ASMS Environmental Applications Working Group – Workshop Report 2016

Environmental Analysis: Emerging Topics

This year's workshop was particularly well attended (~140 attendees), and focused on high resolution mass spectrometry solutions for complex environmental matrices. Each of our three invited discussion leaders gave a 5-10 minute informal synopsis, followed by questions and discussion. Their topics were; "Characterization of Fracking Fluids" (Mike Thurman U of CO), "Petroleomics of Naphthenic Acids" (Mark Barrow, Warwick University), and "Non-Targeted Water Contaminant Analysis" (Heinz Singer, EAWAG). In addition to HRMS analysis, Mike Thurman also included a nice perspective of all entities affected by the storage and disposal of fracking waste waters, and discussions regarding the availability of custom spectral libraries. Mark Barrow focused on the effects of different ionization strategies and their impacts on detectable contaminants by HRMS, including strategies for visualization of the complex data sets. Heinz Singer gave an overview on the state-of-the art of non-targeted analysis with particular emphasis on data handling and showing applications on surface water quality.

Following the workshop, a portion of the group (34) continued lively discussions at our annual working group dinner on the San Antonio river walk.

In September we will survey the Environmental Applications interest group members for format and topic suggestions for next year. Two early suggestions are; direct and non-direct sampling techniques for environmental analysis and new instrumental approaches for environmental analysis.

If you have any suggestions for next years workshop, either topics or speakers please send them to either Marc Engel (marceengel@gmail.com) or Achille Capiello (achille.cappiello@uniurb.it)

Sincerely,

Achille Cappiello, Marc Engel and Chris Gill

Co- Chairs, ASMS Environmental Applications Interest Group

Not for publication

We had about 140 attendees at workshop. Each speaker gave a 5-10 minute informal presentation followed by lively discussions. The discussion period for each speaker was easily filled by questions and comments.

The working group has found a 3 person, three year rotation is effective in carrying forward the group activities. It is the end of Chris Gill's term as a co-chair, and it was announced at the workshop that we are recommending Dr. Imma Ferrer as the next co-chair replacement.

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