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American Chemical Society  
March 2008

*PICOGRAM v. 74*

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Allan S. Felsot, *Washington State University*, and Kenneth D. Racke, *Dow AgroSciences*

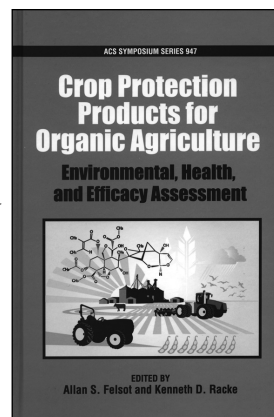
This book covers environmental chemistry, toxicology, and efficacy of biopesticides and certified organic pesticides. The book examines hazards of currently certified organic pesticides and potential exposures after use. The book will start with an overview of the process used by the National Organic Materials Standards Board to judge the acceptability of products for certification. The decision making process of the NOMSB is compared to the risk assessment paradigm used for all pesticides. Biologically derived pesticides that are candidates for certified organic status are discussed from the perspective of development, mode of action, and potential limitations to certification.

(ACS Symposium Series 947)

(An American Chemical Society Publication)

2006 326 pp.; 41 halftones & line illus.

978-0-8412-3881-7 \$174.50



## ASSESSING EXPOSURES AND REDUCING RISKS TO PEOPLE FROM THE USE OF PESTICIDES

James N. Seiber, *U.S. Department of Agriculture*, Edited by Robert I. Krieger, *University of California, Riverside*, and Nancy Ragsdale, *U.S. Department of Agriculture*

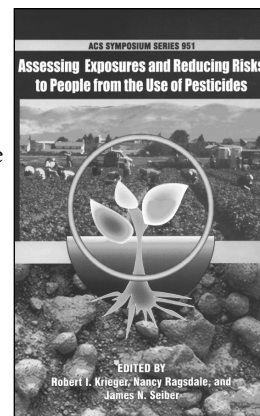
*Assessing Exposures and Reducing Risks to People from the Use of Pesticides* practices that have been developed in the past 10 years marked from the passage of the Food Quality Protection Act and other pertinent legislation (eg the Clean Air Act Amendments), which deal all, or in part with reducing risks associated with pesticides.

(ACS Symposium Series 951)

(An American Chemical Society Publication)

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978-0-8412-3974-6 \$154.50



## SYNTHESIS AND CHEMISTRY OF AGROCHEMICALS SERIES VII

Edited by John W. Lyga, *FMC Corporation*, and George Theodoritis, *FMC Corporation*

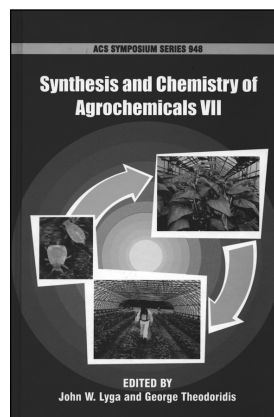
This book is a continuation in the series of Synthesis and Chemistry of Agrochemicals. The focus of this volume is the translation of pesticidal activity from the lab to the greenhouse to the field. The book covers the chemistry, ADMET and biochemistry research lending a better understanding of the issues involved with loss in activity going from lab assays to greenhouse and field. The second topic covered is synthesis of agrochemicals. This topic addresses the good ideas that never made it to products, chemistry work done in the field of agriculture that was based on a good hypothesis yet never made it to a product. The chapters cover insecticide, herbicide, fungicide and specialty products.

(ACS Symposium Series No. 948)

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## Editor's Notes

*The PICOGRAM without abstracts?!*

*AGRO is continuing to evolve and this is the first spring in many years that we will not be attending the Spring ACS National Meeting. But to keep the communication channels open and because some traditions should be kept, we will continue to produce two issues of the PICOGRAM each year.*

*In this issue, you will find a the standard fare of awards , calls for nominations, call for papers, and general AGRO business. We have also included a first draft of the AGRO Strategic Plan for 2008 - 2011 which was crafted in January by the Strategic Planning Committee. Your input to the subcommittees will be greatly appreciated.*

*As an outcome of the Boston Meeting last Fall, the Publications Committee and those involved in other communications venues (e.g., website, AG-LIST, ACS Books) were merged into the Communications Committee. Another outcome of the meeting is the new electronic newsletter, the Femtogram, an excellent idea from Tom Potter who will serve as editor. Other new roles on the Communications Committee are Jay Gan, Abstracts Editor; Sharon Papiernik, Awards Coordinator; and Laura McConnell, special interest articles. We welcome their expertise and look forward to serving the AGRO membership.*

*As always, if you have suggestions to make the PICOGRAM more useful to you or if you have other ideas to communicate to the membership, please drop me an email or give me a call.*

*See you in August!*

*Cathleen J. Hapeman  
Communications Committee Chair  
PICOGRAM Editor*



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# From the Chair's Desk

*John J. Johnston*

## *What's New with AGRO? Plenty!!!*

We are expanding our borders scientifically and programmatically to include new venues and new topics in order to serve our membership more effectively. By embracing our philosophy of "Chemistry for and from Agriculture", we are expanding our areas of interest to include a wide array of agriculturally related issues, opportunities, and disciplines as well as forming symbiotic relationships with other organizations. AGRO offers more opportunities for professional development, networking, and collaboration than ever before!

## *Strategic Planning Meeting*

On January 11-13, 2008, fourteen AGRO members meet to develop a first draft of the Division's Strategic Plan for 2008 – 2011. In addition to stellar technical programming, the future holds an increased focus on services for AGRO members, increased international opportunities and coordinating the technical expertise of our members, partners and stakeholders to develop solutions to challenges faced by our ever-changing world. A synopsis and some details of the meeting can be found beginning on p. 23. This is quite an ambitious and exciting undertaking that will require the participation of many. Several Strategic Planning Committees are forming and we will see frequent updates as we take on this new adventure. Special thanks to Laura McConnell for spearheading this effort.

## *New Approach to National Meetings*

For 2008 – 2010, AGRO will organize technical programming at one ACS national meeting per year. For 2008 and 2009, AGRO will be programming at the Fall National Meetings in Philadelphia and Washington, DC. Meeting selection for 2010 (Spring = San Francisco, Fall = Boston) is under discussion. Our programming at the ACS National Meetings will be larger and more comprehensive to attract more attendees. We will be supplementing our programming at National ACS meetings with collaborative programming at a variety of national and international meetings.

## *Moving towards a Global Organization*

By moving to one National Meeting per year, AGRO can develop workshops and conferences which are of value to AGRO members. In addition to our bi-yearly Pan Pacific Conference on Pesticide Science collaboration with the Pesticide Society of Japan, AGRO is planning collaborative meetings with:

1. SETAC (Society of Environmental Toxicology and Chemistry). We have proposed a symposium entitled "Modern Pesticides in Urban Environments: Risk Assessment and Management" symposium at the November 2008 SETAC North America Meeting in Tampa. Kudos to Stewart Cohen for spearheading this effort.
2. GARP (Brazilian Association of Professionals on Residues and Organic Pollutants), ABQ (Brazilian Chemical Association), and IUPAC (International Union of Pure and Applied Chemistry). We are planning to collaborate on a variety of symposia (e.g.

Risk Assessment, Risk Management, Biotechnology,) at the October 2009 International Workshop on Crop Protection Chemistry in Búzios, Brazil.

3. FLAQ (Latin American Federation of Chemical Associations). AGRO is planning to develop an Environmental Impacts of Bioenergy Symposium at the PRChem July 2008 symposium in Puerto Rico.

#### *Providing Educational and Training Opportunities*

In an effort to increase the value of AGRO membership and participation, we are adding workshops to our technical programming.

1. Residential Pesticide Exposure Workshop will be held in conjunction with AGRO programming at the upcoming National ACS meeting in Philadelphia.
2. Risk Modeling Workshop will be offered at the end of the Pan Pacific Conference on Pesticide Science, June 2008 in Honolulu.
3. Rodenticide Chemistry and Environmental Impacts workshop is also being organized in conjunction with the June 2008 Pan Pacific Conference.
4. Stewardship of Neonicotinoids Workshop will be held immediately following the Pan Pacific Conference.

#### *Improving Communication*

- **Communication Committee.** Tom Potter has championed an effort to develop an electronic newsletter called the *Femtogram*. Working with *PICOGRAM* guru Cathleen Hapeman, we now have a means to keep AGRO membership abreast of important events, achievements, and opportunities throughout the year.
- **AGRO Logo.** We developed a new logo for AGRO. The new logo was developed with input from a wide range of AGRO members. It depicts AGRO's expansive range of scientific interests. I believe the logo will attract a wide demographic of interdisciplinary scientists. We plan to unveil this logo at the 2008 Fall meeting in Philadelphia.
- **Electronic Voting.** The printing and distribution of AGRO officer and executive committee candidate statements and ballots has been an arduous and time consuming task for as long as many of us can remember (no jokes please). This year, we initiated internet distribution of candidates' statements and are attempting to institute internet based voting for next year. This should facilitate increased participation in the electoral process by AGRO membership.

#### *Increasing Membership*

While our current membership appears to be participating enthusiastically in AGRO activities, we have initiated activities to attract new members and retain existing members. One such activity is offering a complementary one-year AGRO membership to non-members who presented research at 2007 AGRO symposia. These folks will hopefully be enticed to participate further in AGRO activities via the information they receive in the *Femtogram* and *PICOGRAM*. Of course, once they get to know us, we're sure they will become dues-paying AGROites :0)

Thanks to everyone who is helping to make AGRO an increasingly valuable and enjoyable organization!

*James F. Brady, Ph.D. LLC*

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## Awards Committee Report

**Drs. John Clark, Ann Lemley, and Don Wauchope** received the AGRO Fellow Award at the Fall 2007 ACS National Meeting in Boston, MA for their contributions to agrochemical science and the AGRO Division. Their contributions can be found on pages 6 – 7.

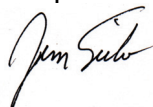
**Dr. David Soderlund**, Cornell University, will receive the International Award for Research in Agrochemicals at the Fall 2008 ACS National Meeting in Philadelphia, PA for his discoveries on the insect sodium channel and insecticides that disrupt its action. DuPont Crop Protection and BASF Company will co-sponsor the award. An award symposium will be organized by Dr. Jeffrey Bloomquist.

Beginning in 2008, only one International Award will be presented. Nominations for the 2010 International Award for Research in Agrochemicals are currently being solicited by the Awards Committee. The Awards Committee is also accepting new award nominations for the Division Fellow Award. The nomination forms and criteria for both awards can be found in the *PICOGRAM* on pages 11 and 9, respectively. Please consider nominating a deserving colleague. The deadlines each year are December 31 for the International Award and May 31 for the Fellow Award.

The 2008 Sterling Hendricks Lectureship Award, which is sponsored by USDA-ARS will be hosted by AGFD. The winner will be announced shortly. Nominations for the 2009 award are being solicited by ARS. The nomination form can be found on page 13.

Congratulations to Drs. Clark, Lemley, Wauchope, and Soderlund!

Respectfully submitted,



James N. Seiber, Chair  
Awards Committee



## 2007 AGRO DIVISION FELLOW AWARDS

For Outstanding Contributions to the Endeavors  
of the AGRO Division and to the Science of Pesticide Chemistry

*Presented to*

*Dr. J. Marshall Clark,*

*Dr. Ann T. Lemley,*

*&*

*Dr. Robert Donald Wauchope*



*J. Marshall Clark* is currently a Professor of Environmental Toxicology & Chemistry in the Department of Veterinary & Animal Sciences at the University of Massachusetts-Amherst and directs the Massachusetts Pesticide Analysis Laboratory, a USEPA- and MA Department of Agricultural Resources-funded enforcement facility.

Dr. Clark is the coordinator of the Environmental Toxicology & Chemistry Concentration for the Environmental Sciences Program and is an affiliated faculty member in the Molecular & Cellular Biology and Plant Biology Graduate Programs. John received his B.S. (Zoology) and M.S (Entomology) degrees from the University of Wisconsin-Madison and his Ph.D. (Entomology & Pesticide Toxicology) from Michigan State University. He has published over 125+ peer-reviewed articles and has edited six books in the areas of pesticide mode of action, insecticide resistance and management, environmental chemistry and human exposure to pesticides.

Dr. Clark is on the editorial boards for *Pesticide, Biochemistry & Physiology*, *Pest Management Science* and *Journal of Medical Entomology*. He has served on numerous grant panels, including NIH, NSF, USEPA, and USDA. Recently, he served as the Program Chairman for the 3rd Pan-Pacific Conference on Pesticide Science (Honolulu, Hawaii) and was a member of the Scientific Program Committee for the 11th IUPAC International Congress of Pesticide Chemistry (Kobe, Japan). Dr. Clark was the 2004 recipient of the International Award for Research in Agrochemicals from the Division of Agrochemicals, American Chemical Society and was designated as an Outstanding Research Faculty in the College of Natural Resources and the Environment in 2005.

