

NEWSLETTER INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY

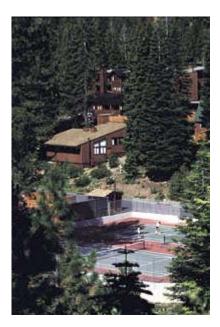
Volume 18, Number 3, October 2001

REPORT FROM THE ANNUAL BUSINESS MEETING

Report from the 2001 ISCE Business Meeting, Wednesday July 11, 2001, Granlibakken Conference Center, Lake Tahoe, NV.

President Leal opened the meeting by announcing the election results for vice president (Jean-Luc Clément) and councilors (Jeff Aldrich, Ben Burger, Jenny Mordue, Irena Valterova), and the 2002 winners of the Silver Medal (John Pickett) and the Silverstein-Simeone award (Tom Baker, Iowa, USA).

Leal thanked Fuji Flavours for their generous donation in support of the Silver Medal, Kluwer for their support of the Silverstein-Simeone award, and Trécé (\$3,000)



for their support of the Student Travel Awards. Leal also thanked meeting host Gary Blomguist for obtaining a further \$5,000 for student travel from a USDA grant, and announced that the 2002 student travel awards committee will consist of Gary Blomquist as chair, Wittko Francke as local host, and Judith Reinhard.

Leal then reported on the formation of an ad hoc committee

charged with recommending updates to the bylaws, consisting of Wittko Francke, Gunnar Bergstrom, Paul Weldon, Jim Nation, Ritsuo Nishida, Nancy Targett, and Johannes Steidle. Later in the year, the suggested amendments and updates will be sent out to the membership for vote. Leal urged all members to vote on these updates, to involve members in the reworking of the structure of the Society.

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From the Editor:

Your 2002 Membership Renewal Form is at the back of this Newsletter. Please print and return this form with your dues to Treasurer Steve Teale. For renewing members, please note that you do not have to fill out your mailing address unless your address has changed. <u>PLEASE MAKE SURE THAT YOUR CURRENT EMAIL ADDRESS IS</u> <u>LISTED AND THAT IT IS CORRECT BECAUSE ALMOST ALL SOCIETY BUSINESS IS BEING CONDUCTED ELECTRONI-CALLY</u>. IF YOUR EMAIL ADDRESS IS INCORRECT, I WILL MAKE REASONABLE EFFORTS TO FIND YOU, BUT IT IS <u>YOUR RESPONSIBILITY TO LET US KNOW WHEN YOUR ADDRESS CHANGES</u>. There is an address update form on the society website at www.chemecol.org. If you do not have access to electronic mail, please clearly indicate this so that we can make alternate arrangements for mailings to you. Credit card payments of dues and subscriptions can be made with VISA, MasterCard, or Discover card.

Announcements of available student, postdoctoral, faculty, or other positions are posted in the Newsletter and on the ISCE website as a service to members. Such announcements will be accepted free of charge from any ISCE member. Please send them to me by email at the address below. <u>Also, let me know when the position is filled so</u> that we can remove the posting. Please also send announcements of upcoming meetings that might be of interest to members. In particular, because my interests focus on insect semiochemistry, I may not be aware of meetings that stress other aspects of chemical ecology, or regional meetings. Other items, such as announcements of new books, and honors and awards to Society members, are also most welcome.

Thanks to members who have sent me photos and other items over the past year; keep them coming. In particular, with the electronic format for the Newsletter, many more photos can be included. Please send me photos of ISCE members at work or at meetings or other events. However, if at all possible, please send them in electronic format, for example as jpg files, as these are easiest to handle. However, if you only have prints or slides, I can have them scanned.

Leal announced the creation of the ISCE Outstanding Service Award, which will be given in recognition of extraordinary service to the Society. The first two recipients were named as Jim Nation and David Jones, in recognition of their contributions as editors of the Journal of Chemical Ecology.

Leal announced the formation of the ISCE Webmaster position, with Allard Cossé as the ISCE's first formally designated Webmaster. Leal then reported that due to the efforts of Treasurer Teale and Secretary Millar, the membership had been increased from 423 to almost 600 over the past 2 years. These efforts to maintain and expand ISCE membership will continue.

Gary Blomquist, as meeting host, reported that there were 176 registered participants, plus 32 guests, from 22 countries on 6 continents. He reported that the meeting would probably make a small profit.

Leal announced that the planning for the 2003 meeting in South Korea, hosted by K.S. Boo, was underway, and that a more detailed report would be available at the Hamburg meeting next year. The meeting is tentatively planned for the ancient city of Kyungju in south-central Korea, Aug. 25-29, 2003, as a joint meeting with the Asia-Pacific Association for Chemical Ecology (APACE).

Leal announced that the budget had been audited by Coby Schal and Monika Hilker, who reported everything in order. Treasurer Teale presented the itemized budget for the 2000 year and the first part of 2001. The Society is in good shape financially, despite some dips in the stock market, and revenues had exceeded expenses in 2000. Teale discussed options for the future, including a reevaluation of the financial situation and investments once the ISCE's investment pool hits \$100,000. David Jones moved that theTreasurer's report be accepted, seconded by Coby Schal, unanimously approved.

Leal announced that Secretary Millar would be stepping down after the Hamburg meeting. Millar reported that the all-electronic version of the Newsletter is in place and running smoothly. Millar stressed the importance to members of making sure that their email addresses are up to date, so that Newsletters and other communications would reach members. Millar then discussed a significant problem that had been detected with the billing for the printed version of the Newsletter. This problem has now been resolved, and the account has been terminated. Millar pointed out the advantages of the all-elec-

tronic Newsletter, including speed and ease of preparation and receipt by members, and substantial cost savings. There are still substantial numbers of ISCE brochures available. Millar recommended that an updated print version not be prepared, but instead, that an electronic version be created, that can be updated, downloaded, and printed as required. In response to a question, Millar indicated that he has been accepting and will accept votes on Society matters by email instead of regular mail, as long as the sender is clearly indicated.

Webmaster Cossé reported that the new ISCE website at www.chemecol.org is running smoothly, and that items such as the Newsletter are downloadable in several formats. He requested that members send him links, and that members promptly inform him once posted "positions available" are filled.

