

2013 ASMS Meeting Workshop Report

Metal Ion Coordination Chemistry Interest Group

Current Topics in Metal Ion Chemistry

Workshop coordinators:

Jianhua Ren (University of the Pacific)

Michael van Stipdonk (Lawrence University)

Tuesday, June 11, 5.45 – 7.00pm

Estimate of attendance; 40 people

The workshop consisted of five short oral presentations (3 slides, ~8 minutes) followed by a period of discussion. Contributions were solicited from research groups conducting research in the field of gas-phase metal ion and clusters. Speakers were asked to present new results or interesting problem in metal-ion chemistry. Among the presenters, two were graduate students and one was a postdoctoral fellow.

The workshop also included a discussion panel consisted of a few recognized researchers in the field (including Scott Gronert, Robert Dunbar, Victor Ryzhov, Glen Jackson, Benjamin Bythell, George Khairallah and Jos Oomens). The panel participated in the active discussion after each presentation.

The workshop participants were given a written survey asking for comments and suggestions. The surveys were collected at the end of the workshop. The questions included:

- 1) What do you like the most about this workshop? Please list as many as you would like.
- 2) What do you like the least about the workshop? Please list as many as you would like.
- 3) What can/should we do to encourage more individuals interested in metal ion chemistry to participate in the ASMS meeting?
- 4). What topics/format you would like to see for next year's workshop?
- 5). Would you like to be a co-organizer/coordinator (two-year term)? If yes, please provide your contact information.

Program:

- Michael van Stipdonk, Lawrence University, "Curious Fragmentation Behavior of Acetone-Coordinated Vanadyl Species"
- Rebecca Thomas (graduate student), University of Utah (Armentrout group), "IRMPD and DFT Study of Ethane and Ethene Activation by Gas-Phase Pt⁺"
- Don Gunaratne (Postdoctoral fellow), Pacific Northwest National Laboratory, "Evolution of Electronic Properties in Transition Metal-Silicide Diatomics"
- Holliness Nose (graduate student), Wayne State University (Rodgers group), "Progress Towards Understanding Collision-Induced Dissociation of 2,2'-Bipyridine Complexes of the Late First-Row Divalent Transition Metal Cations"
- Jianhua Ren, University of the Pacific, "Alkali Metal Ion Assisted Peptoid Fragmentation, CID vs. ECD."
- Topic suggestions for future metal ion workshop

Summary of the participant survey and comments by co-coordinators:

- a) Most people felt that the workshop format was good with a casual, informal, and relaxed atmosphere. The same format will be used for the 2014 meeting. The talks were short, to the point, and were not merely additional ASMS oral presentations outside the daily sessions. Each short talk was followed by friendly discussion and comment that was aimed at solving the particular problem presented. Some suggestions to be acted upon include: more advertisement of the interest group workshop, “grass roots” recruiting of participants, including encouraging more activity with mass spectrometry and metal ions and enhancing and increasing student participation.
- b) Topics suggested for future workshops
 - a. Ion spectroscopy of metal complexes
 - b. Metal ion catalysis
 - c. Structure elucidation and energetics
 - d. Transition metal coordination to biomolecules
 - e. Metal ion in biology
 - f. Metal ion electronics
 - g. Kinetics in metal ion chemistry

6. The workshop coordinators/organizers for 2013-2014:

Mike van Stipdonk, Duquesne University (current group co-coordinator)

Benjamin Bythell, University of Missouri-St. Louis