds <u>Ralph Kühne</u> , Ralf-Uwe Ebert, Gerrit Schüürmann
15:30	New insights in the Photolysis of Carbamazepine under environmentally relevant conditions by using a flow system on-line coupled to LC-HRMS <u>Cindy Weidauer</u> , Bettina Seiwert, Thorsten Reemtsma	Detection of engineered cerium oxide nanoparticles in soils using single particle ICP-TOF-MS <u>Antonia Praetorius</u> , Willi Fabienke, Alexander Gundlach-Graham, Jana Navratilova, Detlef Günther, Frank von der Kammer, Thilo Hofmann	Air-soil exchange of semi-volatile organic compounds in a central European receptor area: diurnal variations and influence of soil moisture and soil properties <u>Celine Degrendele</u> , Ondřej Audy, Jakub Hofman, Jiří Kučerík, Petr Kukučka, Marie D. Mulder, Krisztina Pinter, Petra Pfiylová, Roman Prokeš, Tatsiana Rusina, Milan Sánka, Gabriele E. Schaumann, Foppe Smedes, Gerhard Lammel

15:50 Coffee, Poster & Exhibition

	Analytical methods for trace analysis - 1	Nanomaterials: from characterization to risk assessment - 2	Multimedia partitioning, transport and modeling - 2
	Chairs: Silvia Lacorte, Willem de Lange	Chair: Thilo Hofmann	Chairs: Gerhard Lammel, Roland Kallenborn
16:15	Automated evaluation of LC-HRMS full scan data for the rapid characterization of surface water samples <u>Martin Krauss</u> , Christine Hug, Robert Bloch, Tobias Schulze, Werner Brack	Natural transformation of silver and cerium oxide nanoparticles and subsequent toxicological effects in aquatic environments <u>Christian Gagnon</u> , Audrey Bruneau, Patrice Turcotte, Martin Pilote, François Gagné	Polychlorinated Biphenyls in Switzerland – New Insights into their Transport and Deposition Processes <u>Juliane Glüge</u> , Christian Bogdal, Martin Scheringer, Konrad Hungerbühler
16:35	Applications of the all-ions approach for non-target screening of water contaminants by high resolution tandem mass spectrometry <u>Sylvain Merel</u> , Sascha Lege, Jorge Yanez, Christian Zwiener	Chronic exposure to engineered nanomaterials: sedimentation kinetics by Centrifugal Separation Analysis (CSA) <u>Andrea Brunelli</u> , Alex Zabeo, Elena Semenzin, Danaïl Hristozov, Antonio Marcomini	Limits of applicability of using the modified Bowen ratio to estimate gas fluxes of persistent organic pollutants <u>Damien Bolinius</u> , Annika Jahnke, Matthew MacLeod
16:55	Trends in Extraction of Chemical Information from N-Dimensional Analytical Strategies Applied to Atmospheric Aerosols <u>Armando C. Duarte</u> , João Matos, Sónia Lopes, Andrea Paula, Regina Duarte	Sorption of pesticides to natural and synthetic nanoparticles <u>Leyla Guluzada</u> , Stefan Haderlein	Airborne PAH transfer into soils – A comparison study in karstic mountain forests <u>Marion Carteret</u> , Liliane Savoye, Yves Perrette, Jérôme Poulenard, Emmanuel Malet, Philippe Fanget, Emmanuel Naffrechoux

17:15 Poster Social

-19:15 (Poster presentations of 1<sup>st</sup> Session: Emerging contaminants | Metals, metalloids and elemental speciation | Chemical risk and regulatory issues | Nanomaterials: from characterization to risk assessment | Multimedia partitioning, transport and modeling & Predicting compound properties and effects | Analytical methods for trace analysis | OpenTopic | Soils and bound residues | Isotope techniques and application)

Lecture Building | Hall 16

18:45 General Meeting  
Mitgliederversammlung der Fachgruppe Umweltchemie und Ökotoxikologie der GDCh

Tuesday, 22 September 2015

Lecture Building | Hall 3

Plenary lecture: Water sustainability and climate change

Jerald Schnoor - University of Iowa, Iowa City, USA

Chair: Fritz Frimmel

09:00

09:45

Award Ceremony: Prof. Karlheinz Ballschmiter (DCE-Award) | Sebastian Scheinhardt (Paul-Crutzen-Award)

