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Deadline for the next issue is June 15, 2008.

### Secretary/Editor's Message

I often get requests from members regarding who has or has not been President, Councilor or an award winner. Over the last few months, we have archived more society material on the website for members to use as a reference source. You can access this on the front page of the website using the "Archive" pull-down menu. Here you will find links to the winners of the Silver Medal and Silverstein-Simeone awards (under "Awards") and to current and past executive and council members. Also, David Jones scanned all the old newsletters that weren't previously available on the website and sent these to me. I, for one, am really appreciative of David's effort in archiving this important information that, amongst other things, documents the development of the Society. Without his effort, this information might have been lost to members. The scans (in pdf format) are available on the "Newsletter" pull-down menu under "All Volumes". I would recommend all members, but especially younger members, to read these newsletters, to gain a better perspective on how the Society was formed and has developed over the years. The early newsletters show the dedication of a small group of founding members in getting the society going.

Finally, it is the time of year for ISCE elections. I encourage you to vote for the candidates. The voting form is available on the front page. You may notice that Erika Plettner is standing for secretary. After six years as secretary I have decided to step down and will hand over the reins. I am sure Erika will do a great job in the position.

Stephen Foster  
Secretary, ISCE



**Update on the 24th Annual Meeting of the International Society of Chemical Ecology to be held at Penn State University, August 17-22 2008**

The 25th Anniversary meeting of the International Society of Chemical Ecology will be held from 17 to 22 August at [The Pennsylvania State University](#) (PSU), located in State College, Pennsylvania, USA. This meeting is in celebration of the Silver Anniversary (25th year) of the society, which was started in 1983. The meeting will be hosted by Jim Tumlinson and program committee members (all Center for Chemical Ecology, [Department of Entomology](#)):

[Jim Tumlinson](#) (meeting host, travel awards chair) [Student Travel Awards Form](#)

[Consuelo De Moraes](#) (program chair)

[Tom Baker](#) (local arrangements, program committee)

[Mark Mescher](#) (program committee)

[Julie Todd](#) (abstract submissions) [Abstract Submission Form](#)

Our four plenary symposia feature presentations on

1. Chemical Deception/Mimicry
2. Phylogenetic Analyses of Plant Defense and Insect Host Range
3. Chemical Ecology of Disease Transmission
4. Chemical Ecology of Plant-Plant Interactions

Submitted oral presentations or posters related to these, or other topics, are welcome.

Forms (can send original Word documents if needed):

Abstract Submission Form

<http://Downloads.cas.psu.edu/CCE/ISCE2008Abstractform.doc>

Travel Awards Application Form

<http://Downloads.cas.psu.edu/CCE/ISCE2008travelawards.doc>

For further information about the meeting, including registration, click [Meeting Registration](#). For those of you needing to renew your ISCE membership, you can easily do so when you register by registering as "member" or "student member" on the first page of the registration process, and then adding your \$35 (regular) or \$15 (student) membership fee to your bill on the appropriate later page. This will ensure that you receive a substantial discount in your meeting registration fee.

## ISCE ELECTIONS, 2008 Candidate for ISCE Vice-President



### **Dr. Jeffrey Aldrich, USDA-ARS, Beltsville, USA**

Dr. Aldrich joined the Beltsville Agricultural Research Center's Insect Physiology Laboratory in 1980 as a Research Entomologist. In 1990, he was transferred to the Insect Chemical Ecology Laboratory, and served as the Research Leader of the Laboratory (now known as the Invasive Insect Biocontrol & Behavior Laboratory) from 1999-2004. Jeff received B.S. and M. S. degrees in biochemistry and entomology from the University of Missouri in 1971 and 1974, respectively, and a Ph.D. in entomology under Dr. Murray Blum at the University of Georgia in 1977. Following a one-year Postdoctoral Fellowship studying the alarm pheromones of Africanized honeybees with Dr. Blum, he was a Research Associate for two years with Dr. William Bowers, N. Y. State Agricultural Experiment Station, investigating the mode of action for anti-juvenile hormone compounds. Jeff is best known for his research on the allomones and pheromones of true bugs (Hemiptera: Heteroptera), including identifications of the first pheromones for phytophagous and predacious species in the order. Recently, Dr. Aldrich and collaborators identified the first aggregation pheromones for green lacewings (Chrysopidae), and his current research is focused on using pheromones for these and other general predators to enhance biological control. He has conducted research as a Visiting Scientist in Brazil, Australia, Italy, and Japan; and hosted numerous international scientists and students in his lab. Jeff has published in the Journal of Chemical Ecology throughout his career (27 papers from 1978-2007; currently on the Editorial Board), he has presented papers at 15 ISCE meetings beginning with the first meeting in 1984 in Austin, Texas, and he hosted the 2005 meeting in Washington, D.C.

