

# 2016

**24<sup>TH</sup> ANNUAL MEETING OF MIDWEST  
SOCIETY OF ENVIRONMENTAL TOXICOLOGY  
& CHEMISTRY - (SETAC)**



Courtesy of **Madison Convention Bureau**



**Midwest Chapter  
Society of Environmental  
Toxicology and Chemistry**

## Midwest SETAC Meeting | March 14-16, 2016 | Madison, Wisconsin

*Welcome to the 24th Annual Meeting of the Midwest Chapter of the Society of Environmental Toxicology and Chemistry (SETAC). The 2016 program consists of technical presentations and posters, and social activities. The Midwest Chapter of SETAC holds their annual meeting to provide professionals, academics, and students the opportunity to present their work, exchange ideas, and network with their peers. This year, our professional development workshop is geared towards effectively communicating scientific findings to a general audience. With the meeting theme of communicating, we are providing a variety of ways for all of us attending this meeting to communicate more effectively. There should be plenty of opportunities during this meeting, whether it is by the experiences gained taking the short course, talking during the social events, information exchanges during platform and poster presentations, or networking with your peers. Communication plays a central role in the scientific process, but it is imperative that scientists are proficient in communicating their findings to a wide variety of audiences. With that in mind, we hope you find this meeting rewarding.*

**REGISTRATION:** On Monday, Registration for the short course and meeting will be available from 10:30 A.M. to 1:00 P.M. on the first floor of the Concourse Hotel, just outside the Assembly Room. On Tuesday, registration will open at 7:30 A.M. on the 2nd-floor foyer, adjacent to the Madison Ballroom. Keep in mind that the meeting registration includes breakfast, breaks, and lunches on Tuesday and Wednesday, plus the Tuesday poster social. For those registering onsite, please plan to use a credit card for the online registration.

**PROGRAM:** Plan to download the abstract booklet from the Midwest SETAC webpage ([www.midwestsetac.org](http://www.midwestsetac.org)) before arriving at the meeting. As part of the commitment to a green meeting, abstract booklets won't be provided at the meeting; display copies will be available at registration.

### MONDAY BOARD OF DIRECTORS MEETING:

The Midwest Chapter will hold a board of director's meeting from 5:00 P.M. to 6:30 P.M. in the Assembly Room, Concourse Hotel (open to all members).

**MONDAY SOCIAL:** Join the meeting attendees at the informal Meet-n-Greet at the Brocach Pub & Restaurant on Monday, March 14 from 7:30 P.M. to 9 P.M. (or later!). Meet in the Upstairs Lounge at the Brocach, 7 West Main Street, Madison ([www.brocach.com](http://www.brocach.com)). This is 'walking distance' from the meeting location, and across from the State Capitol Building. This event is not included in the registration,

**PLATFORM PRESENTATION UPLOAD:** All platform presenters will upload their presentations onsite. Presentations can be uploaded at the registration desk on Monday (11 A.M. to 1 P.M.) and both Tuesday and Wednesday mornings between 7:00 A.M. to 7:50 A.M. Please make every effort to bring your presentation to the registration desk during this time.

**POSTER PRESENTATIONS:** Poster boards will be available in the Wisconsin Ballroom of the Concourse Hotel beginning after lunch on Tuesday; details to be provided at the meeting. This informal session provides opportunities for technical and informal discussions with colleagues. Keep in mind that the student submissions may be viewed by the judges during this time, so get your poster up early. Your poster needs to be available for viewing for the entire two and a half-hour social program and has to be taken down at the end of the social. Please make sure to get some food and beverages and make your way to your poster.



Courtesy of **Madison Convention Bureau**

**RAFFLE:** Our Chapter raises money to support the student travel program with a raffle. Anyone can donate something for the raffle (donate your re-gifting items), so please consider contributing items to the raffle (coffee, books, foods, and more). Bring them to the registration desk and we will take it from there! We will sell tickets for the raffle, and at the conclusion of the meeting, we will draw tickets for the lucky winners to pick their prize(s).

**GREEN MEETING:** As a means to conserve resources, diminish waste, and promote recycling, we have made a commitment to have a "green" meeting. Recycle bins will be distributed throughout the conference center for aluminum cans, plastic bottles, paper glass, and more. Please bring your water bottle or hot beverage container for use at the meeting.

**PARKING:** An indoor parking garage for overnight hotel guests is available at \$10/night. Please note the garage has low (6'2") clearance. The hotel garage is also available for visitors on a first come, first served basis at \$1.50/hour (maximum of \$17/day). Additional parking is available across the street at the State Street Capitol Garage (214 North Carroll Street). For information on rates and real-time availability, refer to the City of Madison Parking Utility ([www.cityofmadison.com](http://www.cityofmadison.com)).

**VOLUNTEERING:** Please consider volunteering for the Midwest SETAC organization. Leadership roles in the Regional Chapters bring your name onto the radar and aids in becoming active at the national level as well as providing you with opportunities to become part of the next generation of leaders. Each year our Midwest Chapter needs board members and at our March 2016 meeting, we will elect a vice president from the BoD, a treasurer, two at large BoD positions, and a student board member. Nominations for these positions are welcome and can be submitted anytime to the during the annual meeting. Please become a member and vote for the new board members.

## **BEST STUDENT PLATFORM AND POSTER AWARDS:**

Midwest SETAC provides support for the Best Student Platform and the Poster Presentation at our Chapter's annual meeting. The 3M Company and SC Johnson have both graciously provided cash awards of \$1,000 for each category. The best student papers are determined by a panel of environmental scientists, and the winners are announced at the end of the Annual Meeting. Each award must be used to defray costs to attend and present research results at the next SETAC North America meeting.

