

INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

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Deadline for the next issue is September 15, 2006.

Secretary/Editor's Message

To start off, my congratulations go to the successful election winners. Wendell Roelofs was elected as Vice President for 2006/2007, and will assume the Presidency in 2007/2008. Mauricio Bento, Michael Birkett, Stefan Schulz and Paulo Zarbin were elected as councilors. They will assume their duties after the Annual Meeting in Barcelona.

On the subject of the Annual Meeting, it is barely over a month away. Angel Guerrero has provided an update on the meeting, which is posted below. It is shaping up to be a great meeting, with an excellent attendance of members from all around the world. Remember that early registration is due by 15th June.



After that, registration will increase (an additional 50 euros). The Scientific Committee has come up with a great series of symposia for this meeting, and, for the first time, an ISCE meeting will feature talks by two Silver Medal winners, John Hildebrand and Cam Oehlschlager!

I was saddened to learn of the passing away of Jan van der Pers. Jan was a pioneer in the field of insect olfaction and regularly attended ISCE meetings. He not only made a tremendous personal contribution to chemical ecology research but, through his business, he built and supplied a great number of laboratories around the world with equipment for insect olfaction studies. He will be sadly missed.

Stephen Foster, Secretary, ISCE

Update on the 22nd Annual Meeting of the ISCE

LETTER FROM THE HOST

It has been a wonderful, but perhaps not unexpected, surprise to receive a large number of abstracts (we calculate that the final figure could be around 200) for oral and poster presentations for the upcoming 22th ISCE Meeting in Barcelona (15-19 July 2006). This has brought us to include in the program a new session for oral presentations on Tuesday, 18. In addition, there will be 8 Student Awards presentations instead of the 6 previously considered. With regard to the number of attendants to the meeting, the list of registrants so far is more than satisfactory, although presumably the number of registrations will be steadily increasing at least up to June 15, the final date for the reduced fee.

We acknowledge the following speakers who have accepted to give the following 30 min contributions: Sunday 16.

Plenary Lecture (ISCE Silver Medal Award) John G. Hildebrand: "Chemical Ecology by Way of the Brain: Explorations of Moth-Host Interactions" Symposium 1. Biochemistry and Molecular Biology of Olfactory reception. Chair: W.S. Leal

Richard Vogt: "Peripheral Networks: The Biochemistry of Odor Presentation"



Walter S. Leal: "Bug's Life in the Fast Lane: Rapid Binding, Transport, Release and Inactivation of Semiochemicals"

Richard Newcomb: "The Molecular Basis of Pheromone and Odorant Reception in the Tortricid Moth, *Epiphyas postvittana*"

Kazushige Touhara: "Molecular Mechanism Underlying Insect Sex Pheromone Reception"

Heinz Breer: "Receptors and Binding Proteins for Moths' Pheromones"

Special Lecture. Jerrold Meinwald: "Exploring the Chemical Basis of Biotic Interactions"

Monday, 17

Symposium 2. Semiochemical practical approaches for pest control. Chair: T.C. Baker Cam Oehlschlager: "Development of a Monitoring and Mass Trapping System for Coffee Berry Borer" Tom Baker: "Pros and Cons of Using High Release-Rate, Low Density Dispensers for Mating Disruption"

Peter Landolt: "Application of Non-Pheromone Attractants for Management of Insect Pests: Promises and Pitfalls"

Christer Lofstedt (or Olle Anderbrant): (tentative title) "Mating Disruption of the Indian Meal Moth in Commercial Facilities"

Jim Miller and Larry Gut: "Implications of Competitive Attraction as a Primary Mechanism of Moth Mating Disruption"

Tuesday, 18

Symposium 3. Biosynthesis and pheromone production. Chair: W.L. Roelofs Ada Rafaeli and Russell Jurenka: "Regulation of Pheromone Production in Moths" Christer Löfstedt: "Recruitment and Loss of Components in the Evolution of Moth Pheromones" Claus Tittiger: "Pheromone Biosynthesis and Regulation in Bark Beetles" Gemma Fabriàs: "Fatty Acid Desaturases in Moth Pheromone Biosynthesis" Alejandro Rooney: "Molecular Evolution of Pheromone Production Genes in Moths"