John Romeo gave the Journal of Chemical Ecology editors' report. The journal is now based in Tampa, FL, with himself as editor, and Kelsey Downum, Nancy Targett, and Walter Leal as associate editors for different subject areas. The new team has now done 9 issues of the journal. The journal has added 6 new members to the editorial board, including Linda Walling, Wilhelm Boland, John Hildebrand, Coby Schal, Bob Mason, and Chris Mullens. There were some distribution problems with the journal early in 2001, but those have been resolved. Re. statistics, Romeo, indicated that 261 manuscripts were submitted last year, with 201 published. In 2001, the number of submitted papers is projected to rise to 326. However, he projects that the journal will only publish about 177 papers this year because of a higher rejection rate. The impact factor for 2000, based on 2 years data, was 1.44, down slightly from the previous year, with the journal ranking 36/100 in journals in the general field of ecology. The number of citations per paper over 10 years was a respectable 6.69 citations per paper. Romeo indicated that reviews and special topics issues are being solicited. Downum then commented that all papers are reviewed by at least 2 reviewers, and in cases of split reviews, by at least one more. The journal is targetting having all functions electronic in 1.5 years. A rapid communications class of papers will be introduced in November, with an anticipated 3 months between submission and appearing in print. Rapid communications will be available free on the website, and will appear in the hard copy of the journal several weeks later.

Leal then listed the anticipated meeting sites for the

coming years, including Hamburg (2002), South Korea (2003), Ottawa (2004), Maryland (2005), Barcelona (2006), and Jena (2007), and invited Wittko Francke to report on the plans for the 2002 meeting, scheduled for August 3-8. Francke outlined the scientific program, and showed some slides of the meeting site and the city. He also commented that the meeting is timed to dovetail with some related meetings, and there should be minimal clash with other meetings.

There being no other business, the meeting was adjourned.

Jocelyn Millar, Secretary.

Message from the President

It is an honor for me to serve as the President of the ISCE for the 2001-2002 term. Those who attended our



splendid meeting at Lake Tahoe are aware that I had to leave before the annual general meeting on the final day, owing to a previous family commitment. So in fact, I did not receive the Society's gavel until mid-August! But rest assured, I have been communicating with your Executive Committee and Council right from the beginning of my term. Although I have

presided over two other scientific societies, the truly international flavor of our membership was clearly brought to my awareness at the Executive Committee meeting prior to the scientific program at Lake Tahoe. While biodiversity may be under threat, diversity of opinion amongst our Executive Committee and Council certainly is not. I see that as a healthy situation, one in which all of our constituents have a voice that can and will be heard.

Change is coming to the ISCE, and your Executive is working hard to ensure that it is change for the better. The transition to an electronic newsletter is a prime example, in terms of convenience and substantial cost savings to the Society. However, while we take internet access and electronic mail for granted in many countries, we recognize that the situation is not the same everywhere and we must not allow ourselves to speed away at the expense of leaving some of our members behind.

Scientific publication, *The Journal of Chemical Ecology* included, is quickly moving to an electronic platform and this may also prove beneficial to the majority of our members – but we have to be careful to ensure that access is as broad-reaching as we can make it and also cost-effective. This is just one of the challenges that will face the Executive this year.

This year should also see some important changes taking shape in the manner in which the ISCE operates. A committee has been working diligently behind the scenes to produce a number of revisions to the Society's bylaws - a long overdue task - and we hope to have a series of proposals to put forward for your endorsement at the next general meeting in Hamburg in August 2002. In broad terms the Society has been functioning well, meeting its mandate and standing on sound financial ground. One of the most important roles of the Society is to attract the brightest young minds to join our discipline and Society, and to encourage their participation in meetings and society affairs. In this way the discipline will grow and flourish. We hope to increase funding in support of student participation at meetings through increased fundraising. At the same time we are planning on raising awareness of chemical ecology and its profile not just among those engaged in the discipline, but among the scientific community as a whole, and perhaps even beyond. This is a first step towards seeing chemical ecology attract more funding from the agencies that sponsor our research.

Let me say that one of the reasons for accepting the nomination for President-Elect over a year ago was my knowledge that the ISCE was a well-run scientific society with clear goals, a record of truly international participation, and a bright future. Previous presidents, my immediate predecessor Walter Leal included, have helped to make it that way. It is my goal to follow in their footsteps and serve you to the best of my ability. And I will respect the confidence you have placed in me.

One final note. The tragic events of early September in New York have affected everyone, though perhaps not all to the same extent or in the same way. It is not a goal of our Society to comment on world affairs, but one repercussion of these events is that air travel, the primary mode for most of our members attending annual meetings, will likely be less convenient than in the past. It is my sincere hope that our members will not be deterred from travelling to attend our next annual meeting in Hamburg in the summer of 2002.

Murray B. Isman, President

Message from the Secretary.

With the help of the treasurer, and mailings to members whose memberships had expired, we have managed to get the membership numbers back up to around 600. Greater use of emails has also allowed us to re-



mind people to renew their memberships, and to track people down.

The June 2001 Newsletter was the first electronic-only version of the Newsletter, after sending it out in both electronic and paper form in February. The process consists of Millar compiling the Newsletter items, which are then

sent electronically to Cossé, the Webmaster, for formatting and mounting on the ISCE website in HTM and PDF formats. When this is ready, Cossé informs Millar, who then sends out a message to the membership by email that the Newsletter is ready to be downloaded. The electronic Newsletter has a number of advantages:

• it is faster and simpler to prepare because there are no delays for printing and proofreading.

it is faster to send out

• it costs very little, in contrast to the paper copy, which cost about \$2000 per issue to print and mail. Thus we will save \$5-6,000 per year.

There are 2 lingering problems. First, approximately 40-60 email addresses in the database are incorrect at any one time, due to incorrect entry, or member's addresses changing. However, we are weeding out the errors, and if necessary, sending people a letter to ask them to update their information if we cannot contact them by email, i.e., we are doing everything we can to keep in contact with Society members.

Second, there is a small group of members who for whatever reason do not have email, or want paper copies. Paper copies can be printed easily from the website, but if people do not have an email connection, this is not possible. We are waiting to see how many members may be affected, and if necessary, we will devise a solution.