## ISCE ELECTIONS, 2008 Candidate for ISCE Secretary

### **Dr Erika Plettner, Simon Fraser University, Canada.**

Erika Plettner works in the Department of Chemistry at Simon Fraser University. Dr Plettner grew up in Mexico and moved to Canada to attend university. She obtained a B. Sc. from Simon Fraser University in 1990, and continued at S. F. U., working with Prof. Keith Slessor on the caste-specific biosynthesis of functionalized fatty acids (such as 9-keto-2*E*-decenoic acid, queen substance, and 10-hydroxy-2*E*-decenoic acid, royal jelly acid) in honey bees. After obtaining a Ph. D. in 1995, she worked as an organic chemistry instructor for two semesters and then moved to Toronto to pursue postdoctoral studies with Prof. Bryan Jones. The work in Toronto was focused on modifying subtilisin, a bacterial protease, for use in biocatalytic applications, including ester and amide synthesis. In 1997, she moved to Salt Lake City (Utah) to work with Prof. Glenn Prestwich on gypsy moth pheromone olfaction. Two years later, she returned to S. F. U. as an assistant professor. Her current research is focused around a general interest in molecular recognition of small molecules by proteins. Current projects are: 1) the modification of cytochrome P450 for use in synthetic applications; 2) the synthesis of conformationally locked chiral pheromone analogs that could function as olfaction inhibitors; 3) structure-activity studies of insect odorant-binding proteins and chemosensory proteins (partly in collaboration with Prof. Murray Isman); 4) pheromone catabolism in moths, in particular oxidative reactions initiated by monooxygenases; 5) biosynthesis of esters in honey bees (in collaboration with Prof. Yves LeConte). She teaches organic chemistry (beginner to intermediate synthesis) and bio-organic chemistry (natural product biosynthesis). She is the current director of the Chemical Ecology Research Group, an organization of chemical ecology researchers in British Columbia ([www.sfu.ca/chemistry/CERG](http://www.sfu.ca/chemistry/CERG)). Dr. Plettner is a regular contributor to ISCE meetings.



### **ISCE ELECTIONS, 2008 Candidates for ISCE Councilors**



### **Dr. Stefano Colazza, University of Palermo, Italy**

Stefano Colazza is currently a Professor in Entomology at University of Palermo, Italy. He received his Diploma in Agricultural Science from the University of Perugia, and, in 1990, he became Research Associate. Then, in 1999, he moved to the University of Palermo as Associate Professor for Entomology. In 2006 he became full Professor at the University of Palermo. Dr. Colazza has conducted research as a visiting scientist in the USA: Department of Entomology, Texas A&M University (CNR fellowship); Department of Entomology, University of California (CNR-NATO fellowship); USDA-ARS Beltsville (USDA grant), and France: I.N.R. A. Antibes (OECD fellowship). In 2003, Dr. Colazza spent one year sabbatical c/o Department of Entomology, University of California, Riverside, and during his stay he had a closed collaboration with Professor

Jocelyn Millar. In 2004, he was appointed as a General Secretary IOBC-Global. Dr Colazza is best known for his work on the tri- and multitrophic interactions between plants, herbivorous insects, and insect parasitoids. His research interests are focused on the mechanisms underlying the host-finding behavior in insect parasitoids, principally using egg parasitoids, belonging to the families Trissolcus and Telenomus, as model organisms. Dr. Colazza is a co-chairman of a European Science Foundation program on Behavioural Ecology of Insect Parasitoids. He is a frequent reviewer for various journals covering behavioral ecology and chemical ecology. Dr Colazza publishes and reviews manuscripts in the Journal of Chemical Ecology and is a regular attendee at ISCE Annual Meetings.

