NEWSLETTER
International Society of Chemical Ecology

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— In This Issue —

— Important Dates —

◊ **1 May 2022**
Last day to submit ballots for the 2022 ISCE Officer Election

◊ **DATE CHANGE: 8-12 August 2022**
ISCE Annual Meeting, Kuala Lumpur,

2022-2023 ISCE Elections

All members are invited to vote in the 2022-23 ISCE Elections. This year, the membership will vote to select a vice-president and four councilors. For additional information, please consult the ISCE bylaws. Please log in to your ISCE account to vote at the society website.

Message from the President

I am honored to be elected as the ISCE President, and I look forward to fulfilling this mission in the coming year in close collaboration with the members of the Executive Committee and the Council, with their advice and counsel to guide our decisions.

Nonetheless, my first thought is dedicated to Prof. James H. Tumlinson who passed away at the beginning of February. All in our tight-knit community will remember Jim, since he had such a tremendous influence on the development of Chemical Ecology concepts and approaches which have inspired scientific research worldwide. In this issue, the obituary written by Ted Turlings and Consuelo de Moraes summarizes his extraordinary career, from a lieutenant in the US Marine Corps to an internationally known scientific pioneer.

As we left 2021 and entered 2022, the scientific community exhibited resilience and operational excellence in the face of the ongoing pandemic resulting from COVID-19, even as each of us continues to struggle in a world that has been turned upside down. While concerns are mounting, there are still many unanswered questions about the overall impact of the COVID Omicron variant. In this scenario, the organizers of the 3rd ISCE-APACE 2022 (joint meeting of the 37th Annual Meeting of ISCE and 12th APACE Conference), are planning to set the meeting in-person, observing of course, all COVID safety protocols as recommended by the host country. The meeting is scheduled from August 8-12, 2022 in Kuala Lumpur. I wish to take this opportunity to once again thank Jeremy, Christian, Francois, Bernard and all their coworkers, for their tremendous efforts in organizing the excellent virtual meeting in South Africa. However, it is time to return in-person meeting, if it is possible. Many thanks to Alvin and the other members involved in the challenges of arranging the upcoming meeting for all of us in person reinforcing that we are part of a larger community, and providing a sense of connectedness that is so important after two years in which we have been prevented from seeing friends and colleagues in person!

Reflecting on the duties of the ISCE leadership team for 2022, in spite of all the COVID-19 restrictions, the Executive Committee and the Councilors have actively managed the scientific and administrative activities which attest to the vitality of our society. We have been evaluating nominations for the Silver Medal Award, Silverstein-Simeone Award, and Applied Chemical Ecology Award. The Society is in very sound financial health, so we are in a very good position to bounce back from the restrictions caused by COVID. My special thanks to the people who volunteered for positions on council to help out with general operations during the year or at annual meetings. This year the meeting will host the first memorial lecture, given by Stefan Schulz, and sponsored by the Wittko Francke- Daaks Chemicals fund. This fund was created to honor deceased prominent members of the Society and show connection between "older and current" science in the field of chemical ecology. I wish to thank the committee, May Berenbaum, Christer Löfstedt, Jeremy McNeil, and Anna-Karin Borg-Karlson for their excellent job in the evaluating the nominees for 2022, and for their availability for the 2023 call which will be launched during the following months.

I send our best wishes to all of you and to your families, and hope that you are able to stay healthy and strong as COVID becomes more manageable, and I look forward to seeing you in Kuala Lumpur.

Stefano Colazza, ISCE President

2022 ISCE Officer Elections

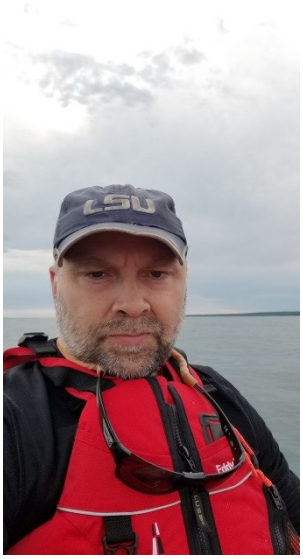
All members are invited to vote in the 2022 ISCE Elections. This year, the membership will vote to select a vice president and four councilors. The **vice-president** serves one year in this position and then serves as president in the following year. The **Councilors** serve a three-year term and act in an advisory capacity to the Executive Committee. For additional information, please consult the ISCE bylaws, available online at the society website.

