NEWSLETTER
International Society of Chemical Ecology

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— Important Dates

◊ **16 August**: Deadline for late registration for 2017 ISCE/APACE meeting

◊ **23-27 August**: 2017 ISCE/APACE meeting in Kyoto, Japan http://www.2017isce-apace.jp

Results of the 2017-18 Officer Elections

Vice-President	Coby Schal
Treasurer	Jerry Zhu
Secretary	Irena Valterová
Councilors	Vincas Būda
	Gabrielle Nevitt
	Sandra Steiger
	Sybille Unsicker

See following page for full biographies.

Message from the Secretary

Dear colleagues,

Some of us remember times when the ISCE Newsletter had its printed form and was sent out to all members. The printing and mailing was however expensive and time- and labor-consuming, therefore it was decided in 2001 to produce newsletters in electronic form only. The printed newsletter had a different form from the current one, it looked nicer and more professional. Rob Mitchell, our webmaster, took time for creating a template to return to the original form of the newsletter. I hope you will like the old/new design. Thank you, Rob, for your great job!

Update on the 2017 ISCE/APACE Meeting

Dear Friends and Colleagues,

We are approaching the second Joint Meeting of the 33rd Annual Meeting of ISCE and the 9th Meeting of APACE (Asia-Pacific Association of Chemical Ecologists). We expect a very exciting meeting with more than 300 participants from 32 different countries. The scientific program is now complete and will be uploaded on the event's website soon. Please access http://www.2017isce-apace.jp for updated information about the meeting. The program includes a total of 15 sessions and 2 poster sessions. More than 310 abstracts have been submitted, including 134 oral presentations. All posters will be on display throughout the whole meeting. Furthermore, the symposium will celebrate the 90th birthday of Prof. Jerrold Meinwald on the first day (Aug 23).

Summer in Kyoto is generally very hot, humid and sunny. The long-range weather forecast reports that it will be hotter than usual in August this year. Please prepare for hot summer temperatures during your stay.

We and the organizing committee members look forward to seeing you all in Kyoto.

Sincerely,

Junji Takabayashi

Naoki Mori

Results of the 2017-18 ISCE Officer Elections

2017-18 ISCE Elections: Vice President

Coby Schal holds the Blanton J. Whitmire Distinguished Professorship at North Carolina State University (USA). He has a B.Sci. from the State University of New York at Albany, a Ph.D. from the University of Kansas (with W.J. Bell), and postdoctoral training at the University of Massachusetts (with R.T. Cardé). He was Assistant and then Associate Professor of Entomology at Rutgers University in New Jersey. Coby's chemical ecology projects include cockroach sex and aggregation pheromones, roles of microbes in mosquito and sand fly oviposition, cuticular lipids in various insects, evolution of sex pheromones in moths, and the neuronal basis of sugar-aversions in cockroaches. Research on cockroach-produced allergens also includes their biology, intervention strategies to mitigate their pervasiveness, and studies on the impacts of environmental interventions on health outcomes in asthmatic children. The Schal lab has also been investigating the recent resurgence of bed bugs, through collaborative research in population genetics, chemical ecology and pest and resistance management. Coby's lab has published over 260 peer-reviewed papers, and he has mentored 35 graduate students and 36 post-doctoral researchers. He teaches graduate courses in Insect Behavior, Urban Entomology and Chemical Ecology. Coby has served as subject editor and on the editorial boards of 6 journals, including the Journal of Chemical Ecology, as councilor of the ISCE, and on the Entomological Society of America (ESA) Governing Board. Recent honors include the Silverstein-Simeone Award from the ISCE, Fellow of ESA, Fellow of AAAS, Holladay Medal (NCSU's highest faculty award), Outstanding Research Award, Outstanding Adviser Award, ESA's Recognition Award in Urban Entomology, and ESA's Nan-Yao Su Award for Innovation and Creativity in Entomology.

2017-18 ISCE Elections: Treasurer

Jerry Zhu is a Research Chemical Ecologist/Entomologist at USDA-ARS. He is also an ADJ Professor of Entomology at the University of Nebraska since 2010. He received his PhD in Chemical Ecology with Prof. Christer Löfstedt at Lund University, Sweden. Since 1995 he has worked in various universities, Industry, and Research Institutes in US and Europe. His research focuses on semiochemical-based pest management (from basic understanding to practical applications). He has published over 80 peer-reviewed journal papers, with 5 US patents and several developed commercial products from his inventions. He also served as a guest editor of Journal of Chemical Ecology and was involved with the recent special issue of JCE titled, "Semiochemicals in Pest Management: Development, Regulation Applications" with John Romeo, Tom Baker and Jocelyn Millar. He is a member of ISCE since 1992. He has been involved in organizing several ISCE conferences (including the present 2nd joint conference of ISCE and APACE in Japan) and attends ISCE meeting regularly. Currently, he serves as the President of Asia-Pacific Association of Chemical Ecologists and the President of Overseas Chinese Entomologists of America..