10:30 Coffee, Poster & Exhibition

Lecture Building | Hall 1

Lecture Building | Hall 2

Lecture Building | Hall 8

Lecture Building | Hall 7

**Analytical methods for trace analysis - 2**  
Chairs: Philippe Garrigues, Martin Krauss

**Open Topic**  
Chair: Jan Triska

**Isotope techniques and application - 1**  
Chairs: Martin Elsner, Hans Hermann Richnow

**Soils and bound residues**  
Chairs: Andreas Schäffer, Christine Achten

**Keynote lecture: Thresholds in trace analysis**  
Silvia Lacorte

**Investigation on the catalytic activity of the red mud – industrial waste – in different model reactions**  
Tatjana Juzsakova, Akos Redey, Jozsef Nemeth, Viktor Sebestyen

**Keynote lecture: Current Challenges in Isotope Studies of Environmental Contaminants: Multielement Isotope Analysis and Investigations of Micropollutants**  
Martin Elsner

**Long-term monitoring of organic pollutants in soil: a conceptual approach to select chemicals potentially accumulating in soil**  
Daniel Wächter, Thomas Bucheli, Andreas Gubler, Armin Keller, Reto G. Meuli, Peter Schwab

**Enhanced Raman spectroscopy – a novel technique for versatile environmental gas analysis**  
Torsten Froesch, Anne Bachmann, Robert Keiner, Tobias Jochum, Jürgen Popp

**Nanoparticles-based sensors for detection of thiourea in hydrometallurgical operations**  
Maria Guadalupe Sanchez Loreda, Graciela Gonzalez, Fernando Battaglini, Ignacio Pedre, Gladis Labrada, Agustin Tashdjian

**Quantitative assessment of biodegradation in the subsurface using stable isotope analysis – theoretical assessment and reactive transport simulations**  
Martin Thullner, Falk Hejze, Florian Centler

**Assessment of the biological and chemical availability of the freshly spiked and aged DDE in soil by various approaches**  
Lucia Škulcová, Lucie Bielská, Natálie Neuwirthová, Jakub Hofman

**Possibilities of hybride quadrupole-orbital trap mass spectrometer for screening and identification of pharmaceuticals and their transformation products in soils and sediments**  
Roman Grabic, Olga Kaba, Oksana Golovka, Antonín Nikodem, Radka Kadešová

**Helium - abundant in the Universe, scarce on Earth. Take it or leave it?**  
Willem de Lange

**Protein-based stable isotope probing (protein-SIP) - bacteria dominate the short-term decomposition of 15N-labeled plant - overview on Proteomics**  
Robert Starke, Rene Kermer, Lynn Ullmann-Zeunert, Ian Baldwin, Jana Seifert, Felipe Bastida, Martin von Bergen, Nico Jehmlich

**Biogenic residue formation from pesticides in soil: extent and relevance for risk assessment**  
Karolina Nowak, Shizong Wang, Bettina Seiwert, Anja Miltner, Andreas Schäffer, Thorsten Reemtsma, Matthias Kästner

**Highly sensitive analysis of 67 polycyclic aromatic compounds in environmental samples by gas chromatography – atmospheric pressure laser ionization – mass spectrometry (GC-APLI-MS)**  
Sigrid Große Brinkhaus, Christine Achten

**Bacterial Cellulose Production by Komagataeibacter henselii using Algae-based Glucose**  
Huma Kurtoğlu Uzyol, Melek Turker Sacan

**Functional investigation of marine methylophilic communities by protein based stable isotope probing**  
Martin Taubert, Carolina Grob, Alexandra Howat, Oliver Burns, Yin Chen, Nico Jehmlich, Martin von Bergen, Collin Murrel

**Biogenic, non-extractable residues of pesticides**  
Claudia Paßberg, Burkhard Schmidt, Markus Telscher, Dieter Schäffer, Andreas Schäffer

**Environmental screening and monitoring for emerging pollutants by immunoanalytical methods**  
N. A. M. Abdelshafi, C. Y. Véliz Montes, P. Carl, C. Knizia, H. Hoffmann, S. Schmidt, S. A. Roquette, L. Oberleitner, S. Gärtner, Rudolf J. Schneider