John has been a member of the Agrochemicals Division for 31 years and has served on the Executive Committee for 12 of those years. He has taken great interest in and enjoyment from various aspects that help develop scientific program for the Division. He has organized or co-organized 10 AGRO symposiums, edited or co-edited 5 ACS Symposium books, authored 13 chapters, and has published 41 AGRO abstracts on research presentations. A highlight for Dr. Clark has been speaking in 13 International Award Symposiums. John has been a member of the Publications Committee from 1996-2007 and is currently the Chair of the Special Conference Committee (2000-present) and a member of the AGRO Long-term Strategic Planning Group. He has most enjoyed, however, his 12 years on the Young Scientist Recognition Award Committee where the excellence, breadth and innovation of the Agrochemicals Division is so obvious.



*Ann T. Lemley* is a Professor in the College of Human Ecology at Cornell University and is currently Chair of the Department of Fiber Science & Apparel Design and founding member of the Graduate Field of Environmental Toxicology at Cornell. Her faculty appointment is a combination of Research and Outreach. Her research goal is to study the presence and degradation of contaminants in the environment, particularly water and indoor dust, to assess and to decrease risks through removal or treatment. Projects have focused on pesticides and other organic contaminants.

Dr. Lemley and her group develop analytical methods for low levels of contaminants and study treatment methods for removal including degradation kinetics and mechanisms. They are exploiting basic methods of advanced oxidation, particularly the electrochemical Fenton method, to reduce chemical contaminant risk in water.

Her Cooperative Extension Program focuses on environmental issues such as drinking water quality, protection of water, household chemicals, pesticides in the home, and household hazardous waste. She was recognized in 1993 by USDA with an IMPACT 2000 award for her Rural

Water Quality Education Program and was also a winner of the U.S. Environmental Protection Agency Region 2 Environmental Quality Award for Academia/Research in 1989. She received the BA in chemistry from St. John's University and the MS and PhD in chemistry from Cornell University.

Professor Lemley has been a member of the American Chemical Society since 1968 and a member of the Agrochemical Division since 1982. She has been responsible for organizing Symposia for the Division related to chemical degradation of pesticides. She has been a member of the Executive Committee for a total of three terms over the time of her membership, was Vice Chair (1998), Program Chair (1999), Division Chair (2000), and Nominations Chair (2001). She has also been a member of the Long Range Planning Committee, the Public Relations Committee, a judge for the Student Poster Contest, Education Awards, and the Sterling Hendricks Award. Dr. Lemley, her graduate students, and post-docs present papers and posters regularly at national meetings.

*Don Wauchope* has spent a full-time career in research with USDA using basic chemical principles to clarify the behavior of pesticides in the environment.

Following graduate study in inorganic and physical chemistry, and a postdoctoral fellowship in agricultural chemistry under Virgil Freed at Oregon State University, Don joined the USDA-Agricultural Research Service in 1972 under weed scientist Chester McWhorter. He initially focused on arsenical pesticides and ultimately used these compounds as environmental tracers. This work broadened into the study of the environmental fate of a broad range of pesticides, where Don contributed new knowledge on the behavior of pesticides in soils, pesticide application efficiency and efficacy, and nonpoint pollution of water by agricultural pesticides.



Don is an authority on pesticide runoff. His 1978 review of pesticide runoff from agricultural fields is heavily cited and set the research agenda for this area. His pesticide properties database for environmental pollution prediction is in use worldwide by water-quality agencies, researchers, modelers, consultants, and industry.

Don has authored 134 scientific papers and has served on many scientific society committees organizing symposia and technical programs (many for AGRO) and publishing reports on the state of technology and its interface with policy and regulatory programs. He was AGRO Chair in 2006.



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## CALL FOR NOMINATIONS AGRO Division Fellow Award

The Division has established the Fellow Award to recognize its members whose dedicated and enthusiastic service has kept the Division moving forward.

Criteria shall be

“continued and substantial contributions of time, talents, and service to the Division of Agrochemicals, ACS, and agrochemical science over a period of at least six years.”

Nominations include a letter noting the contributions to the Division and a current *curriculum vitae*. Deadline for submitting nominations is May 31 of each year. Contact the Awards Committee for further information.

Dr. James Seiber  
USDA-ARS, WRRRC  
800 Buchanan St.  
Albany, CA 94710  
510-559-5600 – phone  
510-559-5963 – fax  
jseiber@pw.usda.gov



## PAST WINNERS OF THE AGRO DIVISION FELLOW AWARD

1971	Dr. Louis Lykken Dr. Tom H. (Bucky) Harris Dr. Herman Beckman (Posthumous)	1985	Mr. Henry Dishburger Dr. Richard C. Honeycutt
1972	Mr. Wendell F. (Bud) Phillips Dr. Don G. Crosby Dr. Elvins Y. Spencer	1986	Dr. Gunter (Jack) Zweig
1973	Mr. Roger C. Blinn Dr. Philip C. Kearney Dr. Julius J. Menn	1987	Dr. Willa Garner
1974	Dr. Morton Beroza Dr. James P. Minyard, Jr. Dr. Joe C. Street	1988	Dr. Jan Chambers Dr. James Seiber
1975	Dr. Hank F. Enos Dr. Maurice B. Green Dr. Charles H. Van Middlelem	1990	Dr. Joseph Fenyes
1976	Dr. Marguerite L. Leng Dr. Jack R. Plimmer Dr. Gerald G. Still	1991	Dr. Nancy N. Ragsdale
1977	Dr. Gustave K. (Bob) Kohn	1992	Dr. Don Baker Dr. Joel Coats Dr. Guy Paulson
1978	Dr. S. Kris Bandal Dr. Paul Hedin	1993	Dr. Larry Ballantine
1979	Dr. Rodney D. Moss	1994	Dr. James Heitz Dr. Ralph Mumma Dr. Willis Wheeler
1980	Dr. G. Wayne Ivie Dr. John B. Siddall (Posthumous)	1996	Dr. John Bourke
1981	Dr. Robert M. Hollingworth Dr. Gino J. Marco	1998	Dr. Hank Cutler Mr. Paul Giesler
1983	Dr. John Harvey, Jr.	2000	Dr. Barry Cross
		2001	Dr. Robert Hoagland
		2003	Dr. Judd O. Nelson
		2005	Dr. Rodney Bennett
		2006	Dr. Terry D. Spittler
		2007	Dr. Ann T. Lemley Dr. R. Don Wauchope Dr. John M. Clark

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1969	Dr. John E. Casida, University of California, Berkley	1981	Dr. Philip C. Kearney, USDA-ARS, Beltsville, Maryland
1970	Dr. Richard D. O'Brien, Cornell University	1982	Dr. Jack R. Plimmer, USDA-ARS, Beltsville, Maryland
1971	Dr. Robert L. Metcalf, University of Illinois	1983	Dr. Karl Heinz Buechel, Bayer AG, Germany
1972	Dr. Ralph L. Wain, Wye College, University of London, England	1984	Dr. Jacques Jean Martel, Roussel Uclaf, Paris
1973	Dr. Hubert Martin, British Crop Protection Council, England	1985	Dr. Junshi Miyamoto, Sumitomo Chemical Co., Japan
1974	Dr. T. Roy Fukuto, University of California, Riverside	1986	Dr. James Tumlinson, USDA-ARS, Gainesville, Florida
1975	Dr. Michael Elliot, Rothamsted Experiment Station, England	1987	Dr. Fumio Matsumura, Michigan State University
1976	Dr. Morton Beroza, USDA-ARS (retired)	1988	Dr. Ernest Hodgson, North Carolina State University
1977	Dr. Francis A. Gunther, University of California, Riverside	1989	Dr. Toshio Narahashi, Northwestern University
1978	Dr. Julius J. Menn, Stauffer Chemical	1990	Dr. David Schooley, University of Nevada, Reno
1979	Mr. Milton S. Schecter, USDA (retired)	1991	Dr. Stuart Frear, USDA-ARS, Fargo, North Dakota
1980	Dr. Minuro Nakajima, Kyoto University, Kyoto, Japan		

# PAST WINNERS OF THE ACS INTERNATIONAL AWARD FOR RESEARCH IN AGROCHEMICALS

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1994-F	Dr. Toshio Fujita, Kyoto University, Kyoto, Japan	2001-F	Dr. Ralph Mumma, Pennsylvania State University
1995-S	Dr. Mohyee Eldefrawi, University of Maryland, Baltimore	2002-S	Dr. Keith Solomon, University of Guelph, Ontario, Canada
1995-F	Dr. Koji Nakanishi, Columbia University, New York	2002-F	Dr. Marinus Los, American Cyanamid
1996-S	Dr. Günther Voss, Ciba, Basel, Switzerland	2003-S	Dr. Bob Hollingworth, Michigan State University
1996-F	Dr. Klaus Naumann, Bayer, Leverkusen, Germany	2003-F	Dr. Hideo Ohkawa, Kobe University, Japan
1997-S	Dr. Fritz Führ, Jülich, Germany	2004-S	Dr. Stephen Duke, USDA-ARS, Oxford, Mississippi
1997-F	Dr. Izuru Yamamoto, University of Tokyo, Japan	2004-F	Dr. John Marshall Clark, University of Massachusetts
1998-S	Dr. George Levitt, DuPont, Wilmington, DE	2005-S	Dr. Robert Krieger, University of California, Riverside
1998-F	Dr. Leslie Crombie, University of Nottingham, England	2005-F	Dr. Janice E. Chambers, Mississippi State University
1999-S	Dr. Don Baker, Zeneca, Richmond, CA	2006-S	Dr. Joel Coats, Iowa State University
1999-F	Dr. James Seiber, University of Nevada, Reno	2006-F	Dr. Isamu Yamaguchi, Agricultural Chemicals Inspection Station, Tokyo Japan
2000-S	Dr. George P. Georghiou, University of California, Riverside	2007-S	Dr. Gerald T. Brooks, West Sussex, UK
		2007-F	Dr. Frederick J. Perlak, Monsanto Company, Chesterfield, MO



# CALL FOR NOMINATIONS ACS INTERNATIONAL AWARD FOR RESEARCH IN AGROCHEMICALS

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I hereby nominate \_\_\_\_\_ as a candidate for this award.  
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Complete the following for your candidate:

1. Birthplace: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ Citizenship: \_\_\_\_\_

2. Business Address: \_\_\_\_\_

3. **IMPORTANT** Please Attach:

- a. A **Curriculum Vitae** for your candidate which describes the individual's career data including: places and nature of employment, professional affiliations, honors received, and a list of publications and patents. Please provide 11 copies.
- b. A **description** (200 – 1000 words) of the reasons why your nominee should receive this award, stressing the individual's major accomplishments.
- c. Nominations often include one or two letters of support, but this is optional.

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

**Deadline:** Nominations should be received by the committee chair by December 31 of each year. Balloting will be conducted in January/February and results will be announced at the spring of the following year.

The nominating official(s) should be prepared to assist in organizing a symposium and dinner at the National ACS meeting in honor of the awardee.

Please, return this completed form to:

Dr. James Seiber  
USDA-ARS, WRRRC  
800 Buchanan St.  
Albany, CA 94710  
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| 1982 | Warren L. Butler, Professor of Biology and Past Chairman, Biology Department, University of California at San Diego                     | 1995 | Winslow R. Briggs, Director Emeritus, Department of Plant Biology, Carnegie Institution of Washington      |
| 1983 | Melvin Calvin, Nobel Laureate and University Professor of Chemistry, University of California at Berkeley                               | 1996 | Hugh D. Sisler, Professor Emeritus, Department of Plant Biology, University of Maryland                    |
| 1984 | Frederick Ausubel, Professor of Genetics, Harvard Medical School and Massachusetts General Hospital                                     | 1997 | Ernest Hodgson, Head, Department of Toxicology, North Carolina State University                            |
| 1985 | Alan Putnam, Professor, Department of Horticulture and Pesticide Research Center, Michigan State University                             | 1998 | Martin Beroza, Chief, Organic Chemicals Synthesis Laboratory, Agricultural Research Service                |
| 1986 | Ralph Hardy, President, Boyce Thompson Institute for Plant Sciences, Cornell University, and Deputy Chairman, BioTechnica International | 1999 | Bruce D. Hammock, Professor, Department of Entomology, University of California at Davis                   |
| 1987 | Mary-Dell Chilton, Director of Biotechnology Research for Ciba-Geigy Corporation, Research Triangle Park, North Carolina                | 2000 | William S. Bowers, Professor, Department of Entomology and Chemical Ecology at the University of Arizona   |
| 1988 | Bruce N. Ames, Chairman, Department of Biochemistry, University of California at Berkeley   | 2001 | Malcolm Thompson, Research Chemist, USDA-ARS, Beltsville, Maryland (retired)                               |
| 1989 | Sanford A. Miller, University of Texas Health Science Center at San Antonio   | 2002 | Ervin E. Leiner, Professor Emeritus, Biochemistry Department, University of Minnesota                      |
| 1990 | Roy L. Whistler, Emeritus Professor of Purdue University  | 2003 | Dr. Kriton Kleanthis Hatzios, VA Agricultural Experiment Station   |
| 1991 | Peter S. Eagleson, Professor of Civil Engineering, Massachusetts Institute of Technology  | 2004 | Dr. Robert L. Buchanan, Food & Drug Administration   |
| 1992 | John E. Casida, Professor of Chemistry and Toxicology, University of California at Berkeley   | 2005 | Dr. Donald Sparks, University of Delaware  |
| 1993 | Philip H. Abelson, Deputy Editor, <i>Science</i> , and Scientific Advisor to AAAS   | 2006 | Dr. Stanley B. Prusiner, Institute for Neurodegenerative Diseases, University of California, San Francisco |
|      |   | 2007 | Dr. Bruce E. Dale, Department of Chemical Engineering & Materials Science, Michigan State University       |



## CALL FOR NOMINATIONS 2008 STERLING B. HENDRICKS MEMORIAL LECTURESHIP

The Agricultural Research Service (ARS), USDA's primary research agency, is seeking nominations for the

### 2009 Sterling B. Hendricks Memorial Lectureship

This Lectureship was established in 1981 by ARS to honor the memory of Sterling B. Hendricks and to recognize scientists who have made outstanding contributions to the chemical science of agriculture. Dr. Hendricks contributed to many diverse scientific disciplines, including soil science, mineralogy, agronomy, plant physiology, geology, and chemistry. He is most frequently remembered for discovering phytochrome, the light-activated molecule that regulates many plant processes.