Due to some questions raised last year re. the costs of the Newsletter, Treasurer Teale and I reviewed the

charges from the UC Riverside printing and mailing departments, and discovered that there were serious errors. We had been double billed a couple of times, not billed at all for other charges, and funds had been left dormant in an account instead of being transferred to cover expenses. We have now corrected the errors and negotiated the reduction of some questionable printing charges, and are awaiting the final bill for charges outstanding. Payment of that bill will effectively end our involvement with the UC Riverside printing department.

I am working well with Webmaster Cossé on both the Newsletter and other web items, such as job postings, which come in continually. Everything is being handled electronically, so there is almost no delay between receiving items and having them posted.

About 3 years ago, we assembled and printed an updated ISCE brochure at a cost of about \$2,000. After a brief flurry of interest, I have received no further requests for the brochure. I still have hundreds of them left, rapidly becoming outdated. Consequently, the Society may want to rethink whether having a professionally printed brochure is worthwhile and cost effective. The experience of the past few years would tend to indicate that it is not. However, if you would like some brochures for fundraising or other purposes, please let me know and I will send you some.

Finally, I intend to step down as Secretary after the Hamburg meeting, by which time I will have been Secretary and editor of the Newsletter for five years. I have enjoyed helping to run the Society, but it is time for a fresh face and new ideas. Past-President Leal is assembling a list of candidates to fill the position, and the announcements and ballots will appear in the February Newsletter. Treasurer Teale has informed me that he will continue as Treasurer for several more years, so that he will be available to help the new secretary assume his/ her duties.

Jocelyn G. Millar, Secretary

Treasurer's Report, Fiscal Year 2000 and through May 31, 2001

The ISCE had total revenues of \$38,009.13 in fiscal year 2000, with the bulk of revenues coming from membership dues, a surplus from the Marseille meeting, and investment income of \$4,649.52 from the Society's in-

vested capital. Other sources of revenue included gifts from Trécé Inc., Fuji Flavor, and Kluwer Academic Publishers, in support of Student Travel, the ISCE Silver Medal, and the Silverstein-Simeone Award lecture.



Expenses in 2000 included \$11, 140,87 for expenses related to the meeting in Poços de Caldas, Brazil, including \$6,100 for Student Travel Awards, and the remainder for costs of Silverstein-Simeone and Silver Medal Awards, and partial travel expenses for the Society's Executive committee mem-

bers. Printing and mailing costs for the Newsletter totaled more than \$8,000, but this figure is under review, pending accounting mistakes that were made at the University of California, where the Newsletter was printed. The final figure for printing and mailing costs should be somewhat less. There were also charges related to bank and credit card fees (\$408.82). Overall, the Society posted a surplus of \$17,974.05 for fiscal year 2000, and this figure should increase once the accounting errors are corrected.

The Society's invested capital increased from \$83,837 on December 31, 1999 to \$90,043.10 in December, 2000. Overall, the Society's assets increased from \$104,024.70 to \$121,998.75 during that same period.

The above figures reflect those that were reported in the Society's 2000 U.S. Federal Income Tax return. In addition, \$9,826 was collected and paid out for subscriptions to the Journal of Chemical Ecology, volume 26 (2000).

For the period from January 1 - June 19, 2001 the ISCE Chase checking account received \$15,498.30 in dues, JCE subscriptions, and a small surplus from the 2000 meeting in Poços de Caldas. \$9,044.75 was paid out for JCE subscriptions, and there have been \$495.40 in credit card and bank charges. \$20,000 has been transferred to our Merrill Lynch investment account making our balance in the Chase checking account \$18,091.82.

Our investments with Merrill Lynch began the year at \$90,043.10 and stood at \$90,118.46 on May 31, 2001. Between December and May, our account went through a trough associated with the volatile stock market; the lowest point was just over \$82,000. By June 19 it was down slightly from the May high to \$87,736. On June 20, the \$20,000 from our Chase checking account brought the ML investment account to approximately \$108,000.

On May 22, we opened a new interest-bearing checking account with Merrill Lynch which will provide a higher

return than the previous Chase account. Over the course of the summer, the remaining balance in the Chase checking account will be transferred to this account. The interest on this account should earn about \$1,000/year for the Society.

Stephen Teal, Treasurer

Summary of the 18th Annual Meeting, Lake Tahoe, USA, 2001

The 18th annual meeting of the International Society of Chemical Ecology was held at the Granlibakken Resort at Lake Tahoe from July 7 - 12, 2001. A total of 176



conference participants and 32 guests enjoyed the scenic beauty of the Lake Tahoe area, and the meeting was highlighted by the lovely setting, outstanding science, and excellent hospitality. The meeting featured 30 symposia papers, 46 contributed talks and 73 posters. Symposia were organized on the subjects of Olfactory Reception by John Hildebrand, on Aquatic Chemical Ecology by Niels Lindquist and Peter Sorenson, on Semiochemical Techniques by Jocelyn Millar, and on Pheromone Production by Coby Schal. The meeting began on a strong note on the evening of July 7 with David Wood presenting the ISCE Silver Medal lecture, which most appropriately for the setting, featured bark beetles! Glenn Prestwich presented an outstanding Silverstein-Simeone lecture, giving an overview of some of his career highlights and the direction his research has gone more recently, and Wendell Roelofs did an superb job of both entertaining and enlightening participants with the Social Lecture, describing

the first exciting years of insect pheromone research, and how his research program has evolved in the intervening years. Tom Baker also joined in, playing one of his origi-



nal compositions, the Roelofs Rag, as a tribute to Professor Roelofs. The meeting also featured a lecture by Charles Goldman of University of California, Davis, discussing the history of Lake Tahoe, followed by an afternoon or evening cruise on the Lake. The ping-pong tournament was also a great success, with Dangsheng Liang taking the singles title, and Tom Baker and Yongliang Fan sweeping the doubles championship after some fierce competition. The meeting ended on the evening of July 11 with a wonderful banquet. The Society is grateful for the financial support for the meeting received from the USDA-NRI, Fuji Flavor Co. Ltd, Kluwer Academic/Plenum Publishers, Trécé, Inc., and Clorox Corporation. Overall, the meeting was a financial success, with a small surplus being contributed to the ISCE treasury.