**The benefits of pre-treating PCBs with DMSO for a high copper recovery by leaching with H2SO4**  
Marco António Eira Martins, Catarina Lopes Rodrigues, Maria Margarida Marques Ribeiro, Maria Teresa Sena Esteves

**Isotopic insights into the fate of anthropogenic micropollutants in aquatic environments**  
Bani Bakour, Stefanie Jucker, Börje Sellergren, Thomas Hofstetter

**Influence of metals on PAHs biodegradation processes in soils**  
Cristina Palet, Oriol Baltrons, Montserrat López-Mesas, Carmen Gutierrez, Florence Koltalo

12:50 Lunch, Poster & Exhibition

**Fate and behavior of contaminants of emerging concern in the agricultural environment - 1**  
Chairs: Benny Chefetz, Josep M Bayona

**Current advances in environmental risk assessment of ionic organic chemicals - 1**  
Chairs: Satoshi Endo, Steven Droge

**Isotope techniques and application - 2**  
Chairs: Martin Elsner, Hans Hermann Richnow

**Biological effects of chemicals & Human exposure and toxicity - 1**  
Chair: Rolf Altenburger

**Keynote lecture: Fate and behavior of pharmaceutical sulfonamide antibiotics in agricultural soils**  
Sören Thiele-Brun

**Keynote lecture: Sorption interactions of ionizable organic compounds in soil environment**  
Mikhail Borisover

**Carbon stable isotope analysis (CSIA) of sulfamethoxazole during biodegradation by Microbacterium sp. strain BR1 and direct photolysis – a new approach to monitor environmental fate of pharmaceuticals**  
Danuta Cichočka, Jan Birkigt, Tetyana Gilevska, Benjamin Ricken, Hans Hermann Richnow, Davide Vione, Ivonne Nijenhuis, Philippe F.-X. Corvini

**Keynote lecture: Human exposure to contaminants of emerging concern**  
Adrian Covaci

**Towards to standardization in the experimental set up for the uptake of emerging organic pollutants by crops under controlled conditions**  
Carles Hurtado, Carmen Dominguez, Núria Cañameras, Jordi Comas, Josep M Bayona

**Sorption of anionic, zwitterionic, and cationic per- and polyfluorinated alkyl substances to soil and sediment**  
Krista Barzen-Hanson, Markus Kleber, Jennifer Field

**Evaluation of brominated hydrocarbon transformation using dual C and Br compound specific isotope analysis**  
Kevin Kuntze, Angela Woods, Faina Gelman, Hans Hermann Richnow, Ivonne Nijenhuis

**Influence of climate change on transport, levels, and effects of contaminants in Northern areas**  
Pernilla Carlsson, Janet Pawlak, Lars-Otto Reiersen, Simon Wilson, Jesper H. Christensen, Katrine Borgå, Katrine Aspmo Pfoffhuber, Jon Øyvind Odland, Roland Kallenborn

**Irrigation of root vegetables with treated wastewater: Evaluating uptake translocation and metabolism of pharmaceuticals**  
Tomer Malchi, Yehoshua Maar, Moshe Shenker, Benny Chefetz

**Sorption of anionic and neutral species of organic acids to carbonaceous sorbents - mechanisms and prediction**  
Gabriel Sigmund, Thilo Hoffmann, Huichao Sun, Melanie Kah

**Hydrogen isotopic signature applied to determine the fate of polycyclic aromatic hydrocarbons in Mediterranean soils under climate change**  
Carme Audi-Miró, Montse Marquès, Montse Mari, Jordi Sierra, José L. Domingo, Martí Nadal Soler, Albert

**Linking exposure pathways to biomarkers of flame retardants**  
Georg Becher, Enrique Cequier, Cathrine Thomsen, Rosa Maria Marcé

**Polar pollutants and carbamazepine metabolites monitored in common vegetables irrigated with treated wastewater under field conditions**  
Christina Riemenschneider, Myah Goldstein, Marwan Al-Raggad, Bettina Seiwert, Monika Möder, Benny Chefetz, Elias Salameh, Thorsten Reemtsma

**Molecular dynamics modeling of herbicide adsorption by goethite: 4-chloro-2-methylphenoxyacetic acid (MCPA)**  
Michael Kersten, Daniel Tunega, Ivelina Georgieva