2017-18 ISCE Elections: Secretary

Irena Valterová is the Head of the Research Group of Infochemicals of the Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic in Prague. She graduated in organic chemistry at the Faculty of Natural Sciences of the Charles University in Prague. As a PhD student, she worked on isolation and structure elucidation of defense substances of termite soldiers under the supervision of Dr. Jan Vrkoč. As a postdoctoral research fellow, she spent two years (1990-1992) at the Royal Institute of Technology in Stockholm, Sweden. She worked in the group of Prof. Torbjörn Norin on enantioselective separations using a two-dimensional gas chromatography. She applied this technique in the determination of enantiomeric purity of monoterpene hydrocarbons isolated from insects and plants.

Her current research includes chemical communication in bumblebees and biosynthesis of male marking pheromones. She published 147 original papers, 4 review articles, and 4 patents, mainly in the field of chemical ecology. As a principal investigator of a successfully solved project "Pollinators as a Crucial Factor in Agriculture", she was awarded the Prize of the Technology Agency of the Czech Republic and the Prize for Usefulness of Solution in 2015.

Irena is an active member of the Czech Chemical Society where she works in the Executive Committee. Furthermore, she is a member of the Board for Alfred Bader Prize awarding outstanding Czech young scientists in bioorganic and bioinorganic chemistry. Irena became an ISCE member in 1993 where she served as councilor in 2002-2004 and as Secretary since 2014 until now. She has been nominated for a second three year term by the current Past-President, Kenneth Haynes.

2017-18 ISCE Elections: Councilors

Vincas Būda is a professor of animal ecology at Vilnius University, Lithuania. He obtained his PhD at Moscow State University for his work on pheromone communication in codling moth and degree of dr. *habilitus* at Institute of Ecology (Vilnius) for work on chemical communication in moths: biological, ecological and chemical aspects. For few years he has been Visiting Scientist at Lund University (Sweden), Prof. C. Löfstedt's pheromone group, and for one year at Iowa State University with Prof. T.C. Baker. In the State Scientific Research Institute of Ecology (Vilnius) he established his own group to study chemical and behavioral ecology of insects. He prepared and published textbook for university students on chemical ecology (part on intraspecific interactions by means of semiochemicals). Later his research program was expanded from insects to certain mammals, their pheromones and behavior, as well as to animal-plant interactions. Vincas with co-authors published numerous papers in international journals and won several prizes, including Fulbright Foundation award (USA) and Lithuanian award for science (National award for outstanding achievements). During 2008-2013 he was appointed a member of Research Council of Lithuania and since 2008 became fellow of the National Academy of Sciences in Lithuania. Vincas hosted ISCE annual meeting in Vilnius, 2012.

Gabrielle Nevitt is a Professor in the Department of Neurobiology, Physiology and Behavior at UC Davis who is fascinated by the sensory worlds of animals. She received her BS and MS Stanford University, and a PhD in Zoology from the University of Washington, where she studied olfactory imprinting and homing in Pacific salmon. She did postdoctoral work at Cornell University where she was highly influenced and encouraged by Professor Tom Eisner to "just keep doing what you are doing." In response to his suggestion, she has spent most of her career engaged in questions elucidating how behavior is shaped by interactions with chemical signals and landscapes in natural (field) contexts. Career-wise she went out on a limb to conduct pioneering studies into the sense of smell in birds at a time when they were thought to be mostly anosmic. She has worked extensively in the sub-Antarctic to better understand how petrels and albatrosses use odor landscapes to find patchily distributed prey in a seemingly featureless ocean. Discoveries include 1) that dimethyl sulphide is not only a global climate regulator but also serves as a keystone foraging cue in marine ecosystems, and 2) that birds can discriminate each other using scent cues alone. Her publications have appeared in leading journals (Science, Nature, PNAS) and, she has been a regular contributor to ISCE meetings over the years.

Sandra Steiger is Assistant Professor at the University of Ulm, Germany since 2012. She received her PhD at the University of Freiburg, Germany, where she studied chemically mediated recognition processes in burying beetles. She was awarded the Horst Wiehe Prize of the German Zoological Society for her outstanding PhD thesis and the presentation award of the ISCE conference in 2007. Supported by a Feodor Lynen Fellowship of the Alexander von Humboldt Foundation, she spent two years in the US at the Illinois State University working on the role of cuticular lipids in mate choice of crickets. After a short stop in the group of Prof. Joachim Ruther at the University of Regensburg, she moved on to the Chemical Ecology Section headed by Prof. Manfred Ayasse at the University of Ulm. Her research interests lie in the intersection of the fields of Chemical Ecology, Behavioral Ecology and Evolutionary Ecology. The focus of Sandra's research is to investigate the evolution of chemical traits and how sexual selection shapes chemical profiles. Moreover, she is particularly interested in how pheromones regulate family life and coordinate the interaction between the different members of a family. Her main model system are burying beetles, which show an elaborate form of biparental care. As burying beetles breed on dead vertebrates and treat it with antimicrobial secretions, she is also interested in the topic of internal and external immune defenses and the role of microbial symbionts. Sandra has published numerous articles in international journals like Nature Communication, Current Biology, Ecology Letters, Molecular Ecology, Proceedings Royal Society B, Evolution and Journal of Chemical Ecology.