### **Dr Consuelo De Moraes, Pennsylvania State University, USA**

Consuelo M. De Moraes is currently an Associate Professor in the Department of Entomology at The Pennsylvania State University. Dr. De Moraes's research focuses on chemically mediated interactions among plants and insects. Her research attempts to illuminate the critical role of chemical communication in mediating ecological interactions between plants, insect herbivores, and



predators and parasitoids.



**Dr. Martin Heil, CINVESTAV, México**



Dr. Martin Heil is Researcher at CINVESTAV (Centro de Investigación y de Estudios Avancados) in Irapuato, Guanajuato, México (since 2007). He studied biology and philosophy at the University of Würzburg, Germany, where he received his PhD degree in 1997. He was a postdoctoral fellow at CEFE-CNRS (Centre d'Ecologie Fonctionnelle et Evolutive) in Montpellier, France (1999-2001) and then joined the Dept. of Bioorganic Chemistry of Prof. Wilhelm Boland at the Max-Planck-Institute of Chemical Ecology in Jena, Germany, where he was head of a junior group (funded by the Emmy Noether program of the DFG). In 2004 he accepted a position as full professor (head of the Dept. of General Botany – Plant Ecology and Director of the Botanical Garden) at University of Duisburg-Essen, Germany, which he left in 2007 to accept the position at CINVESTAV. He has published ca. 50 articles, amongst others in the Journal of Chemical Ecology, Nature, Science and Proc. Natl. Acad. Sci USA, and he is an editorial board member of the Journal of Ecology, The Plant Pathology Journal and Communicative and Integrative Biology. His major research interests are facultative and obligate defensive ant-plant mutualisms, costs of induced resistance to pathogens and herbivores and the signalling processes that underlie plant-insect and plant-plant communication.

**Dr Christer Löfstedt, Lund University, Sweden**

Christer Löfstedt is Professor in Ecology at Lund University, Sweden, since 1997. He studied chemistry and biology at Lund and was awarded a PhD in 1984 in animal ecology for his research on "Sex pheromone communication in the turnip moth *Agrotis segetum*" at the same university. Moths have remained a focus for his research, including all aspects of insect chemical communication. His research emphasis is on evolutionary analysis of communication systems and questions about population variation, biosynthesis, genetics of pheromone variation, mechanisms of specific pheromone production and response, and phylogenetic reconstruction.

Applied aspects also have an important role in his research and Christer started his scientific career as a PhD student in the large-scale Swedish project "Odour signals for control of pest insects". In the mid 1990's he launched another large-scale applied project on "Pheromones and kairomones for control of pest insects" together with his former supervisor Professor Jan Löfqvist. The program became a collaborative effort involving four Swedish universities and 30 scientists. His applied research has focused on pests in seed orchards and stored product pests. His teaching has included courses in sensory biology, chemical ecology and behavioral ecology, as well as lectures about taste and olfaction to students in medical school. He



has organized and taught several international training courses in sensory ecology and chemical ecology for graduate students.

Christer is a strong believer in multi-disciplinary science and international collaboration. He was one of the professors who recently founded the Centre for Genomic Ecology at Lund University to forge links between molecular biologists working with cutting-edge genomics and evolutionary biologists who aim to understand the genetic mechanisms that underlie the process of evolution. He is the director of the affiliated Research school in Genomic Ecology at Lund University. Christer has previously served on the editorial board of *Entomologia experimentalis et applicata* and is currently a member of the editorial board of the *Journal of Chemical Ecology*. He regularly attends the annual meetings of ISCE.