**Carbon and hydrogen compound-specific stable isotope analysis of organophosphorus pesticides for characterization of the degradation pathways in contaminated aquifers**  
Lanqiang Wu, Shujuan Lian, Steffen Kümmel, Anko Fischer, Morten Bondgaard, Anja Melve, Hans Hermann Richnow

**Saliva as a biomarker of arsenic exposure**  
Debashis Chatterjee, S. Bhowmick, D. Halder, J. Nriagu, M. Iglesias, J. Adhikari, D. Chatterjee

**Findings of antibiotics in groundwater under worst case criteria in the agricultural environment in Germany**  
Sebastian Zuehlke, Stephan Hannappel, Frederike Balzer

**Partitioning of ionic organic chemicals to proteins: Influences of solute molecular structure**  
Luise Henneberger, Kai-Uwe Goss, Satoshi Endo

**In situ microcosms and compound-specific stable isotope analysis (CSIA) for evaluating biodegradation of ethyl tert-butyl**  
Petra Bombach, Norbert Nägele, Mónica Rosell, Hans Hermann Richnow, Anko Fischer

**Analysis of oxidative stress biomarker 8-iso-prostaglandin F2α in wastewater by liquid chromatography-mass spectrometry coupled with immunoaffinity clean-up**  
Yeonsuk Ryu, Malcolm Reid, Kevin Thomas

Poster Coffee

15:50 (Poster presentations of 2<sup>nd</sup> Session: Fate and behavior of contaminants of emerging concern in the agricultural environment | Current advances in environmental risk assessment of ionic organic chemicals | Biological effects of chemicals & Human exposure and toxicity | Atmosphere 1 - Tropospheric Multiphase and Heterogeneous Chemistry | Water quality, wastewater treatment and reuse, drinking water | Microplastic | Biodegradation of chemicals in natural and man-made ecosystems | Atmosphere 2 - Air pollution chemistry)

**Fate and behavior of contaminants of emerging concern in the agricultural environment - 2**  
Chairs: Benny Chefetz, Josep M Bayona

**Current advances in environmental risk assessment of ionic organic chemicals - 2**  
Chairs: Satoshi Endo, Steven Droge

**Atmosphere 1 | Tropospheric multiphase and heterogeneous chemistry - 1**  
Chairs: Gerhard Lammel, Dominik van Pinxteren

**Biological effects of chemicals & Human exposure and toxicity - 2**  
Chair: Rolf Altenburger

**Evidence for the impact of sulfamethoxazole residues on denitrification rates in soil and formation of transformation products of concern**  
Serge Chiron, Céline Duwig, Sandra Perez

**Modeling frameworks for the prediction of the ecotoxicity of ionizable organic chemicals**  
Beate Escher, Ruben Abagyan, Kai Bittermann, Alistair Boxall, Bryan Brooks, Michelle Embry, Tala Henry, Hiroshi Yamamoto, Theodore Valenti

**Gas-particle partitioning of semivolatile polycyclic aromatic hydrocarbons in polluted and unpolluted air in central Europe and the Aegean: observation vs. model prediction**  
Pouya Shahpoury, Gerhard Lammel, Aysun Sofuoğlu, Yetkin Dumanoğlu, Linda Landlová, Marie D. Mulder, Petra Pfißlová, Roman Prokeš, Adela Holubová Šmejkalová, Sait Sofuoğlu, Milan Váňa

**A comprehensive LC-HRMS screening method to investigate biotransformation of polar chemicals in zebrafish embryos (Danio rerio) - clofibrac acid as an example**  
Bettina Seiwert, Stephan Brox, Nora Haase, Eberhard Küster, Thorsten Reemtsma

**Microbial quality of treated wastewater for agricultural reuse in Apulia region (Italy)**  
Nicola Montemurro, Vita Locasella, Antonio Lonigro

**Sampling ionized pharmaceuticals in protein binding assays using C18-based SPME coatings**  
Hester Peltenburg, Steven Droge, Ingrid Bosman, Joop Hermens

**Iminium-catalysed hydrolysis of epoxides by NH4+ in water: importance for atmospheric and green chemistry**  
Aurelia Maxut, Barbara Nozière, Bernard Fenet, Ludovic Fine, Corinne Ferronato

**Effects of imidacloprid on detoxifying enzyme glutathione S-transferase**  
Panwad Sillapawattana, Burkhard Schmidt, Andreas Schäffer

