

2018 SoCal SETAC Annual Meeting Agenda

Thursday, April 12

7:45 A.M. Registration and Continental Breakfast

Misty Mercier, SoCal SETAC Secretary; **Joe Freas**, SoCal SETAC Treasurer

assortment of breakfast items, coffee, tea, and juice served

8:30 A.M. Welcome and Announcements

Keith Maruya, SoCal SETAC President; **James Landry**, Loyola Marymount University

8:45 A.M. Tribute to Brock Bernstein

Ken Schiff, Southern California Coastal Water Research Project; **Chris Stransky**, wood.

Sediment Quality

Facilitated by Chris Stransky, SoCal SETAC Vice President

9:00 A.M. Development and Implementation of a Sediment Quality Assessment Framework for Protection of Benthic Communities in Bays and Estuaries

Steve Bay, Southern California Coastal Water Research Project

9:30 A.M. Sediment Quality Objectives for Enclosed Bays and Estuaries of California - Protecting Human Consumers of Sportfish from Contaminants in Sediment that Bioaccumulate into Fish Tissue

Chris Beegan, California State Water Resources Control Board

10:00 A.M. Break

assortment of snack items, coffee, and tea served

10:30 A.M. Evaluating Sediment Toxicity: Challenges, Uncertainties, and Lessons Learned

Jeffery Steevens, US Geological Survey

11:00 A.M. Compliance with Sediment and Fish Tissue TMDLs through Sediment Quality Objectives: A Collaborative Approach

S. Anghera, Latitude Environmental, Inc.; **Wendy Hovel**, Anchor QEA, LLC; K. Curtis, A. Jirik, Port of Los Angeles; J. Vernon, M. Arms, Port of Long Beach; S. Bay, Southern California Coastal Water Research Project; C. Beegan, State Water Quality Control Board; L.B. Nye, T. Nguyen, Los Angeles Regional Water Quality Control Board

11:30 A.M. Seasonal Toxicity Observed with Amphipods (*Eohaustorius estuarius*) at Paleta Creek, San Diego Bay, USA

Nicholas Hayman, G. Rosen, M. Colvin, B. Chadwick, SPAWAR Systems Center Pacific; J. Munson-Decker, San Diego State University Research Foundation; B. Rao, D.D. Reible, I. Drygiannaki, D. Athanasiou, M. Rakowska, M. Bejar, Texas Tech University

12:00 P.M. Loyola Marymount University Sustainability & Green Chemistry

Ian McKeown, LMU Campus Sustainability; **Raymond Dennis**, LMU Auxiliary Management and Business Services

12:15 P.M. *Lunch*
"Little Italy" 3-course buffet including vegetarian/vegan pasta, chicken cacciatore, chocolate espresso cake, and non-alcoholic beverages served

1:15 P.M. **SETAC North America Update**
Jeffery Steevens, Research Toxicologist, U.S. Geological Survey, Columbia Environmental Research Center, National SETAC

Passive Sampling

Facilitated by Rachel Adams, SoCal SETAC Past President

1:30 P.M. **Passive Samplers for Monitoring Contaminants in the Environment: An Overview**

Rachel Adams, Loyola Marymount University

1:45 P.M. **Use of SPMEs to Detect Low Level Water Column PCBs and DDX in Support of Greater Harbor Waters Model Calibration**

Wendy Hovel, A. Martin, D. Opdyke, Anchor, QEA, LLC; S. Anghera, Latitude Environmental; K. Curtis, A. Jirik, Port of Los Angeles; M. Arms, J. Vernon, Port of Long Beach

2:15 P.M. **Actively Shaken In Situ Deployment: An Innovative Approach to Accelerate Equilibrium in Passive Samplers**

Meg Jalalizadeh, J. Conder, Geosyntec Consultants Inc.

2:45 P.M. **Comparison of Passive Sampling and In Vitro Approaches for PAH Bioavailability Studies of Skeet-impacted Soils**

Robert George, K. Sorensen, A. Obratsova, SPAWAR Systems Center Pacific; J. Conder, GeoSyntec Consultants

3:15 P.M. *Break*

assortment of snack items, coffee, and tea served

3:45 P.M. **Application of In Vivo SPME Sampling and Monitoring Trace Organic Compounds in Plant**

Fang Zhu, J. Gan, University of California, Riverside

4:15 P.M. **Measuring the Flux of Persistent Organic Pollutants Across the Sediment-Water Interface on the Palos Verdes Shelf Using Passing Samplers**

Chi-Li Tang, Sanitation Districts of Los Angeles County; L. Fernandez, Northeastern University; R. Burgess, US Environmental Protection Agency

4:45 P.M. **Passive Samplers for Contaminant Monitoring in Surface Water: Future Research Needs**

Jay Gan, University of California, Riverside

5:00 P.M. *Break*

assortment of snack items, coffee, and tea served



5:30–7:30 P.M. **POSTER SOCIAL**

heavy appetizers including cocktail meatballs, pork pot stickers, vegetable samosas, dessert, beer, wine, and non-alcoholic beverages served

