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**CHEMISTRY**  
*for and from*  
**AGRICULTURE**

**PICOGRAM V. 79**

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AMERICAN CHEMICAL SOCIETY  
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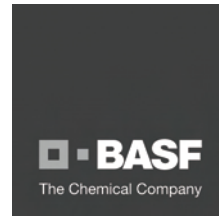
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- Half-page ad in PICOGRAM



## FROM THE COMMUNICATIONS CHAIR.....

*Question:* What happened to my Fall 2010 PICOGRAM?

*Answer:* It was never published – for a variety of reasons, the most important being timing. There was no rush to get an issue assembled as our next meeting was a year away; the symposia for the Denver meeting were still being discussed, and frankly, I was swamped with “real-job” responsibilities.

Aside from saving money on publishing and mailing, skipping the Fall 2010 issue allowed the Communications team, the AGRO officers, and the Executive Committee to focus on several other projects.

1) *Submitting two ACS Technical Division Innovations Project Grant proposals* for developing communication and promotional materials for IUPAC 2014 and for revamping the AGRO logo, websites, and newsletter to increase communications and to conform with the new ACS branding guidelines. Kudos to Ken Racke and Laura McConnell for shepherding these grants, both of which were awarded to AGRO last Fall.

2) *Developing IUPAC 2014 communication and promotional materials.* Check out the new website IUPAC2014.org to see the latest preparations for the 13<sup>th</sup> IUPAC Pesticide Congress to be held in August 2014 concurrently with the Fall ACS meeting in San Francisco, our best venue.

3) *Introducing the new monthly AGRO eNewsletter.* This tool will allow AGRO to keep members up-to-date on all the latest information on meetings, awards, and new initiatives. Members can even submit job postings by the third Tuesday of every month to updates@agrodiv.org to be included in the next issue.

If you are not receiving the AGRO eNewsletter, visit our website [www.agrodiv.org](http://www.agrodiv.org) or see inside the back cover for how to sign up! And if you want to place an ad in the eNewsletter, please contact Laura McConnell ([laura.mcconnell@ars.usda.gov](mailto:laura.mcconnell@ars.usda.gov)).

4) *Updating the AGRO logo and the website.* As we continue to grow as a division, we need to have more effective electronic files and techniques to interface as seamlessly as possible with other venues. We have also developed new branding guidelines for a consistent presence in official AGRO activities.

So, we have been busy. We hope you like our new look and our new products. Let us know what you think!

*CJ Hapeman*, PICOGRAM Editor  
[cathleen.hapeman@ars.usda.gov](mailto:cathleen.hapeman@ars.usda.gov)



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# FROM THE CHAIR'S DESK

KEN RACKE

I attended my first ACS AGRO program some 25 years ago, and since that time the programs and activities of the Division have been critical components of my vocation. In addition to having a "scientific" home, what I have also found extremely rewarding have been the professional networking and common friendships that have emerged. In fact, the success of our Division is a collective – one dependent on poster presenters and platform session speakers, symposium organizers and committee members, officers and spontaneous volunteers, grad students and professors, researchers and regulators. It will be a great pleasure and privilege to serve the membership this year as AGRO Chair, and I'd like to highlight a couple areas of recent success and some future plans.

First, AGRO continues to sponsor a **strong and innovative scientific program**. Since we shifted our efforts to focus annual programming around one ACS national meeting per year we've had some truly outstanding programs. This change began during August of 2008 in Philadelphia, continued during August of 2009 in Washington, DC, and once again directed our plan for San Francisco this past March of 2010. We've experienced more symposia, a greater number of papers, larger poster sessions, and an increased number of attendees at these past 3 meetings than during recent history. In fact, we broke all previous single meeting records in San Francisco where more than 350 papers were presented, including some 80 posters. Continuing on this path, I've been pleased to note that incoming Program Chair Al Barefoot has a robust program shaping up for the Denver meeting planned for August of 2011. There have been many positive comments from the membership concerning the high quality and diversity of the AGRO national meeting program these past 3 years, so it appears the move to an annual focus has been a success. We will need to consider in future whether to strictly plan for the same ACS national meeting each year (i.e., autumn) or opportunistically shift between fall and spring to take advantage of popular venues (the variable period of 6 or 18 mo's between programs a downside of the latter approach).