The lecture should address a scientific topic, trend, or policy issue related to agriculture. Nominees may be outstanding, senior scientists in industry, universities, or government positions. Current ARS employees are not eligible.

The Award will be presented during the American Chemical Society National Meeting held in Washington, DC on August 16-20, 2009 prior to the Lecture. (Giving the presentation is a requirement of the honor.) The Divisions of Agrochemicals and Agricultural & Food Chemistry co-sponsor the Lecture which will be held in a joint session of these divisions. The lectureship is presented at an AGFD symposium in even-numbered years and in an AGRO symposium in odd-numbered years. The award includes an honorarium of \$2000, a bronze medallion, and expenses to attend the meeting.

To make a nomination, send

- (1) a letter explaining the nominee's contributions to chemistry and agriculture, and
- (2) a current *curriculum vitae* to:

Kim Kaplan, Lecture Coordinator  
(301) 504-1637

at either

[kim.kaplan@ars.usda.gov](mailto:kim.kaplan@ars.usda.gov)

or

ARS Information Office  
Room 1-2253, Mail Stop # 5128  
5601 Sunnyside Ave  
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Electronic transmission is best; otherwise use a carrier such as FedEx.  
**The deadline for nominations is November 3, 2008 (COB, EST).**



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## 2007 AGRO EDUCATION AWARDS FOR GRADUATE STUDENT TRAVEL

Sponsored by Dow Agrosciences

Agricultural chemistry student research was well represented at the Fall 2007 ACS meeting in Boston. Ten students received \$600 educational grants to help defray the costs of presenting their research posters at this meeting. Sixteen students representing ten universities participated in the AGRO division's student research poster symposium. The quality of the presentations was excellent, making the judging of the posters extremely difficult. However, the judges persevered in picking the top three (and in this case four) posters.

Students interested in participating in the 2008 AGRO student research poster competition (ACS National Meeting, August 17 - 21, 2008, Philadelphia, PA) should see the announcement on page 21 and email [john.j.johnston@aphis.usda.gov](mailto:john.j.johnston@aphis.usda.gov) by March 17, 2008.

### *2007 Graduate Student Research Poster Competition Winners*





## 2007 AGRO EDUCATION AWARDS FOR GRADUATE STUDENT TRAVEL

Sponsored by Dow Agrosciences



**First Place - Hilliary E. Hodgdon.** Binary mixtures of pyrethroids crosstalk between voltage-sensitive calcium and chloride channels in isolated presynaptic nerve terminals from rat brain. H. E. Hodgdon, R. K. Frisbie, J. M. Clark; University of Massachusetts, Amherst, MA.

Hilliary Hodgdon is a Master's student in Dr. John M. Clark's toxicology lab at the University of Massachusetts at Amherst in the Animal Biotechnology and Biomedical Sciences program. She received her Bachelor's degree in Animal Science with a pre-veterinary concentration from UMass-Amherst in 2005. She plans to graduate in the spring of 2008 and obtain a research and development position in the pharmaceutical industry. Hilliary's current research is focused on the mechanism of action of binary mixtures of pyrethroids at the pre-synaptic nerve terminal of rat brain and the contribution that individual voltage-sensitive ion channels play in the observed neurotoxicity.

**Second Place - Keri L. Henderson.** Fate of sulfamethazine in surface water microcosms. K. L. Henderson, T. B. Moorman, J. R. Coats; Iowa State University, Ames, IA.

Keri is currently a Ph.D candidate in Toxicology at Iowa State University, finishing a dissertation under the direction of Dr. Joel Coats (Dept. of Entomology) and Dr. Tom Moorman (USDA-ARS National Soil Tilth Laboratory, co-major advisor). Her research centers on the potential environmental significance of current livestock production practices, specifically, focusing on the transport and degradation of veterinary pharmaceuticals in manure-soil and surface water systems, including the assessment of potential biological impacts of antibiotics using relevant invertebrate and microbial models. She was awarded a STAR Graduate Research Fellowship from the U.S. Environmental Protection Agency to fund her Ph.D. studies. Her dissertation research objectives involve assessing the fate of veterinary antibiotics in soil columns and aquatic microcosms, developing models for assessing bioavailability in soil and water, and evaluating the potential impact of antibiotics on microbial communities. She completed her M.S. in Toxicology from Iowa State University in August 2004. The focus of her M.S. was the environmental fate of herbicides in grass phytoremediation soil systems, and involved the assessment of herbicide degradation in soil and plant tissues. She holds a B.A. from Wartburg College, with majors in Biology and Education. In her spare time, Keri enjoys spending time with her daughter, camping, hiking, and trying new recipes. She also enjoys participating on the Board for the Ozark-Prairie Region of the Society of Environmental Toxicology and Chemistry (SETAC), and as a symposium organizer and student representative in the Agrochemicals Division of ACS. She looks forward to seeing all of you at future ACS meetings.





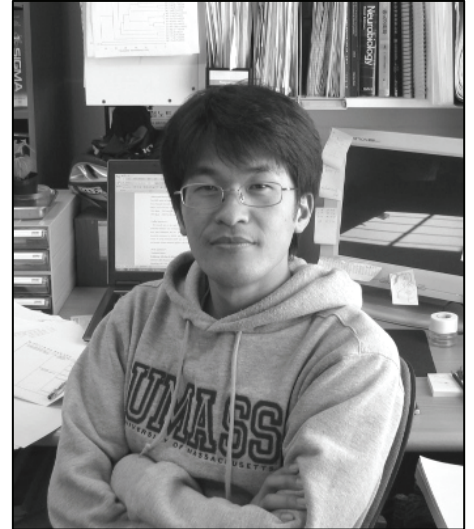


## 2007 AGRO EDUCATION AWARDS FOR GRADUATE STUDENT TRAVEL

Sponsored by Dow Agrosciences

***Third Place (tie) - Deok Ho Kwon.*** Molecular cloning of sodium channel and identification of point mutations putatively associated with fenpropathrin resistance in *Tetranychus urticae*. D. H. Kwon, B. R. Choi, S. W. Lee, H. M. Park, J. M. Clark, S. Lee; University of Massachusetts, Amherst, MA.

Deok Ho Kwon received his BS in agricultural biology in 2001 from Andong National University and his MS in applied entomology in 2003 from Seoul National University. His research area is the rapid diagnostics of insecticide resistance level to the field population by the molecular biological and biochemical approaches for the effective management of resistant population. He has established two point mutation allele frequency determination methods associated insecticide resistance by rtPASA and quantitative sequencing from *Plutella xylostella* and *Tetranychus urticae*. Recently he has discovered L1022V and A1374D mutations from the resistant *T. urticae*. He will carry out the analysis the function of these mutations against to the fenpropathrin utilizing an electrophysiological approach.



***Third Place (tie) - Dhana Raj Boina.*** Toxicity and mode of action of the anion transporter blockers against the European corn borer. D. R. Boina, J. R. Bloomquist; Virginia Tech University, Blacksburg, VA.

Dhana Raj Boina is an international student from India. He came to the USA in 2002 to pursue his masters program in entomology at Kansas State University, Manhattan, KS. He won few awards in recognition of his research. The most notable were a first prize in poster competition at the 51st national annual meeting of the Entomological Society of America in 2003 and a David and Lillian Francis memorial fellowship from Virginia Tech in 2006. Currently, he is a doctoral student working under the supervision of Dr. Jeffrey R. Bloomquist at Virginia Polytechnic Institute and State University, Blacksburg, VA. His dissertation research involves

determining the toxicity and site/mode of action of anion transporter (AT) blockers against selected insect and nematode species using toxicological, electrophysiological and molecular techniques. AT blockers are known for inhibiting anion transporters such as voltage-gated chloride channels and chloride/bicarbonate exchangers in biological systems. Major goal of his research is to find new pesticidal molecules targeting novel sites in insects and nematodes for effective control of crop pests.

*Congratulations to all our winners!*



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## ANNOUNCING THE AGRO NEW INVESTIGATOR AWARD

Sponsored by Dow Agrosciences

The Division of Agrochemicals is sponsoring the New Investigator Award starting for the Fall meeting 2008 in Philadelphia, PA. The purpose of the New Investigator Award is to recognize scientists who have obtained a doctoral degree and have been actively conducting academic, industrial, consulting, or regulatory studies.

*To be eligible for the award, the scientist must have obtained his or her doctorate no more than five years before the time of the Fall ACS national meetings. Thus, for the first award, applications will be considered from scientists who have obtained their doctorates no earlier than the year 2003.*

Applications for the New Investigator Award will consist of the following elements.

1. Submission of a maximum **five page paper describing the area of research** or other work relevant to the broad mission of the Division of Agrochemicals. The paper may be structured as a research paper (i.e., contains the main elements of a typical journal article) or as a critical review of one's particular contributions to the scientific fields covered by the Division of Agrochemicals. The Division is interested especially in work on all aspects of agrochemicals. Agrochemicals are broadly defined to mean pesticides of all kinds (e.g., chemical pesticides, biopesticides, pheromones, chemical attractants, fumigants, plant incorporated protectants, disinfectants) as well as biotechnology-derived crops (e.g., Bt crops, Roundup Ready crops, etc.). Studies of veterinary pharmaceuticals and antibiotics are also included in the Divisions mission. The Division is also interested in chemical products made from crops, including biofuels. The categorial areas of study related to agrochemicals is very broad, including environmental chemistry, toxicology, exposure assessment, risk characterization, risk management, and science policy. The Division especially encourages submissions related to public health protection as well as crop, livestock, aquaculture, and wildlife protection.
2. Submission of a **150 word abstract** for the submitted paper.
3. Submission of at least **one letter of recommendation** from a current supervisory scientist (e.g., a business manager, a departmental chair, etc.)
4. Both the paper and letter of recommendation should be **submitted** to Dr. Allan Felsot via email (afelsot@tricity.wsu.edu) **no later than Feb. 20, 2008** for consideration of an award at the Fall meetings in Philadelphia.

The award winner will be expected to deliver an oral presentation in their area of interest in one of the Agrochemical Program sessions. The award winner will receive a \$1000 honorarium, a commemorative plaque, one-year complementary membership in the Division of Agrochemicals, a meeting registration fee waiver, and reimbursement for travel expenses in association with the Philadelphia meeting.



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# CALL FOR APPLICANTS AGRO Education Awards

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**NOTE DEADLINE IS EARLIER!!**

## UNDERGRADUATE & GRADUATE STUDENT RESEARCH

### SUPPORT FOR POSTER PRESENTATIONS AT THE 2008 FALL MEETING IN PHILADELPHIA

The AGRO Division has established an endowment fund that will be used to promote an understanding of the role of chemistry in agriculture as embraced in the following areas related to pest management chemistry. Potential topics include synthesis, metabolism, regulatory, biotechnology, delivery, risk assessment, resistance, residues, mode of action, and fate/behavior. To address this mission, awards will be made through the Division's Education Committee.

Proposals are sought for the 2008 awards. Undergraduate and graduate students will be awarded up to \$600 each to help defray costs of attendance to give poster presentations at the ACS 2008 Fall Meeting, which will be held August 17 – 21, 2008 in Philadelphia. Posters will be displayed in a special poster session of the ACS Division of Agrochemicals. First, Second and Third place winners will receive an additional cash award. The subject of the presentation should fall within the areas listed in the introductory sentence.

**To apply, a graduate student should submit the following to be received no later than MARCH 17, 2008 (OASYS Deadline):**

1. An abstract formatted according to the directions given on the ACS website. Be sure to include name (of applicant), address, and e-mail address.
2. A two page extended abstract giving more detail of the research/presentation.
3. A short letter of nomination from the faculty advisor.

