

Mixtures Specialty Section

26 Mar 07

Mois Mumtaz opened the Mixtures Specialty Section Meeting during the Monday night reception at 6:28. He reported that there are 48 members in this new specialty section. He then had a slide presentation ([See presentation at end of minutes.](#)).

Linda Birnbaum and Mike Holshapple attended the mixer and were acknowledged by Mois for their efforts to start this specialty section. There were 46 attendees during his presentation and a total of 50 attendees overall.

The next SOT will be Mar 16-20, 2008. Jan Chambers asked for attendees to submit ideas for next year's SOT meeting. The deadline to submit is Apr 15 for the specialty section and 30 April for SOT Council.

Ideas suggested:

- [See List from Jane Ellen below.](#)

Bruce Fowler announced the web site for the TRAC 07 meeting which will be 23-25 Apr 07. This meeting has had sessions and workshops dealing with mixtures the last several years.

<http://www.team-psa.com/trac>

Proposals for SOT 08 need final form with names of speakers and ideally sponsorship with other Specialty Sections

Need to propose an Informational Session.

Time to meet next year? Need to move away from Risk Assessment Specialty Section (RASS) but still meet in evening. Group does not want a speaker at the meeting.

Need to recommend students and postdocs for student and post doc representative to this specialty section as the membership prefers to have a representative for both categories. Need to develop Student/Post Doc Award to draw students to the group. Cost of more than just a plaque will be challenging as we are in the funds buildup phase

Teleconferences: We can try to integrate with RASS for web meetings. There is money available from SOT for teleseminars. Need to find out how to apply for SOT funding, explore co-sponsoring teleconferences with other Specialty sections. Talk to Annie Jarabek, who has done a great job of RASS teleconferences (she is just down the hall from me, so I'll talk to her when she gets back in town, she is away on a family medical emergency with her Dad's illness). How frequently to have – better to start with less frequency and ensure quality to build a solid following.

Sponsorship can be obtained to support specialty section activities.

Point from Jane Ellen:

1) Student/PostDoc Rep – Dave found out that we can have one of each – one graduate student rep and one post-doctoral rep. Looking at the Specialty section list in Program Book (pages 291 and 292) it is much more common for Specialty Sections to have just one student representative (I'm assuming that this can be either a grad student or post-doc) then to have both a graduate student rep and a post-doctoral rep. Not sure why this is, but we may want to talk to some of the other specialty sections and find out their reasons for operating this way.

List from Jane Ellen:

- Continuing Education Course – Case Studies for Chemical Mixtures.

Case studies using 1) Hazard Index methodology and target-organ toxicity hazard index, 2) TEF and RPF approaches, 3) WINBOE methodology, 4) response addition assessment for cancer assessment for mixture. Based on what people have said about this year's continuing ED course, this will be a big draw. Should be submitted as a Basic Course as these are all established methods in current use. Moiz and Chris Borgert, organizational leads. As will be hands on, may want to limit the number of participants to be sure each gets enough one-on-one instructional time. One thought is to have one lead presenter for each 'case study' but have 2 or 3 people who are also versed in the methods who can walk around the room and help during the hands on exercise segment – these can be the same people for all case studies. Based on feedback from this year's course, will be well intended. Not perceived to overlap with this year's course, but to be a logical extension. RASS as secondary endorsers

