

NEWSLETTER

INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

Volume 20, Number 3, December 2003

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Deadline for the next issue is February 15, 2004.

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Secretary/Editor's Message

With the cancellation of the Annual Meeting of the Society in Gyeong-ju, 2003 has seemed like a quiet year for Chemical Ecology. Without its usual focal point, the year's developments in chemical ecology have apparently passed without some forum for their recognition. However, the field is alive and well, as evidenced by the papers published in the Journal of Chemical Ecology. Additionally, there have been a number of new initiatives that testify to the health and vitality of our field. One exciting development, especially in regard to North America is the setting up of a Chemical Ecology Center of Excellence at Pennsylvania State University (see contributions by Tom Baker and Gary Felton below). The appointments of Drs Tom Baker and Jim Tumlinson have further strengthened the already strong research programs in chemicals ecology at Penn State. The synergy from this group of chemical ecology, as well as



benefits accrue to agriculture. Also, cooperation, in chemical ecology at least, between Europe and the US is strong. Frederic Marion-Poll (INA, Paris and INRA, Versailles) is leading a comprehensive project on sustainable agriculture with special emphasis on chemical ecology, collaborating with various universities from Europe and three partners in the USA, Pennsylvania State University, University of California, Davis, and University of Illinois. More on this at a later date.

Finally, there are a few society issues that need to be addressed. First, with 2004 on the horizon, it is time to renew membership. The new forms will be posted on the website in a few days time. Please renew your membership as soon as possible and please update your membership details if they have changed, especially your email address. Reinstated this year will be a life membership category, involving a one-off payment. One other change of note, is that the Executive Council has approved the

upgrade of Israel to full membership dues of US\$35. Please also encourage students especially and others working in the field of chemical ecology to become members. Second, nominations are called for the next vice-president, who will, a year later, assume the presidency, as well as for four new councilors (see below for details). Since we have moved to an electronic ballot, there has been good participation of members in voting for candidates. Therefore, please do not be passive in nominating candidates. It is healthy to have choice! Last, but not least, it is time to start thinking about attending the Annual Meeting in Ottawa this July. Details of the meeting, including symposia are given below.

Stephen Foster Secretary

Message from the President



It is my privilege to address you for the first time as President of the International Society of Chemical Ecology. Due to unfortunate circumstances earlier this year, we were unable to convene our 2003 ISCE Meeting in South Korea in conjunction with APACE, our companion Asian-Pacific Association of Chemical Ecologists. Thus, the transfer of the presidency and other officer positions took place via e-mail, as announced in the August newsletter. All the long hours of planning and preparation for the South Korea meeting by the lead organizer Professor Kyung Saeng Boo were dashed by the SARS epidemic and associated travel scares. I want my first message as President to convey to Professor Boo, our long-time friend and colleague, how much we appreciate his tireless efforts to try to make this joint meeting happen. His dedication has been nothing short of remarkable, not just to this meeting but over many decades he made significant advances towards his goal expanding participation in chemical ecology throughout the Asia-Pacific region. Chemical ecology, and the ISCE in particular, are indebted to you, Professor Boo. We send you our

profound thanks and gratitude.

It is always a few key individuals who make the difference, isn't it? The organizers and hosts of our recent wonderful ISCE meetings are exemplars, the most recent being Professor Wittko Francke and the exceptional meeting he hosted in Hamburg. Such passion for chemical ecology that spills over into dedication to ISCE can elevate everyone to new heights. I have been lucky in my career to have been a student of, and then collaborator with, so many such driven and passionate people who continue to be dedicated to the fun and intrigue of exploring—just exploring! And learning. As a student at Cornell, I took the first course in chemical ecology ever offered. The lecturers in this landmark course included Tom Eisner, Jerry Meinwald, R. H. Whittaker, Paul Feeny, Dick Root, and Wendell Roelofs. Who could fail to be excited after listening to and learning from these giants in the field they helped give birth to? I am also fortunate to have had contact with the two founders of the ISCE, Milt Silverstein and John Simeone, over the years. These people, and many others like them all over the world, are why chemical ecology coalesced into a formal society that continues to add new members.