Short Symposium. Causes and consequences of variation in Lepidoptera sex pheromones. Chair: R. T. Cardé

Jeremy Allison: "Patterns of Variation"

Ken Haynes: "Genetic Mechanisms of Variation"

Ring T. Cardé: "Evolutionary Causes and Consequences of Variation"

Wednesday, 19

Symposium 4. Plant-herbivore interactions. Chair: Th. Hartmann

Birger L. Moller: "Cyanogenic Glucosides in Plants and Insects and their Role in Plant-Insect Interactions"

Jörg Bohlmann: "Terpenoid Synthases and Cytochrome P450 Enzymes in the Interacting Genomes of Conifers, Bark Beetles and Fungal Pathogens"

Wilhelm Boland: "Sequestration of Plant-Derived Glycosides by Leaf Beetles: a Model System for Evolution and Adaptation of Chemical Defenses"

Ute Wittstock: "Special Weapons - Exceptional Countermeasures: Glucosinolate Hydrolysis in Plants and their Insect Herbivores"

Dietrich Ober: "Plant Defenses Utilized by Insects: Functional and Evolutionary Aspects of the Pyrrolizidine Alkaloids"

Plenary Lecture (ISCE Silver Medal Award):

Cam Oehlschlager: "Management of Insect Pests in Tropical Crops by Mass trapping"

In addition, we also thank to the Ministry of Education and Science, Generalitat de Catalunya, CSIC, Faculty of Pharmacy (University of Barcelona), Syntech, Bedoukian, TRÉCÉ and Kenogard for their generous sponsorship to the meeting.

For further information and continuous update of the meeting, please contact the web page of the Society <u>www.chemecol.org/meetings/ISCE_2006</u> and/or that of the Secretariat <u>www.pacifico-meetings.com/isce</u>

I look forward to meeting you all in Barcelona

Angel Guerrero President of the Organizing Committee

ELECTIONS RESULTS 2006



Vice-President and President-Elect

Wendell Roelofs was elected as Vice-President and President-Elect of ISCE. Wendell is a Professor and Chair of the Department of Entomology at Cornell University, Geneva. He is well known for his pioneering work on insect chemical communication Dr Gary Blomquist will become the new President.

Councilors

ISCE councilors are elected for a term of three years.Councilors are appointed fromvariousgeographical and subject areas, and advise the ISCE Executive Committee. The following councilors were elected:



Dr. Maurício Bento is currently a Professor in the Department of Entomology, University of São Paulo, Brazil. His research interests include pheromones and chemically mediated ecological interactions among plants, herbivores, and parasitoids.



Dr Michael Birkett is a Senior Research Scientist in the Chemical Ecology Group atRothamsted Research, United Kingdom. He works on the chemical ecology of medical and veterinary arthropod pests, ladybirds, and the development of plants as renewable materials for theproduction of semiochemicals.

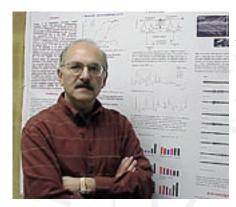


Dr. Stefan Schulz is Professor of Organic Chemistry at the Technical University Bruanschweig in Germany. His research focuses on the identification, synthesis, and biosynthesis of semiochemicals used by animals, plants, and microorganisms.



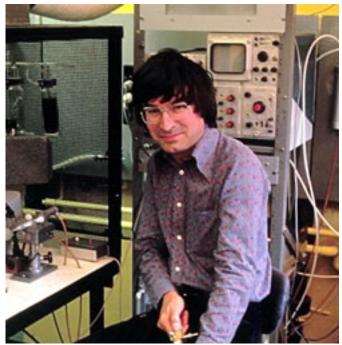
Dr. Paulo Zarbin is professor of chemistry at the Federal University of Parana (UFPR), Curitiba, Brazil. His main research interest is focused on the identification, synthesis, biosynthesis and field evaluation of insect pheromones.