The online ballot is available for all paid members. Please log in to your ISCE account to vote:

http://chemecol.org/login.aspx

After reviewing the biographies below, please vote for your candidates: **ONE** (**1**) for Vice President and **FOUR** (**4**) candidates for Councilors. Please submit this information via the electronic ballot. **Voting will close at midnight (EDT) on May 1, 2022**.

Candidates for Vice President
(in alphabetic order)



Jeremy Allison is a research scientist with the Canadian Forest Service, an adjunct Assistant Professor at the University of Toronto, and group leader of the satellite lab in Applied Chemical Ecology at the Forestry and Agricultural Biotechnology Institute, University of Pretoria. He has a Master of Pest Management degree from Simon Fraser University where he studied the chemical ecology of the Cerambycidae under the supervision of John H. Borden. His PhD is in entomology from the University of California-Riverside where he studied the behavioral and chemical ecology of pheromone communication in moths under the supervision of Ring T. Carde.

His current research is focused on understanding the behaviors that chemical cues and signals mediate in forest insects. This information is used to develop and improve integrated pest management programs and to develop a more complete understanding of the chemical ecology of forest insects. To date he has published more than 60 peer-reviewed papers (11 in the Journal of Chemical Ecology), three book chapters and was senior editor of the book "Pheromone Communication in Moths: Evolution, Behavior and Application".

He has been active in service of the society and discipline of chemical ecology. He attended his first meeting in 2002 in Hamburg and has attended all but three meetings since, organized symposia at the 2006 and 2015 meetings and served as chair of the organizing committee for the 2021 meeting in South Africa. He served as Treasurer from 2011-18 and currently coordinates the International Union of Forest Research Organizations Working Party 7.03.16 "Behavioural and Chemical Ecology of Forest Insects".

***Statement of Motivation*:** My motivation to serve the ISCE as vice-president (VP) is in part a desire to pay back the society for what it has done for me. Access to this professional network has been instrumental to my development as a scientist and facilitated my career development. Election as VP would allow me to pay back the society and help maintain this network so that others can benefit similarly. In addition, I want to help the society provide these and new benefits to a more diverse community of chemical ecologists. For example, one goal of my tenure on the Executive Committee if elected would be to work with sister societies (ALAEQ and APACE) to develop capacity in chemical ecology and provide opportunities to chemical ecologists working in the southern hemisphere.

Ted Turlings is originally from the Netherlands, where he did his studies at Leiden University, obtaining a bachelors and masters degree in Biology, with a specialization in Ecology. In 1985 he moved to the University of Florida to conduct a PhD in Entomology/Chemical Ecology under the direction of the renowned chemical ecologist James Tumlinson. During his PhD he discovered that insect-damaged plants emit specific volatile signals that attract parasitic wasps, which set the stage for his future research and that of many others. After a brief post-doctoral period in Florida, he moved to Switzerland in 1993, where he first spent three years at the ETH-Zurich and then obtained a prestigious START-fellowship which he took to the University of Neuchâtel to start his own research group. Eventually he was nominated full professor at the same university where he helped to establish the National Centre of Competence in Research *Plant Survival*, a Swiss-wide research network that he directed for four years. He has received several awards related to the field of chemical ecology. Currently, he is the director of the newly established Center of Competence in Chemical Ecology (C_3E) at the University of Neuchâtel. His latest research focuses on the use of plant-produced signals to enhance crop protection.

Affiliation with the International Society of Chemical Ecology:

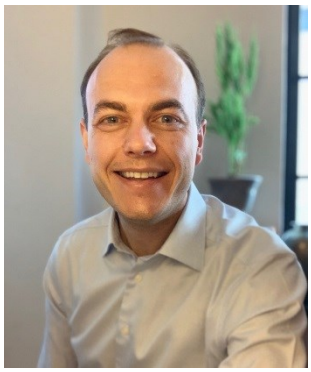
- Member since 1987
- Served as councilor
- On the editorial board of the JCE since 2006
- Organized the 25th annual ISCE meeting (2009)
- Received the 2015 Silverstein-Simeone Award
- Head of the ISCE fundraising committee for about 10 years.