Ca²⁺ Dependent Gene Expression by Gene Regulator DREAM (Downstream Regulator Element Antagonist Modulator) and distal C-terminal (dCT) in Response to PCB95 and Triclosan Exposure

Jorge Alfaro* and E. Holland, California State University, Long Beach

The Potential Environmental Impact of Discarded Cigarette Waste In Marine Sediments

Ian King* California State University Dominguez Hills; V. Lorenzi, M. Blasius, and R. Gossett, IIRMES, California State University, Long Beach

Connecting Calcium Signaling Disruption with Altered Gene Transcription to Develop a Cellular Bioassay

Nicolette Schuko*, E. Holland, California State University, Long Beach

***Ceriodaphnia dubia* Chronic Toxicity Test Variability: Evaluation of Food as a Source of Test Variability**

B.C. Jorgenson, **Krista Prosser**, S.L. Clark, A.M. Briden, R.S. Ogle, and J. Cotsifas, Pacific EcoRisk

***Ceriodaphnia dubia* Chronic Toxicity Test Variability: Is There a Need for Method Improvement?**

Stephen Clark, B. Jorgenson, A. Briden, R. Ogle, and J. Cotsifas. Pacific EcoRisk

***Ceriodaphnia dubia* Chronic Toxicity Test Variability: Evaluation of Water as a Source of Test Variability**

A. Briden, **Stephen Clark**, B. Jorgenson, R. Ogle, and J. Cotsifas, Pacific EcoRisk

Gemfibrozil Disinfection Byproducts: Occurrence in Aquatic Environments and Quantification of Biological Effects in Fish and Worms

Nicolette Andrzejczyk* D. Schlenk, University of California, Riverside; J. Zhang, Chinese Academy of Sciences

An Environmentally Relevant Approach for Stormwater Toxicity Testing Compliance Monitoring

Molly Colvin, G. Rosen, C. Katz, N. Hayman, SPAWAR Systems Center Pacific, C. Stransky, wood., T. Hoang, Loyola University, Chicago; B. Phillips, B. Anderson, University of California, Davis; J. Diamond, Tetra Tech; H. Bailey, A. Cibor, Nautilus Environmental

Evaluation of the Estrogen Receptor and the Dopamine Signaling Pathway as a Possible Target of Bifenthrin Toxicity in Zebrafish Embryos

Luisa Bertotto* S. Dudley, J. Gan, Jay; D. Volz, and D. Schlenk, University of California, Riverside

Exploring Mechanisms of Cardiotoxicity in Crude Oil Exposed Fish

Victoria McGruer*, D. Schlenk, University of California, Riverside

Comparative Life Cycle Assessment of Seven Coffee Brewing Machines

Justin Kurihara*, **Mara Ley***, and T. Zink, Loyola Marymount University

Assessment of Fecal Indicator Bacteria Diversity and Density During Tidal Exchanges in an Urbanized Saltwater Marsh System (Ballona Wetlands)

Samantha Geier* and J. Dorsey, Loyola Marymount University

Defining Freshwater Invertebrate and Vertebrate Species Sensitivity to the Pesticides Imidacloprid and Chlorantraniliprole Using Ligand Binding Assays

Jordan Alejo* and E. Holland, California State University Long Beach

Analysis of PAHs and VOCs Present on LMU's Artificial Turf Fields

Erica Choe,* O. Strieleman, N. Bouvier-Brown, Loyola Marymount University

Pilot Study for the Analysis of Microplastics Found on Santa Monica Beaches

H. Campo,* R. Manning,* **Emily Vees,*** H. Weyland,* M. Dea, J. Landry, V. Onyike, Coastal Research Institute, Loyola Marymount University

Effects of Polycyclic Aromatic Hydrocarbons on Diatom Species Composition and Morphologies from a Southern California Creek

Eilleen Salas* and D. Underwood, California State University Long Beach, Long Beach, CA

Los Angeles River Storm Drain Filtration Mechanism Efficiency Study Part I: Water Quality in Reach 3 of the Los Angeles River

Marian de Orta-Barile,* S. Appleton, V. Lorenzi, E. Holland, California State University Long Beach

Evaluating the Effectiveness of Advanced Oxidation Processes at Reducing AhR, ER, and p53 activity via *In vitro* Cell Bioassays

Gary Harraka,* S. Coffin, E. Xu, K. Cochran, S. Richardson, and D. Schlenk, University of California, Riverside

Level and Occurrence of the Neonicotinoid Pesticide, Imidacloprid, in Forester Creek, Santee, CA

Christine Batikian,* A. Lu,* K. Watanabe, and R. Gersberg, San Diego State University

The Sediment Record in the Tibetan Plateau: Evidence of the Significant Contribution of Organochlorine Pesticides from Lateral Remobilization

Jun Li,* G. L. Yuan, China University of Geosciences, Jay Gan, University of California, Riverside