**Steroid conjugates in New Zealand's dairy environment – is there a risk?**  
Ajit K Sarmah

**Processes related to ADME (absorption, distribution, metabolism, excretion) as determinants of chemical uptake and toxicity in zebrafish embryos**  
Till Luckenbach, Eberhard Küster

**Radical production from photosensitization of imidazoles**  
Pablo Corral-Arroyo, Laura González, Sarah Steimer, Rainer Volkamer, Thorsten Bartels-Rausch, Markus Ammann

**New insights into developmental neurotoxic effects in zebrafish at protein level using Tandem Mass Tags®**  
Jessica Legardi, Stephan Jung, Vadim Farztdinov, Saša Končarević, Karsten Kuhn, Stefan Selzer, Pim Leonards, Juliette Geiler

20:00 Conference Dinner at the Moritzbastei

Wednesday, 23 September 2015

University Leipzig | Lecture Building | Hall 3

Plenary lecture: Atmospheric chemistry: Recent findings in gas phase, aerosol and multiphase studies  
Hartmut Herrmann - Leibniz Institute for Tropospheric Research, Leipzig, Germany  
Chair: Gerhard Lammler

09:00

09:45 Coffee, Poster & Exhibition

Hall 1 Hall 2 Hall 8

Hall 1		Hall 2		Hall 8	
<b>Water quality, wastewater treatment and reuse, drinking water 1</b> Chair: Fritz Frimmel		<b>Microplastic</b> Chair: Thomas Knepper		<b>Atmosphere 1   Tropospheric multiphase and heterogeneous chemistry - 2</b> Chairs: Constantini Samara, Gerhard Lammler	
10:20		10:20			
10:30	<b>Identification of direct and indirect industrial dischargers as dominating sources of 1,4-dioxane in German rivers</b> <i>Ursula Kargus, Wilhelm Püttmann, Christian Frankenbach</i>	<b>Analysis of microplastic in environmental samples using thermal analytical methods</b> <i>Ulrike Braun, Eric Duemichen, Anne-Kathrin Barthel, Heinz Sturm, Claus G. Bannick, Kathrin Brand, Martin Jekel</i>		<b>Cloud chemistry during the HCCT-2010 hill cap cloud experiment</b> <i>Dominik van Pinxteren, Kanneh Wadinga Fomba, Konrad Müller, Gerald Spindler, Stephan Mertes, Johannes Schneider, Taehyoung Lee, Jeff Collett, Hartmut Herrmann</i>	
10:50	<b>Chemical and toxicological screening of the Danube river using mobile passive sampling</b> <i>Branislav Vrana, Foppe Smedes, Tatsiana Rusina, Krzysztof Okonski, Ian Allan, Klara Hilscherova, Jiri Novak, Peter Tarabek, Roman Grabic, Jaroslav Slobodnik</i>	<b>Microplastic in urban sources and receiving water within an urban area</b> <i>Rachid Dris, Johnny Gasperi, Cecile Mirande, Mohamed Saad, Vincent Rocher, Alain Rabier, Bruno Tassin</i>		<b>Online coupled meteorology-chemistry modelling: Current status and case studies</b> <i>Renate Forkel, A. Baklanov, A. Balzarini, D. Brunner, M. Hirtl, L. Hanzak, P. Jiménez-Guerrero, O. Jorba, J.L. Pérez, R. San José, W. Schröder, J. Werhahn, R. Wolke, R. Zbikar</i>	
11:10	<b>Anthropogenic influences on dissolved organic matter from drinking water reservoirs in Central Germany</b> <i>Julia Raake, Marieke Oosterwoud, Bettina Seiwert, Katrin Bornmann, Oliver Lechtenfeld, Thorsten Reemtsma</i>	<b>Microplastic as potential environmentally relevant sorbents for organic contaminants</b> <i>Thorsten Hüffer, Thilo Hofmann</i>		<b>Modelling of the tropospheric non-radical aqueous phase chemistry of organic carbonyl compounds and acids</b> <i>Andreas Tilgner, Erik Hans Hoffmann, Luisa Schöne, Ralf Wolke, Hartmut Herrmann</i>	
11:30	<b>Adsorption of trifluralin, alachlor and atrazine from different water matrices onto powdered activated carbons (PACs)</b> <i>Anita Leovac-Macerak, Ivana Ivanec-Tumbas, Djurdja Kerkez, Jelena Molnar-Jazic, Minja Bogunovic</i>	<b>First overview of microplastics in indoor and outdoor air</b> <i>Johnny Gasperi, Rachid Dris, Cécile Mirande, Corinne Mandin, Valérie Langlois, Bruno Tassin</i>		<b>Towards an advanced description and modelling of the multiphase DMS chemistry: CAPRAM DMS module 1.0</b> <i>Erik Hans Hoffmann, Andreas Tilgner, Roland Schrödner, Ralf Wolke, Hartmut Herrmann</i>	
