

## INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

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#### **Secretary/Editor's Message**

It is the usual suspects for attention this newsletter. First, a heads up for the annual meeting, this year to be held in Barcelona, Spain, July 15-19. Angel Guerrero and his organizing committee are putting together an outstanding meeting (see below), which should be well attended by ISCE members from all around the world. Furthermore, what better backdrop to a chemical ecology meeting than the magnificent city of Barcelona? The architecture, museums, sun and sea, shopping, and food and wine will ensure that there are plenty of things to do outside of meeting hours as well as being of great interest to accompanying persons. Note that July is the high season for tourism in Barcelona. Therefore, register (see below for details) and reserve your accommodation early!



Second, quite a few members have yet to pay their 2006 <u>membership</u> dues! Please send your overdue dues to Ken Haynes as soon as possible. Membership dues are used primarily to fund student travel awards and the travel costs of the Silver Medal Award winner(s). Note that non-members will pay extra (greater than the actual membership due) for registration at this year's annual meeting.

Finally, it is <u>election time again</u>! In recent years, there has been an excellent participation rate of members in elections for Executive and Council positions. Keep up the good work!

#### Stephen Foster, Secretary, ISCE

Update on the 22nd Annual Meeting of the International Society of Chemical Ecology to be held in Barcelona, Spain July 15-19, 2006

## LETTER FROM THE HOST

On behalf of the Local Organizing Committee, I have great pleasure in inviting you to attend the 22nd Annual Meeting of the ISCE that will take place in Barcelona (Spain), July 15-19, 2006. The aim of the meeting is to bring together people, from young researchers to experienced leaders, working on all aspects of Chemical Ecology, paying particular attention to olfactory reception, new approaches for pest control, pheromone biosynthesis, variation in sex pheromones and plantherbivore interactions. There will be two plenary lectures by the recipients of the ISCE Silver Medal Awards, Dr. John Hildebrand and



Dr. Cam Oehlschlager. In addition to the invited contributions for the symposia, chaired by Drs. Walter S. Leal, Tom C. Baker, Wendell L. Roelofs, Ring T. Cardé and Thomas Hartmann, the meeting has been designed to accommodate as many 15 min oral presentations as possible but poster contributions are also welcome. As in previous meetings of the Society, a certain number of excellent students will be granted a <u>Student Travel Award</u> to assist with the expense of attending the meeting. There will be also a cultural and entertainment program for accompanying persons.

From a scientific point of view, there are numerous reasons why nobody should forego this opportunity to learn together by sharing information and data on a whole range of topics related to Chemical Ecology in the lovely Mediterranean atmosphere of Barcelona, the second city in the world in the organization of international meetings in 2004. The meeting will take place in the Faculty of Biology (University of Barcelona) at the university campus, just at the southwest entrance of the city. The area is very well connected with other parts of the city by public transportation (subway, bus, tram, taxi). Barcelona offers many interesting places (Sagrada Família, Parc Güell, Casa Batlló, La Pedrera, the Gothic Quarter, Palau de la Música) and museums (Tàpies, Picasso, Thyssen-Bornemisza, MNAC, Miró, FC Barcelona) to visit, as well as many restaurants to enjoy the famous Mediterranean cuisine.

Looking forward to seeing you in Barcelona in July 2006.

#### Angel Guerrero President of the Organizing Committee

## SYMPOSIA

Biochemistry and molecular biology of olfactory reception. Chair: W.S. Leal Semiochemical practical approaches for pest control. Chair: T.C. Baker Biosynthesis and pheromone production. Chair: W.L. Roelofs Causes and consequences of variation in Lepidoptera sex pheromones. Chair: R.T. Cardé Plant-herbivore interactions. Chair: Th. Hartmann

## ABSTRACTS

All participants are invited to submit abstracts of their scientific communications between March 1st and April 30th. Preference of oral or poster presentation should be indicated by authors on the Abstract Submission Form. The Abstracts will be reviewed for their acceptance and communication about the final decision on the format presentation will be made by the Scientific Committee by May 31st.

Abstracts of the accepted communications will appear in the Abstracts Book and distributed to all attendants.