**Dr. Georg Pohnert, Friedrich-Schiller-University, Jena, Germany**

Georg Pohnert studied Chemistry at the University of Karlsruhe, Germany. He then moved to the University of Bonn, Germany, where he pursued his doctoral studies in the Group of Prof. W. Boland. Part of this work, which was focused on the pheromone chemistry of brown algae, was carried out at the University of Washington, in the laboratories of Prof. Heinz G. Floss. In 1997 he joined the groups of Prof. Bruce Ganem and Prof. David B. Wilson at Cornell University in Ithaca, USA, where he stayed as a postdoctoral fellow working on receptor biophysics. He was then appointed to a group leader position at the Max-Planck-Institute for Chemical Ecology in Jena, Germany, where he started to work on algal defence reactions. In 2005, he was appointed as assistant professor at the Institute of Chemical Sciences and Engineering of the Ecole Polytechnique Fédérale de Lausanne, Switzerland. He moved in 2007 to the Friedrich-Schiller-University in Jena where he was appointed as chair in Instrumental Analytics. His research interests include chemical communication in plankton, macroalgal defense and wound closure and the oxylipin chemistry of algae, mosses and ferns.

#### **Dr. Nicole van Dam, Netherlands Institute of Ecology, The Netherlands**

Nicole van Dam is a senior researcher at the Netherlands Institute of Ecology (NIOO-KNAW). Originally trained as a plant physiologist/phytochemist during her MSc at Wageningen University, she became infected with the “chemical-ecology bug” during her PhD in Leiden. Under the guidance of Eddy van der Meijden, Rob Verpoorte (both Leiden University) and Thomas Hartman (TU Braunschweig), she studied the chemical ecology of pyrrolizidine alkaloids in *Cynoglossum officinale*. After obtaining her PhD degree in 1995, she worked as a post-doctoral research associate with J. Daniel Hare at the Entomology Department of the University of California, Riverside (USA). In California she worked on a glandular trichome polymorphism and its effects on various herbivores in natural populations of *Datura wrightii*. In 1997 she moved to Jena (Germany) for a three-year post-doctoral fellowship with Ian T. Baldwin at the newly founded Max-Planck-Institute for Chemical Ecology. In this “Mecca” for chemical ecology, she studied the ecology of induced responses in the native tobacco species *Nicotiana attenuata*. In 2000 she returned to the Netherlands to join the department of Multitrophic Interactions at the NIOO-KNAW in Heteren. There she studies interactions between above- and below-ground induced defenses in plants. In 1992 she joined the ISCE and she has been a member since. As a councilor, she would like to promote the active involvement of young scientists and other groups of scientist that are under-represented (e.g. women scientists, ethnic minorities) at ISCE activities, such as the annual meetings, governing boards, and committees. She believes that this is of critical importance for the viability of the ISCE now and in the future.





**Dr. Junwei (Jerry) Zhu, USDA-ARS, Lincoln, USA**

Dr. Junwei (Jerry) Zhu is a Research Entomologist (Chemical Ecology) with the U. S. Department of Agriculture, Agricultural Research Service, Agroecosystem Management Research Unit in Lincoln, Nebraska. He received his Ph.D. in Chemical Ecology from Lund University, Sweden (1995) under the supervision of Prof. Christer Löfstedt. During the course of his Ph.D. study he also received training under the supervision of Prof. Wendell Roelofs and Dr. Russell Jurenka at Cornell University (1993-1994). He then started his postdoctoral training under the supervision of Prof. Kenneth Haynes in the University of Kentucky, Lexington, U.S. (1995-96). After that, he worked as a Research Assistant Professor in Lund University, then Iowa State University (1996-2007). In 1998, Dr. Zhu joined with Prof. Tom Baker (Founder) to start a Biotech company that researches, develops, manufactures and sells semiochemical-associated products for controlling insect pests in agricultural and urban settings. Since then, he worked as a Research Scientist, the Research Director, and the Chief Technology Officer in MSTRS Technologies, Inc. In 2008, Dr. Zhu started as a Research Entomologist with the USDA-ARS with research focusing on livestock insect pest management. He has also been appointed as an Adjunct Associate Professor at the Department of Entomology, University of Nebraska, Lincoln, Nebraska. He regularly publishes and reviews manuscripts in chemo-ecological journals including Journal of Chemical Ecology. He served as the Secretary and Treasurer for the Asia Pacific Chemical Ecologist Association, a sister society of ISCE.