11:50	<b>Treatability of cyanotoxins (microcystins and cylindrospermopsin) using UV and UV/H2O2 processes</b> <i>Xuexiang He, Armah de la Cruz, Dionysios Dionysiou</i>	<b>Experimental and modeling studies of the influence of ingestion of microplastics on bioaccumulation of hydrophobic organic chemicals by fish</b> <i>Margaretha Adolfsson-Erici, Christoph Rummel, Matthew MacLeod</i>		<b>Degradation of pesticides in the atmosphere: direct photolysis, photo-oxidation and reaction with ozone</b> <i>Amalia Munoz, Esther Borrás, Teresa Vera, Milagros Ródenas</i>	
12:10	Lunch, Poster & Exhibition			<b>Publishing Session: "Past, presence and future of publishing in environmental sciences" (Roundtable Discussion)</b> Moderators: Walter Giger, Gerhard Lammler Panel members: Philippe Garrigues, Jerald Schnoor, Ulrich Pöschl	
<b>Water quality, wastewater treatment and reuse, drinking water 2</b> Chair: Dionysios Dionysiou		<b>Biodegradation of chemicals in natural and man-made ecosystems - 1</b> Chairs: Lukas Y. Wick, Hans Hermann Richnow		<b>Atmosphere 2   Air pollution chemistry - 1</b> Chairs: Hartmut Herrmann, Pérola Vasconcellos	
13:40	<b>Two approaches for fluoride removal from natural waters: adsorption on a new titanium oxide material and transport through a polymer inclusion membrane</b> <i>Claudia Fontas, Enriqueta Anticó</i>	<b>Keynote lecture: Design and use of bacterial bioreporters for measuring organic pollution and their degradation</b> <i>J.R. van der Meer</i>		<b>Keynote lecture: Characterization of Organic Aerosol Composition with Ultra-High Resolution Mass Spectrometry Techniques</b> <i>Markus Kalberer</i>	
14:00	<b>Drinking water contamination with perfluoroalkyl acids – Source tracking, distribution modeling and influence on concentrations in human serum</b> <i>Urs Berger, Irina Gyllenhammar, Maria Sundström, Philip McCleaf, Karin Eurén, Sara Eriksson, Sven Ahlgren, Sanna Lignell, Marie Aune, Natalia Kotova, Anders Glynn</i>	<b>Mechanisms and causative agents of amine biotransformation in activated sludge</b> <i>Rebekka Gulde, Yujie Men, Stefan Achermann, Kathrin Fenner</i>		<b>Unravelling the chemiodiversity of organic matter in atmospheric aerosols: contribution from CN-linkAIR and ORGANOSOL projects</b> <i>Regina Duarte, Sônia Lopes, Andreia Paula, João Matos, Armando Duarte</i>	
14:20	<b>Transformation of carbamazepine in the presence of zero valent iron and adapted biology</b> <i>Anne Köniq, Martin Jekel</i>	<b>Modelling bacterial degradation after disturbances</b> <i>Sara Köniq, Anja Warrich, Thomas Banitz, Florian Centler, Karin Frank, Matthias Kästner, Anja Miltner, Lukas Wick, Martin Thullner</i>		<b>Aerosol Composition in Three South American Cities</b> <i>Pérola Vasconcellos, Guilherme Pereira, Sandra Soares, Sofia Caumo, Nilmara Alves, Willy Maenhaut, Magda Claeys, Risto Hillamo, Kimmo Teinila, Odan Sanchez-Coaylo, Nestor Rojas</i>	
14:40	<b>PDMS-embedded palladium nanocatalysts for water treatment</b> <i>Daniele Comandella, Katrin Mackenzie, Frank-Dieter Kopinke</i>	<b>Reactome-based encoding of microbial communities and their application to contaminant biotransformation prediction</b> <i>Diogo Latino, Kathrin Fenner</i>		<b>Study of biomarkers and nitro-organic compounds from sugarcane burning in atmospheric samples collected in São Paulo in 2012 and 2013</b> <i>Sofia Caumo, Pérola Vasconcellos, Magda Claeys, Willy Maenhaut</i>	