Sybille B. Unsicker is a Group Leader at the Max Planck Institute for Chemical Ecology (MPI-CE) in Jena and an associated member of the Chair for Terrestrial Ecology at the Technical University Munich (Germany) where she teaches courses in Chemical Ecology. Sybille obtained her Master Degree in Tropical Ecology at the University of Würzburg in 2002 and earned her PhD in Ecology at the University of Jena in 2007. After a one-year postdoc at the MPI for Chemical Ecology Sybille established her own project group in 2008 to study the chemical ecology of poplar trees. She is particularly interested in the role of volatiles and phenolics in tree defense against insects and pathogens. Sybille published numerous papers in international journals like *Ecology*, *Current Opinion in Plant Biology*, *Oecologia*, *The Plant Cell*, *Journal of Chemical Ecology* etc. In 2016 Sybille co-chaired the Gordon Research Seminar on Plant Volatiles. She is a member of ISCE since 2008.

Congratulations to all of you!

New Book in Chemical Ecology

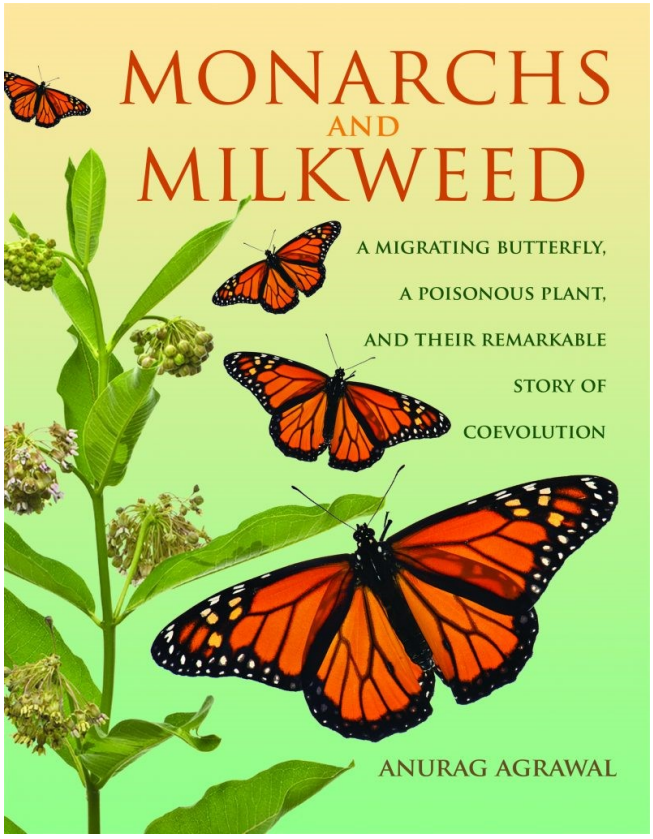
Anurag Agrawal: Monarchs and Milkweed: A Migrating Butterfly, a Poisonous Plant, and Their Remarkable Story of Coevolution

The fascinating and complex evolutionary relationship of the monarch butterfly and the milkweed plant

Monarch butterflies are one of nature's most recognizable creatures, known for their bright colors and epic annual migration from the United States and Canada to Mexico. Yet there is much more to the monarch than its distinctive presence and mythic journeying. In *Monarchs and Milkweed*, Anurag Agrawal presents a vivid investigation into how the monarch butterfly has evolved closely alongside the milkweed - a toxic plant named for the sticky white substance emitted when its leaves are damaged - and how this inextricable and intimate relationship has been like an arms race over the millennia, a battle of exploitation and defense between two fascinating species.

The monarch life cycle begins each spring when it deposits eggs on milkweed leaves. But this dependency of monarchs on milkweeds as food is not reciprocated, and milkweeds do all they can to poison or thwart the young monarchs. Agrawal delves into major scientific discoveries, including his own pioneering research, and traces how plant poisons have not only shaped monarch-milkweed interactions but have also been culturally important for centuries. Agrawal presents current ideas regarding the recent decline in monarch populations, including habitat destruction, increased winter storms, and lack of milkweed - the last one a theory that the author rejects. He evaluates the current sustainability of monarchs and reveals a novel explanation for their plummeting numbers.

Lavishly illustrated with more than eighty color photos and images, *Monarchs and Milkweed* takes readers on an unforgettable exploration of one of nature's most important and sophisticated evolutionary relationships.



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