## **STUDENT TRAVEL AWARD PROGRAM:**

Midwest SETAC established a program to support student travel to our annual meeting, and a limited number of travel awards (up to approximately \$150) were made for this meeting. The purpose is to encourage student participation and the award aids in defraying the cost of attending the annual meeting. Keep this in mind for 2017 and apply early!

**IN THE EVENT YOUR PLANS CHANGE:** To withdraw any presentation, please notify Teresa at 218-393-1789 as soon as possible. To cancel a registration, refunds can be made (minus a \$50 processing fee) provided the request is received in writing (email or fax) on or before March 4, 2016, by the University of Wisconsin La Crosse (UW-La Crosse) Continuing Education and Extension (CEE), 1725 State Street, 205 Morris Hall, La Crosse, WI 54601. UW-La Crosse CEE can be reached at [conted@uwlax.edu](mailto:conted@uwlax.edu) or by fax: 608.785.6547. Refunds after March 4 cannot be honored; however substitutions are allowed provided you email Teresa Norberg-King ([tjnorberg@gmail.com](mailto:tjnorberg@gmail.com)) or call her at 218-393-1789.

## **SPECIAL ASSISTANCE, QUESTIONS, SUGGESTIONS:**

If you require special assistance, have any questions or suggestions, please contact Teresa Norberg-King (C: 218-393-1789) or Dawn Perkins (T: 608-224-6230). If you must withdraw a presentation, please notify Teresa and Dawn as soon as possible.

**2016 MEETING SCHEDULE AT-A-GLANCE: March 14 to 16**

Midwest SETAC Annual Meeting, The Madison Concourse Hotel

Date	Times	Meeting Events	Location
Mon, Mar 14	10:30 A.M. to 1:00 P.M.	Registration	1st floo , Foyer of Assembly Room
	11:00 A.M. to 4:00 P.M.	Short Course	Assembly Room
	1:00 P.M. to 2:00 P.M.	Lunch for registered short course attendees	Caucus Room
	5:00 P.M. to 6:30 P.M.	Midwest SETAC Board Meeting	Assembly Room
	7:30 P.M. to 9:00 P.M.	Meet-n-Greet, Brocach (food & drink on your own)	Brocach (offsite)
Tue, Mar 15	7:30 A.M. to 5:00 P.M.	Registration/Presentation Upload & Drop-off	2nd floo , Foyer of Madison Ballroom
	7:30 A.M. to 8:25 A.M.	Breakfast	
	8:30 A.M. to 8:45 A.M.	Welcome and Meeting Overview	Madison Ballroom
	8:45 A.M. to 9:00 A.M.	Update from North America SETAC	
	9:00 A.M. to 9:45 A.M.	Plenary Speaker, Dominique Brossard	
	9:45 A.M. to 10:00 A.M.	Break	Outside the Ballroom
	10:00 A.M. to 5:00 P.M.	Platform Presentations	Madison Ballroom
	12:00 P.M. to 12:55 P.M.	Lunch	University Room
	12:30 P.M. until poster social	Poster Set-up	Wisconsin Ballroom
	3:00 P.M. to 3:10 P.M.	Break	Outside the Ballroom
	4:10 P.M. to 4:15 P.M.	5 Minute Stand & Stretch Break	Madison Ballroom
	4:15 P.M. to 4:50 P.M.	Plenary Speaker, Dave Krabbenhoft	Madison Ballroom
5:00 P.M. to 7:30 P.M.	Poster Session and Social	Wisconsin Ballroom	
Wed, Mar 16	7:30 A.M. to 8:00 A.M.	Registration/Presentation Upload & Drop-off	2nd floo , Foyer of Madison Ballroom
	7:30 A.M. – 8:10 A.M.	Breakfast	
	8:15 A.M. to 12:15 P.M.	Platform Presentations	Madison Ballroom
	12:15 P.M. to 1:30 P.M.	Lunch	
		Chapter Business Meeting, Raffle, Awards	
	Closing Ceremony		

## MEETING PROGRAM FOR MARCH 2016

### *Communicating Environmental Science: Research, Tools, and Policy*

#### SHORT COURSE:

**Monday, March 14, 11:00 A.M.  
in the Assembly Room, Concourse Hotel.**

#### COMMUNICATING SCIENCE -

**IMPROV 4 SCIENTISTS** is based on workshops offered at the Alan Alda Center for Science Communication at Stony Brook University. This training is a way for scientists and health professionals to learn to communicate more effectively with their peers and colleagues, the public, government officials, media, and others outside their discipline. Participants will learn how to utilize theatrical improvisation to communicate their research and messaging. Improvisers are experts in storytelling, spontaneity, and using observation skills to adjust to their audiences and team members accordingly. Among other skills, this workshop will teach attendees how to 1) effectively communicate your work to different audiences, 2) adjust your behavior in real time to respond to audience feedback, and 3) manipulate a vocal and physical presence to communicate more effectively. Everyone can learn to use these skills when giving lectures, presenting abstracts, describing research posters, and talking with mentors and peers. This short course will be led by Amy Zelenski and Clare Haden, both from the University of Wisconsin Madison and trained at the Alan Alda Center for Communicating Science.