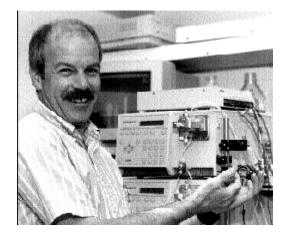
Gary J. Blomquist, Meeting Host

Glenn D. Prestwich, ISCE Silverstein-Simeone Lecturer for 2001

Professor Glenn Prestwich has developed an unusual approach to natural products chemistry, one that has led to the discovery of new structures, to the completion of new synthetic strategies, and to the understanding of the molecular mechanisms of action of many natural products in living systems. From a traditional background in natural products structure determination and synthesis, his research program now focuses on an eclectic mixture of molecular and biological targets. The integrating

theme in all of Dr. Prestwich's efforts has been to achieve an understanding of natural products as ligands interacting with macromolecular targets to effect a biological result.

Glenn's doctoral research with the late William S. Johnson at Stanford University included both physical organic studies of olefin polycyclization and the total synthesis of a pentacyclic triterpene, serratenediol by



polyolefin cyclization. Glenn then joined the International Centre for Insect Physiology and Ecology in Nairobi, Kenya, as a postdoctoral fellow under the supervision of Professors Jerrold Meinwald and Koji Nakanishi, where he isolated and characterized natural products important in termite sexual attraction, queen cell building behavior, trail following, and chemical defense. He then moved on to the study of three natural products problems with potential applications in insect control: (i) mechanism of insect phytosteroid dealkylation, (ii) molecular action of insect juvenile hormones, and (iii) chemical recognition of insect pheromones in olfaction. Glenn's most unique and cutting edge accomplishments in chemical ecology pertain to understanding the molecular basis of olfaction in insects. Beginning with a collaboration with Dick Vogt and Lynn Riddiford in 1983, he has made numerous radiolabeled insect pheromones, and these have been employed in innumerable metabolic and binding studies in moths, termites, beetles, houseflies, bugs, bees, ants, and cockroaches. He moved from pheromone degradation to pheromone binding, and from small molecules to macromolecules to accomplish the first overexpression of an insect pheromone binding protein and the first overexpression of an insect general odorant binding protein (GOBP). These proteins have been used to develop binding assays and photoaffinity labeling to show ligand

specificity and the location of the binding site.

In 1997, Glenn's group began the study of olfactory proteins in the Asian elephant, *E. maximas*, that mediate responses to a simple insect-like pheromone, *Z*7-dodecenyl acetate. This project, a collaboration with Bets Rasmussen of Oregon Graduate Institute, has led to characterization of urinary, trunk mucosal, and vomeronasal proteins involved in the transmission and transduction of this chemical signal.

Glenn is the recipient of numerous honors, including the Alfred P. Sloan Fellowship (1981-85), Camille and Henry Dreyfus Teacher-Scholar (1981-86), Distinguished Research Fellow, Bodega Marine Laboratory (1989), H. C. Brown Lecturer, Purdue University, 1990, and the Paul Dawson Biotechnology Award of the American Association of Colleges of Pharmacy, 1998. He has now trained over 55 graduate students and 42 postdoctoral scientists in the past 24 years. Finally, Glenn is a lifetime member of the International Society for Chemical Ecology, he served on the editorial board of Journal of Chemical Ecology from 1984-1996, in which journal he has published 23 of his more than 360 published papers, reviews, and book chapters. He is currently Presidential Professor and Chair of Medicinal Chemistry, and Research Professor of Biochemistry at the University of Utah

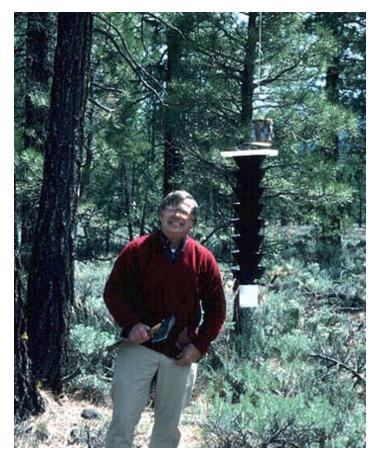
James T. Tumlinson, US Department of Agriculture

ISCE 2001 Silver Medal Winner Dr. David Wood

Although Professor David L. Wood is a renowned forest entomologist, he is best known to members of the ISCE as a true pioneer in insect chemical ecology. In his Ph.D. studies he was the first to challenge and refute Hopkins' Host Selection Principle, demonstrating that the California fivespined ips did not orient preferentially to chemical stimuli emanating from the host species in which it had developed. After graduating with a Ph.D. in entomology from the University of California, Berkeley in 1960, he continued work on Ips paraconfusus, first at the Boyce Thompson Institute for Plant Research and later as a new faculty member at his alma mater. This research produced irrefutable evidence that aggregation of both sexes and mass attack on new hosts was due to a male-produced pheromone. This work was really quite courageous, because it was done at a time when many skeptics considered pheromones at best to be minor scientific

curiosities.

Further elucidation of the chemical ecology of bark beetles was limited by a lack of chemical knowledge. This limitation evaporated abruptly when Dr. Wood became the entomological catalyst in a fruitful collaboration with Dr. R.M. Silverstein, then at the Stanford Research Institute. This collaboration soon grew to involve numerous students, as well as academic colleagues and researchers in the U.S. Forest Service. It was a pioneer-



ing association that profoundly influenced the emergence of chemical ecology as a new and exciting discipline.

Largely due to Dr. Wood's inspiration, innovation, expertise, and sheer energy, an astounding array of landmark advances ensued in a period that spanned four decades. These include: identification of the first insect aggregation pheromones (in the scolytid genera *lps* and *Dendroctonus*); discovery of terpene alcohols and bicyclic ketals as new insect pheromones; first demonstration of multicomponent pheromones and of synergism between pheromone components; discovery of synergism between insect pheromones and host kairomones; description of the first example of interspecific chemical communication in insects; elucidation of the first example of semiochemical-based antagonism and resource partitioning between sympatric insect species; first demonstration of enantiospecificity in a coleopteran pheromone; discovery of the first example of synthesis of an insect pheromone by a microorganism; first record of an entomophagous insect responding to the pheromone of its prey; first demonstration of the efficacy of semiochemicalbased mass trapping of an insect pest; and the first application of pheromones in the biosystematics of insects.