Environmental Relevance in a Sea of Plastic

Win Cowger,* and A. Gray, University of California, Riverside

Movement Patterns and Habitat Association of Five Demersal Fish Species Along the Orange County Sanitation District Outfall

Echelle Burns,* C. Lowe, California State University, Long Beach; J. Armstrong, K. Sakamoto, D. Tang, Orange County Sanitation District

Short-, Medium- and Long-chain Chlorinated Paraffins in Wildlife from Paddy Fields in the Yangtze River Delta

Xinyu Du,* Y. Zhou, Y. Qiu, J. Zhao, Tongji University; B. Yuan, J. Benskin, G. Yin, Stockholm University

Novel Electrosorption-Enhanced Solid-Phase Microextraction Device for Ultrafast In Vivo Sampling of Ionized Pharmaceuticals in Fish

Junlang Qiu,* F. Zhu, G. Ouyang, Sun Yat-Sen University

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8:15 A.M. Welcome and Announcements

Rachel Adams, SoCal SETAC Past President

Microplastics & Marine Debris

Facilitated by Keith Maruya, SoCal SETAC President

8:30 A.M. Plastic Particle Pollution Impacts on the Environment and the Food Web

Anna-Marie Cook, H. Allen, US Environmental Protection Agency

9:00 A.M. Analysis of Microplastics Found on Santa Monica Bay Beaches: Status of Method Development

James Landry, Loyola Marymount University

9:30 A.M. Characterization of Estrogenic Compounds from Simulated Digests of Plastic Items

Scott Coffin,* D. Schlenk, University of California, Riverside; G. Huang, , Guangzhou Institute of Geochemistry

10:00 A.M. Break

assortment of snack items, coffee, and tea served

10:30 A.M. Identification of Microplastic Pollution Below 500µm in the Highly Urbanized Aquatic Environments Surrounding Long Beach, CA

Kara Wiggan,* E. Holland, California State University Long Beach

11:00 A.M. Trends in the Quantity of North Pacific Gyre Debris: Two Approaches--Two Answers

Charles Moore, G.L. Lattin, Algalita Marine Research and Education; S.L. Moore, S.B. Weisberg, Southern California Coastal Water Research Project; N. Maximenko, J. Hafner, University of Hawai'i, Honolulu, Hawai'i

11:30 A.M. An Estimation of Plastic Debris and Persistent and Bioaccumulating Toxic Contaminants in the Tijuana River Estuary: a Case Study in Estuarine Contaminated Sediment Management

Harry Allen, M. Rogow, A. Cook, U.S. Environmental Protection Agency; R. Kelly, K. Villars, Formerly Ecology & Environment, Inc., C. Peregrin, Tijuana River National Estuarine Research Reserve, C. Rochman, University of Toronto

12:00 P.M. Lunch

"Backyard Cook Out" 3-course buffet including hamburgers, veggie burgers, hot dogs, dessert, and non-alcoholic beverages served

1:00 P.M.	<p>Advantages of Large-Volume-Sampling in the Study of Microplastics in Effluents Discharged from Wastewater Treatment Plants.</p> <p>Jin Liu, S. Carr, Sanitation Districts of Los Angeles County</p>
1:30 P.M.	<p>Talking Trash: Management Strategies for Preventing and Removing Trash from Receiving Waters</p> <p>Paul Maechler, Kelly Tait, K. Holman, Port of San Diego</p>
<p>Unrestricted Topics</p> <p>Facilitated by Scott Coffin, SoCal SETAC Board, Student Sector</p>	
2:00 P.M.	<p>The Effects of Temperature and Bifenthrin on the Neuroendocrinology of Chinook Salmon Parr</p> <p>Marissa Giroux*, S. Vliet, D. Volz, D. Schlenk, University of California Riverside</p>
2:30 P.M.	<p><i>Break</i></p> <p>assortment of snack items, coffee, and tea served</p>
2:45 P.M.	<p>Remedy and Recontamination Assessment Array: An Initial Proof of Concept</p> <p>B. Chadwick, Molly Colvin, G. Rosen, B. Davidson, SPAWAR Systems Center Pacific; D. Moore, US Army Corps of Engineers; A. Burton, University of Michigan</p>
3:15 P.M.	<p>Water Infiltration and Pollutant Retention in the Ballona Creek Rain Garden</p> <p>Jamie Burkhard*, J. Dorsey, S. Kawecki, J. Saez, Y.-J. Li, V. Kuehn, T. Boughey, Loyola Marymount University</p>
3:45 P.M.	<p>The Growth of a Kelp Restoration Project: Informing the Physical, Chemical and Biological Characteristics of Coastal Management in Southern California</p> <p>Tom Ford, J. Landry, Coastal Research Institute, Loyola Marymount University; K. Elsmore, Bodega Marine Laboratory</p>
4:15-4:45 P.M.	<p>Awards, Raffle, Closing Remarks</p>

Bold text indicates presenting author(s); * indicates a student presentation