*(Course is limited to 20 participants.)*

The course runs from 11:00 A.M. to 4:00 P.M. with course registration starting at 10:30 A.M. at the Assembly Meeting Room in the Madison Concourse Hotel. Lunch for registered attendees will be served in the Caucus Room next to the Assembly Room.

#### SHORT COURSE BIOGRAPHIES:



AMY ZELENSKI, PhD, is the Director of Education for the Department of Medicine in the School of Medicine & Public Health at the University of Wisconsin-Madison. She designs curriculum and teaches communication, empathy, teamwork, and self-awareness skills to medical professionals.



CLARE HADEN, Associate Lecturer, School of Education, Department of Theatre & Drama at the University of Wisconsin Madison. Clare received her Masters of Fine Arts in Acting from the University of Wisconsin Madison and currently serves as the Oral Communication Specialist at Saint Meinrad Seminary and School of Theology. She has worked as a professional actor, voice, and speech coach, and teaching artist.

## MEETING PROGRAM FOR MARCH 2016

### *Communicating Environmental Science: Research, Tools, and Policy*

#### PLENARY SPEAKER:

**Tuesday, March 15, 9:00 A.M., Madison Ballroom**



**DOMINIQUE BROSSARD, PhD,** will present *Communicating Science: Insights from the Science of Science Communication*.

Her talk will address the recent debates surrounding controversial scientific topics that have highlighted the fact that many questions raised by scientific breakthroughs do not have

scientific answers, but instead ethical, political, or societal ones. She plans to discuss what we know about how these issues are likely to play out in the media and in the political sphere, based on insights from science communication research. Dominique is an internationally known expert in public opinion dynamics related to controversial scientific issues. Dominique is professor and chair in the Department of Life Sciences Communication at the University of Wisconsin-Madison. Her teaching responsibilities include courses in strategic communication theory and research, with a focus on science and risk communication. Her research focuses on the intersection between science, media, and policy with the Science, Media and the Public research group, which she co-directs. She is particularly interested in understanding the role of values in shaping public attitudes and using cross-cultural analysis to understand these processes. Dominique earned her M.S. in plant biotechnology from the Ecole Nationale d'Agronomie de Toulouse and her M.P.S and PhD in communication from Cornell University.

#### PLENARY SPEAKER:

**Tuesday, March 15, 4:15 P.M., Madison Ballroom**



**DAVID KRABBENHOFT, PhD,** will present *Communicating Your Results after the Journal Paper: The Most Important Consumers of Your Hard Work Do Not Read Science Journals!*

Dave received his PhD from the University of Wisconsin-Madison in 1988 and had been a research scientist with the U.S. Geological Survey ever

since. His general research interests are in biogeochemistry and hydrogeology of aquatic ecosystems. Dave began working on environmental mercury cycling, transformations, and fluxes in aquatic ecosystems with the Mercury in Temperate Lakes project in 1988; since then, the topic has consumed his professional life. Currently, Dave's research team is active on projects that span environments from the open oceans to high altitude freshwater ecosystems. Since 1990, he has authored or coauthored over 150 papers on mercury in the environment but spends at least as much of his effort presenting to non-technical audiences – including frequent briefings at the US capital. In 2014, Dave received the USGS Shoemaker Award for lifetime achievement in science communication.

# 24<sup>TH</sup> ANNUAL MEETING OF MIDWEST REGIONAL CHAPTER OF SETAC

## Meeting Program: Tuesday Morning, March 15, 2016

TIME	EVENT	LOCATION
7:30 A.M.	<b>REGISTRATION, CONTINENTAL BREAKFAST</b>	MEET IN MADISON BALLROOM FOYER
8:30 A.M.	<b>WELCOME AND MEETING OVERVIEW</b>	MADISON BALLROOM Teresa Norberg-King, Regional Chapter President
	UPDATE ON NORTH AMERICA SETAC Wendy Hillwalker, SC Johnson, Member SETAC NA Board of Directors	
9:00 A.M.	<u>Plenary Speaker:</u> COMMUNICATING SCIENCE: INSIGHTS FROM THE SCIENCE OF SCIENCE COMMUNICATION Dominique Brossard	
9:45 A.M.	<b>BREAK (15 MIN)</b>  <i>Moderator: Teresa Norberg-King</i>	
10:00 A.M.	EVALUATION OF THE STATUS OF BENTHOS AND PLANKTON COMMUNITIES AT WISCONSIN'S GREAT LAKES AREAS OF CONCERN ON LAKE MICHIGAN Barbara C. Scudder Eikenberry, Hayley A. Templar, Daniel J. Burns, Amanda H. Bell	
10:20 A.M.	EVALUATING IMPACTS OF PULP AND PAPER MILL PROCESS CHANGES ON BIOACTIVE CONTAMINANT LOADING TO ST. LOUIS BAY Eric C Randolph, Gerald T Ankley, Jason P Berninger, Jenna E Cavallin, Evan P Eid, Megan Hughes, Michael D Kahl, Kathleen M Jensen, Joe Mayasich, Al Parrella, Anthony Schroeder, Daniel L Villeneuve, Kyle E Stevens	
10:40 A.M.	SURFACE WATER PHARMACEUTICAL CONTAMINATION: INVESTIGATING ADVERSE BIOLOGICAL CONSEQUENCES IN FISH POPULATIONS Troy D Lehto, Heiko L Schoenfuss, Nicole M Bentz	
11:00 A.M.	TOXICITY PREDICTION IN ECOLOGICAL EFFECTS ANALYSES – LIMITATIONS, UNCERTAINTY AND INFORMATION GAPS Tyler Linton, Keith Taulbee, Charles Delos, Wade Lehmann	
11:20 A.M.	UTILIZING HG STABLE ISOTOPE RATIOS TO MORE FULLY RESOLVE HG SOURCES AND PROCESSES IN THE GREAT LAKES Ryan F Lepak, Runsheng Yin, David P Krabbenhoft, Thomas M Holsen, James P Hurley	
11:40 A.M.	USE OF AIR DISPERSION MODELING IN PREDICTING RISK FROM BENEFICIAL REUSE OF STEEL SLAGS IN WISCONSIN Adam B Streiffer, Robert L Thiboldeaux	
12:00.-12:55 P.M.	<b>LUNCH</b>	UNIVERSITY ROOM