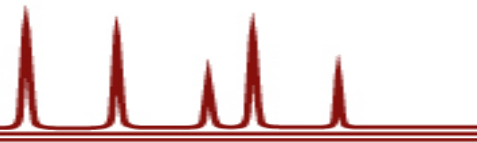
Submit items 1 and 2 to the ACS OASYS abstract submission website.  
[www.acs.org](http://www.acs.org)

Submit item 3 as a Word or pdf file to Dr. John Johnston at  
[john.j.johnston@aphis.usda.gov](mailto:john.j.johnston@aphis.usda.gov).

Direct questions to:

Dr. John J. Johnston  
USDA/APHIS/National Wildlife Research Center  
4101 LaPorte Avenue  
Fort Collins, CO 80521  
(970) 266-6082

*Abstracts will be reviewed by the Education Committee.  
Submitters will be notified of their selection status in May 2008.*



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# Three-year Strategic Plan for AGRO

*First Draft  
January 13, 2008*

## MISSION/OBJECTS ByLaw I. Name and Objects

### Existing

The objects of the Division shall be to bring together persons particularly interested in agrochemicals, to consider all scientific aspects of chemistry relevant to the control of pests of agricultural or public health significance and to other methods for enhancing or modifying agricultural productivity, to develop and improve the professional stature of chemists with these interests, and to render whatever service it may to the scientific and lay communities on the topic of agrochemicals.

### Recommended Replacement/Mission Statement \*

The AGRO Division promotes knowledge benefiting society through advancements in agricultural, public health, and environmental science and technologies.

*\*Drafted January 12, 2008; subject to approval of the Constitution & Bylaws Committee.*

## VISION

The AGRO Division will increase its recognition as a global leader in agriculture, public health, and environmental sciences by engaging and energizing its membership to foster global interactions that provide innovative solutions to challenges facing our world.

## GOALS

### Goal 1

Enhance the membership experience by providing accessible and innovative programs, educational products, mentoring and career services and opportunities for professional development and recognition.

### Goal 2

Foster constructive interactions among diverse communities to provide solutions to agricultural, public health, and environmental concerns.

### Goal 3

Build the infrastructure for becoming a global center for solutions to problems of plant, animal, environmental, and public health protection, and advancing scientific and regulatory harmonization.

# Drafting a Three-year Strategic Plan for AGRO

## *Synopsis of the January 2008 Workshop*

Chris Peterson, USDA Forest Service, Joe Massey, Mississippi State University, and Laura McConnell, USDA Agricultural Research Service

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Beginning on January 11, 2008, the Strategic Planning Committee held a three-day workshop in Herndon, Virginia. The goal of the workshop was to develop a first draft of the Division of Agrochemicals (AGRO) Strategic Plan, which charts our course for the next three years.

The team consisted of the AGRO officers and university, government, and industry scientists with a wide variety of interests. Participants were: Kevin Armbrust, John Clark, Allan Felsot, John Johnston, Joe Massey, Laura McConnell, Chris Peterson, Pamela Rice, Patricia Rice, Liliana Schwartz, Will Ridley, Terry Spittler, and Dan Stout. The workshop was facilitated by Dale Gaddy and Ena Castro of ACS. The proposed strategic plan clarifies the Mission and Vision of AGRO, and sets forth realistic goals to be attained in the next three years.

***Your input is needed to ensure that we serve the needs of the entire Division.***

### Identifying the needs of AGRO

The workshop kicked off on Friday with a frank discussion of needs within AGRO. Results of the electronic needs assessment survey conducted prior to the planning meeting were reviewed in detail. Participation in the survey was approximately 10% of the membership. There was a large degree of consensus, both among survey respondents and workshop participants, on the need for change in the Division. The specific needs identified were to:

- 1) Enhance the AGRO membership experience,
- 2) Foster constructive interactions among diverse communities to provide solutions to agricultural, public health, and environmental concerns, and
- 3) Develop and expand relationships with other agricultural chemistry-related organizations around the world.

### Developing specific goals

Saturday morning was the most intense session where we developed specific goals based on the needs assessments.

*Goal 1:* In order to enhance the membership experience, we proposed to focus on improving AGRO's programs, products, and services by making symposium content available electronically for those unable to attend the meetings, developing a membership directory, and by providing mentoring and career services. A wealth of experience and wisdom exists among our retired and senior members that could be of tremendous value to junior members navigating through careers in industry, government, and academia.

*Goal 2:* The second proposed goal reflects a desire to engage our division in activities that, in addition to dispensing timely scientific information, increase interactions with diverse groups, such as other ACS divisions, professional societies, federal agencies, and NGO's (non-governmental organizations). This will allow us to devise more solutions-based outcomes for key agricultural, environmental, and public health challenges facing society. To better tap into our expertise and creativity, the membership will be surveyed periodically to identify key issues that should be addressed. Future symposia and workshops will take up these topics. In all areas, we will seek to be inclusive and responsive to those who can benefit from their interactions with AGRO.

*Goal 3:* Involving our sibling organizations from around the world in AGRO is crucial in our increasingly-connected world. This is the third goal identified during the workshop. There are a large number of scientific and regulatory issues that require a global perspective. Involvement of foreign agrochemical societies in AGRO activities will broaden our perspective as well as our influence and impact. We can draw on their expertise and they can draw on ours. The Division hopes to develop a recurring symposium on issues of global regulatory importance with participation from overseas societies.



## Revising the mission & vision of AGRO

With these goals and specific actions in mind, the latter part of the Saturday session was devoted to revising our Mission and Vision statements. We looked at our goals and action steps, and the two statements almost wrote themselves.

At each proposed revision, however, we stopped and asked ourselves "Who would not feel included by this Mission or Vision statement, and how can we word it so that they are included?" We wanted to be as inclusive as possible, and give everyone an opportunity to participate.

## Reflecting and assigning tasks

The Sunday session gave us an opportunity to reflect on and to revise what we had developed over the previous two days. We also identified people who would be able to oversee the Strategic Plan Process, coordinate the distribution of the Strategic Plan, and collect comments from the general membership. Laura McConnell will lead the effort to communicate the strategic plan to the AGRO membership.

Please take some time to review the draft Strategic Plan. More details will emerge as the various subcommittees become active and action items are added. Updates will be forthcoming on our website and via the Ag-List system. We invite all AGRO members to participate in this strategic planning activity at the level to which you are able in order to improve and energize our division.

## Be part of the process

If you have comments or suggestions about the proposed AGRO Strategic Plan, or if you would like to join one of the subcommittees and working groups being formed, please contact:

### Goal 1:

Patricia Rice  
patricia.rice@basf.com; 919-547-2668  
Dan Stout  
stout.dan@epa.gov; 919-541-5767

### Goal 2:

Joe Massey  
jmassey@pss.msstate.edu; 662-325-4725

### Goal 3:

Chris Peterson  
cjpeterson@fs.fed.us; 662-325-0199

### Strategic Plan Communication Subcommittee

Laura McConnell  
laura.mcconnell@ars.usda.gov; 301-504-6298

## The Strategic Planning Process Used by AGRO

The strategic planning process used by AGRO has been refined by ACS and has been used by many ACS divisions. ACS staff is ready to support us in moving forward on our goals. If you have further questions on this process, please contact Laura McConnell or any AGRO officer.

### *Purpose of the Workshop*

To develop a 1<sup>st</sup> draft of the Division's strategic plan for 2008-2011.

### *Important Definitions*

**Mission:** A mission statement defines what an organization exists to do. It may include answers to the following questions: What business are we in? Who are our customers? What programs, products, and services do we offer?

**Vision:** A vision is a mental image of a highly desirable future state which is unique, inspiring, and far better than today.

**Goal:** A goal is a long term (typically more than one year) plan designed to achieve the vision.

**Actions:** Specific actions that must be taken in the current cycle (typically one year) to make progress towards the vision.

### *Twelve Conversations*

During the workshop, "conversations" were carried out which moved the group through the process of developing the draft plan:

Current State – What is the current status of AGRO?

Case for Change – Why should this division change?

Future State – What do you want the division to be within three years?

Goals – What targets will lead the division from here to there?

Barriers to Goals – What obstacles are you likely to encounter?

Actions for each Goal – What must be done in order to achieve each goal?

Mission and Vision – How should the Mission and Vision statements be worded?

Implementation – Who must do what by when and within what financial limits?

Communication – How will you reach others - and be reached?

Evaluation of the process – How will you know the plan is working?

Next Steps – How can you get buy-in from the membership at large?

Timeline for First Six Months – What needs to be done by you and others in the immediate future?

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- Independent method validation (ILV)

### MAJOR INSTRUMENTATION

- Gas chromatography: MSD (in both EI and CI modes), nitrogen, phosphorous, sulfur, EC and FID detection
- HPLC: MS/MS (triple quad), UV, photoconductivity, electrochemical and fluorescence detection (including post-column derivatization and column switching capabilities)
- Gel Permeation Chromatography
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# Notes from the Program Chair

*Kevin L. Armburst*

The 236th National Meeting in Philadelphia marks AGRO's first step into the unknown: Programming at only one National meeting per year. However we have developed a strong program that should be very attractive to individuals in many disciplines within our broad definition of Agrochemicals and expect a fantastic turnout!!

Symposia included at this meeting will address reduced risk pesticides, agrochemical residue and metabolism chemistry, energy issues and agriculture, biochemical and chemical transformations of animal hormones and veterinary pharmaceuticals; evaluation of the impacts on human, environmental and animal health of agriculturally related chemicals; natural products including i-RNA technology; environmental forensics and the monitoring and modeling of Atrazine exposure across the Midwest. Additionally, we are happy to bring back the synthesis of Agrochemicals symposia. A symposium exploring developments in agricultural best management practices to protect Chesapeake Bay water and air quality should attract local interest. General oral and poster presentations are welcome into the new developments issues in Agrochemicals sciences symposia.

Four awards symposia will also be featured. AGRO will co-sponsor the Sterling B. Hendricks lecture which will be hosted by the division of Agricultural and Food Chemistry. Dr. David M. Soderlund will be honored in a symposium as the winner of the International Award for Research in Agrochemicals. Graduate and undergraduate research for students receiving travel awards will be featured in a poster symposium. Finally, we are very excited to introduce the AGRO Awards symposium for New Investigators that will be open to researchers who have received their doctorate degrees within the last five years. The winner will receive an honorarium in addition to having all of their travel expenses paid to the meeting. We expect this award to attract the best and brightest up and coming young scientists from around the world.

We have great hopes for Philadelphia and are already making plans for 2009 in Washington DC. Our future looks bright indeed!!



# AGRO

*Chemistry for and from Agriculture*

# AGRO Program Committee Report

The Program Committee is made up of the Division Officers, Executive Committee members, Standing members, Volunteer members, and a Long Range Program Coordinator to keep a continuous record of past and future programming. Some names are listed twice as they are serving in more than one category. If you have an interest in serving as a volunteer member of this committee, or if you would like more information on participating in AGRO programming, please contact Kevin Armburst, Joe Massey, or one of the division officers.

A list of standing topic areas was established which reflects better the broader areas of agricultural research being addressed by AGRO. These topics will be part of each AGRO program beginning in 2008 along with our normal awards, programming, and symposia to address ACS themes for each meeting and special topics of emerging or continuing interest.

**If you have additional ideas for standing topics or programming that you would like to see included in AGRO, please contact one of the division officers.**

<b>AGRO Program Committee</b>			
Joseph Massey, 2006 – 2010 Long Range Program Coordinator		jmassey@pss.msstate.edu	
<b>Division &amp; Subdivision Officers</b>			
John Johnston	Division Chair	John.J.Johnston@usda.gov	
Kevin Armburst	Program Chair	armbrust@mscl.msstate.edu	
Ellen Arthur	Vice Chair	ellen.arthur@bayercropscience.com	
Bill Hall	Chair, FERT Subdivision	bill.hall@mosaicco.com	
Terry Spittler	Treasurer	tds2@cornell.edu	
Liliana Schwartz	Secretary	Liliana.Schwartz@usa.dupont.com	
Laura McConnell	Immediate Past Chair	laura.mcconnell@ars.usda.gov	
Barry Cross	Councilor	barry.cross@worldnet.att.net	
<b>Standing Members</b>			
Jim Seiber	Awards Committee Chair	jseiber@pw.usda.gov	
Allan Felsot	New Investigator Award Chair	afelsot@tricity.wsu.edu	
John Johnston	Education Award Committee Chair	John.J.Johnston@usda.gov	
John Clark	Special Conferences Chair	jclark@vasci.umass.edu	
Cathleen Hapeman	Communications Committee Chair	hapemanc@ba.ars.usda.gov	
Jason Sandahl	International Outreach Chair	Jason.Sandahl@usda.gov	
<b>Executive Committee Members</b>			
Todd Anderson	todd.anderson@ttu.edu	Will Ridley	william.p.ridley@monsanto.com
Cathleen Hapeman	cathleen.hapeman@ars.usda.gov	Jay Gan	jgan@ucr.edu
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Diana Aga	dianaaga@buffalo.edu		
<b>Volunteer Members</b>			
Steven A. Ripp	saripp@utk.edu		