- Study Design Continuing Education Course. Better not to try for two continuing education courses. Likely to be perceived to have overlap between this year's CE course, so harder to get accepted. Idea brought forth that this might be better to consider as an ancillary course. Needs some time to flesh out how to make this work, consider for out year.
- Symposium on Drug-Drug Interactions. Based on feedback from the CE course, there is a lot of interest in drug-drug interactions. Sami Haddad, organizational lead. Logical Secondary Endorsers are Drug Discovery Toxicology Specialty Section, Regulatory and Safety Evaluation, Occupational and Public Health, RASS
- Symposium or Workshop on Innovative Methods in Chemical Mixtures Analysis and Risk Assessment. The idea is to focus on new developments – so nice contrast to the CE course, which has an established method focus. J E. Simmons organizational lead. Logical secondary endorsers are Mechanisms, RASS, Occupational and Public Health, Regulatory and Safety Evaluation. Topics are: 1) generalized concentration addition; 2) combined dose addition and response addition; 3) interaction-based hazard index; 4) proportional-response addition; 5) mode of action subgroups for complex mixtures of chemicals. I'll finish contacting speakers and send out an abstract with titles next week.
- Workshop or Symposium on Pesticide Mixtures. Pesticide mixtures are very interesting as they may be the mixtures 'class' with the longest period of active research – and lots of recent research following from the FQPA of 1996. I'm hopeful that Janice would like to be the organization lead for this. I think that taking a chemical class viewpoint will be of great interest – it will draw people who work on pesticides, mixtures researchers, and risk assessors. Exposure may be an interesting addition
- Uncertainty Analysis – How much more accurate are risk assessment for mixtures? Are mixtures risk assessments more accurate than single chemical assessments? Proposed by Chris Borgert.
- Exposure – How do you define the mixture of concern? Proposed by Chris Borgert

Slides from Moiz's presentation:

Welcome!!!

**Mixtures Specialty Section
Reception**

**March 26, 2007
46th Annual Meeting
Charlotte, NC**

The Society of Toxicology's Core Purpose is to Enhance Human, Animal and Environmental Health Through the Science of Toxicology

“Toxicology is part of the solution!”

Mixtures Task Force

Chris Borgert	John Bucher
Jim Bus	Rory Conolly
Bill Farland	Jay Goodman
John Groten	James Klaunig
Kanan Krishnan	Shawn Lamb
Ann Mason	Moiz Mumtaz
Greg Schiefer	Jane Ellen Simmons
I. Glenn Sipes	Claudia Thompson

SOT Leadership

**Linda Birnbaum
Michael Holsapple
Elaine Faustman**

**Mixtures Specialty Section
Election Results**

Moiz Mumtaz, President
Janice Chambers, Vice-President
Jane Ellen Simmons, Vice-President Elect
Dave Mattie, Treasurer
Cecilia Tan, Councilor I
Sami Haddad, Councilor II

SOT Chronology of Mixtures Events

Risk Assessment of Chemical Mixtures: Biologic and Toxicologic Issues (Symposium Annual Meetings, 1992)

Risk Assessment of Mixtures: Development of Testable Hypotheses...(SOT Expert Panel

Workshop, 2002)

Dose-Additivity of Mixtures: Where are We going with the Science? (SOT CCT, 2005)

The Focus:

- **Real world exposure**
- **Toxicity testing at environmental doses**
- **Biologically-based models**

Note: It is possible to perform hypothesis-driven research aimed at explaining why a threshold may exist.

The Range:

Exposure Sources to Dose

How common are exposure to Mixtures?

Dose to Response

Is additivity a valid default approach for mixtures?

Modeling Biological Responses

Is computational Toxicology the solution?

The Opportunities:

Leadership Roles

Office bearers responsibilities

Endorsement of Annual Meeting Programs

Support symposia, workshops, CE courses

A Common Podium

Share research findings and ideas to advance our interests

Look Out This Year:

Toxicological Evaluation of Chemical and Drug Mixtures – C E Course

Sunday March 25, 2007; 1:00 PM

Modeling A Mixture: PBPK/PD Approaches for Predicting Chemical Interactions - Symposium

Wednesday March 28, 2007; 9:00 AM

SOT Presidents': A Perspective on Mixtures Toxicology – Historical Highlights

Wednesday March 28, 2007; 12:00 PM

Chemical Mixtures: Is the “Problem” Solvable?- Round Table

Thursday March 29, 2007; 7:30 AM

Future Activities

Proposals for next Years Meeting
Seattle, WA

March 16-20, 2008

Sponsors:

- **Society of Toxicology**
- **Agency for Toxic Substances Disease Registry**
- **Chlorine Chemistry Council**
- **National Institute of Environmental Health Sciences**
- **Society for Environmental Toxicology and Chemistry**
- **U.S. Environmental Protection Agency**