One major eye-opening impression that came through to me so clearly from each instructor in that first chemical ecology course was that these people get to explore! They get to see things no one has ever seen; they get to follow their noses, their hunches. And then they get to tell people about what they've discovered. The miracle, the privilege, of our position in society is that we are the few who society designates to be paid explorers. But who pays us? For most of us, the public does, through the taxes they pay that are then allocated to us through our government agencies (never enough, though!). For many of the rest of us, students pay us through the tuition and fees they pay to attend university. All the public asks of us is to tell them what we've discovered and what it means for them. It's not much that they're asking. A few decades ago, they didn't even seem to ask this at all, and we could go about to our hearts' content asking blue-sky, curiosity-driven questions, for the edification of only our scientific friends and colleagues.

But in the past decade or so with more limited budgets, our government agencies (the public) are justifiably asking us to be more accountable, to tell them what we've discovered and its overall importance. And most importantly, now our findings are measured in comparison with those of other (competing) scientific explorations.

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Due to the passion and unswerving drive of a few key people many decades ago in various parts of the world, we in chemical ecology have our own society. They gave our work the name we all use to describe what we do. We have a journal where we report in detail our new discoveries, knowing that our reports will be read by others who share our passion for this knowledge. We have annual meetings where all our fellow explorers drop what they're doing and come back to base camp, to share meals and drinks while hearing about the newest, most exciting research everyone's doing. These meetings are where, as one, we get to see in person our colleagues' excitement and love of their work, conveyed through so many different (usually endearing!) personalities.

We all want ISCE to grow and flourish. We all love the camaraderie and common mission of exploring and pushing back the boundaries of the unknown. So, as in the past, we need to make sure that we bring along new colleagues, get them to join ISCE, and help them realize that ISCE is where they can feel most at home. We need to convincingly tell the public about the importance of our chemical ecology explorations, what our discoveries mean to them, and how our research can continue to improve their lives. Advancing our basic knowledge about how the world works is important unto itself. But due to shrinking funds and increasing accountability, communicating the relative merits of what we do compared with what explorers in other fields do is essential if we are to continue to be given the privilege of exploring. More opportunities for ISCE and growth of chemical ecology research will be the outcome of our efforts.

Chemical ecology is growing in importance, and administrators around the world are realizing that this is a field upon which to build strong thrusts into the future. The recently formed Max Planck Institute in Jena, Germany with its new building and team of scientists represents a large investment by the scientific administration in that country for the next 30 - 50 years or more. Jim Tumlinson and I have now joined the strong insect chemical ecology team at Penn State University, and the idea of forming a Center of Excellence in Chemical Ecology that was nurtured over the past few decades by Jack Schultz is now becoming a reality. The Penn State upper administration has seen, even in the face of severe budget cuts, that chemical ecology represents a strong area to invest in for the future (see accompanying letter by Department Chair, Gary Felton). Many of you can, at your universities and institutes, see opportunities to band together the chemical ecologists around you and to organize similar centers. When you convince your administrators about the strong trajectory that the field of chemical ecology is on, you may be able to create more positions for chemical ecologists on your staffs. This will not only help the current students in the ISCE find positions where they can apply their intellect for new explorations, but it will increase the field of chemical ecology to deliver more useful findings to society. The time is ripe. We're on a roll.

You will hear more ideas on these themes in the coming months from me and from the ISCE Executive Council. Please start making plans now to attend the 2004 meeting in Ottawa, which will be held in conjunction with the annual meeting of Phytochemical Society of North America. This meeting will be an extraordinary opportunity to join with an expanded audience of fellow explorers to hear reports of what they've found and where they're going next.

Thanks.

Sincerely,

Tom Baker President

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Treasurer's Report International Society of Chemical Ecology Fiscal Year 2002 and through July, 2003

Fiscal Y	Year 2002 Account activit	ity		
Revenu	e		Credits	Debits
	Gifts			
	Trécé		\$3,000.00	
	Plenum		\$2,500.00	
	Dues		\$6,950.00	
	JCE Subscriptions		\$13,200.00	
	Total		\$25,650.00	
Expenses				
	Student travel awards			\$7,050.00
	S-S, Silver Awards			\$2,856.07
	Executive Committee			\$740.00
	Meeting expenses (Hamburg)			\$830.00
	Account & credit card fees			\$279.40
	JCE Subscriptions			\$13,200.00
	Web page			\$525.15
	Total			\$25,480.62
Net			\$169.38	
Account	balances - December 31, 2002			
	Merrill Lynch	Investments 12/31/01	\$79,088.00	
		Investments 12/31/02	\$69,741.00	
		Net		-\$9,372.00
	Merrill Lynch	Cash	\$48,799.98	
	Total Assets		\$118,541.98	