## Meeting Program: Tuesday Afternoon, March 15, 2016

TIME	EVENT
	<i>Moderator: Curtis Hedman, Wisconsin State Laboratory of Hygiene</i>
1:00 P.M.	REPRODUCTIVE EFFECTS OF PYRIPROXYFEN ON <i>DAPHNIA MAGNA</i> <u>Benjamin Westerhoff</u> , Heiko Schoenfuss
1:20 P.M.	IMPACTS OF WASTEWATER CONTAMINANT METFORMIN ON THE REPRODUCTIVE SYSTEM OF FATHEAD MINNOWS ( <i>PIMEPHALES PROMELAS</i> ) <u>Nicholas J Niemuth</u> , Rebecca D Klaper
1:40 P.M.	CHRONIC EFFECTS OF BINARY-METAL MIXTURES OF CADMIUM, ZINC, AND NICKEL ON <i>DAPHNIA MAGNA</i> <u>Edgar Perez</u> , Tham Hoang
2:00 P.M.	ON-SITE EVALUATION OF TOXICITY AND ESTROGENICITY OF WASTEWATER EFFLUENTS TO THE ENDANGERED RIO GRANDE SILVERY MINNOW <u>Kevin J Buhl</u> , Diana M Papoulias, Mandy L Annis, David A Alvarez, Travis W Schaeffer
2:20 P.M.	CHRONIC EXPOSURE OF FATHEAD MINNOWS TO A COMPLEX URBAN MIXTURE <u>Lina C Wang</u> , Jessica L Ward, Heiko L Schoenfuss
2:40 P.M.	MODULATION OF ESTROGENIC EFFECTS VIA TEMPERATURE ON TWO LIFE STAGES OF <i>PIMEPHALES PROMELAS</i> <u>Megan K Cox</u> , Jessica L Ward, Heiko L Schoenfuss
3:00 P.M.	<b>BREAK (10 MIN)</b>
3:10 P.M.	PERSISTENT LEAD CONTAMINATION IN AN URBAN MARSH: THE LEGACY OF LEAD SHOT <u>Tisha C King-Heiden</u> , Colin Belby, Gretchen Gerrish
3:30 P.M.	DOES SOCIAL HIERARCHY MODULATE RESPONSES OF FISH EXPOSED TO ENDOCRINE DISRUPTERS? <u>Jelena Ivanova</u> , Shiju Zhang, Heiko L Schoenfuss
3:50 P.M.	EFFECT OF CARBAMAZEPINE ON THE PHYTOTOXICITY OF PHARMACEUTICALLY ACTIVE COMPOUNDS <u>Madison E Czerwinski</u> , Sara L Nason, Joel A Pedersen
4:10 P.M.	<b>STAND &amp; STRETCH (5 min)</b>
4:15 P.M.	<i>Plenary Speaker:</i> COMMUNICATING YOUR RESULTS AFTER THE JOURNAL PAPER: THE MOST IMPORTANT CONSUMERS OF YOUR HARD WORK DO NOT READ SCIENCE JOURNALS! David Krabbenhoft, USGG
5:00 - 7:30 P.M.	<b>POSTER SESSION: POSTERS LISTED ON PAGE 9</b>