## COMMITEES

Local Organizing Committee Angel Guerrero (Chairman) (IIQAB-CSIC, Spain) Gloria Rosell (Univ. Barcelona, Spain) M<sup>a</sup> Pilar Bosch (IIQAB-CSIC, Spain) Carmen Quero (Scientific Secretary) (IIQAB-CSIC, Spain)

Scientific Committee Walter Soares Leal (Univ. California Davis, USA) Thomas C. Baker (Penn State University, USA) Wendell Roelofs (Cornell University, USA) Ring T. Cardé (Univ. California, Riverside, USA) Thomas Hartmann (Tech. Universität Braunschweig, Germany) Angel Guerrero (IIQAB-CSIC, Spain) Francisco Camps (IIQAB-CSIC, Spain) Josep Coll (IIQAB-CSIC, Spain) Gloria Rosell (Univ. Barcelona, Spain) M<sup>a</sup> Pilar Bosch (IIQAB-CSIC, Spain) Carmen Quero (IIQAB-CSIC, Spain)

## **CONGRESS SECRETARIAT**

Travel and accommodation arrangements GRUPO PACÍFICO Marià Cubí, 4 08006 Barcelona (Spain) Tel. +34.93.238.87.77 Fax. +34.93.238.74.88 isce@pacifico-meetings.com www.pacifico-meetings.com/isce Scientific arrangements Carmen Quero, Ph D. Dept. Biological Organic Chemistry, IIQAB-CSIC Jordi Girona, 18-26, 08034 Barcelona (Spain) isce2006@cid.csic.es

## **MORE INFORMATION**

Further information will appear in the web page of the Society <u>www.chemecol.org/meetings/</u> <u>ISCE\_2006.htm</u> and of the Secretariat <u>www.pacifico-meetings.com/isce</u>

# STUDENT TRAVEL AWARD APPLICATION (for application form click here)

Eligibility Rules. The applicant must:

1. Be a full-time graduate student or postdoc. A post-doctoral fellow is eligible during the first five years of being a post-doc.

- 2. Present a paper or poster at the meeting.
- 3. Not have previously received a ISCE travel grant
- 4. Have an endorsement from his/her Professor/Supervisor

#### **ISCE ELECTIONS, 2006 Candidate for ISCE Vice-President**



Wendell Roelofs received his undergraduate training at Central College of Pella, Iowa and his PH. D. at Indiana University in 1964. Following a brief NIH postdoctoral fellowship at MIT, he joined the faculty at Cornell University where he became the Liberty Hyde Bailey Professor of Insect Biochemistry in 1976, a position he still holds today. He has received worldwide recognition for his pioneering research in the field of insect chemical communication, achieving major breakthroughs in the chemical identification, characterization, and biosynthesis of insect pheromones and the ways in which insects perceive and respond to pheromones. This work has important implications for basic and applied biological sciences and the worldwide importance of his work is reflected in numerous awards and honors, including 4 honorary doctorates, election to the National Academy of Sciences, the National Medal of Science, the Israeli Wolf Foundation Prize, and the United States Department of Agriculture Distinguished Service

Award. He is a regular attendee at ISCE national meetings and is on the editorial advisory board of Journal of Chemical Ecology.

#### **ISCE ELECTIONS, 2006 Candidates for ISCE Councilors**

Dr. Maurício Bento is currently a Professor in the Department of Entomology, University of São Paulo, Brazil. He obtained his PhD in Entomology in 2001, University of São Paulo, Brazil. He then took training on Chemical Ecology in NISES, Japan, University of California, Davis and Max Planck Institute, Jena, Germany. His research interests include pheromones and chemically mediated ecological interactions among plants, herbivores, and parasitoids. In 2005, Prof. Bento organized IV Brazilian Meeting of Chemical Ecology in Piracicaba with more than 240 participants. He is the current Accountant of Entomological Society of Brazil, an organization with more than 1200 members in Brazil.



Dr Michael



Birkett is a Senior Research Scientist in the Chemical Ecology Group at Rothamsted Research, United Kingdom. Dr Birkett studied Biochemistry and Biological Chemistry at the University of Nottingham (1987-1990). Following his undergraduate studies, he stayed on at the School of Chemistry at Nottingham to undertake his PhD studies in Synthetic Organic Chemistry (1990-1993). After completion of his PhD thesis in 1994, he joined the Chemical Ecology Group at Rothamsted, led by Professors John Pickett and Lester Wadhams, as a Post-Doctoral chemist working on the isolation and identification of cattle-derived kairomones for nuisance and pathogen-vectoring cattle flies, and the chemical ecology of aphidophagous ladybirds. In 1998, he was recruited to the Chemical Ecology Group as a permanent member of staff, and in 2002, in recognition of his achievements, he was promoted to the position of Senior Research Scientist,

with responsibility for several key areas of research within the group including, the chemical ecology of medical and veterinary arthropod pests, the chemical ecology of ladybirds, and the development of plants as renewable materials for the production of semiochemicals. Dr Birkett has numerous collaborations worldwide, working with scientists on a wide number of projects. He is a member of the ISCE and the Royal Society of Chemistry, and, since 2002, has been a Chartered Chemist. He regularly publishes and reviews papers in the Journal of Chemical Ecology.