The weak financial markets caused our endowment to decline significantly in FY 2002. Because the Society does not depend on interest and dividends for operating expenses, the paper losses did not affect our ability to carry out Society business and in the long term, we should see our assets recover and grow again.

January 1 – October 31, 2003

Our endowment has partially recovered with the recent improvements in financial markets gaining \$8,612 from the end of 2002 to the end of October, 2003. The bulk (\$40,000) of our cash reserve has been placed in a secure CD with a guaranteed return.

As of October 31, 2003, the Society's assets stood at \$132,662 including \$16,613 in cash.

Stephen Teale ISCE Treasurer December 5, 2003

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Annual Meeting News

Annual Meeting University of Ottawa, Canada, July 25-29, 2004 Tentative Scientific Program

Main symposium (to be published in Recent Advances in Phytochemistry):

Chemical Ecology and Phytochemistry in Forests and Forest Ecosystems: confirmed speakers:

Jorg Bohlmann, Department of Botany, University of British Columbia Peter Constable, Department of Biology, University of Victoria, Johnathan Gershenzon Max-Plank-Institute for Chemical Ecology Murray Isman, Department of Plant Science, University of British Columbia Norman Lewis, Institute of Biological Chemistry Washington State University Hanna Mustaparta, Biology, Norwegian University of Science and Technology Erika Plettner, Department of Chemistry, Simon Fraser University Ken Raffa Department of Entomology, University of Wisconsin Claus Tittinger Department of Biochemistry, University of Nevada Reno Geraldine Wright, Oxford University Takashi Yoshida, Faculty of Pharmaceutical Sciences, Okayama University

Mini symposia:

- B. Kimball and D.Nolte: Chemically Mediated Behavior in Wildlife
- C. Keeling Hymenoptera semiochemicals
- V. De Luca: Aurthur Niesh young investigator symposium
- S, MacKinnon: Marine Chemical Ecology
- J. McNeill: Pheromones

Posters and contributed oral presentations.

These are invited in all areas of phytochemistry and chemical ecology. The organizers reserve the right to limit the number of oral presentations due to time constraints.

Online registration will be available after Jan 15 on the meeting website: http://www.isce-psna2004ottawa.ca/

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Annual Meeting 2005



The 2005 Annual Meeting will be held July 23-28 in Washington, D.C., at the Omni Shoreham Hotel, 2500 Calvert Street NW (at Connecticut Ave.). This renowned hotel has played host to presidents, world leaders and celebrities since 1930 (see: http://www.omnihotels.com/hotels/default.asp?h_id=6). The Omni Shoreham is nestled on 11 acres of lush green landscaping in Rock Creek Park, and is conveniently located via the city's Metro to Reagan National airport, and there is a wide variety of restaurants within walking distance of the hotel. The central location of the Omni Shoreham is convenient for visits to Smithsonian and private museums, the National Zoo, Government monuments and historical sites, and local nighttime attractions such as Georgetown, Adams Morgan and U-Street jazz clubs.

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Call for Nominations for ISCE Vice-President, Councilors for 2004

Nominations for the positions of Vice-President and four new councilors are called.

The position of Vice-President is prestigious in that he/she will assume the position of Society President in the year following tenure of the role of Vice-President. ISCE councilors are elected for a term of three years. Councilors must commit to attending at least two ISCE Executive meetings during this period. Their other principal responsibilities are participation in the selection of the Silver Medal and Silverstein-Simeone awards and to provide general guidance and assistance to the Executive committee. It is expected that all people nominated for the above positions have a strong record of participation in Society activities and meetings. It is highly desirable that the elections have competition for the positions, i.e., that there be more than one high quality candidate for Vice-President and at least 5 candidates for the councilor positions.

