

Characterisation of hazardous chemical contamination – from environmental chemistry and toxicology to risk assessment

Final Programme

| Time | Speaker | Lecture type | Title |
|---|---|--------------------------------|---|
| Sep 23, Thursday | | | |
| 16:00 | Registration | | |
| 18:30 | Marijan Ahel (RBI, Zagreb, Croatia) Knut Erik Tollefsen (NIVA, Oslo, Norway) | Welcome note by the organizers | |
| 18:45 | Werner Brack (UfZ, Leipzig, Germany) | Welcome reception talk | <i>Integrated assessment of complex environmental contamination – The example of contaminated sediments</i> |
| 19:30 | <i>Welcome reception</i> | | |
| Sep 24, Friday morning | | | |
| Section 1. - Chemical identification of environmental contaminants and their transformation products | | | |
| <i>Session chairs: Marijan Ahel and Juliane Hollender</i> | | | |
| 9:00 | Juliane Hollender (Eawag, Dübendorf, Switzerland) | Plenary lecture | <i>Target and nontarget screening of micropollutants and their transformations products in the aquatic environment by high resolution mass spectrometry</i> |



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| 9:45 | Mira Petrović (IDAEA-CSIC, Barcelona, Spain) | Plenary lecture | <i>Advantages and pitfalls of tandem and hybrid LC-MS analysis of emerging contaminants in environmental samples</i> |
| 10:30 <i>Coffee break</i> | | | |
| 11:00 | Ton van Leerdam (KWR Institute, Nieuwegein, Netherlands) | Platform | <i>High Resolution Mass Spectrometric Identification and Quantification of Glucocorticoid Compounds in Various Wastewaters in The Netherlands</i> |
| 11:25 | Sara Castiglioni ("Mario Negri" Institute, Milan, Italy) | Platform | <i>Identification of different classes of therapeutic and illicit drugs in waste and surface water by LC-MS/MS</i> |
| 11:50 | Meritxell Gros (ICRA, Girona, Spain) | Platform | <i>Ultrapformance liquid Chromatography-Quadrupole-linear ion trap-mass spectrometry (UPLC-QqLIT) as a fast and powerful tool for the determination of pharmaceuticals in environmental samples</i> |
| 12:15 | Miroslav Šober (University of Sarajevo, Sarajevo Bosnia and Herzegovina) | Platform | <i>Occurrence of persistent organic pollutants (POPs) in rivers in Bosnia and Herzegovina</i> |
| 12:40 <i>Lunch</i> | | | |

Sep 24, Friday afternoon

Section 2. - Ecotoxicology of classical vs. emerging contaminants

Session chairs: Knut Erik Tollefsen and Tvrtko Smital

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| 14:30 | Karl Fent (ETHZ, Zürich, Switzerland) | Plenary lecture | <i>Personal care products and pharmaceuticals in the environment: Linking gene expression analysis with physiological effects in fish</i> |
| 15:15 | Knut Erik Tollefsen (NIVA, Oslo, Norway) | Platform | <i>In vitro bioassays for toxicity screening of single chemicals, complex mixtures and environmental samples</i> |



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| 15:50 | Tvrtko Smital (RBI, Zagreb, Croatia) | Platform | <i>Bioassay toolbox for identification of hazardous contaminants in the Sava River basin</i> |
| 16:25 | <i>Coffee break</i> | | |
| 16:45 | Brian Quinn (ICET, Galway, Ireland) | Platform | <i>Development and use of in vitro methods to investigate the acute and chronic toxicity of emerging contaminants and their mixtures on the freshwater bivalve <i>Driessena polymorpha</i></i> |
| 17:10 | Roko Žaja (RBI, Zagreb, Croatia) | Platform | <i>PLHC-1/dox cell line as model for identification of substrates and inhibitors of fish P-glycoprotein (abcb1) in aquatic environment</i> |
| 17:35 | Mirna Velki (University of Osijek, Osijek, Croatia) | Platform | <i>Effect of organophosphates malathion and temephos on cholinesterase activity in the earthworm <i>Eisenia fetida</i> (<i>Oligochaeta, Lumbricidae</i>)</i> |
| 19:30 | <i>Workshop dinner</i> | | |

Sep 25, Saturday morning

Section 3. - Risk assessment of emerging chemical contaminants, toxicology and ecotoxicology of chemical mixtures

Session chairs: Karl Fent and Werner Brack

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| 9:00 | Thomas Backhaus (University of Gothenburg, Göteborg, Sweden) | Plenary lecture | <i>Prediction and assessment of the ""cocktail effect"" of chemical mixtures: state of the art and future challenges</i> |
| 9:45 | Senka Terzić (RBI, Zagreb, Croatia) | Platform | <i>Illegal drugs and therapeutic opiates in the wastewaters of the city of Zagreb – estimation of collective consumption and comparison with epidemiological data</i> |



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| 10:10 | Sanja Pelko (University of Zagreb, Zagreb, Croatia) | Platform | <i>Aqueous photodegradation and toxicity of anthelmintic pyrantel embonate</i> |
| 10:35 | <i>Coffee break</i> | | |
| Section 4. - Effect-Directed Analysis (EDA) | | | |
| <i>Session chairs: Kevin V. Thomas and Mira Petrović</i> | | | |
| 11:00 | Kevin V. Thomas (NIVA, Oslo, Norway) | Plenary lecture | <i>Effects-directed identification of emerging contaminants in aquatic and other systems</i> |
| 11:45 | Marijan Ahel (RBI, Zagreb, Croatia) | Platform | <i>Prioritization of hazardous chemical contaminants in the Sava River basin using EDA approach</i> |
| 12:20 | <i>Lunch</i> | | |
| 14:00 | Corine J. Houtman (The Water Laboratory, Haarlem The Netherlands) | Platform | <i>Analytical approaches for the investigation of emerging contaminants in sources for drinking water production</i> |
| 14:25 | Radmila Kovačević (University of Novi Sad, Novi Sad, Serbia) | Platform | <i>Effect-directed analysis of contaminated sediment from the wastewater canal in Pancevo industrial area, Serbia</i> |
| 14:50 | Martine Muusse (NIVA, Oslo, Norway) | Platform | <i>Effect directed analysis of dioxin-like compounds in road-side snow</i> |
| 15:15 | <i>Concluding remarks - end of the workshop</i> | | |