Member News



Professor Coby Schal has been awarded the Distinguished Achievement Award in Urban Entomology for "outstanding and significant contributions to the field of urban entomology". Coby presented the Arnold Mallis Memorial Award Lecture on May 22, 2006 at the National Conference in Urban Entomology held in Raleigh, NC. He was presented a monetary award and a commemorative plague.

Obituary



Jan Van Der Pers passed away on April 29th 2006 at the age of 62, after a brave struggle with cancer. Jan was a well-respected researcher in the field of insect physiology and chemical ecology and the founder of Syntech, a company that specializes in the design and production of dedicated instrumentation for studies of insect chemoreception and insect behaviour.

Jan obtained his PhD at the University of Groningen in 1980 on a thesis entitled "Olfactory receptors in small ermine moths (Lepidoptera:Yponomeutidae): electrophysiology and morphology". His thesis work was based on his improvement of the technique for socalled tip recording, employing two delicate glass knives to cut the tip of an olfactory sensillum hair to make electrical contact with the receptor cells housed in a specific sensillum. Jan was a pioneer among insect

electrophysiologists. With a keen technological interest combined with excellent biological understanding he had a unique vantage point to push the field forward, and to use ever smaller insects available for scientific investigations.

We got to know Jan when he came to Sweden in 1981, to work with the pheromone group at Lund University as a post doctoral researcher. Jan brought his exquisite knowledge about insect electrophysiology, as well as a keen interest in the construction of new equipment for insect studies, to establish insect electrophysiology research in Lund. Already at this time he had a clear vision of the advanced and easy-to-use products, including both hardware and software, that his company was to supply to many members of the chemical ecology over the last two decades. He returned to the Netherlands in 1983 and built his own laboratory and a workshop in the house where he settled with his wife Bonnie. His business and development of new equipment now became his full-time occupation, but occasionally he still published scientific papers with colleagues and customers.

Jan developed specialized solutions based on the particular needs of individual research laboratories. As a customer you could count on his personal commitment to making the equipment

actually produce research results. He visited our laboratories to discuss potential problems and to develop new applications. Less than a month before he passed away, he was in contact with us about problems with an amplifier. At this point he was suffering badly from the effects of his disease and had to see his doctor regularly, yet he was optimistic that he would be back the next day "to help the customers."

In Jan the chemical ecology community has lost an unusually innovative, creative and helpful scientist, a dear friend and colleague. Rather than dwelling on the sadness, we should all acknowledge his contribution as a researcher and friend. In his own words: "it is very tempting to compare your present bad situation with the past. However, it is better to look at the future."

Christer Löfstedt and Bill S. Hansson

Upcoming Meetings

Chemical ecology in aquatic systems

Dr Francesca Gherardi and Dr Roberto Berti are organizing a Workshop in Florence, Italy, focused on aspects of chemical ecology in aquatic systems (ChEAS), including mechanisms of chemical communication.

The Workshop website is: http://www.dbag.unifi.it/cheas2006/

10th Gordon Research Conference on Plant-Herbivore Interactions

Dear Colleagues

We are pleased to announce that the 10th Gordon Research Conference on Plant-Herbivore Interactions has been scheduled for February 18-23, 2007, at the Crowne Plaza, Ventura, California. For over 25 years, the GRC series on Plant-Herbivore Interactions has served as a premier forum for scientists investigating the ecology and evolution of plant-herbivore interactions. Planning is now underway for the 2007 conference, with speakers spanning the range from functional genomics to ecosystem processes. For more information, consult the Gordon Research Conferences.