Please send names, contact addresses, phone and fax numbers, and e-mail addresses of candidates along with a short description of why you think the candidate(s) would be suitable for office, to Dr Jean-Luc Clément, Past-President ISCE, c/o CNRS, International Affairs Directorate 3, rue Michel-Ange 75794, PARIS Cedex 16, FRANCE. Email:jean-luc.clement@cnrs-dir.fr

Deadline for receipt of nominations is January 31 2002.

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News

Pennsylvania State University, Chemical Ecology Center of Excellence

This summer, professors Jim Tumlinson and Tom Baker started their appointments in the Department of Entomology at Penn State University. Tumlinson is a member of the National Academy of Sciences as well as past president of the ISCE, and Baker is the current ISCE president. (Tumlinson assumes the position of Ralph Mumma Endowed Chair in the department). Dr. Michael Arjmand (founder of Centre Analytical) graciously endowed the position in honor of his doctoral advisor Professor Emeritus Ralph Mumma.

We were very fortunate in this time of budgetary constraints to hire both of these outstanding chemical ecologists. This double-hiring is a testament to the high regard that the Penn State administration has for the field of chemical ecology and their conviction that the Department of Entomology's strong chemical ecology core is the place to build a strong foundation for future discovery and innovation. This core had already been building in strength over the past few decades, first on the internationally recognized research programs of Jack Schultz, Ralph Mumma and Jim Frazier, and then with the programs of more recently hired faculty, Consuelo DeMoraes and myself.

Through the vision and dedicated efforts of Jack Schultz, one of the pioneers and leaders in plant-plant signaling and induced plant defenses, and the additions of Tumlinson and Baker, we are now at the threshold of formalizing our core faculty intellect into a Chemical Ecology Center of Excellence. Our goal is to make this interdepartmental program one of the premier chemical ecology programs in the world.

We were able to convince our university administration to make the double-hire because of the strength that the field of chemical ecology has exhibited. The administration recognized the great potential that our field represents for future discoveries that will have an impact in

agriculture, medicine, molecular biology, and biochemistry, as well as in bio-terrorism threat reduction and defense. We are not stopping here, and are making efforts to continue to build this program further.

Gary W. Felton Professor and Head, Entomology

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Member News

There is life after chemical ecology......

Dear Dr. Foster

I have been a Chemical Ecologist and member of the ISCE until a couple of years ago when I quit science and started a new life in Italy together with my husband Ruurd de Jong who was a neurobiologist.

We are friends of Jocelyn Millar, John Hildebrandand, John Pickett and many other of the senior members of the society who asked us to keep them posted on how things were going.

When I informed Jocelyn we decided to quit science and open a guest house in Central Italy, he mentioned that I should contact him when we were ready and he would have put a note in the ISCE Newsletter.(see please Jocelyn's message below) Few days ago we received some good press http://seattletimes.nwsource.com/html/travel/2001790368_italy16.html which I have forwarded to him and he told me that he was no longer the ISCE secretary but that I should write to you, so there I am.

If you ever need a "diversion" form the "chemistry of plants and insects" versus "the chemistry of man and good food" may be we could be a good subject!

Best regards and thanks for reading this crazy letter!

Letizia Mattiacci Agriturismo Alla Madonna del Piatto Pieve San Nicolo' 18 06081 Assisi Italy

tel/fax 0039 075 8199050 cell. 0039 328 7025297 http://www.incampagna.com

You can't keep a good man down......

After a short retirement, Dr Jeremy McNeil, former President of ISCE and this year's Silver Medal winner, will not only emerge to take up one, but two part-time positions! Jeremy will be the appropriately named Helen I Battle Visiting Professor in Chemical Ecology at the University of Western Ontario as well as the McConnell Professor of Biological Control at the University of Montreal. Along with the Silver Medal, Jeremy will also be presented with an "Out for 5 Minutes" sign at next year's annual meeting.

All-keen to retire......

Dr Ralph Howard (USDA-ARS, Manhattan, KS) will retire on January 2 2004. Ralph, however, cannot resist the attraction of chemical ecology. He will remain in the society and will attend the Annual Meeting in Ottawa. Ralph will be spending the first year of his retirement working on a monograph on arthropod hydrocarbons along with Gary Blomquist and Dennis Nelson.