15:00	<b>Activated carbon enhancement with covalent organic polymers: An innovative material for application in water purification and carbon dioxide capture</b> <i>Paul Mines, Damien Thirion, Basil Uthuppu, Yuhoon Hwang, Mogens Jakobsen, Henrik Andersen, Cafer Yavuz</i>	<b>Enantiomeric fractionation of metoprolol and its major transformation products for quantitative biodegradation measurement and elucidation of biodegradation mechanisms</b> <i>Marine Soucier, Dale Benali-Raclot, Claude Casellas, Valérie Ingrand, Serge Chiron</i>		<b>Second Order Rate Constants for the Gas Phase Reactions of Cyclic (D3-D5) and Linear (L2-L4) Siloxanes with Hydroxyl Radicals Measured using a Relative Rate Method</b> <i>Ian Zammit, Ruiyang Xiao, Amelie Kierkegaard, Matthew MacLeod</i>	
15:20	Coffee, Poster & Exhibition				
<b>Water quality, wastewater treatment and reuse, drinking water 3</b> Chair: Martin Jekel		<b>Biodegradation of chemicals in natural and man-made ecosystems - 2</b> Chairs: Lukas Y. Wick, Hans Hermann Richnow		<b>Atmosphere 2   Air pollution chemistry - 2</b> Chairs: Pérola Vasconcellos, Hartmut Herrmann	
15:45	<b>Cyclophosphamide and ifosfamide residues in aqueous environment: occurrence, treatment and toxicity</b> <i>Marjeta Cesen, Tina Kosjek, Francesco Busetti, Ester Heath</i>	<b>The behavior of uptake and decomposition of the herbicide propanil in plant <i>Bidens pilosa</i> L. dominating in the Yangtze Three Gorges Reservoir (TGR), China</b> <i>Zhongli Chen, Burkhard Schmidt, Andreas Schäffler</i>		<b>Long-range atmospheric transport and transformation of PAHs, PCBs and PBDEs over the Aegean in summer 2012</b> <i>Mariëlle Mulder, Johannes Bieser, Yetkin Dumanoglu, Christos Efsthathiou, Kostas Eleftheriadis, Aristeidis K. Georgoulas, Petr Kukucka, Hana Liskova, Jana Matejovicova, Petra Pribylava, Roman Prokes, Aysun Sofuoglu, Sait Sofuoglu, Vassiliki Vassilatou, Gerhard Lammler</i>	
16:05	<b>Applying the sunlight to pharmaceuticals removal from aquaculture's waters</b> <i>Joana F. Leal, Valdemar I. Esteves, Eduarda B.H. Santos</i>	<b>Microbial based remediation of oil spill &amp; oily sludge: A sustainable approach for environmental protection from oil contaminants!</b> <i>Banwari Lal, Sanjukta Subudhi</i>		<b>Air-sea exchange in the Aegean Sea 2012: Vertical fluxes of PAHs and halogenated semivolatile organic compounds</b> <i>G. Lammler, C. Efsthathiou, P. Kukučka, F.X. Meixner, P. Pribylava, R. Prokeš, T.P. Rusina, G.Z. Song, B. Vrana</i>	
16:25	<b>Removal of selected antibiotics and antiretroviral drugs from water by ozonation and ozone-based AOPs</b> <i>Alexey Ignatev, Elijah Ngumba, Paivi Kosunen, Tuula Tuhanen</i>	<b>Dispersal of degrading bacteria impedes outgassing of organic contaminants</b> <i>Sally Otto, Thomas Banitz, Karin Johst, Thomas Hübschmann, Hauke Harms, Lukas Y. Wick</i>		<b>Soil-air exchange and source of persistent organic pollutants (POPs) in Kaidu-Peacock River system in Xinjiang, Northwest of China</b> <i>Wei Chen, Shihua Qi, Fei Peng, Chengkai Qu, Xinli Xing</i>	
16:45	<b>Contamination of various types of Parisian sewage sludges by a wide range of priority and emerging micropollutants</b> <i>Romain Mailler, Johnny Gasperi, Dominique Patureau, Emmanuelle Vuillet, Steven Deshayes, Sabrina Guérin, Régis Moilleron, Ghassan Chehbou, Vincent Rocher</i>			<b>PAHs and PCBs fluxes at the air-water interface in a high altitude mountain lake: Muzelle, France</b> <i>Johanna Marçais, Junior professor Christine Piot, Philippe Fanget, Nathalie Cottin, Prof. Emmanuel Naffrechoux, Prof. Jean-Luc Besombes</i>	
University Leipzig   Lecture Building   Hall 3					
17:15	Closing   Roland Kallenborn: Announcement of ICCE 2017 in Oslo   Thorsten Reemtsma, Conference Chairman   Willem de Lange, DCE				