Second, it's been great to see AGRO advancing **national and international collaborations**. We continue to seek symposium co-sponsorships with other ACS technical Divisions, including ACS national meetings for which we are otherwise not programming. For example, AGRO co-sponsored a Graduate Student Committee symposium at the August, 2010, meeting in Boston and is co-sponsoring two symposia with AGFD at the Anaheim meeting during March, 2011. During February, 2010, we co-sponsored a pesticide ecological modeling course organized by Stone Environmental, Inc. in Orlando, and also sponsored the 47<sup>th</sup> Annual Florida Pesticide Residue Workshop during July, 2010. AGRO has also been increasingly active on the international stage. Two AGRO symposia were organized as part of the Pacificchem Conference in Hawaii during December,

2010, and special thanks go to John Johnston for spearheading this effort. A number of AGRO members played key roles at the 13<sup>th</sup> IUPAC International Congress of Pesticide Chemistry held in Melbourne, Australia, this past July, where AGRO also hosted a high profile exhibit booth. In fact, AGRO's bid to organize and host the 14<sup>th</sup> IUPAC Congress in San Francisco during August, 2014, has now been approved by both IUPAC and ACS brass. This will be a great opportunity for the Division to welcome the world's scientists into our program. AGRO has also recently agreed to co-organize the 5<sup>th</sup> Pan-Pacific Pesticide Conference, which will occur in Tsukuba, Japan, during July of 2012.

Finally, we are all best served by a Division which looks beyond recent successes and immediate plans to consider future trends and evolving needs of the membership. A strength of AGRO in recent years has been an **increased emphasis on membership needs and strategic planning**. We've now been through two cycles of strategic planning and implementation efforts during the past 5 years and are now embarking upon a third. During January, 2011, a cross-section of members will convene AGRO's third strategic planning workshop to review progress of the Division on past goals and chart future directions. In advance of this session, a survey of the membership was recently completed to provide input, and I'd like to thank the more than 400 members whose responses we received. A report on the proposed strategic plan which emerges from this session will be circulated during early 2011. Meanwhile, a few tidbits from the pre-workshop membership survey are listed below:

- ♣ Nearly one-third of members joined AGRO within the past 5 years.
- ♣ Slightly more than one-quarter of members participated in one or both of our national meeting programs during 2009 or 2010.
- ♣ Two-thirds of the membership rate the overall service and programs of AGRO as either "Good" or "Outstanding".
- ♣ The most valuable AGRO benefits cited by members included: a) keeping informed of developments in the field, b) participation in symposia at national meetings, c) professional networking opportunities.
- ♣ Two-thirds of the membership categorize their involvement in AGRO during the past year as either "Not very involved" or "Not involved at all". Most common reasons cited for lack of involvement were time, money, and work or personal constraints.
- ♣ More than a quarter of those surveyed flagged interest in increasing their participation through employing their skills as volunteers and/or serving on specific committees.





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## HOSPITALITY COMMITTEE REPORT

Fifteen companies graciously donated a total of \$3000 to support our San Francisco coffee lounge. Several firms provided literature to promote their services to meeting attendees. If you wish to join these companies in supporting our coffee lounge, please contact any of our committee

members. Our coffee lounge offers a brief respite from our technical sessions as well provides an alternative forum for exchange of ideas and networking. We thank the contributors of our coffee lounge that are also listed below



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### **AGRO Social at San Francisco**

The AGRO Division Awards & Social was held at the Moscone Center on Tuesday, March 23, 2010. Shinzo Kagabu was recognized as the recipient of the ACS International Award for Research in Agrochemicals and Chris Somerville as the receipt of the Sterling B. Hendricks Memorial Lectureship Award. Also honored were Daniel Cordova, John, Freudenberger, Thomas Selby, and Thomas Stevenson for the

ACS Team Innovation Award; George Lahm for the Kansas City Section Spencer Award; and Kyong Sup Yoon for the AGRO New Investigator Award. We also introduced the winners of the AGRO Education Awards to the revelers in attendance. Our inevitable prize drawing could not be stopped and drew smiles from surprised winners.

HOSPITALITY COMMITTEE MEMBERS - James Brady, Julie Eble, Joseph Massey & Patricia Rice  
SOCIAL CO-CHAIRS - Al Barefoot & Jeff Jenkins