# Status of Planned AGRO Programming & Outreach Activities 2008 – 2011

Activity/Event	Leader(s)	Status	Actions Required
4th Pan Pacific Conference on Pesticide Science June 1-4, 2008 Honolulu, Hawaii	Al Barefoot Joel Coats	<ul style="list-style-type: none"> <li>Organizing &amp; Science Program Committees holding meetings</li> <li>Pesticide Science Society of Japan will co-sponsor</li> </ul>	<ul style="list-style-type: none"> <li>Committees are working on various aspects and securing sponsorships</li> <li>AGRO to provide some financial support</li> </ul>
236 <sup>th</sup> ACS National Meeting August 17-21, 2008 Philadelphia, Pennsylvania	Kevin Armburst	<ul style="list-style-type: none"> <li>Call for Papers TBA in PICOGRAM 74</li> </ul>	<ul style="list-style-type: none"> <li>Submit abstracts</li> </ul>
<b>Activities beyond 2008</b>			
AGRO Activity in Winter/Spring 2009	John Clark Ken Racke Others?	<ul style="list-style-type: none"> <li>Human exposure assessment workshop is under consideration</li> </ul>	<ul style="list-style-type: none"> <li>Volunteers are needed to move this forward</li> </ul>
238 <sup>th</sup> ACS National Meeting August 16-20, 2009 Washington, DC	Ellen Arthur	<ul style="list-style-type: none"> <li>Call for Symposia &amp; Papers TBA in PICOGRAM vols. 75 &amp; 76</li> </ul>	<ul style="list-style-type: none"> <li>Contact Ellen if you are interested in organizing a symposium</li> </ul>
239 <sup>th</sup> ACS National Meeting March 21-25, 2010 San Francisco, California	2009 Vice Chair	<ul style="list-style-type: none"> <li>Call for Symposia &amp; Papers TBA in PICOGRAM vols. 77 &amp; 78</li> </ul>	<ul style="list-style-type: none"> <li>Decide in 2010 if AGRO is returning to 2 national meetings per year</li> </ul>
IUPAC Pesticide Congress Summer 2010 Melbourne, Australia		AGRO should exert a strong presence at this meeting. In the meantime, AGRO should decide whether to pursue a proposal to host the 2014 Pesticide Congress in the U.S.	
241 <sup>st</sup> ACS National Meeting March 27-31, 2011 Anaheim, California	2010 Vice Chair		
242 <sup>nd</sup> ACS National Meeting August 28-September 1, 2011 Denver, Colorado	2010 Vice Chair		

## Standing Programming

- Environmental Fate, Transport, Risk Assessment and Modeling of Agriculturally-Related Chemicals
- Technological Advances and Applications in Agricultural Science: Nanotechnology, Genetically Modified Organisms, and Biocontrol Agents
- Development of Value-Added Products from Agricultural Crops and Byproducts
- Bioenergy and Biofuels from Agriculture
- Natural Products, Pheromones, and Chemical Signaling in Agriculture
- Human and Animal Health Protection: Veterinary Pharmaceuticals, Antimicrobials, Worker Protection Products
- Advances in Agrochemical Residue and Metabolism Chemistry
- Urban Agriculture – Turf, Ornamentals, Household Products, and Water Re-Use
- Developments in Integrated Pest Management and Resistance Management
- Soil and Nutrient Management for Sustainable Agriculture
- Agrochemical Toxicology and Mode of Action
- Residue and Metabolism Chemistry
- Synthesis of Bioactive Compounds



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## Reviews of Environmental Contamination and Toxicology

*Sulfonamides in the Environment as Veterinary Drugs*  
*Gonadal Anomalies in Fish and Amphibians Resulting from Chemical Exposures*  
*Pyrethroid Illnesses in California, 1996-2002*  
*Health Risks of Enteric Viral Infections in Children*  
*Ecotoxicological Evaluation of Perfluorooctanesulfonate*



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*Manuscripts are solicited from ACS members*

*Rev Environ Contam Toxicol* seeks detailed review articles covering chemical (including pesticide) contamination in the total environment with toxicological considerations and consequences. Volume 181 is especially helpful for style and format.

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Complete manuscripts may be submitted by email. Or submit the original and one photocopy of the manuscript plus electronic files complete with figures and tables. See Volume 181 for style and format. Manuscripts are published in the order received, reviewed, and accepted.

*For further information contact:*

David M. Whitacre, Editor  
phone/fax 336-643-2131  
dmwhitacre@triad.rr.com

## **Future ACS National Meetings**

236th ACS National Meeting & Exposition  
August 17-21, 2008, Philadelphia, PA

237th ACS National Meeting & Exposition  
March 22-26, 2009, Salt Lake City, UT

238th ACS National Meeting & Exposition  
August 16-20, 2009, Washington, DC

239th ACS National Meeting & Exposition  
March 21-25, 2010, San Francisco, CA

240th ACS National Meeting & Exposition  
August 22-26, 2010, Boston, MA

241st ACS National Meeting & Exposition  
March 27-31, 2011, Anaheim, CA

242nd ACS National Meeting & Exposition  
August 28 - September 1, 2011, Denver, CO

243rd ACS National Meeting & Exposition  
March 25-29, 2012, San Diego, CA

244th ACS National Meeting & Exposition  
September 9-13, 2012, New York, NY

245th ACS National Meeting & Exposition  
April 7-11, 2013, New Orleans, LA

246th ACS National Meeting & Exposition  
September 8-12, 2013, Indianapolis, IN



# AGRO 2008 ANNOUNCEMENTS & CALL FOR PAPERS

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania**

## **Award Symposia**

### **ACS International Award for Research in Agrochemicals Symposium**

#### **Sterling B. Hendricks Award Symposium**

#### **AGRO Awards for New Investigators**

Organizer: Allan Felsot, Washington State University, 509-372-7365, afelsot@tricity.wsu.edu

#### **AGRO Education Awards for Undergraduate and Graduate Student Travel: Research Poster Presentations**

Organizer: John J. Johnston, USDA-NWRC, 970-266- 6082, john.j.johnston@aphis.usda.gov

## **Special Events**

### **Residential Pesticide Exposure Assessment: Indoor Exposures and Modeling Workshops**

Organizers:

John Clark, University of Mass., jclark@vasci.umass.edu

Dana Vogel and Jeff Evans, US EPA-OPP

Nicole Tolve and Valerie Zartarian, US EPA-ORD

Curt Lunchick, Bayer Crop Science

### **Research Poster Competition!**

The top three AGRO posters will be awarded Amazon.com gift certificates. All posters not in the student competition are eligible; at least one author must be present.

**BACK BY POPULAR DEMAND!**

## **Symposia for Invited and Solicited Papers**

### **Agricultural Best Management Practices to Protect Chesapeake Bay Water and Air Quality**

Organizers: Laura L. McConnell, USDA-ARS, 301-504-6298, laura.mcconnell@ars.usda.gov;

Cathleen J. Hapeman, USDA-ARS, 301-504-6451, cathleen.hapeman@ars.usda.gov

### **Agrochemical Residue & Metabolism Chemistry**

Organizers: Teresa A. Wehner, Merial, Ltd., 732-729-5713, teresa.wehner@merial.com; David J. Smith, USDA-ARS, 701-239-1238, david.j.smith@ars.usda.gov; John J. Johnston, USDA-NWRC, 970-266-6082, john.j.johnston@aphis.usda.gov



**Bioenergy Production:****Changing the Agriculture Paradigm; Environmental Concerns & Consequences**

Organizers: Joseph Massey, Mississippi State University, 662-325-4725, jmassey@pss.msstate.edu; Cathleen J. Hapeman, USDA-ARS, 301-504-6451, cathleen.hapeman@ars.usda.gov

**Biological and Chemical Transformations of Animal Hormones and Veterinary Pharmaceuticals in Plants, Soil and Wastewater Treatment Systems**

Organizers: Diana Aga, SUNY Buffalo, 716-645-6800, ext. 2226, dianaaga@buffalo.edu; Pamela Rice, USDA-ARS, 612-624-9210, pamrice@umn.edu

**Environmental Forensics**

Organizers: Suresh Mislankar, Bayer CropScience, 913-433-5491; suresh.mislankar@bayercropscience.com; Ellen Arthur, Bayer CropScience, 913-433-5328; ellen.arthur@bayercropscience.com; Gopal Coimbatore, Texas Tech University, 806-885-0310; gopal.coimbatore@TIEHH.TTU.edu; Robert Cook, Louisiana State University, 225-578-2980; rlcook@lsu.edu

**Evaluation of Agriculturally-Related Chemicals:****Impacts on Environmental, Animal, and Human Health**

Organizers: Pamela Rice, USDA-ARS, 612-624-9210, pam.rice@ars.usda.gov; Todd Anderson, Texas Tech University, 806-885-4567, todd.anderson@tiehh.ttu.edu; Patricia Rice, BASF Corporation, 919-547-2668, patricia.rice@basf.com; Ellen Arthur, Bayer CropScience, 913-433-5328, ellen.arthur@bayercropscience.com

**Monitoring and Modeling Atrazine Ecological Exposure Potential Across the Midwest**

Paul Hendley, Syngenta Crop Protection, Inc. 336-632-6112, paul.hendley@syngenta.com

**Natural Products (to include i-RNA technology)**

Organizer: Stephen O. Duke, USDA-ARS, 662-915-1036, sduke@olemiss.edu; William P. Ridley, Monsanto, 314-694-844, william.p.ridley@monsanto.com; Paul Zubkoff, USEPA (retired), 757-229-4037, plzubkoff@msn.com

**New Developments and Issues in Agrochemical Sciences (Gen. Presentations/Posters)**

Organizer: Kevin Armbrust, Office of the State Chemist – Mississippi, 662-325-3324, armbrust@mscl.msstate.edu

**Reduced Risk Pesticides:****Environmental Chemistry, Toxicology, & Compatibility with IPM**

Organizer: Allan Felsot, Washington State University, 509-372-7365, afelsot@tricity.wsu.edu

**Synthesis of Agrichemicals**

Organizer: Tom Stevenson, DuPont, 302-737-8226, Thomas.M.Stevenson@usa.dupont.com



# AGRO 2008 WORKSHOP ANNOUNCEMENT

## Residential Pesticide Exposure Assessment: Indoor Exposures and Modeling Workshops

**236<sup>th</sup> ACS National Meeting & Exposition**  
**August 17-21, 2008**  
**Philadelphia, Pennsylvania USA**

### General

The purpose of this pair of half-day workshops is to review state-of-the art procedures for residential exposure assessment and explore opportunities for further refinement. In addition to lectures by eminent researchers from government and industry, panel discussions with audience participation will be employed to highlight issues and potential solutions.

### Workshop 1 (Half-Day)

*Existing Exposure Data Applied to Regulatory Risk Assessment and Modeling Inputs*

- Lecture - Overview of environmental residue data and biological monitoring studies
- Lecture - Relationships between environmental concentrations & urinary biomarkers
- Lecture - Patterns of urinary metabolites observed across various studies
- Panel - Potential revisions to current methods for regulatory risk assessment

### Workshop 2 (Half-Day)

*Exposure Model Algorithms: Comparisons by Exposure Pathway across Four Models*

- Lecture - Review of exposure assessment framework (scenarios, algorithms, inputs)
- Lectures - Equations, assumptions, results of 4 post-application exposure models, including dermal, inhalation, and incidental oral exposures
- Panel - Comparative evaluation of alternative post-application exposure algorithms

### For more information contact the workshop organizers or AGRO coordinator:

David Miller, US-EPA/Health Effects Division, Exposure Workshop Co-Organizer  
(703) 305-5352; Miller.David@epa.gov

Jeff Evans, US-EPA/Health Effects Division, Exposure Workshop Co-Organizer  
(703) 305-7877; Evans.Jeff@epa.gov

Curt Lunchick, Bayer CropScience, Exposure Workshop Co-Organizer  
(919) 549-2986; curt.lunchick@bayercropscience.com

John Clark, University of Massachusetts, AGRO Workshop Coordinator  
(413) 545-1052; jclark@vasci.umass.edu



# AGRO 2008 CALL FOR PAPERS

## **Agricultural Best Management Practices to Protect Chesapeake Bay Water and Air Quality**

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

Provide an opportunity for scientists from producers, industry, government, university, and regulatory institutions to share their latest research findings concerning mitigating transport of sediments, nutrients, pesticides, and other potential pollutants to the Chesapeake Bay airshed and waterways.

### **Suggested Topics**

- Chesapeake Bay health
- Identification/quantification of pollutant transport processes in crop and animal production in the Chesapeake Bay Region
- Management strategies to mitigate offsite transport of pollutants such as vegetative/riparian buffers, cover crops, composting, controlled drainage
- Application technologies that minimize nutrient and pesticide losses
- Techniques to minimize potential pollutant losses in urban settings
- Models to estimate pollutant fate in the Chesapeake Bay air and watersheds
- Modeling approaches to assess conservation practices used in the Chesapeake Bay

### ***Special Regional Emphasis***

*Accepted papers will be limited to those that focus on the Chesapeake Bay and estuaries of the Mid-Atlantic Region or whose subject matter is applicable to the region.*

### **For additional information contact the organizers**

Laura L. McConnell, USDA-ARS  
3012-504-6298; [laura.mcconnel@ars.usda.gov](mailto:laura.mcconnel@ars.usda.gov)

Cathleen J. Hapeman, USDA-ARS  
301-504-6451; [cathleen.hapeman@ars.usda.gov](mailto:cathleen.hapeman@ars.usda.gov)

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



# AGRO 2008 CALL FOR PAPERS

## Agrochemical Residue and Metabolism Chemistry

**236<sup>th</sup> ACS National Meeting & Exposition**  
**August 17-21, 2008**  
**Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

This symposium will focus on the determination of agrochemicals (herbicides, insecticides, fertilizers, anti-microbials, pheromones, animal health compounds, etc.), metabolites, and degradation products in a wide variety of matrices.