**Meeting Program: Wednesday Morning, March 16, 2016**

TIME	EVENT	LOCATION
7:30 A.M.	<b>CONTINENTAL BREAKFAST</b> <i>Moderator: David Feifarek</i>	MEET IN MADISON BALLROOM FOYER
8:15A.M.	<b>GREETINGS AND OVERVIEW OF THE DAY</b>	MADISON BALLROOM
8:20 A.M.	EFFECTS OF REARING TEMPERATURE AND POLYBROMINATED DIPHENYL ETHER (PBDE) ON GROWTH, DEVELOPMENT, AND METABOLISM OF LEOPARD FROG ( <i>LITHOBATES PIPIENS</i> ) TADPOLES  <u>Jeremiah M Yahn</u> , William H Karasov	
8:40 A.M.	DETECTION OF AVIAN INFLUENZA A IN GROUNDWATER: RESULTS FROM THE 2015 HPAI OUTBREAK  <u>Laura E Hubbard</u> , Susan K Spencer, Mark A Borchardt, Joel P Stokdyk, Aaron D Firnstahl, Dana W Kolpin	
9:00 A.M.	DETERMINING THE IMPACTS OF TOXICS IN THE GREAT LAKES USING GENOMIC BIOMARKERS OF MUSSELS INVOLVED IN THE CONTAMINANT MONITORING OF THE NOAA MUSSEL WATCH PROGRAM  <u>Nicklaus Neureuther</u> , Ed W Johnson, Kimani Kimbrough, Annie Jacob, Rebecca D Klaper	
9:20 A.M.	ACUTE TOXICITY OF CLOTHIANIDIN IN ZEBRA FINCHES: DEVELOPMENT OF A NEW MODEL OF NEONICOTINOID TOXICITY IN PASSERINES  <u>Erik Hofmeister</u> , Julia Lankton, Da Chen, Mark D. Jankowski	
9:40 A.M.	CONTAMINANT EXPOSURE IN TREE SWALLOWS NESTING ALONG THE ST. LOUIS RIVER, DULUTH, MN AND SUPERIOR, WI  <u>Christine M Custer</u> , Th mas W Cyster, Paul M Dummer	
10:00 A.M.	INGESTION OF MICROPLASTIC ASSOCIATED WITH GREEN ALGAE BY <i>DAPHNIA MAGNA</i> : EVIDENCE OF NO EFFECT  <u>Patrick M. Canniff</u> , Tham C Hoang	
10:20 A.M.	<b>BREAK (15 MIN)</b> <i>Moderator: Christine Custer, USGS</i>	
10:35 A.M.	THE ROLES OF PHYSICOCHEMICAL PROPERTIES AND ROOT PHYSIOLOGY IN PREDICTING PLANT UPTAKE OF PHARMACEUTICALS AND PERSONAL CARE PRODUCT INGREDIENTS  <u>Elizabeth L Miller</u> , Sara L Nason, K G Karthikeyan, Joel A Pedersen	
10:55 A.M.	DEMONSTRATION OF SCALABLE ANALYTICAL METHODS FOR THE SCREENING OF ALGAE BLOOM CONTAMINATED SURFACE WATERS BY UHPLC-TOFMS EQUIPPED WITH A NOVEL AND AUTOMATED ANALYTE SEARCH ALGORITHM  <u>Nicole Lenca</u> , Judy Westrick	
11:15 A.M.	METABOLOMICS: DOSE RESPONSE IN CELLULAR ASSAYS  <u>Joel G Putnam</u> , Justine E Nelson, Eric Leis, Richard A Erickson, Terrance D Hubert, Jon J Amberg	
11:35 A.M.	BRINGING THE FATHEAD MINNOW INTO THE GENOMIC ERA  <u>Travis W Saari</u> , Daniel L Villeneuve, Gerald T Ankley, Frank R Burns, Amarin L Cogburn, Stephane D Deschamps, Raymond E Jackson, Robert A Hoke, Anthony L Schroeder	
11:55 A.M.	POLYBROMINATED DIPHENYL ETHERS (PBDES) IN FISH FROM WISCONSIN'S GREAT LAKES AND INLAND WATERS  <u>Meghan CW Williams</u> , Candy Schrank	
12:15 P.M.	<b>LUNCH, BUFFET STYLE; PLEASE BRING YOUR LUNCH TO THE BALLROOM.</b> <b>CHAPTER BUSINESS MEETING, RAFFLE, &amp; AWARDS</b>	MADISON BALLROOM

**Poster Program: Tuesday, March 15, 2016****5:00 P.M. to 7:30 P.M. | Wisconsin Ballroom, Concourse Hotel**

Poster presentations will be available for viewing for the entire social program, and presenting author(s) should be present at their poster to answer questions. Authors please attend your posters no later than 5:15; partake in the food and beverages before attending your poster!

NUMBER	TITLE	PRESENTER/AUTHOR(S)
1.	DISTINGUISHING BETWEEN BIOACCUMULATION AND BIOMAGNIFICATION OF TRICLOSAN USING MACROINVERTEBRATES	<u>Banni Lopez Zavala, Sarah A Rubinfeld</u>
2.	A REFINED MULTI-SITE MODEL TO ESTIMATE THE TOXICITY OF PAH-CONTAMINATED SEDIMENTS AT MGP SITES	<u>Michael W Kierski, Ann Michelle Morrison, Susan B Kane Driscoll, Charles A Menzie</u>
3.	A SURVEY: DEMOGRAPHICS AND THE REBOUND EFFECT IN VEHICLE FUEL EFFICIENCY	<u>James M Mahoney, Andrea L Hicks</u>
4.	ADSORPTION OF LAMOTRIGINE TO MONTMORILLONITE CLAY	<u>Brian Ferrer, Sara Nason, Joel Pedersen</u>
5.	ASSESSING THE CONVENTIONAL CALCULATED METHOD (CCM) OF THE GLOBALLY HARMONIZED SYSTEM (GHS) FOR ACUTE AQUATIC TOXICITY CLASSIFICATIONS OF CHEMICAL MIXTURES USING 48-HOUR LC50 <i>DAPHNIA MAGNA</i> TEST RESULTS	<u>Kim D'Aloia, Magdalena Osorio, Owen Kinsky, Nathan Pechacek</u>
6.	BIOLOGICAL EFFECTS OF SEPTIC POLLUTION ON LARVAL FATHEAD MINNOWS, <i>PIMEPHALES PROMELAS</i>	<u>Les Warren, Heiko Schoenfuss</u>
7.	ASSESSING THE INFLUENCE OF PART PER BILLION VARIATION OF NATURAL ORGANIC CARBON LEVELS ON CATIONIC POLYMER ACUTE TOXICITY TO <i>D. MAGNA</i>	<u>Jared S Bozich, Edward R Salinas, Lars Peters, Reudiger Lukas, Rebecca D Klaper</u>
8.	ASSOCIATION OF THE ANTICONVULSANT DRUG LAMOTRIGINE WITH DISSOLVED HUMIC ACID	<u>Bei Liu, Joel A Pedersen</u>
9.	BACTERIAL TRANSFORMATION OF ENGINEERED NANOMATERIALS USED IN ELECTRIC VEHICLE ENERGY STORAGE DEVICES	<u>Debra R Garvey</u>
10.	THE FATE OF FRAGRANCE CHEMICALS FROM WASTEWATER TREATMENT PLANTS	<u>Helaina Rosenmayer, Macy Anderson, Sarah A Rubinfeld</u>
11.	CHANGES IN TYROSINE HYDROXYLASE EXPRESSION IN ZEBRAFISH EMBRYOS RESULTING FROM EXPOSURE TO BISPHENOL A (BPA)	<u>Brenda L McKee, Sarah Gempeler, Kelsey Smith, Peter Kuhn</u>
12.	<i>IN VITRO</i> ASSESSMENT OF ANDROGENIC ACTIVITY OF WATER RECLAMATION PLANT EFFLUENTS IN GREATER CHICAGO	<u>Abigail Lukowicz, Jackie Heitzman, Tom Minarik, Dalma Martinović-Weigelt</u>
13.	EFFECTS OF THE AZOLE FUNGICIDE IMAZALIL ON THE FATHEAD MINNOW ( <i>PIMEPHALES PROMELAS</i> ) STEROIDOGENESIS PATHWAY	<u>David J Fejfarek, Rebecca Y Milsk, Kathleen M Jensen, Brett R Blackwell, Eric C Randolph, Jenna E Cavallin, Travis W Saari, Michael D Kahl, Gerald T Ankley, Wan-Yun Cheng, Daniel L Villeneuve</u>
14.	EMPIRICAL MODELS FOR QUANTIFYING THE ROLE OF CHEMICAL POLLUTANTS OF EMERGING CONCERN IN FISH BIODIVERSITY LOSS IN US	<u>Daniel Bampoh, Shweta Singh</u>