### News of Interest

Congratulations to John Pickett, Jim Tumlinson and Joe Lewis for winning the prestigious 2008 Wolf Prize in Agriculture. For further information, click on <http://www.wolffund.org.il/full.asp?id=158>

Congratulations to Martine Rahier for her appointment as President of the University of Neuchâtel and also to Ted Turlings who succeeds her as Director of the National Centre of Competence in Research (NCCR) Plant Survival, at the University of Neuchatel, Switzerland. For links to the news click on:

<http://www2.unine.ch/presse/page22329.html>, [http://www2.unine.ch/nccr/page23119\\_en.html](http://www2.unine.ch/nccr/page23119_en.html)

Life Science Trace Gas Facility: a way towards top-research on biological systems

The 6th Framework Programme of the European Commission is offering European researchers of all levels of experience the unique opportunity to obtain FREE access to the laboratory facilities at the Life Science Trace Gas Facility in Nijmegen, the Netherlands.

The Life Science Trace Gas Facility operates a variety of unique state-of-the-art trace gas detectors that allow real time measurements at or below ppbv level (parts per billion volume = 1: 10<sup>9</sup>) of trace gases released by various biological samples in a seconds time scale. Using these detectors, a broad variety of molecular gases such as ethylene (C<sub>2</sub>H<sub>4</sub>), nitric oxide (NO), methane (CH<sub>4</sub>), ethane (C<sub>2</sub>H<sub>6</sub>), acetaldehyde (CH<sub>3</sub>CHO), ethanol (C<sub>2</sub>H<sub>5</sub>OH), and many others released by plants, fruits, algae, bacteria, fungi, insects, breath, human skin, culture media, etc. can be monitored under rapidly changing conditions (e.g. temperature, O<sub>2</sub>-, CO<sub>2</sub>-levels, biotic stress, etc.) in a seconds time scale and without incubation periods.

The staff of the Facility will assist you in optimizing the measuring setup for your specific plant species. A typical project will consist of one or more visits of min. three weeks each to perform the experiments on-site.

Travel, accommodation and subsistence costs for the visiting scientists are covered by EU Facility founding. The application procedure is simple and straightforward (download the application form at <http://www.ru.nl/tracegasfacility>). Researchers from different fields of Life Sciences interested in this Facility and invited to submit their applications any time; the evaluation procedure will be performed every 3 months.

### Book of interest

Bilingual scientific dictionary publisher Editorial Castilla La Vieja has just released the DICTIONARY OF CHEMISTRY (English - Spanish / Spanish -English): 1,637 pages of terminology and illustrative example sentences in both languages, covering all aspects of chemistry, including: organic and inorganic chemistry, analytical chemistry, pharmaceutical chemistry, industrial chemistry, geochemistry, spectroscopy, food chemistry, radiochemistry, metallurgical chemistry, forensic chemistry, chemistry lab equipment and instruments, huge bilingual appendices of chemical compounds with formulae, and more.

More information is available on their website:

<http://editorialcastilla.com/chemistry.html>

## Proposed Changes to By-Laws

The executive have proposed changes to the ISCE by-laws for the appointment of councilors. According to the current by-laws any changes to the by-laws must be put to the membership at least 14 days prior to the Annual Meeting. These amendments are posted below and will be voted upon at the business meeting at the Annual Meeting at The Pennsylvania State University, August 2008.

Amendment to By-Laws

ARTICLE VI: OFFICERS

*Section 1.*

The officers of the Society to be elected by the membership shall be a President, a Vice-President, a Secretary, a Treasurer and fifteen Councilors. The office of Vice-President shall be considered to be that of President-elect. The offices of Secretary and Treasurer may be combined.