Thursday, 24 September 2015

Leipziger KUBUS   Hall 1A		Leipziger KUBUS   Meeting Point: Lobby		Leipziger KUBUS   Meeting Point: Lobby		Meeting Point: Leipzig Central Station	
Satellite Event 3: High-resolution imaging and correlative analyses in life sciences down to sub nanometre scale		Technical Excursion to the chemical park Bitterfeld / Wolfen		Guided Tour of the Helmholtz Center for Environmental Research – UFZ		Excursion to Dresden / Meissen	
09:00	Welcome	09:00	Departure from the Leipziger KUBUS	10:00 -11:00	Start of the Guided Tour Meeting Point: Lobby of the Leipziger KUBUS	09:00	Departure by bus from Leipzig Hauptbahnhof
09:10	Fluorescence in situ hybridization of microorganisms in the age of super-resolution microscopy <i>Cristina Moraru</i>	10:00	Visit of of IFM-Industrie- und Filmmuseum Wolfen (Industry and Film Museum Wolfen)			10:30	Guided Tour in the Porcelain Manufacture Meissen
09:35	Correlated fluorescence and multi-isotope high-resolution imaging <i>Silvio Rizzoli</i>		Lecture presentation by Dr. Polk (Managing Director of the Chemical Park)			12:30	Lunch in the Café Meissen
10:00	Coffee & Posters		Lecture presentation by Uwe Holz (Director of the IFM)			14:00	Continuation of the journey to Dresden
10:45	Stable isotope resonance Raman microspectroscopic and SERS analysis of microorganisms at single cell level <i>Patrick Kubryk</i>	11:30	Transfer by bus to Bayer Bitterfeld GmbH			10:40	Guided City Walk Dresden
11:10	Surface Enhanced Confocal Raman Microscopy of Electroactive Biofilms <i>Gal Schkolnik</i>	12:00	Visit of the Bayer Bitterfeld GmbH			17:00	Return by bus to Leipzig Central Station
11:35	Raman-analysis of stable isotope labelled organic substances in soil for improving the water holding capacity <i>Alexandra Wiesheu</i>	13:15	Return by bus to Leipziger KUBUS (arrival appr. at 14:00)				
12:00	Lunch						
13:00	Helium Ion Microscopy. Extending the frontiers of nanotechnology <i>Peter Gnauck</i>						
13:25	Mass Spectrometric Imaging by MALDI for the Analysis of Proteins and Metabolites in Tissue <i>Sören-Oliver Deininger</i>						
13:50	Coffee & ProVIS lab visit						
14:20	High Resolution Characterization of Recent and Ancient Microbial Systems using ToF-SIMS <i>Christine Heim</i>						
14:45	Microscale complexity of a permafrost soil evaluated by combining NanoSIMS and VIS-NIR spectrometry <i>Carsten Mueller</i>						
15:10	Speciation of nitrogen bearing species using negative and positive secondary ion spectra with Nano Secondary Ion Mass Spectrometry <i>Kexue Li</i>						
15:35	Application of nanoSIMS-based, high-resolution chemical imaging for the identification of anaerobic hydrocarbon-degrading microorganisms <i>Florin Musat</i>						
16:00	Closing remarks						
16:15 - open end	Lab demo -MALDI imaging and ProVis lab visits						