My visions for the ISCE: In my opinion, the success and health of the ISCE is largely dependent on two factors: the attendance and interactions during its annual meetings and the quality and impact of the papers published in its flagship journal, the *Journal of Chemical Ecology*. The recent loss of Jim Tumlinson, my

mentor and one of the giants in chemical ecology, reminds me again of these factors. When I was doing my PhD under Jim's supervision, I not only benefitted from his brilliant guidance but also had the good fortune that he let me attend the annual meetings. It is where I became truly part of community and was able to network with and learn from other great experts. We also published several of our key publications in JCE, where our work drew considerably more attention from our real peers than it would have in other journals, despite a possible difference in impact factor. It is of key importance that the top chemical ecologists, being it the senior and established scientists or the young and upcoming stars, identify themselves with the ISCE and continue to be involved in the meetings as well as the journal. If my nomination is successful, my tenure as (vice-) president of the society will therefore focus on motivating members to contribute to the success of the ISCE.

Candidates for Councilors
(in alphabetic order)

Simon C. "Niels" Groen is assistant professor at UC Riverside.



Growing up in the Netherlands, Niels became fascinated with plant-animal-microbe interactions while working as a "ziekzoeker" in tulip fields outside of school hours. A "ziekzoeker" looks for diseased plants and he searched in particular for the variegated white and red tulips you might recognize from golden-age Dutch still life paintings. He learned how these tulips are infected with an aphid-transmitted virus and during his PhD with John Carr at the University of Cambridge he investigated the molecular mechanisms of how virus infections change plant interactions with aphids and pollinators through altering production of volatile and non-volatile compounds. Niels continued to study how plant chemicals may shape species interactions as postdoc with Noah Whiteman at the University of Arizona and UC Berkeley, focusing on how the monarch butterfly evolved resistance to milkweeds' cardenolide toxins. While this work mostly revolved around a single, large-effect gene, typically many genes are involved in organisms' evolutionary responses. As a Gordon and Betty Moore Foundation fellow with Michael Purugganan at NYU, Niels observed genome-wide patterns of natural selection on gene expression in rice populations that he grew under wet and dry field conditions with collaborators at IRRI in the Philippines. He found that selection acted on growth/defense tradeoffs and that under field drought rice plants do not just respond to diminishing water availability, but also to concomitant changes in the soil microbiome. At UC Riverside, Niels is continuing to study rice and milkweeds, as well as plants from the mustard and nightshade families, looking at the complex evolutionary tug-of-war between these plants, their insect herbivores, and parasitic nematodes. Combining laboratory and field experiments, his lab is zooming in on the central role that plant chemicals play by using approaches from chemical ecology, evolutionary biology, and systems biology.

Andrew Hayes is a Senior Forest Health Research Fellow in the Forest Industries Research Centre at the University of the Sunshine Coast, Queensland, Australia. He began his research career investigating the signals used to maintain social status in wild European rabbits (*Oryctolagus cuniculus*). After completing his PhD he stayed within the field of vertebrate chemical ecology, studying signals linked to genetic relatedness in lemurs (*Propithecus edwardsii*), response to predator odours in Australian native rats (*Uromys*, *Melomys* and *Rattus*) and inter-specific signals in the invasive cane toad (*Bufo marinus*). Since 2008 Andrew's interests have moved to insect chemical ecology, where his research now focuses on control and monitoring tools for insect pests of horticultural crops and forestry plantations. His current projects include: 1) development of an external attractant trap for the Small Hive beetle (*Aethina tumida*), a pest of European honeybees; 2) development of standardised methods to enhance early detection and response to post-border pest and disease incursions on pine plantations in Queensland; 3) investigating a push-pull semiochemical pest management strategy for control of *Ips grandicollis* in pine plantations; 4) assessment and characterisation of West Indian drywood termite volatiles; 5) presymptomatic detection of Panama disease (TR4) in bananas.