# 24<sup>TH</sup> ANNUAL MEETING OF MIDWEST REGIONAL CHAPTER OF SETAC

NUMBER	TITLE	PRESENTER/AUTHOR(S)
15.	EVALUATING CHEMICAL TRACERS IN SUBURBAN GROUNDWATER AS INDICATORS OF NITRATE-NITROGEN SOURCES	<u>Amy L Nitka</u> , <u>William M DeVita</u> , <u>Paul M McGinley</u>
16.	EVALUATION OF TRADITIONAL SOIL TESTING METHODS TO ESTIMATE LEAD HAZARD IN SOIL	<u>Shannon A Plunkett</u> , <u>Douglas J Soldat</u>
17.	EVALUATION OF WHOLE-MOUNT <i>IN SITU</i> HYBRIDIZATION AS A TOOL FOR PATHWAY-BASED TOXICOLOGICAL RESEARCH IN EARLY-LIFE STAGE FATHEAD MINNOWS	<u>Jenna E Cavallin</u> , <u>Anthony L Schroeder</u> , <u>Brett R Blackwell</u> , <u>Kerri Carlson</u> , <u>Kathleen M Jensen</u> , <u>Michael D Kahl</u> , <u>Eric C Randolph</u> , <u>Daniel L Villeneuve</u> , <u>Gerald T Ankley</u>
18.	EVIDENCE OF LAMPRICIDE PHOTODEGRADATION DURING FIELD APPLICATIONS TO TRIBUTARIES OF THE GREAT LAKES	<u>Megan B McConville</u> , <u>Adam S Ward</u> , <u>Christina K Remucal</u>
19.	EXPOSURE TO TWO 2,4-D HERBICIDE FORMULATIONS DECREASED LARVAL SURVIVORSHIP IN FATHEAD MINNOWS ( <i>PIMEPHALES PROMELAS</i> )	<u>Gavin K Dehnert</u> , <u>Mariella B Freitas</u> , <u>Zachary A DeQuattro</u> , <u>Terence P Barry</u> , <u>William H Karasov</u>
20.	EXAMINING THE DEMOGRAPHIC EFFECTS OF COAL FLY ASH EXPOSURE ROUTES IN <i>DAPHNIA MAGNA</i> AND <i>DAPHNIA PULEX</i>	<u>Madison Hull</u> , <u>Paul C Pickhardt</u>
21.	IMPACTS OF EARLY EXPOSURE TO TRICLOSAN ON GROWTH, MATURATION, AND REPRODUCTION IN ZEBRAFISH	<u>Cole W Fuchs</u> , <u>Tisha King-Heiden</u>
22.	THE EFFECTS OF CHLORINATED SOLVENTS ON TYROSINE HYDROXYLASE 1 EXPRESSION IN ZEBRAFISH EMBRYOS USING QUANTITATIVE POLYMERASE CHAIN REACTION (QPCR)	<u>Brenda L McKee</u> , <u>Emilie Anderson</u> , <u>Emily Buchner</u> , <u>Caroline Kucha</u> , <u>Sarah Datzza</u> , <u>Sarah Rendon</u> , <u>Peter Kubn</u>
23.	INTERACTION OF NANOPARTICLES WITH GRAM-POSITIVE BACTERIAL SURFACES	<u>Emily R Caudill</u> , <u>Joel A Pedersen</u>
24.	TREE SWALLOWS AS INDICATORS OF SEDIMENT CONTAMINATION	<u>Thomas W Custer</u> , <u>Christine M Custer</u>
25.	POPULATION EFFECTS OF COAL FLY ASH-EXPOSED <i>CHLAMYDOMONAS REINHARDTII</i> FED TO <i>DAPHNIA MAGNA</i> AT LOW AND HIGH FOOD CONCENTRATIONS	<u>Brooke Wilder-Corrigan</u> , <u>Paul C Pickhardt</u>
26.	DEFINING GREAT LAKES TRIBUTARY REPRESENTATIVE MIXTURES FOR CHEMICAL EXPOSURE EXPERIMENTS	<u>Zachary G Jorgenson</u> , <u>Mandy L Annis</u> , <u>JoAnn Banda</u> , <u>Mark E Brigham</u> , <u>Steven J Choy</u> , <u>Sarah M Elliott</u> , <u>Dan J Gefell</u> , <u>Richard L Kiesling</u> , <u>Dalma Martinović-Weigelt</u> , <u>Heiko L Schoenfuss</u> , <u>William Tucker</u>
27.	CHRONIC EFFECTS OF LEAD TO TOPSMELT FISH ( <i>ATHERINOPS AFFINIS</i> ); SSD DEVELOPMENT, INFLUENCE OF SALINITY, AND INFLUENCE OF ORGANISM AGE ENHANCEMENT OF MICROPLASTICS ON ENDOSULFAN SULFATE UPTAKE IN EARTHWORM ( <i>LUMBRICUS TERRESTRIS</i> )	<u>Erik Reynolds</u> , <u>Tham C Hoang</u>
28.	ENHANCEMENT OF MICROPLASTICS ON ENDOSULFAN SULFATE UPTAKE IN EARTHWORM ( <i>LUMBRICUS TERRESTRIS</i> )	<u>Ritesh Kashyap</u> , <u>Tham C Hoang</u> , <u>Kathryn Renyer</u> , <u>Paul Chiarelli</u>
29.	CHARACTERISTICS OF WISCONSIN MALE ANGLERS OVER 50 RELATED TO FISH CONSUMPTION AND ADVISORIES	<u>Candy Schrank</u> , <u>Meghan Williams</u> , <u>Krista Y Christensen</u> , <u>Henry A Anderson</u>
30.	METHOD REFINEMENTS FOR THE MIDGE LIFE-CYCLE, <i>CHIRONOMUS DILUTUS</i> TEST	<u>Teresa J Norberg-King</u> , <u>Terry L Highland</u> , <u>J Russell Hockett</u> , <u>David R Mount</u>