Web site: http://www.grc.uri.edu/

Rick Lindroth and Martine Rahier Chair and Vice Chair, 2007 GRC on Plant-Herbivore Interactions

V-TH INTERNATIONAL CONFERENCE ON ARTHROPODS: CHEMICAL, PHYSIOLOGICAL AND ENVIRONMENTAL ASPECTS

Stefan Kope• Memorial Conference, <u>http://www.varthropods.uni.wroc.pl</u> September 16-21, 2007 Białka Tatrza•ska near Zakopane, Poland

Dear Colleague,

The Organizing Committee is pleased to invite you to participate in the V-TH INTERNATIONAL CONFERENCE ON ARTHROPODS: CHEMICAL, PHYSIOLOGICAL AND ENVIRONMENTAL ASPECTS which will held in Białka Tatrza•ska in September 16 -21, 2007. Białka Tatrza•ska is a

lovely Polish health resort 100 km south from Krakow, an old town with rich history, Krakow features airway connection with Warsaw, Budapeszt, Frankfurt/Main, London, Paris, Rome, Tel Aviv, Vienna or Chicago. You are cordially invited to attend this Conference.

SCIENTIFIC PROGRAM

The V-the Conference is intended to cover current chemical and physiological aspects of arthropod endocrinology and environmental problems, with an emphasis on research that supports the development of biorational, ecologically friendly arthropods control method. The purpose of the Conference is to bring together biologists, biochemist and chemists to share their most recent results (the proceedings will be published). The scientific program will consist of plenary lectures (by invited specters), and either oral or poster presentations.

LANGUAGE

The official language of the Conference will be English.

ACCOMMODATION

Accommodation will be available in hotel in Białka Tatrza•ska near Zakopane. Details hotel reservation and transport will be given in the second circular. The number of participants will be limited.

PRE-REGISTRATION

All persons interested in receiving the second circular with program outline the registration and abstract forms and the application for accommodations, are requested to complete the attached preliminary registration form and return it to the Conference Organizing Committee before 1 January 2007 on address:

Prof. Danuta Konopi•ska - chair

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Books of Interest



Caroline Mueller and Markus Riederer have edited a book on the "Biology of the plant Cuticle". The homepage for the book is: <u>http://www.blackwellpublishing.com/book.asp?ref=140513268X&site=1</u>

"Insect-Plant Biology" by Louis M Schoonhoven, Joop J.A. van Loon, Marcel Dicke Oxford University Press, ISBN 0-19-852595-8 (paperback), 0-19-852594-X (hardback). Website: <u>http://www.oup.cp.uk/isbn/0-19-852595-8</u> or <u>http://www.oup.cp.uk/isbn/0-19-852594-X</u>

Call for Contributions

Encyclopedia of Earth (http://www.earthportal.net/about/eoe/)

The world's experts on the environment of Earth, and the interaction between society and the natural spheres of the Earth, are forming to produce a single comprehensive and definitive electronic encyclopedia about the Earth. The Encyclopedia of Earth (EoE) will be free to the public and free of advertising.

We seek all qualified editors and authors to collaboratively develop:

- A free, fully searchable, trusted source of articles about the Earth.
- A to Z coverage of topics describing the environment of Earth that span the natural, physical, and social sciences, the arts and humanities, and the professional disciplines.
- An information resource that will be useful to students, educators, scholars, professionals, decision-makers, as well as to the general public.
- An authoring site that combines the authority of peer review with the power of Web-based collaboration.
- A public reference site that is updated every 15 minutes.

Editors: Professor Cutler J. Cleveland of Boston University, Editor-in-Chief of the award-winning/ Encyclopedia of Energy/ (Elsevier Science), is the Editor-in-Chief of the/ Encyclopedia of Earth. A distinguished International Advisory Board provides editorial oversight.

Publisher: The/ Encyclopedia/ is one component of the/ Earth Portal (<u>http://earthportal.net/</u>)/, the world's first comprehensive resource for timely, objective, science-based information about the Earth and environmental change. It is published by the Environmental Information Coalition, National Council for Science and the Environment (<u>http://www.ncseonline.org</u>).

The scope of the/ Encyclopedia/ is the environment of the Earth broadly defined, with particular emphasis on the interaction between society and the natural spheres of the Earth. See the taxonomy and topic areas at <u>http://earthportal.net/about/eoe/eoetopics/</u>.

If you are interested and want more information, please send an email to <eoe@earthportal.net>, or visit <u>http://earthportal.net/about/steward/</u>.



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

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