

Fundamentals Interest Group Workshop and Business Meeting
ASMS 2012, Vancouver, CA

Workshop Title: **Structures, Reactions and Thermochemistry of Gas-Phase Ions (in Honor of Alex Harrison's 80th Birthday)**

Presided by: Becca Jockush and Glen Jackson

Meeting Date: Mon, May 21, 2012, 5:45-7:00 pm.

Attendance: 135 (peak), ~150, total

The workshop started with a brief introduction by Becca Jockush before handing the proceedings to Mike Bowers. Mike (Special Issue Editor at IJMS) explained the events leading up to IJMS's special edition honoring Alex's accomplishments and contributions to the field of fundamentals in mass spectrometry. Mike also thanked the guest editors who orchestrated the volume: Veronica Bierbaum and Bela Paizs.

Mike reminded the audience that the special issue of IJMS and this workshop were a statement by the community to thank Alex for his contributions to our science and to honor him for his dedication and contributions over the years.

Bob Boyd then presented a series of photographs, articles and anecdotes from Alex's career to help inform the audience about the contributions of this special scientist. After the presentation, Mike Bowers presented Alex with a hardbound edition of the volume from Elsevier. Alex, clearly humbled with appreciation, concluded this portion of the workshop with a few sincere words of gratitude. He thanked his wife for their marriage of more than 50 years, Bela and Veronica for editing the special edition, all the contributors to the volume and his students for their efforts over the years. He reminded us all that the mass spectrometry community is, in general, a very open, honest and collegial community, and one that is rife with gifted individuals.



Figure 1. Mike Bowers presenting Alex Harrison with a bound copy of the IJMS special edition published in his honor.

Becca then resumed control of proceedings and polled the audience for ideas for oral sessions and workshop topics. We also discussed nominations for interest group chairs for next year.

The workshop concluded with short powerpoint presentations from four graduate students who are active in fundamental aspects of mass spectrometry.

Beixi Wang from Sarah Trimpin's group at Wayne State U. talked about solvent assisted inlet ionization (SAIL). She presented various versions of SAIL: 1) a laser desorption version that allows spatial analysis, 2) a multichannel pipet version and 3) a nano-flow fused silica version.

Li Cui from Gavin Reid's group at Michigan State U. discussed the limitations of ion trap CID and MS3 for protonated phosphopeptides, especially regarding the potential for phosphate group scrambling during slow heating of low charge states in CID.

Ahmet Atik in Talat Yalcin's group at the Izmir Institute of Technology discussed macrocyclization of b ions, a topic close to Alex's heart. He showed that although acetylation of the N-terminus can usually prevent cyclization, lysine-containing peptides can still scramble, even if acetylated on the N-terminal. The proposed reason is a so-called side-to-tail cyclization, the mechanism of which is similar to head-to-tail cyclization, but of course is only possible for unprotected lysine residues.

Sandra Osburn from Victor Ryzhov's group at Northern Illinois U. discussed distonic radical ions, especially those from Cys-S-NO groups. She discussed their use of gas phase spectroscopy to confirm the distonic radical cation form of the ions.

We thank the various contributors and audience for the lively atmosphere and active discussion following the presentations.