Vartika Mathur is full Professor and Head, Animal Plant Interactions lab in Department of Zoology, SV College, University of Delhi, India, where she is working on permanent basis since 2006. In 2008, she became the first Indian to receive NFP-Nuffic fellowship to pursue PhD from Wageningen University, Netherlands. She studied temporal dynamics of induced responses in *Brassica juncea* under guidance of Louise Vet and Nicole van Dam. During PhD, she reported, for the first time, the occurrence, structure, chemical composition and induction of extrafloral nectar (EFN) in family Brassicaceae (*B.juncea*). She went on to study parasitoid behaviour on EFN and its role in plant resistance through a 4-month CDI-UEB European Mobility Grant under Anne-Marie Cortesero at University of Rennes, France. After completing PhD in 2012, she continued her research on Multitrophic interactions in India. She was selected as one of

the twenty Indian scientists in 2014-2017 to host researchers from Developing Countries under RTF-DCS scheme by NAM S&T Centre, India. Since 2017, she has expanded her horizons to study microbial contributions in plant adaptations and their application in agriculture, environment monitoring and therapeutics. Her microbial culture facility has a repository of more than 480 microbial symbionts isolated from various plants, ants and frogs. Her ongoing National and International collaborations focus on the chemical ecology of animal-plant-microbe interactions and 'One Health' of plants, environment and humans. Vartika is a member of ISCE since 2008. She received Student award at ISCE meeting-2010 at Tours, France. She also chaired a session and presented her work on the effects of air pollution on roadside trees in ISCE meeting-2019 at Atlanta, GA. She teaches Animal behaviour, Research methodology, Environmental management and Wildlife Conservation to undergraduate students. She also volunteers as research advisor to Department of Pulmonary Medicine, AIIMS, New Delhi.

Statement of Motivation: My research interest is Chemical ecology of Plant-microbial-insect interactions and its application in the 'One Health' of plants, environment and humans. As councilor to ISCE, I look forward to contributing my ideas for the growth and popularization of ISCE and chemical ecology as a research field.

All life on Earth interacts through the language of chemistry. Prof. **Shannon Olsson** is a chemical ecologist who listens to nature's chemical conversations across India's diverse ecosystems. A Fulbright Scholar, Ramanujan, and INK Fellow, Shannon's research has been featured by Science Magazine, CNN, The Telegraph, USA Today, Chemical and Engineering News, TEDx, Syntalk, Sci- Illustrate, Dublin Science Gallery, V&A Museum London, and the DST Science Express train, among others. Since 2014, Shannon has been a faculty member at the National Centre for Biological Sciences, Tata Institute of Fundamental Research. She is currently a co-PI of the Biodiversity Collaborative and Global Director of the echo network, an international social innovation partnership with the specific focus of increasing scientific awareness, engagement, and insight regarding India's human and environmental ecosystems.

Jacqueline Serrano is a Research Entomologist/Chemical Ecologist with the U.S. Department of Agriculture, Agricultural Research Service (USDA-ARS), Temperate Tree Fruit and Vegetable Research Unit in Wapato, WA, USA. She completed an undergraduate degree in Biology at the University of California, Riverside (UCR). She then went on to also earn her Ph.D. in Entomology at UCR with former ISCE President and Silver Medal Winner, Prof. Jocelyn G. Millar. Her Ph.D. research focused on the identification of North American click beetle pheromones, publishing the first in the *Journal of Chemical Ecology*. While a graduate student she was also able to publish the first pheromone identification for false click beetles in the *Journal of Chemical Ecology*, which was featured as the journal cover for the fourth issue in 2019. In 2019, Dr. Serrano joined USDA-ARS as a Postdoctoral Research Associate before joining the agency as a Research Entomologist in 2020. She continues to make progress on the identification of click beetle pheromones, which has helped her establish collaborations with scientists across the U.S. and Canada. Her current research is also expanding into the chemical ecology of pests of temperate tree fruit and vegetables.

Jacqueline has six publications, which includes three papers in the *Journal of Chemical Ecology* and others in *Scientific Reports*, *Journal of Economic Entomology*, and *Chemoecology*. She currently serves as an associate editor for *Environmental Entomology*. She has received several awards in recognition for her research, including the student travel award for the 2018 ISCE meeting, when she also organized a symposium. She is also a member of the Entomological Society of America, where she currently serves as a branch meeting program chair and on the Diversity and Inclusion committee.