Dr. Jörg Hardege undertook his undergraduate (MSc) degree studies in Biology between 1980 and 1985 in Germany at the University of Oldenburg where he joined the research group of Prof. E. Zeeck in 1985 to start working on the identification of marine invertebrate chemical signals in the Department of Chemistry. During his PhD (summa cum laude in 1992), he and his wife Dr. Helga Bartels-Hardege developed a strong interest in chemical ecology of Nereidid polychaetes. Pheromones in ragworms have become the group's trademark research subject. As such, most of his research work in St. Andrews (post-doctoral researcher 1993-1995), as lecturer in chemical ecology at Cardiff University (1996-1999) and recently at Hull University (Senior lecturer for chemical ecology) has focused on understanding how marine invertebrates 'utilize' chemical signals e.g. in mate choice. Having identified a number of pheromones in marine invertebrates, the majority of the research team now studies the ecological and evolutionary implications of the use of



pheromones in a number of Nereis species, although chemical signals in aquatic organisms (shore crabs, lobster, crayfish, otters) stil feature strongly. Right from the start of his research career as a student, Dr. Hardege joined the ISCE, which he believes is an ideal forum to foster collaborations between chemists and biologists. Since 2004 he is the Head of Department of Biological Sciences at Hull University.



Dr. Stefan Schulz is Professor of Organic Chemistry at the Technical University Bruanschweig in Germany. He studied Chemistry at the University of Hamburg, Germany, where he also got his PhD under the supervision of Professor Wittko Francke in 1987, working on the chemistry of male butterfly pheromones. A post-doc with Prof. Jerrold Meinwald at Cornell University, USA, followed, working on the biosynthesis of alkaloid pheromones. Returning to Hamburg, he obtained a position in the priority program "Chemical Ecology" by the German Science Foundation (DFG) from 1989 to 1993. His habilitation was performed in 1994 in Hamburg, and in 1997 he moved to the Technical University Braunschweig, Germany, for a full Professor position in Organic Chemistry. From 1992 to 1994 he was a student member of the council of the ISCE. The identification, synthesis, and biosynthesis of semiochemicals used by animals, plants, and microorganisms is the primary focus of his research group. Current research focuses on chemical ecology

of arachnids, insects, reptiles, and marine as well as terrestrial bacteria. His group was the first to identify spider pheromones. He has authored over 80 research papers and edited two recent books. Dr Schulz publishes and reviews manuscripts in the Journal of Chemical ecology and is a regular attendee at ISCE Annual Meetings.



Dr. Jeff Weidenhamer is professor of Chemistry at Ashland University, an undergraduate institution in north central Ohio, USA. He studied chemical ecology with Prof. John Romeo at the University of South Florida, where he received his Ph.D. in 1987 for studies of allelopathic interactions in the Florida scrub. He then spent two years as a post-doctoral researcher for Prof. Nikolaus Fischer at Louisiana State University before taking his current position. His research has focused on both the Florida scrub and on methodological issues in allelopathy research, and has shown that density-dependent phytotoxicity effects can be used to distinguish allelopathy and resource competition. His current research is focused on the use of polydimethylsiloxane materials to analyze chemical dynamics in the rhizosphere. A first paper on this approach appeared in the Feb. 2005 issue of the Journal of Chemical Ecology, and he has received funding from the US National Science Foundation (DEB – Ecological Biology Cluster) to develop this new



method. Dr. Weidenhamer has frequently attended ISCE meetings, and regularly publishes in and reviews articles for the Journal of Chemical Ecology. He has been active in supervising a total of 25 undergraduate students in research in chemical ecology. He has previously served as secretary of the International Allelopathy Society.



Dr. Paulo Zarbin is professor of chemistry at the Federal University of Parana (UFPR), Curitiba, Brazil since June-1998. Head of the Laboratory of Semiochemicals, Dr. Zarbin obtained his BS degree in chemistry in 1993 and MS degree in 1995 at the Federal University of Sao Carlos, Brazil. He obtained his Ph.D. in Organic Chemistry in 1998 at the same university, with part of his thesis developed at the National Institute of Sericultural and Entomological Science in Tsukuba, Japan, 1996 and 1997, working under the supervision of Dr. Walter. S. Leal. He was chair of the graduate program in chemistry at UFPR from 2002 to 2004, organizer of the I-Brazilian Meeting on Chemical Ecology, held in Curitiba, in 1999, and member of the organizing committee of the ISCE meeting held in Brazil, in 2000. Dr. Zarbin was the guest editor of the Journal of the Brazilian Chemical Society, JBCS, [vol 11(6), 2000], in a special issue dedicated to chemical ecology, and is currently editor of BioAssay, the electronic journal of the Brazilian Entomological Society. Dr. Zarbin's main research interest is focused on the identification, synthesis, biosynthesis and field evaluation of insect pheromones. He collaborates with researchers from Europe, USA, Japan and Latin America.

