

NAME OF SPECIALTY SECTION **Mixtures Specialty Section**

ANNUAL REPORT: 2017-2018

May 1, 2017 to April 30, 2018

I. Officers/Committees:

Officers	2017-2018	2018-2019
President:	Cynthia V Rider	Chris Gennings
Vice President:	Chris Gennings	Danielle Jessica Carlin
Vice President-Elect:	Danielle Jessica Carlin	Tom Webster
Secretary/Treasurer:	Emily F Madden	Emily F Madden
Past President	Margaret H Whittaker	Cynthia V Rider
Councilors:	Julia E Rager, senior	Jennifer Schlezinger, junior
	Bethany R Hannas, junior	Bethany R Hannas, senior
PDA Representative:	Justin M Conley	Courtney Roper
GSLC Representative:	Elizabeth Marie Martin	Dami Adebambo

Committee meetings:

At 2018 SOT Annual Meeting: Mixtures Specialty Section Officers Meeting, Monday, March 13, 2018, 7:30-8:30 AM at Schilo's, 424 E Commerce, San Antonio, Texas

Attendees: Cynthia Rider, Julia Rager, Nigel Walker, Justin M Conley, Erin Hines, Chris Gennings, Krystin Carlson, Danielle Carlin, Emily Madden, Tom Webster, Meg Whittaker

II. Activities:

2018 SOT Annual Meeting Reception was held in San Antonio, Texas on (Monday, 6:00-7:30 PM). Approximately 80 people were in attendance. Dr. Rider called the meeting to order at 6:30 PM.

Meeting Minutes:

- Hors d'oeuvres and networking
- Cynthia Rider welcomed everyone and provided an update on recent MixSS activities.
- *Flash Mentoring*: Nigel Walker emceed the event. Two to three “mixture experts” were seated at each of 4 tables. Trainees and junior members spent 10 minutes at each table and then rotated from table to table. The table discussions on research interests and mentorship were informal and well received by attendees.
- Cynthia Rider presented the new MixSS officers:
 - Vice President-Elect: Tom Webster;
 - Councilor: Jennifer Schlezinger, PhD;
 - Graduate Student Representative: Elizabeth Martin.

- Cynthis Rider discussed upcoming MixSS-sponsored SOT sessions and program session proposal submissions for 2019.
- Cynthia Rider presented awards (see below).

Awards:

Best Mixtures Abstract: Courtney Roper (Oregon State University), Title: Impacts of PM_{2.5} Filter Extraction Methods on Chemical and Toxicological Analyses. Abstract No. 1984. Board No. P317.

Graduate Student Award: Joshua Salley;

USE OF CHEMOMETRICS AND PARTIAL LEAST SQUARES REGRESSION TO DETERMINE THE TOXIC CONSTITUENTS WITHIN VARIOUS CRUDE OILS TO SELECT ADVERSE RESPONSES.

J.T. Salley¹*, S. Jaligama³, H. Barnett², C. V. Landingham⁴ S. A. Meyer¹.

1 Dept. of Toxicology and 2Sch. of Sciences, University of Louisiana-Monroe, Monroe, LA; 3Battelle Memorial Institute, Columbus, OH; 4Ramboll/Environ, Monroe, LA.

Post-doctoral Award: Jeanette Reyes;

Temporal trends of cumulative risks to phthalate mixtures in the United States from 2005 to 2014

Jeanette Reyes#, Paul Price*

#ORISE Participant hosted at US EPA, RTP, NC

*US EPA, RTP, NC

Top 10 Abstracts (listed alphabetically)

- Monica Andreassen (Norwegian Institute of Public Health), Title: Real-Life Exposure to Mixtures of Chemicals in the Euromix Human Biomonitoring Study: Results from Repeated 24-Hour Diaries Reporting the Use of Personal Care Products, Abstract No. 2386. Board No. P742. Presenting on 3/13/18, 3-4:30 pm.
- Yvonne Chang (Oregon State University), Title: Mechanistically Profiling PAH Biosignatures in 3D HBEC, Abstract No. 2368. Board No. P722. Presenting on 3/13/18, 1:30-3:00 pm.
- Justin Conley (US EPA), Title: How Low Can You Go? Adverse Effects of a Mixture of 15 Pesticides and Phthalates on Reproductive Tract Development in the Male Rat, Abstract No. 3279. Platform presentation on 3/14/18, 3:30-3:50pm.
- Tim Cristy (Battelle Memorial Institute), Title: The National Program Synthetic Turf/Recycled Tire Crumb Research: Characterization of a Crumb Rubber Lot for Use in *In Vitro* and *In Vivo* Studies, Abstract No. 2415. Board No. P772. Presenting on 3/13/18, 3-4:30 pm.
- Nicola Evans (US EPA), Title: Cumulative Assessment of Steroid Hormone Receptor-Mediated Activity of Contaminants in Water Samples Using *In Vitro* Bioassays, Abstract No. 2418. Board No. P775. Presenting on 3/13/18, 3-4:30 pm.
- William Gwinn (NIEHS), Title: The National Toxicology Program Research on Synthetic Turf/Recycled Tire Crumb Rubber: Characterization of the Leachability and Cytotoxicity of Crumb Rubber *In Vitro*, Abstract No. 2416. Board No. P773. Presenting on 3/13/18, 3-4:30 pm.
- Elizabeth Medlock Kakaley (US EPA), Title: Validation of a Glucocorticoid Receptor Effects-Based Environmental Sample Screening Tool, Abstract No. 1831. Board No. P160. Presenting on 3/13/18, 3-4:30 pm.
- Christopher Kassotis (Duke University), Title: Adipogenic Activity of House Dust Extracts. Abstract No. 1821. Board No. P150. Presenting on 3/13/18, 3-4:30 pm.