Amendment will add:

That 3 of the 15 councilors of the ISCE be appointed by the President rather than elected. These councilors would serve 3-year terms as do the others. No more than one could be so appointed during any given year. The purpose of these appointments is to ensure diversity on the Council as it relates to sub-discipline, geography, and gender.

Also, please note that the following protocol for ISCE Student Travel Awards has been proposed and approved by Council. This protocol should be followed at all future meetings.

## PROTOCOL FOR ISCE STUDENT TRAVEL AWARDS

### 1. Award committee.

The Student Travel Awards committee is normally made up of three people appointed by the President, with the meeting host serving as chair. The previous host should also be on the committee, and if possible, the next year's host as well. Thus, one member goes off the committee each year and one new member is added, thus providing continuity. It was deemed useful to have the current meeting host as chair, because funding and other decisions need to be made quickly.

### 2. Applications.

The call for applications will be published in the Newsletter on the ISCE website. Applications are part of the registration materials for the annual meeting which are posted in the Newsletter, and/or in the ISCE website, and/or on the meeting website. The applications are in an ISCE newsletter approx. 6 months before the meeting. Applications must be submitted to the Chair of the Awards committee in electronic format. Applications should consist of:  
Name, address (including FAX and Email), degrees awarded (including University, country and year), travel budget with quotes if possible, alternate sources of travel funds (obtained and applied for), applicant's signature, date, and applicant's senior adviser name and address. The application will also require an endorsement from the senior adviser verifying that the applicant is an eligible student or postdoc (email is acceptable).  
Title and abstract of the presentation, approx. 300 words.  
A complete Curriculum Vitae, including lists of publications and presentations made at other conferences.

### 3. Eligibility.

Applicants must fit the following criteria:

Applications are accepted from graduate students and postdocs. A post-doctoral fellow is eligible during the first three years of being a post-doc. Because of the advantage that postdocs have regarding having larger numbers of publications and presentations in their resumes, no more than 50% of the funds should be awarded to postdocs.

Applicants are not required to be ISCE members. Applicants must present a paper or poster at the meeting.

Applicants must not have received an ISCE award previously.

Applications should be submitted to reach the Chair of the Awards Committee no later than 6 weeks before the deadline for receipt of abstracts, or the deadline for preregistration for the meeting, whichever comes first, to allow time for evaluation by the committee.

#### 4. Award funds.

Support for awards is provided from the ISCE's funds, supplemented by donations. The typical amount of funding available shall be \$6,000 per year, but this may be varied at the discretion of the ISCE Executive Committee. Each year, the ISCE council, with the advice of the Treasurer, will determine the amount of funds to be used for student travel awards the following year, based on the Society's financial status and other anticipated expenses for the coming year. Additional funds for that particular year may be available from grants or donations. The chair of the Student Travel Awards committee should check the amount of funds available for a given year with the Treasurer before the deadline for receipt of applications.

#### 5. Processing of applications.

The chair for the Student Travel Award Committee will be responsible for distribution of copies of the applications to the other committee members. Complete funding will not be awarded for any applicant; each applicant will be expected to provide a portion of the costs of their attendance at the meeting. Awards should be made to applicants from as many different countries as reasonably possible. Award amounts should be adjusted based on the expense of travel to the meeting.

#### 6. Deciding the awards.

Upon reaching a consensus, the chair of the Student Travel Awards Committee should send a list of the awardees and the amount of each award to the President and Secretary for ratification. After approval (as quickly as possible) by the president, the chair of the Student Travel Committee should notify all applicants of the outcomes. Applicants should be notified at least three weeks in advance of the deadline for receipt of abstracts, or the deadline for receipt of annual meeting registration fees, whichever comes first, so that appropriate travel plans can be made.

#### 7. Presentation of awards.

Award checks (cashiers checks or equivalent) normally will be presented to the travel award winners at the annual meeting for which the award was made. Because some students may need the funds to cover their immediate expenses at the meeting, the students may pick up their checks from the Treasurer during the course of the meeting.



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