Statement of Motivation: Jacqueline hopes to use her service experience to become more involved with ISCE and appreciates the opportunity to potentially serve the society as a councilor.

Islam S. Sobhy is currently a research associate at Cardiff University, UK. After a MSc in Entomology (Biological Control) at Suez Canal University (Egypt), he was awarded a fellowship to conduct his PhD under the supervision of Prof. Ted Turlings at Neuchâtel University, Switzerland. In his PhD, he managed to increase the attractiveness of maize plants to parasitoids with the application of chemical plant inducers.

He was then awarded a Rothamsted International Fellowship (RIF) to continue his research line on plant defense inducers, as a postdoctoral fellow, with Prof. John Pickett and Dr. Mike Birkett at Rothamsted Research, UK. He investigated how the plant elicitor *cis*-jasmone (CJ) elicits potato defense against aphid by modulating the emission of volatile defense chemistry.

In 2013, he joined the Plant-Insect Interactions (PII) group, led by Prof. Ivan Galis, at Okayama University, Japan after awarding the Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellowship. He extended his work to include more staple crops such as rice and sorghum where he investigated the inducible defense traits of both cereal crops against lepidopterous herbivores.

In 2016, he joined KU Leuven, Belgium to work with Prof.

Bart Lievens and Prof. Hans Jacquemyn as a postdoctoral fellow where his expertise in plant-insect interactions has expanded to include microbes. He demonstrated that nectar-inhabiting yeasts produce specific microbial volatiles that robustly mediate the foraging behavior of flower-visiting insects. In 2018, he joined the chemical ecology group, led by Prof. Toby Bruce, at Keele University, UK. He worked with collaborators from *icipe* (Kenya) on developing a new phase of 'push–pull' companion planting for tackling the devastating fall armyworm in Sub-Saharan Africa.

In November 2022, Islam Joined the School of Biosciences at Cardiff University to work with Prof. Colin Berry. He is currently conducting research within mosquito feeding behavior using novel sugar feeding systems.

In addition to chemical ecology, he has strong experience in entomology, biological control and crop protection. Since 2010, he has authored over 29 peer-reviewed publications in high-ranking journals, including Current Biology, Journal of Experimental Botany, Plant Cell & Environment, Philosophical Transactions B, Frontiers in Plant Science, Functional Ecology, Frontiers in Ecology and Evolution, The Plant Journal, Animal Behaviour, Oikos, Pest Management Science and Journal of Chemical Ecology.

Islam supports the scientific community by serving as an associate editor, guest editor, and a reviewer for many journals in the field such as the Frontiers, Physiological Entomology and Journal of Chemical Ecology. He was also a member of the organization team of ISCE 25th annual meeting which was held in 2009 at Neuchâtel University.

***Statement of Motivation*:** Islam believes that exploiting the science and knowledge of chemical ecology can prompt further steps towards novel ecologically benign strategies for the control of insect pests as key constraints to food security, particularly in the developing countries.

Xiaoling Sun is a professor of Tea Research Institute of Chinese Academy of Agricultural Sciences in Hangzhou, China. She received her PhD (Aggregation pheromone of *Ips typographus*) in 2006 at Northeast Forestry University (Harbin, China). After this, she worked as a visiting scientist in the Canadian Forest Service Atlantic Forestry Center (Fredericton, Canada), the laboratory of Prof. Consuelo De Moraes at the Pennsylvania State University (University Park, USA) and the laboratory of Prof. Wilhelm Boland in Max-Planck Institute of Chemical Ecology (Jena, Germany). Currently she is the unit head of Insect Resistance Breeding Research Group in Tea Research Institute of Chinese Academy of Agricultural Sciences. Prof. Sun primarily works on molecular interactions between tea plant and insects including molecular mechanisms of tea plant defense responses; plant hormone signaling; direct and indirect defenses and insect resistance tea breeding. She has published over 100 research papers in some high impact scientific journals, such as *Plant Physiology, Plant Cell and Environment*, *Horticultural Research* and *Phytochemistry*, etc. Moreover, she has received numerous national awards, with 13 patents granted from her research. She was the Vice-Chair of the 2019 APACE meeting in Hangzhou. She is currently serving as an APACE councilor (2020-2023) and an councilor of the China Society of Plant Protection. She also serves as editorial board members for *Frontiers in Ecology and Evolution*, etc.