As a teacher, Dr. Wood has challenged generations of students to live up to their full potential. His 31 graduate students will remember and attest to his extraordinary ability to instill in young researchers an excitement for their science, and his uncompromising insistence on the highest possible research standards. Many of his 118 papers in refereed journals are co-authored with his students, and their work is reflected in his 39 invited reviews, chapters and conference proceedings, his two edited books and various other publications. One measure of the quality of his work is the remarkable number of times his papers have appeared in the top journals in the world: 9 papers in Science, 5 in Nature, and 1 in the Proceedings of the National Academy of Science. Dr. Wood's work is cited in several text books, and by countless researchers, who rely on the sound scientific foundations and intricate conceptual syntheses built by this remarkable researcher.

Several other honors have been bestowed on Dr. Wood, including a Silver Medal in 1983 from the government of Sweden for his wise counsel and valuable assistance in developing semiochemical-based strategies for managing insect infestations, the Founder's Award from the Western Forest Insect Work Conference, election as a Fellow of the Entomological Society of Canada, the Founders Memorial Award from the Entomological Society of America, and most recently, election as a Fellow of the Entomological Society of America.

John H. Borden, Simon Fraser University

WINNERS OF YEAR 2001 STUDENT TRAVEL AWARDS



The ten 2002 ISCE Student Travel Award winners, with outgoing President Walter Leal (left), and local meeting host Gary Blomquist.

This year, the ISCE selection committee had a difficult job making award decisions because of the large number of applications received. The Society also was fortunate to receive a grant from the US Department of Agriculture and a generous donation from Trécé Inc., in support of the awards; we are grateful to these donors for their support. Thirty-two applications were received from undergraduates, graduate students, and postdocs from 11 countries, split almost evenly between males and females. Ten awards were made to students and postdocs from five countries, including Germany, Sweden, Israel, France, and the United States, as follows:

Raphaël Boulay, Israel: The source of recognition pheromone in the ant *Campanotus fellah*.

Valérie Campanacci, France: Insect pheromone binding proteins and chemosensory proteins: functional and structural studies.

Yongliang Fan, USA: Hydrocarbon synthesis by oenocytes and its delivery by lipophorin to oocytes and cuticle of the German cockroach

César Gemeno, USA: Behavioral and electrophysiological responses of supella longipalpa to sex pheromone stereoisomers.

Raimondas Mozuraitis, Sweden: Parthenogensis, calling behavior, and potential sex pheromone of the leafminer moth *Phyllonorycter emberizaepenella*.

Michael Lemaster, USA: Evidence for a female sex pheromone mediating male mate choice in red-sided garter snakes (*Thamnophis sirlatis parietalis*).

Göde Schüler, Germany: Coronatine analogs as molecular probes of the secondary plant metabolism.

Dieter Spiteller, Germany: Gut bacteria are involved in the synthesis of elicitor-active compounds from lepidopterans.

Florence Vincent, France: Mammalian odorant and pheromone binding proteins.

Mitchell Wise, USA: Characterization of a myrcene synthase from bioreactor cultures of the marine red algae *Ochitodes secundiramea*.

Due to lack of time in the program, the student award presentations had to be split between an evening oral presentation session and the poster session, both of which were well-attended and enjoyed by all.

The 2001-2002 Student Travel Award Committee consists of Judith Reinhard, Icoal meeting host Wittko Francke, and Gary Blomquist. The call for 2002 awards will appear in the February ISCE Newsletter and on the Website.

ISCE SILVER MEDAL AND SILVERSTEIN-SIMEONE AWARD WINNERS FOR 2002



The 2001 award winners were announced at the ISCE meeting in Lake Tahoe. The Silver Medal Award winner for career achievement in chemical ecology is Dr. John Pickett, a past president and life mem-

ber of the Society, and currently head of the Biological and Ecological Chemistry Department at the Institute for Arable Crops Research at Rothamsted, UK. The Silverstein-Simeone Lecture Award winner for 2002 is Professor Tom Baker of the Department of Entomology, Iowa State University in Ames, Iowa. Professors Pickett and Baker



will present lectures at the 2002 meeting in Hamburg.

ISCE 2002 MEETING, HAMBURG, GERMANY

The 19th annual meeting of the ISCE will be held August 3-8, hosted by Professor Dr. Wittko Francke of the Institute for Organic Chemistry, University of Hamburg, and with an organizing committee of Ian Baldwin, Thomas Hartann, Monika Hilker, and Wittko Francke. Four symposia are planned on the general topics of chemical



ecology in symbiosis, molecular biology, insect-plant relationships, and pheromone chemistry. The meeting will open with a reception on the

evening of Saturday, August 3, and conclude with a banquet on the evening of Wednesday, August 7. The meeting will take place in lecture halls and public areas of the Institute, which is very centrally located in the city, with accomodations in several nearby hotels. Professor Francke is making a special effort to find reasonably priced student housing, so this will be an excellent meeting for students to attend. Shortly before the main meeting, a satellite meeting to be held in Norway, coordinated by Professor Ole Stabell, will focus on marine chemical ecology.

The registration information and forms for the Hamburg meeting will be sent out with the February Newsletter, as well as being posted on the ISCE website.

Other planned meeting sites include: 2003: South Korea/Asia (K.S. Boo), possibly with the new Asia-Pacific Association for Chemical Ecology; 2004, Ottawa (B. Philogene and Thor Arnasson); 2005, Maryland, USA (Jeffrey Aldrich); 2006: Barcelona (Angel Guerrero).

CALL FOR NOMINATIONS FOR ISCE VICE-PRESI-DENT, SECRETARY, COUNCILORS FOR 2002

In an effort to involve the entire ISCE membership in the selection process for candidates for vice-president and secretary, and for the 4 new ISCE Councilors that are required every year, the Executive Committee would like your help in identifying possible candidates. The Secretary and the ISCE Councilors are elected for terms of three years. Councilors must be able to make a commitment to attend at least two of the three ISCE annual meetings during their terms of office. Their primary responsibilities are to participate in the annual Executive Committee meeting, to participate in the selection of the ISCE Silver Medal and Silverstein-Simeone awards, and to provide general guidance and assistance to the Executive Committee as required. A strong record of participation in Society activities and attendance at meetings is an asset.