### **Suggested Topics**

- Equipment, supplies, data analysis, and techniques to improve limits of detection, sample throughput, isolation, identification, and (or) characterization of target molecules and their metabolites
- Results of agrochemical metabolism in target and (or) non-target species, environmental fate, or field residue studies

### **For more information contact the organizers**

Teresa A. Wehner, Merial, Ltd.,  
732-729-5713; [teresa.wehner@merial.com](mailto:teresa.wehner@merial.com)

David J. Smith, USDA-ARS  
701-239-1238; [david.j.smith@ars.usda.gov](mailto:david.j.smith@ars.usda.gov)

John J. Johnston, USDA-NWRC  
970-266-6082; [john.j.johnston@aphis.usda.gov](mailto:john.j.johnston@aphis.usda.gov)

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at*  
<http://oasys.acs.org/acs/236nm/oasys.htm>



# AGRO 2008 CALL FOR PAPERS

## **Bio-Energy Production Changing the Agriculture Paradigm; Environmental Concerns & Consequences**

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

To provide a forum for scientists and interested stakeholders from industry, government, university, regulatory institutions, and non-governmental organizations to present their latest research findings, perspectives, and/or potential mitigation approaches addressing broad environmental issues associated with bio-energy production.

### **Suggested Topics**

- Bioenergy production affects on soil and air quality and/or on water quality and quantity
- Environmental effects of changing land-use and/or crop rotations due to bioenergy production
- Potential approaches used to mitigate negative environmental effects
- Conservation practices and bioenergy production – potential synergistic effects and limitations
- Modeling/projections of bioenergy production and ecosystem health
- Environmental concerns in refining biofuels
- Environmental pros/cons from using biofuels
- Utilization/recycling of biological waste streams to generate bioenergy/biofuels

### **For additional information contact the organizers**

Joseph Massey, Mississippi State University  
662-325-4725, jmassey@pss.msstate.edu

Cathleen J. Hapeman, USDA-ARS  
301-504-6451, cathleen.hapeman@ars.usda.gov

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



# AGRO 2008 CALL FOR PAPERS

## **Biological and Chemical Transformations of Animal Hormones and Veterinary Pharmaceuticals in Plants, Soil and Wastewater Treatment Systems**

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

Provide an opportunity for scientists, engineers, and policy makers to share latest research findings on the fate of hormones, antibiotics, and other feed additives in various environmental compartments.

### **Suggested Topics**

- Laboratory and field studies investigating the fate of these chemicals in current wastewater treatment technologies
- Identification of the chemical and biological transformation products in plants, soil, water, and treatment systems
- Sorption, leaching, run-off, and biodegradation studies to elucidate the fate and transport of these chemicals in the natural environment
- Ecotoxicology and risk assessment of hormones and veterinary pharmaceuticals

### **For additional information contact the organizers**

Diana S. Aga, University at Buffalo, The State University of New York, Buffalo, NY  
716-645-6800, ext. 2226; [dianaaga@buffalo.edu](mailto:dianaaga@buffalo.edu)

Pamela J. Rice, USDA-ARS; University of Minnesota  
612-624-9210; [pamela.rice@ars.usda.gov](mailto:pamela.rice@ars.usda.gov) or [pamrice@umn.edu](mailto:pamrice@umn.edu)

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



# AGRO 2008 CALL FOR PAPERS

## Environmental Forensics

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

The purpose of this symposium – co-sponsored by the Agrochemicals, Environmental Chemistry, and Analytical Chemistry Divisions – is to provide an opportunity for scientists to share investigative methods used to elucidate sources, fate, transport, and ecological effects of environmental contamination which can be defined in terms of chemical characterization and biological influence.

### **Suggested Topics**

Use of environmental forensics associated with agricultural and other anthropogenic compounds, non-target effects, remote sensing, environmental chemical sensors, and biosensors.

### **For additional information contact the organizers**

Suresh Mislankar, Bayer CropScience, Stilwell, KS  
913-433-5491; suresh.mislankar@bayercropscience.com

Ellen Arthur, Bayer CropScience, Stilwell, KS  
913-433-5328; ellen.arthur@bayercropscience.com

Gopal Coimbatore, Texas Tech University, Lubbock, TX  
806-885-0310; Gopal.Coimbatore@TIEHH.TTU.edu

Robert Cook, Louisiana State University, Baton Rouge, LA  
225-578-2980; rlcook@lsu.edu

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



# AGRO 2008 CALL FOR PAPERS

## **Evaluation of Agriculturally-Related Chemicals: Impacts and Benefits on Environmental, Animal, and Human Health**

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

To address the fate, effects, and benefits of agriculturally-related chemicals and evaluate links between the environment, animal, and human health.

### **Suggested Topics**

#### ***Environmental Fate and Health***

- Transformation (hydrolysis, photolysis, soil and aquatic metabolism)
- Transport (drift, runoff, leaching, volatilization)
- Ecosystem health (non-targets effects)
- Exposure and risk assessment (study designs, use of data, comparisons of lab and field data)

#### ***Animal and Human Health***

- Disease prevention and control
- Residues (fate; potential exposure pathways in rural, urban and suburban settings; residential and worker exposure, etc.)
- Pharmaceuticals (veterinary and human)
- Exposure and risk assessment

### **For additional information contact the organizers**

Pamela Rice, USDA-ARS  
pamrice@umn.edu; 612-624-9210

Todd Anderson, Texas Tech University  
todd.anderson@tiehh.ttu.edu; 806-885-4567

Patricia Rice, BASF Corporation  
patricia.rice@basf.com; 919-547-2668

Ellen Arthur, Bayer CropScience  
ellen.arthur@bayercropscience.com; 913-433-5328

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*





# AGRO 2008 CALL FOR PAPERS

## Natural Products for Pest Management

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

### **Purpose of Symposium**

Provide an opportunity for scientists from industry, government, university and regulatory institutions to share their latest research findings with respect to Natural Products and their properties which add protection to crops or affect control and/or regulation of nuisance organisms (i.e., plants, insects, microbes).

### **Suggested Topics**

- Allelochemicals
- New Natural Products for Pest Management
- Bioprospecting for Natural Products
- Chemical Communication (Quorum Sensing)
- Use of Genomics and RNAi in New Product Development

### **For additional information contact the organizers:**

Stephen O. Duke, USDA-ARS  
662-915-1036; sduke@olemiss.edu

William P. Ridley, Monsanto  
314-694-8441; william.p.ridley@monsanto.com

Paul Zubkoff, US EPA (retired)  
757-229-4037; plzubkoff@msn.com

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



## AGRO 2008 CALL FOR PAPERS

### **Reduced Risk Pesticides: Environmental Chemistry, Toxicology, & Compatibility with IPM**

**236<sup>th</sup> ACS National Meeting & Exposition  
August 17-21, 2008  
Philadelphia, Pennsylvania USA**

#### **Purpose of Symposium**

Following the FQPA, EPA formalized a reduced risk pesticide program to fast track registrations of new chemicals that would ultimately replace pesticides of high concern. A decade later, a number of pesticides have qualified for reduced risk status. What are these chemicals, and what makes them reduced risk? You are invited to submit papers to a symposium that is seeking basic information on reduced risk pesticides covering the following topics.

#### **Suggested Topics**

- Environmental chemistry
- Toxicology (human health and ecological)
- Efficacy
- Compatibility of these new crop protection products with IPM

*We are especially looking forward to receiving papers from industry scientists to explain the story behind their products' road to reduced risk status.*

#### **For additional information contact the organizer:**

Allan Felsot, Washington State University  
afelsot@tricity.wsu.edu; 509-460-6082

*Submit abstracts (150 words or less) January 28 – March 17, 2008 at  
<http://oasys.acs.org/acs/236nm/oasys.htm>*



# 4<sup>th</sup> Pan Pacific Pesticide Conference

## Waikiki Beach Marriott Honolulu, Hawaii

June 1 – June 5, 2008

### **Crop and Public Health Protection Products *Science to Meet Consumer and Societal Needs***

The AGRO Division of the American Chemical Society and the Pesticide Science Society of Japan are pleased to announce their co-sponsorship of the 4<sup>th</sup> Pan Pacific Pesticide Conference. The focus of this conference is research directed toward identification and resolution of issues related to discovery, selection, evaluation and use of pesticides intended for crop, public health, and environmental protection. The conference will include poster and technical sessions, a luau, and several luncheons.

#### **Session topics include:**

- Global trade issues
- Environmental issues
- Invasive Species
- New products and product discovery
- Mode of action
- Worker protection concerns
- Toxicology and metabolism
- Pesticide product characterization
- Process analytical technology
- Resistance to pesticides
- Residue analysis
- Government regulations and standards
- Applications of biotechnology

#### **Three workshops will be held:**

- Ecological Risk Assessment
- Environmental Impacts of Anticoagulant Rodenticides
- Stewardship of Neonicotinoid Insecticides Workshop

#### **For further information:**

Vernar Beatty  
American Chemical Society  
Office of Conference Management and Vendor Relations  
202-872-4398

#### *Organizing Committee Chairs:*

Dr. Aldos Barefoot (aldos.c.barefoot@usa.dupont.com)  
Dr. Koichi Yoneyama (yoneyama@cc.utsunomiya-u.ac.jp)

#### *Program Committee Chairs:*

Dr. Joel Coats (jcoats@iastate.edu)  
Dr. Hiroshi Matsumoto (hmatsu@biol.tsukuba.ac.jp)

**Abstracts can be submitted from October 5, 2007 to March 2, 2008**

[www.panpacificconference.org](http://www.panpacificconference.org)



# 4th Pan Pacific Conference on Pesticide Science Preliminary Program

Sunday June 1		Monday June 2		Tuesday June 3		Wednesday June 4		Thursday June 5	
8:00 AM				Session 5	Session 6	Session 7	Session 8	Workshop	
9:00 AM		<b>Keynote Address</b>		<b>Advances in Human Vector Control</b>	<b>Metabolism &amp; Toxicology</b>	<b>Global Trade Issues</b>	<b>Resistance to Pesticides</b>	<b>Environmental Modeling &amp; Risk Assessment</b>	
10:00 AM		Session 1	Session 2					<i>(Fee Required)</i>	
		<b>Discovery</b>	<b>Invasive Species</b>						
12:00 PM		Sponsored Lunch		Lunch on Your Own		Sponsored Lunch			
1:00 PM	Registration			<b>Posters On Display</b>		Session 9	Session 10		
2:00 PM		Session 3	Session 4			<b>Regulatory &amp; Worker Protection Issues</b>	<b>Analytical Chemistry</b>		
		<b>Advances in Human Vector Control</b>	<b>Environmental Fate &amp; Effects</b>			Closing Ceremony			
5:00 PM				Cash Bar					
6:00 PM	Opening Reception			Sponsored Dinner		Luau (Ticketed)			
8:00 PM				Poster Session (Cash Bar)					
9:00 PM									



# Ecological Risk Assessment Workshop

## Waikiki Beach Marriott Honolulu, Hawaii

June 5, 2008

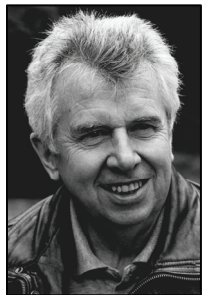
*Following the 4<sup>th</sup> Pan Pacific Conference*

### Workshop Format and Content

- Presentations on the state of the science in agrochemical risk assessment
- Use of exposure and toxicological data in the risk assessment process
- Formulating risk hypotheses; use of ranking, hazard quotients, & probabilistic techniques in risk assessment.

### Registration

There will be an additional fee for participation in the workshop to cover costs of workshop materials and to defray the expenses of the instructors. Participants are expected to bring their own laptops/computers. Check the website for further details as they are finalized.



**Don Mackay** will address agrochemical fate, transport and transformation assessment, especially using mass balance models. Applications to coupled soils and aquatic systems will be described. Participants will be encouraged to run and

interpret the results from steady-state and dynamic models (both concentration and fugacity format) for substances and environmental conditions of their choice. The benefits of models as a vehicle for identifying and understanding key environmental fate processes will be discussed.



**Frank Gobas** will address bioaccumulation processes, primarily in aquatic organisms and food webs, but also in terrestrial organisms. The factors influencing uptake by respiration and from food

and losses by respiration, egestion, metabolism and growth dilution will be described with a focus on their dependence on chemical properties such as the octanol-water partition coefficient.