- Courtney Roper (Oregon State University), Title: Impacts of PM_{2.5} Filter Extraction Methods on Chemical and Toxicological Analyses. Abstract No. 1984. Board No. P317. Presenting on 3/13/18, 9:15-10:45 am.
- Kristen Ryan (NIEHS), Title: An Approach to Evaluate Chemical-Induced Biological Response Similarities across Multiple *Echinacea purpurea* Extracts, Abstract No. 2923. Board No. P451. Presenting on 3/14/18, 3-4:30 pm.

2018 SOT Annual Meeting Courses/Sessions:

Symposium Session: Cancer Risk Assessment of PAH

Mixtures: Current and Future Directions

Session chairs: M. Margaret Pratt (US EPA) and Cynthia Rider (NIEHS)

Speakers: M. Pratt (US EPA), C. Rider (NIEHS), P. White (Health Canada), S. Tilton (Oregon State University), and J. Lambert (US EPA)

Symposium Session: Chemical Grouping for 21st-Century Toxicology, Risk Assessment, and

Decision Making

Session chairs: Jane Ellen Simmons (US EPA) and Mark D. Nelms (ORISE)

Speakers: J.E. Simmons (US EPA), I. Ali (Karolinska Institutet), M.D. Nelms (ORISE), K.N. De Abrew (Proctor and Gamble Company), T.E. Allen (University of Cambridge), J. Swartout (US EPA)

Workshop Session: Safety Evaluation of Plant-Based Color Additives Used in Foods

Session chairs: Yu Janet Zang (US FDA) and Maria Bastaki (IACM)

Speakers: M. Bastaki (IACM), G. Pugh Jr. (The Coca Cola Company), S. Talcott (Texas A&M University), H. Oketch-Rabah (USP), Y. Zang (US FDA), S. McAvoy (Sensient Colors LLC)

Poster Session: Metals and Metal Mixtures

Roundtable Session: Is a Common Mechanism of Action Essential to Conduct a Cumulative Risk Assessment or Just Nice to Have?

Session chairs: Suzanne Fitzpatrick (US FDA) and Elaine M. Faustman (University of Washington)

Speakers: E.M. Faustman (University of Washington), E. Raig (US EPA), A. Hayes (Harvard T.H. Chan School of Public Health), A. Boobis (Imperial College London), S. Fitzpatrick (US FDA)

Symposium Session: Atherosclerosis as a Model to Understand the Combined Effects of Environmental

Chemical and Non-Chemical Stressors

Session chairs: Danielle Carlin (NIEHS) and Michelle Olive (NHLBI)

Speakers: W. Cascio (US EPA), M. Olive (NHLBI), S. Srivastava (University of Louisville), B. Hennig (University of Kentucky), C. Menzie (Exponent)

Regional Interest Session: Toxicology and Public Health Solutions for Environmental Emergency-Related Contamination Events

Session chairs: Ivan Rusyn (Texas A&M University) and Michael Honeycutt (Texas Commission on Environmental Quality)

Speakers: M. Honeycutt (Texas Commission on Environmental Quality), R. Judson (US EPA), S. Masten (NIEHS), J. Wignall (ICF International), E. Baker (Pacific Northwest National Laboratory), G. Sansom (Texas A&M University)

Newsletters:

The Mixtures Specialty Section Newsletter was “published” in March 2018 and disseminated to section members.

Teleseminars and Mixtures related workshops/conferences:

Workshop: Understanding the Combined Effects of Environmental Chemical and Non-Chemical Stressors: Atherosclerosis as a Model

Date: April 3-4, 2018

Location: NIEHS Campus, RTP, NC

Joint H2020 Workshop: Advancing the Assessment of Chemical Mixtures and their Risks for Human Health and the Environment

Date: May 29-30, 2018

Location: Joint Research Centre, Ispra, Italy

New Mixtures book

Chemical Mixtures and Combined Chemical and Nonchemical Stressors

Editors: Cynthia Rider and Jane Ellen Simmons