Lecture Programme

Thursday, May 28, 2018  
Seminar Rooms W427/W428

12:00 - 13:00  Registration and Welcome Reception

13:00 - 13:45  Uwe Karst, University of Münster/Münster, Germany  
Electrogenerated reactive metabolites: Can we predict toxicity and allergen formation?

13:45 - 14:10  Floris van den Brink, University of Twente/Enschede, The Netherlands  
Microfluidic electrochemical chips for drug screening

14:10 - 14:35  Miina Ruokolainen, University of Helsinki/Helsinki, Finland  
Comparison of titanium dioxide photocatalysis, electrochemical reactions and electrochemically assisted Fenton reaction for imitation of phase I metabolism reactions

14:35 – 15:00  Maria Viehoff, University of Münster/Münster, Germany  
Simulation of oxidative transformation processes of iodine-based contrast agents

15:00 - 16:00  Coffee Break / Exhibition / Poster Session

16:00 – 16:25  Maria Fedorova, University of Leipzig/Leipzig, Germany  
Application of electrochemistry coupled to mass spectrometry in lipid oxidation research

16:25 – 16:50  Tina Wigger, University of Münster/Münster, Germany  
Electrochemistry coupled to LC/MS for the identification and characterization of reactive PAH metabolites and their protein adducts

16:50 – 17:00  Coffee Break

17:00 - 18:00  Panel Discussion  
The future of electrochemistry/mass spectrometry

18:00 - 21:00  Workshop Barbecue
0900 – 0925 Ulrik Jurva, AstraZeneca/Mölndal, Sweden

Use of electrochemical oxidation and model peptides to study nucleophilic biological targets of reactive metabolites: The case of rimonabant

0925 – 0950 Lars Büter, University of Münster/Münster, Germany

Differential labelling of cysteine residues in proteins based on electrochemically generated reactive species

0950 – 1015 Günther Weber, Leibniz Institute for Analytical Sciences – ISAS - e.V./Dortmund, Germany

EC-MS for monitoring oxidation mechanism(s) of sulfur containing ligands, as influenced by cisplatin binding

1015 – 1040 Bettina Seiwert, Helmholtz Centre for Environmental Reasearch – UFZ/Leipzig, Germany

Elucidation of transformation pathways of contaminants in biota by electrochemistry – a case study of carbamazepine in a white rot fungus

1040 – 1105 Ugo Bussy, Michigan State University/East Lansing, MI, USA

Electrochemistry enabled quantitative assay of the reductive metabolism of a pesticide in fish by liquid chromatography tandem mass spectrometry (LC-MS/MS)

1105 – 1135 Coffee Break / Exhibition / Poster Session

1135 – 1200 Turan Gül, University of Groningen/Groningen, The Netherlands

Challenges in preparative electrosynthesis of drug metabolites

1200 – 1225 Lisa Frensemeier, University of Münster/Münster, Germany

Electrochemistry coupled to HILIC/ESI-MS and HILIC/ICP-MS for investigating the oxidative transformation of roxarsone

1225 – 1250 Laurent Rieux, Antec/Zoeterwoude, The Netherlands

Electrochemical reduction of disulfide bonds in protein therapeutics

1250 – 1315 Przemyslaw Mielczarek, AGH University of Science and Technology/Cracow, Poland

Electrochemical oxidation of psychoactive compounds with mass spectrometric detection
1315 – 1340  
Renaud Boisseau, University of Nantes/Nantes, France

*In situ ultrafast 2D NMR spectroelectrochemistry for real-time monitoring of redox reactions*

1340 - 1500  Lunch (Seminar Room W328)