#### Awards



Professor Wittko Francke, University of Hamburg, president of ISCE NNNN, was awarded Honorary Doctor of Philosophy by the Faculty of Science, Lund University, on May 27, 2005. Wittko Francke has been a leading researcher in chemical ecology for many years, especially in the fields of insect communication and plant-insect interactions. Over the years he has been involved in a large number of collaborative projects with the Pheromone group in Lund and has generously shared his expertise and social competence with the team in Lund. This collaboration has been critical for the completion of many successful studies and for the development of chemical ecology in Lund.

Wittko Francke at the banquet following the award ceremony. At the banquet Wittko gave the speech on behalf of all 19 honorary doctors, explaining what chemical ecology is about and why it is important to continue and increase research efforts. The audience included the Swedish Minister of Research and Higher Education, Leif Pagrotsky, and other influential people.

Professors J.C. van Lenteren, Marcel Dicke, and Louise.E.M. Vet have been awarded the Rank Prize in Nutrition for their work on "fundamental studies of the interaction between plants, their arthropod pests and the natural enemies of these pests, and the development of strategies for practical biological methods of pest control". The prize giving ceremony took place at The Royal College of Physicians, London, UK, on February 8 2006.

Dr Walter Leal has been elected to the rank of Fellow of the American Academy for the Advancement of Sciences.

## Upcoming Meetings

## VIIIth European Congress of Entomology

Dear Colleagues,

It is our pleasure to greet you on the behalf of the Organizing Committee for the upcoming VIIIth European Congress of Entomology in the historic town of Izmir/Turkey, 17-22 September, 2006. (Please check webpage for further information: <u>www.ece2006.org</u>).

In the frame of this congress we are organizing the "Insect Pheromones" symposium which will take place on the 18th of September. According to our intention this symposium will focus on evolution of communication systems from the molecular across biochemical towards ecological levels and include all approaches from endocrinology to production, emission, identification, perception, evolution, taxonomical and systematical aspects of pheromones etc.

The state-of-art lecture entitled "Chemical Communication: Structural Principles and Evolution" will be presented by Prof. Dr. Wittko Francke (Univ. Hamburg, Inst. Org. Chem. Hamburg) followed by two cover up review lectures given by Prof. Dr. Bill S. Hansson (SLU, Dept. Crop Science, Alnarp) and Dr. Shogo Matsumoto (Lab. Molec. Entomol. and Baculovirol. RIKEN, Wako-shi), respectively.

We invite you and your colleagues to participate in the "Insect Pheromones" symposium with presentations (10 mins + 5 mins discussion) and posters. We strongly encourage posters to avoid overbooking. Please send us (Adrien Fónagy (<u>h7191fon@ella.hu</u>) and Gábor Szöcs) your intention to participate as well as the title and desired form of presentation. Please note that submission deadline of abstracts is on the 25th of May. Abstract format will be provided by the Congress Organizers later. We, however, request you to please send us a copy as well.

We hope to keep contact with all of you and don't hesitate to contact us to assist you if you have any further question, or Dr. Kismali (chair of Organizing Committee of the Congress: <a href="mailto:seniz.kismali@ege">seniz.kismali@ege</a>. edu.tr ) or Dr. Hoffmann (chair of Presidium of ECE: <a href="mailto:Klaus.Hoffmann@uni-bayreuth.de">Klaus.Hoffmann@uni-bayreuth.de</a>)

Please feel free to pass over this message to other colleagues who might be interested in joining this very interesting meeting. We are still in time, everybody is welcome!

Cordial greetings,

Adrien Fónagy (Ph.D.) (h7191fon@ella.hu)

Head of Zoology Dept.

Ecotoxicology and Environmental Analysis Dept. Plant Protection Institute of Hung. Acad. Sci. Budapest, II. Herman Ottó u 15. H-1525 P.O.B. 102 Tel: (36)-1-39-18-612 Fax:(36)-1-39-18-655

## Gorden-Research-Conference

Wittko Francke and Eran Pichersky will organize a Gorden-Research-Conference on "Floral & Vegetative Volatiles" to be held on October 7-12, 2007 at Les Diablerets, Switzerland. Details will be posted in time or contact Professor Dr. Wittko Francke (<u>francke@chemie.uni-hamburg.de</u>)



Stephen Foster, Editor Department of Entomology North Dakota State University Fargo, ND 58105, USA Stephen.foster@ndsu.nodak.edu

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