

2014 ASMS Polymeric Materials Interest Group Workshop Summary Report

Wednesday June 18, 2014 5:45pm to 7:00pm

62st ASMS Conference, June 15-19, 2014, Baltimore, MD

Chairperson: William J. Erb, Bausch and Lomb, Inc. (Rochester, NY)

Co-Chairperson: Gyory Vas, Intertek

Workshop Title: Advancement and Discussion of Mass Spectrometry Technology and Challenges within the Polymer and Material Fields

Introduction:

The attendance at this year's workshop was estimated at 40-55 attendees. In the conference this year, there was one polymer related poster session. The polymer poster session contained 20 submissions, but there were additional polymer related posters observed during the week at other topic sessions.

The agenda for the interest group meeting included the following topics:

General announcements

ASMS discussion items

Discussion of new MS capabilities and their application toward polymers/materials

General Announcements and Business Related Topics:

A discussion of next year's ASMS polymer oral session started with discussion of a future Oral session. The suggestion is to have a Polymer and Material oral session that focuses on the broad range of applications and to generalize the title to increase scope and submissions for talks. A few suggestions were made for potential oral session topics. Attendees were encouraged to submit any additional topic suggestions to William Erb (chemguy23@gmail.com). Additionally a new co-chair is sought to join Gyorgy Vas at next years workshop.

Discussion of Polymer MS capabilities:

Ahlam Alalwiat gave a presentation on polymer-peptide hybrid material. She used MALDI and ESI MS and MS/MS as well as IM-MS to characterize a dendritic polymer conjugated with two different bioactive peptides, one facilitating attachment to bone and the other promoting bone tissue growth.

Additional discussion focused on the need to better understanding of polymer additives and challenges with the variability of commercially available material. Additionally there was much interest in developing a general discussion or mentoring for those just getting into the material analysis field.

The group strongly agreed to a benefit of having an oral session devoted to focus on the polymer materials (structure elucidation) which is a topic that covers a variety of academic, gov't, and industry applications.

Conclusion:

Overall this year was another successful ASMS workshop with good discussion about future topics and the need to understand polymer mass spectrometry within both industry and academia.

Members of the interest group are encouraged to provide feedback to the chairperson, as well as suggestions for content for next year's meeting. The group is also encouraged to search for a LinkedIn group related to polymer mass spectrometry, where discussions can be carried on through the year.

The group recommends Gyorgy Vas as the Polymeric Materials Interest Group coordinator and is seeking a new co-chair.