Please send names, contact addresses, phone and FAX numbers, and email addresses of candidates, along with a short description of why you think that the candidate(s) would be suitable to Prof. Walter Leal, ISCE Past-President, wsleal@ucdavis.edu; Dept. of Entomology, University of California, One Shields Avenue, Davis, CA 95616-8585 USA. Phone & Fax +1-530-752-7755. Deadline for receipt of nominations: November 1, 2001.

CALL FOR NOMINATIONS FOR THE YEAR 2003 ISCE SILVER MEDAL AND SILVERSTEIN-SIMEONE AWARDS

Because of some confusion amongst the membership as to the purpose of the two major ISCE awards, the ISCE Executive Committee has decided to issue the call for both awards simultaneously, with all award nomination packets to be sent to the President, Murray Isman, whose address is below. Please note that both Awards honor scientists who have made outstanding contributions to the discipline of chemical ecology, but the intent of each award is different. The Silverstein-Simeone lecture award was established by the ISCE in 1995 to honor Milt Silverstein and John Simeone for their contributions to the field of Chemical Ecology and for their long service as founding editors of the Journal of Chemical Ecology. It is presented each year to a scientist conducting innovative research on the "cutting edge" of science. The recipient of this award is asked to present a plenary lecture at the annual meeting of the ISCE and to publish a paper on the same topic in the Journal of Chemical Ecology. The expenses of the award recipient to attend the annual meeting are paid by the society through the generous sponsorship of Plenum Press.

In contrast, the ISCE Silver Medal, sponsored by Fuji

Flavor Co., is intended to recognize career achievement, rather than any one single achievement, whereas the Silverstein-Simeone Award recognizes outstanding recent or current work at the frontiers of chemical ecology.

Nominators must be ISCE members in good standing. The President and Vice President will jointly review all nominations, to ensure that all nominations are in the most appropriate award category, before forwarding them to the full Executive Committee (ISCE officers and councilors) for selection of the winners. If nominations for a particular award are deemed to be possibly more appropriate for the other award, the President will contact the nominator(s) to discuss it. Current ISCE officers or councilors cannot be nominated for either award because of possible conflicts of interest.

Please also note that nominations from previous years that were not successful must be renominated, i.e., the files will not be forwarded automatically to the next year's competition. However, we strongly encourage nominators from previous years to resubmit nomination packets for their candidates.

Please help to ensure that deserving colleagues are recognized through nomination for the awards. The nomination process is the same for both awards, and is straightforward. All that is required is:

• a nomination letter explaining why your nominee deserves to be recognized for the particular award, stressing either the current cutting-edge work for the Silverstein-Simeone award, or the career highlights for the Silver Medal award,

• a Curriculum Vitae, including a list of publications pertinent to the research on which the nomination is based (Silverstein-Simeone award), or a full list of publications (Silver Medal award),

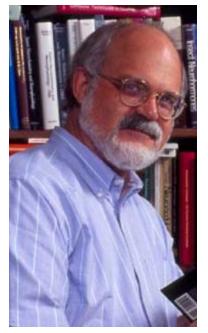
if desired, supporting letters from other colleagues.

Please submit all parts of your nomination packet in electronic format (including supporting letters), with one paper copy also. The electronic copy may be submitted as an email attachment to Murray Isman, ISCE president, at <u>murray.isman@ubc.ca</u>. Please send the paper copy and a copy on disc (if an electronic copy was not sent by email) to Murray Isman, ISCE President, Faculty of Agricultural Sciences, University of British Columbia, Vancouver, BC, V6T 1Z4, CANADA. Nominations must be received by December 31, 2001.

RECENT AWARDS AND HONORS TO ISCE MEM-BERS

John Hildebrand Elected to the American Academy of Arts and Sciences.

Past-President John Hildebrand was among 208 new members elected to the American Academy of Arts and Sciences, an international society composed of the world's leading scientists, scholars, artists, business people and public leaders selected for achievements in fields rang-



ing from mathematics to medicine, from computer science to literary criticism, and from public affairs to the performing arts. The Academy has a membership of 3,700 American Fellows and 600 Foreign Honorary Members. Other newly elected members include former U.S. Secretary of State Madeline Albright, film-maker Woody Allen, photographer Richard Avedon, Czech Republic President Vaclav Havel; His

Majesty Juan Carlos I, King of Spain; London actor Dame Diana Rigg, D.B.E., author Leslie Marmon Silko and composer/lyricist Stephen Sondheim. Founded during the American Revolution by John Adams, James Bowdoin, John Hancock and other leaders of the young nation, the American Academy of Arts and Sciences was chartered "to cultivate every art and science which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people."

Hildebrand is currently Regents Professor, Director of the Division of Neurobiology of the Arizona Research Laboratories, and professor of neurobiology, biochemistry and molecular biophysics, entomology, and molecular and cellular biology at the University of Arizona in Tucson. He earned his A.B. degree magna cum laude in biology at Harvard in 1964 and a Ph.D. in biochemistry at Rockefeller University in 1969. He was on the faculty Harvard Medical School (1970-80), Columbia University (1980-85), and Rockefeller University (1981-86)

before joining the University of Arizona in 1985 to establish and direct the Division of Neurobiology.

The Academy statement said of Professor Hildebrand: "Through multidisciplinary use of molecular, neurophysiological, anatomical and behavioral approaches, he has made signal contributions elucidating the neurobiology of olfaction in insects, illuminating the functional organization, physiology and development of the olfactory system, and characterizing mechanisms underlying detection and processing of behaviorally important odor molecules."

Hildebrand also is an elected member of the Deutsche Akademie der Naturforscher Leopoldina - the oldest academy of sciences in the world (1998), an elected Foreign Member in the Norwegian Academy of Science and Letters (1999), and he was awarded an honorary doctorate from the University of Cagliari, Italy, (2000). He has been awarded the Humboldt Research Award for Senior U.S. Scientists (1997), the International Flavors and Fragrances Award for Innovative Research in the Chemoreception Sciences (1997), and the R.H. Wright Award in Olfactory Research (1990).

