

2013 ASMS Polymeric Materials Interest Group Workshop Summary Report

Wednesday June 12, 2013 5:45pm to 7:00pm

61st ASMS Conference, June 9-13, 2013, Minneapolis, MN

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

Co-Chairperson: Gyory Vas, J&J (Somerville, NJ)

Workshop Title: The Advancement of Polymer Mass Spectrometry

Introduction:

The attendance at this year's workshop was estimated at 45-60 attendees. In the conference this year, there was an extractables and leachables of polymers related oral session and one polymer related poster session. The oral session chair (David Stranz, Sierra Analytics) reported that there were 8-10 submissions, however the subject matter of the orals was well aligned with the topic of the session (Polymers MS: Materials, Medical Devices and Pharmaceuticals). The attendance at the oral session was in the range of 75-100. 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:

Liang Li of University of Alberta, an editor of the Analytica Chimica Acta journal, restated he would like to put together a focus issue on polymer mass spectrometry. He mentioned the deadline for submission will be soon, and issue should be published in the Fall time frame.

The Interest group coordinator succession plan was discussed: Bill Erb (Bausch + Lomb) is the recommendation from the group as the interest group coordinator for his second and final year. Gyorgy Vas (J & J) was selected to continue as co-chair and will move into chairperson position after Bill Erb's term.

A discussion of next year's ASMS polymer oral session started with volunteers for a session chair. The group agreed to recommend David Stranz (Sierra Analytics) as the oral session chair for 2012. A few suggestions were made for potential oral session topics. Attendees were encouraged to submit any additional topic suggestions to William Erb (william.erb@bausch.com).

Separations and MS of Polymers

Discussion of Polymer MS capabilities:

Bill Wallace: Gave a demonstration about the updated NIST polymer MS website. The website includes a comprehensive database regarding to Maldi analysis of different polymers. Polymers are classified by their composition and end group. Once the polymer of interest is selected the database will pull reference literature data for the analysis parameters.

In summary it is a very helpful tool for expert and non-expert polymer chemists, for Maldi based polymer analysis

Gyorgy Vas: Gave a short presentation about the importance of trace metal testing related to polymeric materials. Highlighted the changes of USP 232, which could have a potential impact for the polymer industry.

Different approaches were discussed about the possible future direction of the polymer group, and it was decided that next year will be more focus on the the polymer materials (structure elucidation) vs. the additives and excipients which were the main focus for this year.

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 William Erb of Bausch + Lomb, Inc. as the continued Polymeric Materials Interest Group coordinator and Gyorgy Vas as the co-chair. The group recommends David Stranz of Sierra Analytics, Inc. as the 2013 oral session chair.