A Christmas present for Jim Tumlinson and Joe Lewis......

Dear Dr.Tumlinson,

We are very happy, as Professor Jacques Pasteels announced to you a few hours ago...that you are de winner with Dr.Lewis of the Jean-Marie Delwart Award 2003.

CONGRATULATIONS to both of you. An official letter will follow.

Please give me asap the mail address and private address of Dr.Lewis, please send a short C.V. and tell us if and how you or both of you would manage to come and receive you Prize on Saturday 13 th of Decembre 2003, in Brussels.

Awaiting the pleasure to meet you, Kindest regards, Raphaëlle Holender General Secretary

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Positions Available

Postgraduate Position in Chemical Ecology

A postdoctoral position is available immediately on the Chemical Ecology and Olfaction Group at the University of California-Davis (http:// chemecol.ucdavis.edu). A Ph.D. in chemical ecology, agricultural chemistry, chemistry, or related discipline is expected. Experience in identification of semiochemicals, including instrumentation skills (GC, GC-MS, GC-FTIR, HPLC, GC-EAD, EAG) and behavioral assays is essential.

Please send resume and list of references to Walter S. Leal, University of California-Davis, Department of Entomology, Honorary Maeda-Duffey Lab, 37 Briggs Hall, Davis, CA 95616 or contact by email (<u>wsleal@ucdavis.edu</u>).

The University of California is an Equal Opportunity/Affirmative Action employer.



Supervisory Research Entomologist/Chemist/Physiologist (Insects)/Molecular Biologist.

The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Mosquito and Fly Research Unit, Gainesville, Florida is seeking a permanent full-time Supervisory Research Entomologist/Chemist/Physiologist (Insects)/Molecular Biologist. In addition to research duties the incumbent, as Research Leader, is responsible for exercising leadership, including the management of human, fiscal, and physical resources. Specific research objectives include one or more of the following: development of an interactive mosquito surveillance system on species selective trapping and GIS technology; development of new classes of compact, robust, inexpensive and low maintenance mosquito traps to be used to gather and remotely communicate data; identification, characterization, and synthesis of mosquito and fly attractants/repellents to be used in traps and/or control systems; discovery, development, and testing of biocontrol agents for integrated pest management tactics; identification and development of control agents and dispersal tactics to efficiently and efficaciously control mosquitoes, flies and their related diseases abroad; and basic investigation of the epidemiology of invasive vectors and pathogens in support of producers and national homeland defense missions. Salary range of \$79,344 to \$121,330. For details and application directions, see http://www.afm.ars.usda.gov/divisions/hrd/vacancy/resjobs/X4S-0048.HTM. To have a printed copy mailed, call Jackie Sullivan at 352-374-5861. U.S. citizenship is required. Announcement closes February 6, 2004. USDA/ARS is an equal opportunity employer and provider.

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Courses

Infochemicals in Pest Control and Conservation Biology

Graduate student course on the applications of pheromones, kairomones and other semiochemicals, Department of Ecology, Lund University, Sweden, 2-12 February 2004.

Since the first identification of a pheromone over forty years ago the world of chemical signals has received much attention from scientists in biology, chemistry and agriculture/forestry. Many of the findings have come into practical use, mainly for mornitoring or suppression of insect pests. Yet, a very small fraction of crop protection is based on semiochemicals, despite their obvious advantages over conventional insecticides. Why is this and what can be done to increase the applied use of these sustainable alternatives? More recently other possibilities to use odour signals have become obvious in e.g. detection of rare species. Can this be developed and used more widely in conservation biology? These are issues that will be dealt with during the course, which includes lectures, student presentations, exercises and discussions. Register before 15 January 2004.

For more information see: http://pheromone.ekol.lu.se/infochemkurs.html

Please distribute the information - and for those interested in participation: Sign Up!

Olle Anderbrant

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Books of Interest

Handbook of Thin-layer Chromatography Third edition, revised and expanded Edited by Joseph Sherma and Bernard Fried Marcel-Dekker, Inc., New York and Basel ISBN: 0-8247-0895-4

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Visit the ISCE Webpage at http://chemecol.org/

<u>homepage</u>