Tobias Züst is an assistant professor at the Department of Systematic and Evolutionary Botany of the University of Zürich, Switzerland. He earned his PhD degree from the University of Zürich in 2012 under the supervision of Dr. Lindsay Turnbull. His thesis focused on the role of 'Aphids as drivers of natural selection on plants' and resulted in several publications, including a highly cited article integrating molecular and chemical ecology, evolution, and biogeography published in *Science*. Following his PhD, he was awarded a 3-year postdoctoral fellowship by the Swiss National Science Foundation (SNSF), which he spent in the lab of Prof. Anurag Agrawal at Cornell University. In 2015, Tobias moved to Switzerland and joined the University of Bern on a competitive SNSF Ambizione fellowship to establish an independent research program, before returning to the University of Zürich on a prestigious ERC Starting Grant and a concurrent SNSF Eccellenza professorship to continue this research.

Throughout his career, Tobias has developed a research avenue on understanding the functional role of plant defensive chemicals in plant-herbivore interactions. Driven by this overarching goal, he has worked on a diversity of model systems and developed substantial expertise in analytical chemistry, metabolomics, molecular biology, and statistics, while combining small-scale laboratory approaches with larger-scale experimental and field studies. In his current research, he leads a team to investigate the role of evolutionary novel plant defense compounds in plant-herbivore interactions. Using the model plant *Erysimum cheiranthoides* which gained evolutionary novel cardenolides, he and his team study the physiological, ecological, and evolutionary consequences of the novel traits from the perspective of the plant as well as of insect herbivores for a comprehensive evaluation of co-evolutionary dynamics. Tobias received the 2020 ISCE Early Career Award, and has served as associate editor for the *Journal of Ecology* since 2018.

Don't forget: members may vote for four (4) councilors.

Deadline: May 1, 2022

Society News

Losing Jim Tumlinson, our mentor and friend

The entire chemical ecology community was saddened by the recent passing of Jim Tumlinson, one of the early pioneers of our discipline and a preeminent researcher in the field for the past half century. For us, this loss is particularly painful, as Jim was a mentor and dear friend, who played a critical role in shaping our careers, not only by providing insightful advice and guidance, but also by the example of his own intellectual and personal integrity and his rigorous approach to scientific research. Jim's influence will no doubt continue to serve as a guide for our own work, as well as that of many others who had the privilege of interacting with him over the course of his long and accomplished career. He will also certainly be long remembered both for his role as a key founder of the discipline of chemical ecology and for his numerous contributions to its development into a mature and productive field of scientific research.

Members of our community are no doubt aware of the many accomplishments that established and maintained Dr. Tumlinson's reputation as a leader in our field for more than five decades. A member of the US National Academy of Sciences since 1997, he published more than 300 papers over the course of his career, including numerous landmark studies that helped shape the development of our field. Indeed, the list of groundbreaking discoveries to which Jim contributed is truly impressive. Early in his scientific career, during the 1960s, he became a pioneer in exploring the chemistry of insect pheromones. His identification and synthesis of the sex pheromone of the boll weevil—a devastating pest that threatened the economic survival of the US cotton industry—contributed directly to the eradication of this insect pest and remains a shining example of how work in our field can be applied to solve pressing societal challenges. Together with Milt Silverstein, his postdoctoral advisor at the time, Jim was also the first to characterize the chemistry of an ant trail pheromone—that of the leaf-cutting ant *Atta texana.* After establishing his own program as Research Chemist in the USDA ARS Insect Attractants, Behavior and Basic Biology Lab in Gainesville, Florida, the outstanding team he assembled went on to identify the pheromones of numerous economically important insects and Jim became one of the most recognized scientists in the pheromone field. Indeed, synthetic versions of pheromones characterized by his program are still being used today to monitor pests worldwide.