## **JOIN THE CHAPTER:**

The Midwest Chapter of SETAC is a regional chapter of the Society of Environmental Toxicology and Chemistry (SETAC), a nonprofit worldwide professional society with a mission to support the development of principles and practices for the protection, enhancement, and management of sustainable environmental quality and ecosystem integrity. The Midwest Chapter of SETAC holds their annual meeting to provide professionals, academics, and students the opportunity to present their work, exchange ideas, and network with their peers. The Midwest Chapter has about 70 members from Illinois, Iowa, Michigan, Minnesota, South Dakota, and Wisconsin. The Chapter is committed to the professional development of students and offers a variety of funding avenues to help students attend and present original research findings at the annual Chapter meetings. Also, the Chapter is committed to the professional development of students and offers a variety of funding avenues to help students attend and present original research findings at the annual Chapter meetings. We encourage you to join the chapter or renew your membership.

Our membership rates are \$15.00 for regular membership and \$5.00 for student membership. Application forms are available online at the Membership link ([www.midwestsetac.org](http://www.midwestsetac.org)). You can also pay your regional chapter dues online when you renew your SETAC membership, pay at the registration desk, or email the treasurer for the chapter.

## **THANK YOU TO THE ORGANIZERS OF THE MEETING:**

### **PROGRAM PLANNING AND MEETING ARRANGEMENTS**

Teresa Norberg-King  
Dawn Perkins

### **STUDENT TRAVEL AWARDS**

Kevin J. Buhl

### **STUDENT PRESENTATION AWARDS COORDINATION**

Tyler Linton  
Camille Danielson

### **EXHIBITOR AND SPONSORSHIP**

Nadia Carmosini  
Tham C Hoang  
Tyler Linton

### **RAFFLE COORDINATION**

Jodi Mohs-Davis, St. Paul, MN  
Zachary Jorgenson, Minneapolis, MN

**2015 WINNERS OF THE STUDENT PRESENTATIONS**

**BEST STUDENT PLATFORM:** A \$1,000 award provided by SC Johnson was presented by John Weeks (SC Johnson) to the first place oral presentation. This monetary award supports the student in presenting the research at the North America Annual SETAC meeting in the fall.



**FIRST PLACE: JARED BOZICH** (University of WI, Milwaukee), paper titled *Impacts of a Next Generation Energy Storage Nanomaterial on Daphnia magna*



**RUNNER UP: DAVID FEIFAREK** (St. Cloud State University), paper titled *Vitellogenin, a Biomarker of Estrogenic Exposure in Fish, Is Modulated by Changing Environmental Conditions*

**BEST STUDENT POSTER:** A \$1,000 award provided by 3M was presented by Jodi Mohs-Davis of 3M to the first place winner. This monetary award supports the student presenting the research at the North America Annual SETAC meeting in the fall.