Special Edition of the Journal of Chemical Ecology: Aquatic Chemical Ecology

A special edition of the Journal of Chemical Ecology focusing on Aquatic Chemical Ecology is being planned for late summer/early fall of 2002. The special edition will consist of invited mini-reviews and submitted papers. Those wishing to submit should do so by Feb. 1, 2002. Please send the original and two copies of the manuscript, including illustrations, and a cover letter clearly stating that the manuscript is for the special issue, to:

John T. Romeo Journal of Chemical Ecology Department of Biology University of South Florida Tampa FL 33620-5200

Note from David A. Jones, Former Editor of the Journal of Chemical Ecology

Please accept my thanks for the honor the Society

conveyed when making the 'Award for Outstanding Service'. Jim Nation and I have both greatly enjoyed and benefitted professionally from our interactions with ISCE members during the past 30 years or so. Thus, when the opportunity arose to offer our services (or have our arms twisted) in return, we had little hesitation in responding positively. The record shows what we have done for the society in other ways over the years, but this award marked the end of our period of office as Co-Editors of the Journal of Chemic al Ecology. I feel very humble that the Society acknowledged so promptly our contributions. I am most grateful.

Positions Available:

• Tenure Track Faculty Positions

As part of an aggressive building program in Biology, the Georgia Institute of Technology is searching for:

1. A tenure track Assistant/Associate Professor, Ecological Modeling/Theoretical Ecology. The area of specialty is open, but applicants using field or laboratory experiments to test models of mechanisms and processes affecting ecological patterns would fit well with present faculty (many of whom have aquatic interests) see http:/ /www.biology.gatech.edu/. Applicants should send resume, 3 letters of references, up to 3 reprints, and a statement of research and teaching interests to: Ecological Modeling Search Committee, School of Biology, Georgia Institute of Technology, Atlanta, GA 30332-0230. Applications will be considered beginning October 15, 2001. Georgia Institute of Technology is a unit of the University System of Georgia and an affirmative action/equal opportunity employer. Further information: mark bay@biology.gatech.edu

mark.hay@biology.gatech.edu

2. Several tenure track positions at the level of Assistant/Associate Professor in the areas of Microbial Genetics, Microbial Evolution, and Microbial Signaling (among microbes and between microbes and hosts). Successful applicants are expected to establish an active program of funded research and to teach in the B.S. and Ph.D. programs. Applicants should send resume, a statement of research and teaching interests, and have 3 letters of references sent to: Microbial Search Committee, School of Biology, Georgia Institute of Technology, Atlanta, GA 30332-0230. Applications will be considered beginning October 15, 2001. Georgia Tech is an equal education/employment opportunity institution, also see

www.biology.gatech.edu. Further information, mark.hay@biology.gatech.edu.

• 6 Postdoctoral positions in Marine/Aquatic Chemical Ecology

Georgia Tech's Schools of Biology, Chemistry and Biochemistry, and Civil and Environmental Engineering are searching for as many as **6 Post-Doctoral Fellows** to join an interdisciplinary group in Aquatic Chemical Signaling and Ecology.

Georgia Tech's new program in Aquatic Chemical Signaling invites recent Ph.D.s to apply for post-doctoral positions working with faculty and graduate students in a collaborative, interdisciplinary, and well-funded research effort combining chemistry, ecology, fluid dynamics, and sensory biology and physiology. We are especially interested in candidates who bridge disciplinary borders between chemistry, biology and physics, or in highly trained scientists from a single discipline who now want to broaden their approach to include interdisciplinary questions. Positions are available on the main campus in Atlanta and at Georgia Tech's new marine facility at Skidaway Island, Ga. Also see <http:// www.biology.gatech.edu/>www.biology.gatech.edu.

1) Two NSF IGERT Post-doctoral Fellows These are multidisciplinary positions spanning chemistry, ecology, fluid dynamics, and sensory biology and physiology. We seek applicants to conduct research and help train IGERT graduate students at the juncture of two, or more, of the above disciplines. This program is devoted to training graduate students and post-docs in investigations of how chemical signals are produced, transported, received, and processed in aquatic systems, as well as the role of chemical signaling in affecting population and community structure. Selected candidates may have considerable flexibility in choices of processes (defense, mate selection, prey sensing) and systems (coral reefs, plankton, microbes) to investigate. One position will be on campus at Georgia Tech, the other at Skidaway Island. For guestions contact Dr. Mark Hay at:

mark.hay@biology.gatech.edu or any of the IGERT faculty listed at http://www.biology.gatech.edu/igert.htm.

2) Dreyfus Foundation Environmental Chemistry Postdoc Candidates should have a Ph.D. in organic, biological, or analytical chemistry, and be interested in applying their skills to ecological and environmental questions. The postdoc can choose among a broad range of projects focused on aquatic chemical signaling in systems such as coral reefs, rivers, lakes, or the open ocean plankton, exploring the role of chemistry in defending organisms from natural enemies (e.g. predators, competitors, parasites), in sexual attraction and mate tracking, in locating food, etc. Previous experience in ecology or environmental research is not required; instead, this opportunity is intended to enable a trained chemist to contribute to a new research area. Field and laboratory resources and training in ecological techniques at our Atlanta campus and at our marine lab on Skidaway Island, GA, are available. For questions, contact Dr. Julia Kubanek at: julia.kubanek@biology.gatech.edu.

3) Phytoplankton Chemical Ecology We seek candidates with expertise in the natural products chemistry of phytoplankton, phytoplankton ecology, culturing techniques, and/or phytoplankton-grazer interactions to work with a NSF Biocomplexity funded multidisciplinary group investigating the direct and cascading effects of chemical signaling in affecting interactions between *Phaeocystis* and its natural enemies. This position will be located at Georgia Tech's new marine facility at Skidaway Island, Ga. For questions, contact Dr. Mark Hay at: mark.hay@biology.gatech.edu.

4) Freshwater Chemical Ecology and Plant-Herbivore Interactions We seek candidates with expertise in the ecology of aquatic macrophytes or invertebrates, in macrophyte-herbivore interactions, and/or chemical defenses of aquatic macrophytes. Experience with aquatic systems in the southeastern United States is desirable. The position will be located on campus at Georgia Tech. For questions, contact Dr. Mark Hay at: mark.hay@biology.gatech.edu.

5) **Soft-Substrate Marine Ecology** We seek candidates with experience in experimental studies of factors affecting the population and community structure of marine soft-substrate communities. An interest in chemical signaling will be advantageous. This position will be located at Georgia Tech's new marine facility at Skidaway Island, Ga. For questions, contact Dr. Mark Hay at: mark.hay@biology.gatech.edu.

