

Workshop Report for the FTMS Interest Group, ASMS 2013

This year's FTMS Workshop was presided over by Amy McKenna (chair) and Franklin Leach (co-chair). This workshop occurred from 5:45 – 7:00 on Wednesday, June 11st in Minneapolis, MN. The workshop this year was well attended, filling the room assigned to us with an estimated 50-100 attendees. The format of this year's workshop was the presentation of four short oral presentations, with ample time remaining for discussion and questions.

Our first presentation was by Konstantin Zhurov from the Tsybin lab of EPFL, Lausanne, Switzerland. Konstantin presented data from several on the variation of noise cutoff levels for complex organic mixtures by FTMS. This presentation was followed by a lively discussion of the methodology and statistical data in support of standardization of baseline RMS noise levels. Our second presentation was by Julia Laskin from the Pacific Northwest National Laboratory. Dr. Laskin gave a brief explanation of the chemical analysis of atmospheric secondary organic aerosols using FTMS. Questions followed regarding the experimental design and need for advanced FTMS for aerosol samples. Our third presentation was given by Melissa Soule from the Department of Marine Chemistry and Geochemistry at Woods Hole Oceanographic Institution. Melissa presented analytical merits and challenges associated with dissolved organic matter (DOM) characterization by FT-ICR MS at 7 Tesla. Our final talk was given by Pengxiang Yang of Thermo Fisher Scientific Inc. Dr. Yang presented the methodology and applicability of Orbitrap MS coupled to reversed-phase liquid chromatography for characterization of produced water. Following a discussion on the limitations of Orbitrap for complex petroleum samples, especially weathered oil, and some brief questions, the meeting was adjourned by chair Amy McKenna.