**FIRST PLACE: JENNA CAVALLIN** (University of MN, Duluth): *Assessment of Wastewater Treatment Plant Effluent Effects On Fish Reproduction*

**RUNNER UP: RYAN PAUKERT** (University of Wisconsin La Crosse): *Does Embryonic Exposure to Triclosan Impair the Ability of Zebrafish Larvae to Capture Prey?* (Picture not available)

In the event, the first place winner cannot attend the meeting, the runner-up attends the annual fall meeting.

**THINGS TO DO IN AND NEAR MADISON:**

If you find time to visit some of the sites around town, you might want to use the following web pages for local attractions, events, and restaurant information:

- Greater Madison Visitor & Convention Bureau
- Isthmus Newspaper's Dining Guide
- Isthmus Newspaper's Event Calendar
- Capitol Building & Tour Info
- Wisconsin Historical Museum
- Wisconsin Veterans Museum
- Madison Science Museum
- Madison Museum of Contemporary Art
- UW-Madison Chazen Museum of Art
- UW-Madison/Wisconsin Institutes for Discovery
- Henry Vilas Zoo (free)
- Olbrich Botanical Gardens (free outside garden)



(Middle - Right)  
Map of Madison & the Madison Concourse Hotel

(Bottom - Right)  
(1 w. Dayton Street) and the Brocch Pub

# 24<sup>TH</sup> ANNUAL MEETING OF MIDWEST REGIONAL CHAPTER OF SETAC

## THANK YOU FOR ATTENDING:

On behalf of the 2016 Midwest Chapter Board of Directors, thank you for joining us at this meeting. Below are photos of the current Board of Directors members, if you have suggestions, want to become involved, you can find out more from any one of us!

Teresa Norberg-King,  
President, Midwest SETAC



1ST ROW: Teresa Norberg-King, Dawn Perkins, John Weeks, Jodi Mohs-Davis, Chris Custer, Allison Betancourt  
2ND ROW: Nadia Carmosini, Thomas (Tham) Hoang, Camille Danielson, Zachary (Zach) Jorgenson, Jenna Cavallin, Jared Bozich.

### Midwest SETAC Board of Directors 2015-2016

Position	Name	Email
President	Teresa Norberg-King	<a href="mailto:tjnorberg@gmail.com">tjnorberg@gmail.com</a>
Vice President	Dawn Perkins	<a href="mailto:dawn.perkins@slh.wisc.edu">dawn.perkins@slh.wisc.edu</a>
Past President	John Weeks	<a href="mailto:JAWeeks@SCJ.COM">JAWeeks@SCJ.COM</a> <a href="mailto:Jmohs-davis@hotmail.com">Jmohs-</a>
Secretary (term ends 2017)	Jodi Mohs-Davis	<a href="mailto:davis@hotmail.com">davis@hotmail.com</a>
Treasurer (term ends 2016)	Chris Custer	<a href="mailto:ccuster@usgs.gov">ccuster@usgs.gov</a>
At Large Positions (term ends)		
Board Member (2016 )	Nadia Carmosini	<a href="mailto:ncarmosini@uwlax.edu">ncarmosini@uwlax.edu</a>
Board Member (2017)	Camille Danielson	<a href="mailto:Camille.Danielson@slh.wisc.edu">Camille.Danielson@slh.wisc.edu</a>
Board Member (2017)	Th mas Hoang	<a href="mailto:thoang@luc.edu">thoang@luc.edu</a>
Board Member (2018)	Jenna Cavallin	<a href="mailto:jennacav@gmail.com">jennacav@gmail.com</a>
Board Member ( 2018)	Zachary Jorgenson	<a href="mailto:zjorgens@hotmail.com">zjorgens@hotmail.com</a>
Student Representative (2016)	Jared Bozich	<a href="mailto:jsbozich@uwm.edu">jsbozich@uwm.edu</a>
Web Administrator (non-elective)	Allison Betancourt	<a href="mailto:AKBetanc@scj.com">AKBetanc@scj.com</a>

## OUR MEETING SPONSORS

A BIG THANK YOU TO THE SPONSORS AND EXHIBITORS FOR HELPING ENSURE SETAC'S GOAL OF ENVIRONMENTAL QUALITY THROUGH SCIENCE®



Midwest Chapter  
Society of Environmental  
Toxicology and Chemistry



### Meeting Sponsorship - SUSTAINING

North America Society of Environmental Toxicology and Chemistry (SETAC)

3M Company

SC Johnson

### GOLD SPONSORS

Agilent Technologies

Fisher Scientific

Great Lakes Environmental Center (GLEC)

Environmental Consulting and Testing (ECT)

### SILVER SPONSORS

Exponent

*If you are interested in becoming an exhibitor or sponsor for next year, please visit us at the registration desk or contact Dawn Perkins (608-224-6230; dawn.perkins@slh.wisc.edu).*



**A FAMILY COMPANY**

---

**3M**





# Agilent Technologies



## Fisher Scientific

A Thermo Fisher Scientific Brand

# GLEC



## Great Lakes Environmental Center

The logo for Environmental Consulting &amp; Testing Inc. is contained within a black rectangular border. It features a large, stylized letter 'E' at the top left. To its right, the words 'Environmental Consulting &amp; Testing Inc.' are stacked vertically in a bold, sans-serif font. Below the 'E' is a circular graphic divided into four quadrants: the top-left shows a chemical structure with 'H' and 'OH' labels; the top-right shows a biological cell or organism; the bottom-left shows a chemical structure with 'NH' and 'OH' labels; and the bottom-right shows a biological structure, possibly a fish or insect. Below the company name, the text 'SUPERIOR, WI' is written in a smaller, bold, sans-serif font.