Salaries range from \$32,000-36,000/yr with benefits. Applicants should send a resume, up to 3 reprints, a statement of research interests, and have 3 letters of references sent to: Aquatic Post-doc Search, School of Biology, Georgia Institute of Technology, Atlanta, GA 30332-0230. Applications will be considered beginning October 15, 2001. Georgia Institute of Technology is a unit of the University System of Georgia and an affirmative action/ equal opportunity employer.

• Postdoctoral Researcher: Biochemical effectors of termites and other arthropods.

Projects include detection of termites in structures through vapor analysis of volatile and semi-volatile chemicals from termite nests and feeding areas, characterization of termite-active biochemicals from natural sources, including plant extracts and oils, termite nests and other sources. The applicant will work independently, with cosupervision by professors of entomology and biochemistry, and will work closely with scientists in chemistry and entomology.

<u>Qualifications</u>: Recent Ph.D. with experience in mass spectrometry, chemical extractions, purification and analysis. Successful applicant will be expected to supervise and operate a new Finnigan Polaris GCQ quadrupole ion trap mass spectrometer with El/Cl and MSⁿ capability, thermal desorption and capillary GC.

<u>Application deadline</u>: September 28, 2001 or until suitable applicant is found. Date Available: October 15, 2001 or upon completion of interview process.

<u>Application Procedure</u>: Send resume, university transcripts, and have three letters of recommendation forwarded to Gregg Henderson, Department of Entomology, LSU AgCenter, Rm. 511A Life Sciences Bldg, Baton Rouge LA 70803, phone 225-578-1831, fax 225-578-1643, ghender@unix1.sncc.lsu.edu

• Entomology/Chemical Ecology Laboratory/Field Technician

<u>One-Year Position</u> with possibility of extension to two years, with IPM Technologies, Inc. based in Portland, OR. IPM Technologies seeks a laboratory/field technician to assist in developing an integrated system for management of shoot boring moths (Rhyacionia and Eucosma) with Attract and Kill Technology (A&K). The incumbent will assist the project manager through research activities related to attract and kill trials, including formulation

of materials, manufacture of traps and lures, organization and execution of field trials, observation and video recording of insect behavior, collection and identification of insect specimens, quality control, and recording, processing, and preparation of data for reports, presentations, and publications.

<u>QUALIFICATIONS</u>: Education: BS or equivalent in biology, entomology, forestry or equivalent experience. Experience: Knowledge of entomology, and chemical ecology preferred. Experience in operating basic laboratory equipment. Knowledge of word processing and spreadsheet software. Physical ability to work in forest/tree plantation settings.

SALARY: \$20,800 per annum plus benefits. Start date: October 1, 2001

<u>APPLICATIONS</u>: Send cover letter, curriculum vitae/resumé, and contact information for 3-5 references to: Darek Czokajlo or Philipp Kirsch, IPM Technologies, Inc., 4134 N. Vancouver Ave. #105, Portland, OR 97217, USA. ph. 503-288-2493, fax. 503-288-1887, e-mail: ipmtech@ipmtech.com

• FACULTY POSITIONS IN PLANT MOLECULAR BIOL-OGY / GENOMICS

The Boyce Thompson Institute for Plant Research, a not-for-profit organization at Cornell University, invites applications for three tenure-track faculty positions, at any level. We are seeking scientists who use molecular, biochemical, genetic, cell biological, genomic and/or proteomic approaches to elucidate mechanisms underlying plant development, plant-microbe/insect interactions, or chemical/molecular ecology. Research emphases of interest include, but are not limited to gene expression, signal transduction, and primary or secondary metabolism.

The successful candidates will establish vigorous, extramurally funded research programs and will have opportunities to collaborate in the Boyce Thompson Institute; they will also be expected to develop close ties with one or more departments or programs at Cornell University. Scientists at the junior level will receive highest consideration, but mid- and senior-level scientists are encouraged to apply. Excellent start-up funds and state-of-the-art genomics and plant growth facilities are available. Review of applications will begin November 15 and will continue until the positions are filled.

Applicants should send a curriculum vitae, a three to five page statement of research interests, and the names of four references to Dr. Gary Blissard, Chair, Plant Molecular Biology Search Committee, Boyce Thompson Institute, Ithaca, New York 14853; e-mail: gwb1@cornell.edu. Boyce Thompson Institute is an affirmative action, equal opportunity employer and is committed to increasing the diversity of its faculty and staff. Applications from women and minorities are encouraged.

2001-02 EXECUTIVE COMMITTEE

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Jocelyn Millar, Secretary Department of Entomology University of California Riverside, CA 92521 USA jocelyn.millar@ucr.edu

Stephen Teale, Treasurer Department of Environmental and Forest Biology College of Env. Science & Forestry State University of New York Syracuse, NY 13210 USA sateale@mailbox.syr.edu

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Upcoming Meetings of General Interest:

• 10th Pacific Entomology Conference, Honolulu Hawaii, Feb. 25-26, 2002. Information: Thomas W. Culliney, email culliney@elele.peacesat.hawaii.edu, phone 1-808 973-9528, FAX 1-808 973-9533

• 2nd Gordon Research Conference on Floral Scent: Biology, Chemistry and Evolution, Ventura, California, March 3-8, 2002. All posters welcome. To view the program, apply, and register, see www.grc.org. Further information, Heidi Dobson: dobsonhe@whitman.edu.

• IOBC Working Group Meeting, Pheromones and Other Semiochemicals in Integrated Controls, Erice, Sicily, Sept. 22-27, 2002. Information: Stefano Colazza, Univ. of Palermo, FAX 39-91-423410, email colazza@unipa.it. Website http://phero.net/iobc/sicily/announc4.html or http://phero.net/iobc/index.html



Jocelyn G. Millar, Editor Department of Entomology University of California Riverside CA 92521, USA Email: jocelyn.millar@ucr.edu

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The fiscal year for ISCE is 1 January - 31 December. Renew NOW for year 2002.

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Checks or money orders should be made payable to INTERNATIONAL SOCIETY OF CHEMICAL ECOLOGY, INC., should be drawn upon a *U.S. Bank*, and sent to Dr. Stephen Teale, State University of New York-ESF, 1 Forestry Dr., Syracuse, NY 13210, USA. (Inquiries: sateale@syr.edu) Credit card information:

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