Later on, his research focus shifted toward the chemistry of interactions between plants and insect herbivores, but continued to produce groundbreaking discoveries. Throughout the 1990s and early 2000s, his work on plant volatiles induced by herbivore feeding—frequently in partnership with his longtime friend and collaborator Joe Lewis—yielded many novel insights. We were fortunate to be involved in some of this work during our respective stays in the Tumlinson lab. Key findings from this period included not only the initial discovery of the role of induced plant volatiles in recruiting herbivore natural enemies—and hence their function as an indirect form of plant defense—but also elucidation of the remarkable informational specificity of herbivore-induced volatiles and the complexity of their role in communication between plants and herbivore natural enemies, as well as their influence on the behavior of herbivores themselves. Jim's work on induced plant defenses also yielded novel insight into the biochemical mechanisms by which plants recognize insect herbivores. A highlight of this research was the first identification and synthesis of an herbivore-derived elicitor of induced plant defense responses—the compound volicitin, isolated from the oral secretions of beet armyworm. Still later in his career, Jim continued to make important and novel contributions to our field, extending nearly to the present day, including about the role of phytohormones in regulating plant defense, the nature of plant defense priming, and the mediation of priming responses by volatile cues.

The impact and influence of this wide-ranging body of work was broadly recognized within the scientific community. In addition to his membership in the US National Academy, Jim was a recipient of the Kenneth Spencer Award for Outstanding Achievement in Agricultural and Food Chemistry and the International Society of Chemical Ecology's Silver Medal Award, among many other honors and awards. In 2008, he received the Wolf Prize in Agriculture, which he shared with Joe Lewis and John Pickett. This prize is widely regarded as the most prestigious award presented for agricultural research—given in recognition of work that was "a major force in reorienting the thinking of agricultural scientists and educators toward a more ecologically sound approach to pest management."

While these accomplishments are widely celebrated, fewer members of our field are likely aware of the unique history that shaped Jim's character and the discipline, drive, and determination that characterized his scientific work. Growing up on a farm in rural Mississippi, Jim gained firsthand experience of the harm caused by agricultural pests. Excelling in math and science as a young student, he eventually majored in chemistry at the Virginia Military Institute (VMI). Graduating first among his peers in the Marine Corps Platoon Leaders Class Program, Jim subsequently entered Officer Candidate School, where he again finished first in his class and was commissioned as a Second Lieutenant in the United States Marine Corps. His military service coincided with some of the most precarious moments of the cold war. While returning from deployment in the Mediterranean in 1962, his ship was diverted to the waters near Cuba during the missile crisis. Ten days after returning home from the Caribbean, he married his wife Sue, the start of a marriage that lasted more than 60 years, and which Jim described as "the best thing I ever did." Sue would accompany him as he initiated his scientific career, first taking a position as a technician at the USDA Agricultural Research Service in Mis-

sissippi and eventually obtaining his MS and doctoral degrees in organic chemistry from Mississippi State University before initiating his own program in Gainesville. Jim remained with the USDA for 33 years before accepting the Ralph O. Mumma Endowed Professorship in Entomology at Penn State University, where he directed the Center for Chemical Ecology and inspired numerous young scientists to enter the field.

Finally, as a matter of course, only a very few of us have the good fortune to know first-hand what it was like to work alongside Jim on a daily basis as a member of his research program. The discipline and drive likely acquired at VMI and in the Marine Corps were readily apparent in the way he managed his group. Jim believed in hard work, and he was not given to small talk or euphemism; you always knew exactly where you stood with him. Yet, he also cultivated an exciting intellectual environment and a research culture marked by enthusiasm and constructive collaboration. When one of us asked him the secret to his success in science, he responded “hire the right people.” Jim certainly knew how to build and effective research team and also how to help those around him achieve their potential. To the extent that our own research programs have been successful it is due in large part to the foundations laid during our time in Jim’s lab and to the guidance he provided then and later. We also sincerely hope that our own programs reflect the intellectual integrity and values that were so apparent in his. With his passing, the field of chemical ecology lost one of its founders and leading lights, but we also lost a mentor and a true friend. He will be dearly missed.

Consuelo De Moraes & Ted Turlings

Other Society News

MACE - Mass spectra for Chemical Ecology

We are happy to announce MACE - Mass spectra for Chemical Ecology. This is an open access mass spectral library for GC/MS.