**Keith Solomon** will address how exposure and toxicological data are combined in the risk assessment process. The theory behind basic concepts of ecotoxicology will be presented and practical examples used to

illustrate these concepts. Future directions for risk assessment science will be presented, including measures to increase the credibility and applicability of predictive fate, transport and bioaccumulation models by closer integration with monitoring data and with data required for registration purposes. Participants will run bioaccumulation models describing these phenomena for chemicals of their choice.

Attendance will be limited so early registration is recommended.

**This is an event not to be missed!**

[www.panpacificconference.org](http://www.panpacificconference.org)



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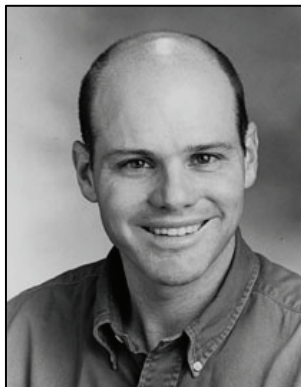
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*AGRO*  
*Division*  
*Officers*



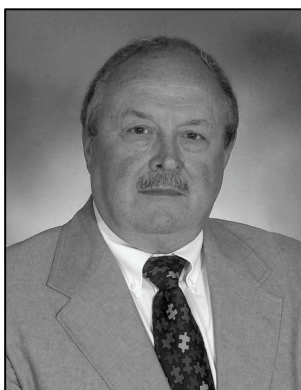
Dr. John J. Johnston  
Division Chair



Dr. Kevin L. Armbrust  
Program Chair



Dr. Ellen L. Arthur  
Vice-Chair



Dr. Terry D. Spittler  
Treasurer



Dr. Liliana Schwartz  
Secretary



# Officers and Committees of the AGRO Division

AGRO DIVISION OFFICERS			
<b>Division Chair</b>			
Dr. John J. Johnston	(970) 266-6082	FAX: (970) 266-6089	john.j.johnston@aphis.usda.gov
<b>Program Chair</b>			
Dr. Kevin L. Armbrust	(662) 325-3324	FAX: (662) 325-7807	armbrust@mscl.msstate.edu
<b>Vice Chair</b>			
Dr. Ellen L. Arthur	(913) 433-5328	FAX: (913) 433-5389	ellen.arthur@bayercropscience.com
<b>Secretary</b>			
Dr. Liliana Schwartz	(302) 451-5842	FAX: (302) 451-5943	liliana.schwartz@usa.dupont.com
<b>Treasurer</b>			
Dr. Terry D. Spittler	(315) 787-2283	FAX: (315) 787-2320	tds2@cornell.edu
EXECUTIVE COMMITTEE			
2006 – 2008	2007 – 2009		2008 – 2010
Dr. Todd Anderson	Mr. Tim Ballard		Dr. J. Marshall Clark
Dr. Cathleen Hapeman	Dr. Scott Jackson		Dr. Joe Massey
Dr. Patricia Rice	Dr. Diana Aga		Dr. Ken Racke
Dr. Luis Ruzo	Dr. Will Ridley		Dr. Pamela Rice
Dr. Jeanette Van Emon	Dr. Jay Gan		Dr. Scott Yates
COUNCILORS			
2005 – 2008	2006 – 2009		
Dr. Joel Coats	Dr. Barrington Cross		
Dr. Nancy Ragsdale, Alternate			

## Division Committees

FERT Program Committee			
Mr. William Hall, <b>Chair</b>	(863) 428-7161	bill.hall@mosaicco.com	
Nominating Committee			
Dr. Laura L. McConnell, <b>Chair</b>	(301) 504-6298	FAX: (301) 504-6298	laura.mcconnell@ars.usda.gov
Dr. R. Donald Wauchope	(229) 386-3892	FAX: (229) 386-7215	pmsci@friendlycity.net
Dr. Allan Felsot	(509) 372-7365	FAX: (509) 372-7460	afelsot@tricity.wsu.edu
Awards Committee			
Dr. James Seiber, <b>Chair</b>	(510) 559-5600	jseiber@pw.usda.gov	
Members			
Dr. John Casida	Dr. Robert Hollingworth		Dr. Willis Wheeler
Dr. Fritz Fuehr	Dr. Ralph Mumma		Dr. Izuru Yamamoto
Dr. Bruce Hammock	Dr. Nancy Ragsdale		
Dr. Ernest Hodgson	Dr. Jim Tumlinson		
Membership Committee			
Dr. Dan Stout, <b>Chair</b>	(919) 541-5767	FAX: (919) 541-0905	stout.dan@epa.gov
Dr. John J. Johnston	(970) 266-6082	FAX: (970) 266-6089	john.j.johnston@aphis.usda.gov
Communications Committee			
Dr. Cathleen Hapeman, <b>Chair</b>	(301) 504-6451	FAX: (301) 504-5048	cathleen.hapeman@ars.usda.gov
Members			
Mr. Tim Ballard – AG-LIST	Dr. Jay Gan – Abstracts Editor		Dr. Tom Potter – Femtogram Editor
Dr. Rodney Bennett – Books	Dr. Laura McConnell – Special Articles		Ms. Judy Ruppert – Website
Dr. Allan Felsot – Website	Dr. Sharon Papiernik – Awards		Dr. Terry Spittler – Publishing
Finance Committee			
Dr. Barry Cross, <b>Chair</b>			bcross@weidel.com
Dr. Terry Spittler, <b>Ex Officio</b>	(814) 272-1039	FAX: (814) 272-1019	tds2@cornell.edu
Members			
Dr. Don Baker	Dr. Ralph Mumma		
Dr. Willa Garner	Dr. Willis Wheeler		

# Officers and Committees of the AGRO Division

(Continued)

Hospitality Committee			
<b>Coffee Hour</b>			
Dr. Patricia Rice	(919) 547-2668	FAX: (919) 547-2850	patricia.rice@basf.com
Dr. Jim Brady	(336) 643-1158	Cell: (336) 708-0097	jfbrady@bellsouth.net
Dr. Joe Massey	(662) 325-4725	FAX: (662) 325-8742	jmassey@pss.msstate.edu
<b>Social Hour</b>			
Dr. Aldos Barefoot	(302) 451-5856	FAX: (302) 451-5941	aldos.c.barefoot@usa.dupont.com
Dr. Jeff Jenkins	(541) 737-5993	FAX: (541) 737-5001	jeffrey.jenkins@orst.edu

## Special Committees

Bylaws Committee			
Dr. Don Baker, <b>Chair</b>			
Patron Relations Committee			
Dr. Scott Jackson, <b>Co-Chair</b>	(919) 547-2349	FAX: (919) 547-2407	scott.jackson@basf.com
Dr. Del Koch, <b>Co-Chair</b>	(573) 443-9003		kochd@abclabs.com
Future Special Conference Committee			
Dr. John M. Clark, <b>Chair</b>	(413) 545-1052		jclark@vasci.umass.edu
Dr. Robert Hollingworth			
Public Relations Committee			
Dr. Jeff Jenkins, <b>Chair</b>	(541) 737-5993	FAX: (541) 737-5001	jeffrey.jenkins@orst.edu
Members			
Dr. Ann Lemley		Dr. James Seiber	
Education Committee			
Dr. John Johnston, <b>Chair</b>	(970) 266-6082	FAX: (970) 266-6089	john.j.johnston@aphis.usda.gov
Dr. John Bourke, <b>Investment Coordinator</b>			
Dr. Allan S. Felsot,	(509) 372-7365	FAX: (509) 372-7460	afelsot@tricity.wsu.edu
<b>New Investigator Award Coordinator</b>			
Members			
Dr. David Barnekow	Dr. J. Harold Falls	Dr. Judd O. Nelson	
Dr. John M. Clark	Dr. Vincent Hebert	Dr. Jack R. Plimmer	
Dr. Joel Coats	Dr. Ann Lemley	Dr. Nancy Ragsdale	
Dr. Barry Cross	Dr. Glenn Miller	Dr. William Ridley	

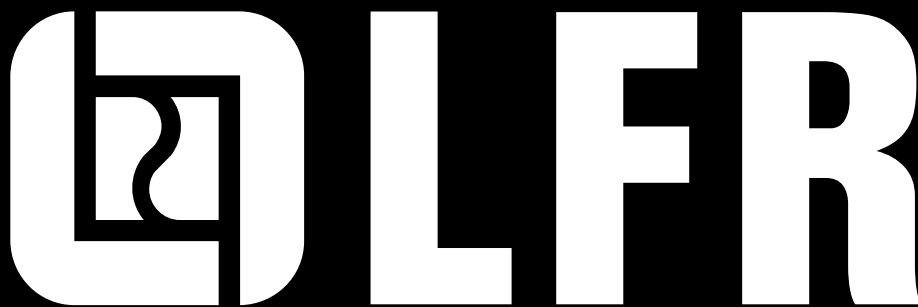
## PROGRAM COMMITTEE LISTING

See page 28

## Past Chairs of the Pesticide Chemistry/AGRO Division

1969	Donald G. Crosby	1982	Gino J. Marco	1995	Don Baker
1970	Elvins Y. Spencer	1983	G. Wayne Ivie	1996	Barry Cross
1971	Wendell Phillips	1984	Robert M. Hollingworth	1997	Willis Wheeler
1972	Philip C. Kearney	1985	John Harvey, Jr.	1998	Judd O. Nelson
1973	Roger C. Blinn	1986	Henry J. Dishburger	1999	Richard Honeycutt
1974	Charles H. Van Middlelem	1987	James N. Seiber	2000	Ann T. Lemley
1975	Henry F. Enos	1988	Paul A. Hedin	2001	Jeffery Jenkins
1976	Julius J. Menn	1989	Gustave K. Kohn	2002	Terry D. Spittler
1977	James P. Minyard	1990	Willa Garner	2003	Jeanette Van Emon
1978	Gerald G. Still	1991	Guy Paulson	2004	Rodney Bennett
1979	S.K. Bandal	1992	Joel Coats	2005	Allan Felsot
1980	Jack R. Plimmer	1993	Larry Ballantine	2006	R. Donald Wauchope
1981	Marguerite L. Leng	1994	Nancy N. Ragsdale	2007	Laura L. McConnell

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- *Study management (field and analytical phase oversight)*
- *Regulatory advocacy*
- *Product stewardship*

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Andrew C. Newcombe  
1413 Woodlawn Avenue  
Wilmington, Delaware 19806  
302.984.1702  
[andy.newcombe@lfr.com](mailto:andy.newcombe@lfr.com)  
[www.lfr.com](http://www.lfr.com)



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# Bylaws of the AGRO Division of the American Chemical Society \*

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*\* Effective October 27, 2000. Approved, as amended, by the Committee on Constitution and Bylaws, acting for the Council of the American Chemical Society.*

## **Bylaw I. Name and Objects**

Section 1. The name of this organization shall be the Division of Agrochemicals (hereinafter referred to as "the Division") of the AMERICAN CHEMICAL SOCIETY (hereinafter referred to as "the SOCIETY").

Section 2. The objects of the Division shall be to bring together persons particularly interested in agrochemicals, to consider all scientific aspects of chemistry relevant to the control of pests of agricultural or public health significance and to other methods for enhancing or modifying agricultural productivity, to develop and improve the professional stature of chemists with these interests, and to render whatever service it may to the scientific and lay communities on the topic of agrochemicals.

## **Bylaw II. Members and Affiliates**

Section 1. Membership in the Division shall be open to all members of the SOCIETY. Application for membership shall be made in writing to the Secretary of the Division and shall be accompanied by one year's dues.

Section 2. A National Affiliate of the SOCIETY may apply to the Secretary to become a National Affiliate of the Division. Provided that Division dues established for National Affiliates are paid, a National Affiliate shall have all the privileges of membership in the Division except those of voting for or holding an elective position of the Division, voting on articles of incorporation or bylaws of the Division, or serving as a voting member of its Executive Committee.

Section 3. The Division may accept Division Affiliates who are not members or National Affiliates of the SOCIETY but who wish to participate in the activities of the Division. Such affiliates shall be entitled to all the privileges of membership in the Division save those withheld by the Bylaws of the SOCIETY.

Section 4. Members may resign their membership in the Division by submitting their resignation, in writing, to the Secretary during the year for which their dues are paid.

Section 5. The name of any member of the Division who is in arrears in payment of dues by as much as two years shall be stricken from the rolls. A member dropped for nonpayment of dues may be reinstated upon payment of arrearages.

Section 6. Affiliates shall retain affiliate status only so long as payment is made of Division dues. An affiliate's name is to be stricken from the rolls as soon as the affiliate is in arrears in the payment of dues.

Section 7. The anniversary dates of Division members and National Affiliates of the Division shall coincide with their anniversary dates in the SOCIETY.

## **Bylaw III. Officers and Councilors**

Section 1. The officers of the Division shall be a Chair, a Chair-Elect, a Vice-Chair, a Secretary, and a Treasurer. The Chair-Elect shall automatically succeed to the office of Chair upon expiration of the latter's term of office or if this office becomes vacant. The Vice-Chair shall automatically succeed to the office of Chair-Elect upon expiration of the latter's term of office or if this office becomes vacant. The offices of Secretary and of Treasurer may be held by one individual. Only MEMBERS are eligible to hold elective positions.