High-quality spectra are stored in one text file and can be integrated into local spectral libraries. The curated library is an add-on concentrating on spectra not found in common databases, but published. This database should serve as a starting point for a community effort to build a library useful for many areas of Chemical Ecology. Additions from the research community are very welcome. Hopefully this effort will advance Chemical Ecology.

You can find the MACE website under

http://www.oc.tu-bs.de/schulz/html/MACE_en.html

and the public data repository under

https://publikationsserver.tu-braunschweig.de/receive/dbbs_mods_00070160?lang=en

We are grateful for any response, comments and mass spectra.

Stefan Schulz, TU Braunschweig, Germany

ISCE Science Club

The lecture of David L. Wood, Professor Emeritus at the University of California, Berkeley, entitled "The Language of Chemical Ecology: Chemical Ecology Memories" and presented at the 25th ISCE Annual Meeting 2008, is available at:

https://chemecol.org/sciclub.shtml

Updates on the 37th ISCE Annual Meeting: New date changes and call for symposia!

As we bade farewell to our first ever virtual 36th ISCE Annual Meeting last year, expectations were high on having to finally participate in person for this year’s ISCE meeting in Kuala Lumpur. Despite still being in the Covid-19 pandemic driven by the Omicron infections, Malaysia has been doing very well in getting her population receiving the vaccine booster jabs. We are now ranked 15th in the world, out of 184 nations in the Covid Recovery Index (https://covid19.pemandu.org/Malaysia). Over 62% of our adults received their booster jabs apart from over 24% of our children below 5 years of age receiving their first Covid vaccine since February 3rd when national children vaccination programme was introduced (https://covidnow.moh.gov.my) Our Covid-19 reproduction rate has been dropping and approaching 1. Border reopenings for vaccinated travellers without having to quarantine, are being gradually introduced and full border reopenings are expected soon.

On a different note, due to unforeseeable circumstances, there has been a slight change in the dates of the 37th Annual Meeting of ISCE. The organisers have been able minimise the changes and thus, the new dates are from **August 8-12, 2022**. This meeting will also be the 3rd Joint Meeting of the 37th Annual ISCE Meeting and 12th Conference on the Asia-Pacific Association of Chemical Ecologists (APACE).

We are now urgently calling for **symposia proposals**. To date, we have only received two proposals since this was an-

nounced in our last online ISCE business meeting in September. Please provide us with your title of the symposium and let us know briefly why you propose the symposium. Please send your proposals to us as follows:

Alvin Hee alvinhee@upm.edu.my

Stefano Colazza stefano.colazza@unipa.it

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We are looking at opening our new meeting webpage in April with registrations and call for abstract submission.

It is indeed a lot of hard work and tears as we manage the uncertainties brought about by Covid-19 restrictions and changes, but it means so much for us to be able to organise this important Joint ISCE-APACE meeting. We sincerely appreciate everyone's support for this Joint Meeting! Do stay tuned and send us your symposia proposals immediately! We look forward to hearing from you! Thank you so much for your patience!

Alvin KW Hee

Organising Chair of the 3rd Joint ISCE-APACE Meeting in Kuala Lumpur

Trending in the Journal of Chemical Ecology

Most downloaded articles from Oct. 2021 — Dec. 2021:

◊ **Climate Change Modulates Multitrophic Interactions Between Maize, A Root Herbivore, and Its Enemies.** October/November 2021 (combined issue). Anouk Guyer, Cong van Doan, Corina Maurer, Ricardo A. R. Machado, Pierre Mateo , Katja Steinauer, Lucie Kesner, Günter Hoch, Ansgar Kahmen, Matthias Erb & Christelle A. M. Robert. [link]

◊ **Ocean Acidification Amplifies the Olfactory Response to 2-Phenylethylamine: Altered Cue Reception as a Mechanistic Pathway?** October/November 2021 (combined issue). Paula Schirrmacher, Christina C. Roggatz, David M. Benoit & Jörg D. Hardege. [link]

◊ **Defense Suppression through Interplant Communication Depends on the Attacking Herbivore Species.** December 2021 (combined issue). Laura O. Marmolejo, Morgan N. Thompson & Anjel M. Helms. [link]