Section 2. The duties of the Chair shall be to preside at meetings of the Executive Committee, to carry into effect the decisions and recommendations of the Committee, to preside at stated meetings of the Division, and to appoint all committees except as otherwise provided.

Section 3. The duties of the Chair-Elect shall be to serve in the absence of the Chair of the Division and to act as Chair of the Program Committee.

Section 4. The duties of the Vice-Chair shall be to serve in the absence of the Chair-Elect and to act as Assistant Chair of the Program Committee, with particular emphasis on planning and developing technical programs.

Section 5. The duties of the Secretary shall be to keep minutes of all meetings of the Division and of the Executive Committee; to keep a roll of Division members and affiliates and to submit the same annually to the Executive Director of the SOCIETY for verification as provided in the Bylaws of the SOCIETY; to conduct the business correspondence of the Division as assigned to the Secretary by the Chair or by the Executive Committee; to prepare and submit an annual report of Division activities to the SOCIETY as required in the SOCIETY's Bylaws; to perform such other duties as may, from time to time, be assigned by the Chair or Executive Committee or required by the SOCIETY's Bylaws. The Secretary shall send to each member, at least two weeks before the regular meetings of the Division, abstracts of papers to be presented at said meetings.

Section 6. The Treasurer shall act as custodian of the funds of the Division, collect dues and other revenues, and pay the bills of the Division after the same have been authorized by the Executive Committee. The Treasurer shall maintain accurate records of receipts and disbursements and shall submit a report of the financial condition of the Division at the annual meeting of the Division. The Treasurer shall furnish a surety bond, the premium for which shall be paid from Division funds.

Section 7. Councilors and Alternate Councilors shall represent the Division on the Council of the SOCIETY as provided in the Constitution and Bylaws of the SOCIETY.

Section 8. The Division shall have an Executive Committee, which shall consist of the officers of the Division; the Immediate Past Chair of the Division; the Councilors and Alternate Councilors; the Chairs, Chairs-Elect, Vice-Chairs, and Immediate Past Chairs of Subdivisions, if any; and fifteen (15) Members-at-Large. The Chair of the Division shall serve as Chair of the Executive Committee.

Section 9. The officers of the Division other than the Chair and the Chair-Elect shall be elected by mail ballot as described elsewhere in these bylaws.

Section 10. At the annual meeting of the Division, the Executive Committee shall appoint a Nominating Committee consisting of at least three members, one of whom shall be the Immediate Past Chair of the Division, who shall serve as Chair of this Committee. This Committee shall nominate two candidates for the office of Vice-Chair and at least ten (10) candidates for the positions as Members-at-Large to be filled on the Executive Committee. This Committee shall nominate candidates for each of the following offices to be filled: Councilor, Alternate Councilor, Secretary, and Treasurer. This Committee shall submit a report in writing to the Chair of the Division for preparation of the ballot to be mailed to the membership. Additional nominations may be made in writing by any group of at least five members and presented to the Chair of the Division not less than three months prior to the fall meeting.

Section 11. Officers and Members-at-Large shall be elected by the members and Division Affiliates of the Division. Only members of the Division may vote for Councilors and Alternate Councilors. The Secretary or other designated officer of the Division shall prepare an election ballot, on which shall appear the names in order chosen by lot of all candidates nominated and found willing to serve. In all Division balloting conducted by mail, the ballot voted shall be sealed, without voter identification, in a special ballot envelope. The special ballot envelope, bearing no voter identification, shall be enclosed in a larger envelope upon which—or within which, on a separate slip—shall be hand-inscribed the name of the member voting; the larger envelope shall then be sealed and forwarded to the Chair of the Tellers Committee. The Tellers shall count the ballots thus received, using the list of members provided by the Secretary to verify the eligibility of all those voting. Any ballot envelope not validated by the voter's accompanying hand-inscribed name shall be rejected. The Secretary shall set and announce in advance of the neither balloting the interval during which ballots must be received to be counted; this interval shall not be less than four nor more than seven weeks following the ballot mailing. The Tellers Committee, appointed by the Chair of the Division, shall be responsible for counting all valid ballots received within the interval and shall certify the results to the Secretary, who shall in turn certify the results to the SOCIETY, the elected officials, and the Division. Elections are to be by plurality, should there be more than two candidates for an office. Resolution of a tie vote shall be made by the Executive Committee.

Section 12. The Chair, the Chair-Elect, the Vice-Chair, the Secretary, and the Treasurer of the Division shall serve for one year or until their successors are elected.

Section 13. The terms of office of the Members-at-Large of the Executive Committee shall be three years. Five Members-at-Large shall be elected each year.

Section 14. The terms of Councilors, Alternate Councilors, and all officers excluding the Chair, Chair-Elect, and Vice-Chair shall begin on January 1 following their election. The terms for Chair, Chair-Elect, and Vice-Chair shall begin at the conclusion of the fall meeting of the SOCIETY.

Section 15. Vacancies in offices other than Chair and Chair-Elect shall be filled by the Executive Committee. Incumbents so selected shall serve until the next regular election.

#### **Bylaw IV. Councilors**

The Division shall have Councilors and Alternate Councilors whose terms of office shall be three years. Alternate Councilors shall serve only for specific meetings of the Council when a Councilor is not able to attend.

#### **Bylaw V. Committees**

Section 1. There shall be a Program Committee, consisting of three or more members, one of whom shall be the Chair-Elect of the Division, who shall serve as Chair of the Committee. A second member of the Committee shall be the Vice-Chair. The Program Committee shall have the entire responsibility for organizing the program of papers for all Division meetings. It shall work cooperatively with other Divisions of the SOCIETY and other bodies in planning joint sessions and symposia of mutual and timely interest.

Section 2. There shall be a Membership Committee of three or more members. This Committee shall aggressively promote membership in the Division by members of the SOCIETY.

Section 3. There shall be a Finance Committee of two or more members. This Committee shall audit the accounts of the Treasurer prior to the business meeting of the Division and report its findings at the annual meeting. This Committee shall advise the Executive Committee on financial resources.

Section 4. There shall be an Awards Committee of at least six members. This Committee shall maintain and develop the Division and International Awards Programs.

Section 5. There shall be a Hospitality Committee of at least two members. This Committee shall direct social events in coordination with other committees and maintain a hospitality table at Division meetings.

Section 6. There shall be a Publication Committee of at least three members. This Committee shall be responsible for publication of the Division newsletter, PICOGRAM, and other Division publications.

Section 7. Special committees may be appointed to consider, conduct, and report upon such special matters as may be delegated to them.

Section 8. Except where otherwise provided, committee appointments shall be made by the Chair, with the advice and approval of the Executive Committee.

#### **Bylaw VI. Dues**

Section 1. Members of the Division shall pay annual dues, the exact amount to be decided by the Executive Committee. Dues are payable in advance. Members who have been granted emeritus status by the SOCIETY and who are interested in the work of the Division shall be granted all privileges of Division membership without the payment of annual dues.

Section 2. Affiliates shall pay annual dues of \$2.00 more than members; except that Division Affiliates who are regularly matriculated students specializing in a chemical science shall pay annual dues of an amount to be decided by the Executive Committee.

#### **Bylaw VII. Subdivisions**

Section 1. Composition. The Division may sponsor Subdivisions devoted to specialized fields within the area of Division interest. Membership in the Division shall be a requirement for membership in a Subdivision.

Section 2. Formation. Formation or discontinuance of a Subdivision shall be at the discretion of the Executive Committee of the Division. Steps to initiate a Subdivision may be made by petition of a group of Division members to the Executive Committee or by the action of the Executive Committee. The scope of the activities of any Subdivision shall be defined by the Executive Committee.

Section 3. Officers. Upon approval of the formation of a Subdivision, the Executive Committee of the Division shall appoint a Chair, Chair-Elect, Vice-Chair, and Secretary for the Subdivision. The Chair-Elect shall assume the office of Chair after one year. In succeeding years the Subdivision shall elect at the annual meeting a Chair-Elect and a Secretary. The Chair, a Chair-Elect, and Secretary shall constitute a Steering Committee for the Subdivision. This Steering Committee shall report through the Chair of the Subdivision and be responsible to the Executive Committee of the Division, of which Subdivision Chairs shall be members ex officio.

Section 4. Funds. The necessary expenses for each Subdivision shall be authorized by the Executive Committee of the Division from Division funds and shall be paid by the Treasurer of the Division upon the usual authentication.

#### **Bylaw VIII. Meetings**

Section 1. There shall be a meeting of the Division at each national meeting of the SOCIETY unless the Executive Committee votes otherwise, provided the requirements for a minimum number of meetings as specified in the SOCIETY Bylaws shall be met.

Section 2. The annual meeting of the Division shall be held at the fall meeting of the SOCIETY. Division business requiring vote of the membership shall be conducted only at this meeting, except as provided elsewhere in these bylaws. However, voting by the membership may be conducted by mail or as directed by the Executive Committee.

Section 3. Special meetings of the Division may be called by the Executive Committee, provided notice is given to the

membership in writing or by publication in Chemical & Engineering News at least two months in advance. Special meetings may not be held within one month before or after a national meeting.

Section 4. Fifteen (15) members of the Division shall constitute a quorum for the conduct of business.

Section 5. The fee for registration at any special meeting shall be decided by the Executive Committee in accordance with the Bylaws of the SOCIETY.

Section 6. The rules of order in the conduct of Division meetings not specifically provided in these bylaws or in the SOCIETY's documents shall be the most recent edition of Robert's Rules of Order, Newly Revised.

#### **Bylaw IX. Papers**

Section 1. The Program Committee may approve or reject papers submitted for presentation before any meeting of the Division.

Section 2. The rules for papers presented before meetings of the SOCIETY as outlined in the Bylaws and Regulations of the SOCIETY shall govern the Division.

#### **Bylaw X. Amendments**

Section 1. These bylaws may be amended at any annual meeting of the Division by a two-thirds (2/3) vote of the members present. All amendments shall be submitted in writing to the Secretary at least sixty (60) days prior to the meeting. Upon approval of the Executive Committee, the Secretary shall send the text of the proposed amendment to the members of the Division at least thirty (30) days prior to the annual meeting.

Section 2. Amendments shall become effective upon approval by the Committee on Constitution and Bylaws, acting for the Council, unless a later date is specified.

#### **Bylaw XI. Dissolution**

Upon dissolution of the Division, any assets of the Division remaining thereafter shall be conveyed to such organization then existent as is dedicated to objects similar to those of the Division and the AMERICAN CHEMICAL SOCIETY, or to the AMERICAN CHEMICAL SOCIETY, so long as whichever organization is selected by the governing body of the Division at the time of dissolution shall be exempt under Section 501(c)(3) of the Internal Revenue Code of 1954 as amended or under such successor provision of the Code as may be in effect at the time of the Division's dissolution.



# Laboratories

We are a contract research organization with an excellent reputation in the conduct of GLP studies for EPA, Japan MAFF and EU registration of agrochemicals and industrial chemicals since 1987.

<b>Product Chemistry:</b>	Solubility, partition coefficients, vapor pressure, etc. GLP certification. Batch analysis. Stability studies.
<b>Environmental Fate and Assessment:</b>	Hydrolysis, photolysis, soil and aquatic degradation, volatility and mobility.
<b>Metabolism and Kinetics:</b>	Animal and plant metabolism, PK/TK, ADME and tissue distribution, <i>in vitro</i> and <i>in vivo</i> bio-transformation, metabolite identification.
<b>Analytical Chemistry:</b>	Method development and validation, ILV, clinical sample analysis, analysis of agrochemicals and metabolites in soil, water, air, crops and animal tissues.
<b>Field Studies Design and Analytical Phase:</b>	Terrestrial and aquatic dissipation, rotational crops, nature and magnitude of residues in crops, lysimetry and small plot dissipation studies utilizing radiolabels. Volatility and Flux determination.
<b>Exposure:</b>	Cow and hen feeding studies, dislodgeable foliar and turf residues, mixer/loader and applicator dosimetry. Tobacco pyrolysis. Environmental monitoring (air and water).

Our laboratories are modern facilities equipped with state-of-the-art instrumentation, including GC- and LC-MS/MS (LCQ ion traps and API3000 triple quadrupoles). Licensed for use of radiotracers.

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**Good science, no surprises.**

# Notes



## WELCOME TO AG-LIST

The AGRO Division of the American Chemical Society maintains a Communications System, AG-LIST, dedicated to keeping members informed about what is happening in our Division and the Society. Keeping up with meeting agendas, calls for papers, committee progress, party locations, elections and other timely announcements is as simple as sending an e-mail. In fact, sending an e-mail is exactly how you get connected. Join the over 900 professionals who have subscribed to AG-LIST.

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The *PICOGRAM* is published twice a year and is the primary communications instrument of AGRO. The Fall issue also contains the national meeting abstracts for the AGRO Division. The *PICOGRAM* is mailed to approximately 1200 division members. Another 300 – 400 copies are distributed at national ACS and other meetings of interest to AGRO members. The page size for the *PICOGRAM* is 8.5" x 11"; ad costs are:

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**AGRO**

*PICOGRAM v. 74*

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