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## PAST WINNERS OF THE AGRO DIVISION FELLOW AWARD

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1972	Mr. Wendell F. (Bud) Phillips Dr. Don G. Crosby Dr. Elvins Y. Spencer	1980	Dr. G. Wayne Ivie Dr. John B. Siddall (Posthumous)	1998	Dr. Hank Cutler Mr. Paul Giesler
1973	Mr. Roger C. Blinn Dr. Philip C. Kearney Dr. Julius J. Menn	1981	Dr. Robert M. Hollingsworth Dr. Gino J. Marco	2000	Dr. Barry Cross
1974	Dr. Morton Beroza Dr. James P. Minyard, Jr. Dr. Joe C. Street	1983	Dr. John Harvey, Jr.	2001	Dr. Robert Hoagland
1975	Dr. Hank F. Enos Dr. Maurice B. Green Dr. Charles H. Van Middlelem	1985	Mr. Henry Dishburger Dr. Richard C. Honeycutt	2003	Dr. Judd O. Nelson
1976	Dr. Marguerite L. Leng Dr. Jack R. Plimmer Dr. Gerald G. Still	1986	Dr. Gunter (Jack) Zweig	2005	Dr. Rodney Bennett
1977	Dr. Gustave K. (Bob) Kohn	1987	Dr. Willa Garner	2006	Dr. Terry D. Spittler
1978	Dr. S. Kris Bandal Dr. Paul Hedin	1988	Dr. Jan Chambers Dr. James Seiber	2007	Dr. Ann T. Lemley Dr. R. Don Wauchope Dr. John M. Clark
		1990	Dr. Joseph Fenyes	2008	Dr. Allan S. Felsot
		1991	Dr. Nancy N. Ragsdale		
		1992	Dr. Don Baker Dr. Joel Coats Dr. Guy Paulson		
		1993	Dr. Larry Ballantine		
		1994	Dr. James Heitz Dr. Ralph Mumma Dr. Willis Wheeler		

# AWARDS COMMITTEE REPORT

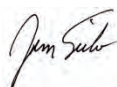
**Dr. George P. Lahm of Dupont Crop protection** will receive the International Award for Research in Agrochemicals at the Fall 2011 ACS National Meeting in Denver, Colorado for his contributions in discovery of the anthranilic diamide insecticides. DuPont Crop Protection and BASF Company will co-sponsor the award. A committee led by Dr. Thomas M. Stevenson is organizing an award symposium.

The Awards Committee is accepting new award nominations for the Division Fellow Award. Criteria for the award and what to submit are shown below. Nominations for the 2013 International Award for Research in Agrochemicals are currently being evaluated by the Awards Committee. The nomination form and criteria for the 2013 award can be found on page 9. Please consider nominating a deserving colleague. The deadlines each year are May 31 for the Fellow Award and December 31 for the International Award.

The 2011 Sterling Hendricks Lectureship Award, which is sponsored by USDA-ARS will be hosted by AGRO. The winner will be announced shortly. Nominations for the 2012 award are being solicited by ARS. The nomination form can be found on page 11.

Beginning in 2012, in accord with a proposal to the AGRO Division Executive Committee from the AGRO Division Awards Committee, the International Award will be sponsored by DuPont and will recognize significant and usually career-long contributions to agrochemicals research. In addition, a **new Award for Innovation in Chemistry of Agriculture**, to be sponsored by BASF, will be given to an active researcher working in North America, who has successfully demonstrated an innovation in the chemistry of agriculture, veterinary science, or public health. It is anticipated that this proposal will be acted upon by the Executive Committee shortly.

Respectfully submitted,



James N. Seiber, Chair  
Awards Committee



## CALL FOR NOMINATIONS AGRO Division Fellow Award

The AGRO 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 current *curriculum vitae*. Deadline for submitting nominations is May 31 of each year. Contact the Awards Committee for further information.

Dr. James Seiber, Chair  
Food Science Department  
University of California  
One Shields Avenue  
Davis, CA 95616-8598  
530-752-1465 – phone  
jnseiber@ucdavis.edu



## PAST AWARDEES OF THE BURDICK AND JACKSON INTERNATIONAL AWARD

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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1992	Dr. Bruce Hammock, University of California, Davis	2002	Dr. Keith Solomon, University of Guelph, Ontario, Canada
1993	Dr. Morifuso Eto, Kyushu University, Fuoka, Japan		Dr. Marinus Los, American Cyanamid
1994	Dr. Toshio Fujita, Kyoto University, Kyoto, Japan		Dr. Bob Hollingworth, Michigan State University
1995	Dr. Mohyee Eldefrawi, University of Maryland, Baltimore	2003	Dr. Hideo Ohkawa, Kobe University, Japan
	Dr. Koji Nakanishi, Columbia University, New York	2004	Dr. Stephen Duke, USDA-ARS, Oxford, Mississippi
1996	Dr. Günther Voss, Ciba, Basel, Switzerland		Dr. John Marshall Clark, University of Massachusetts
	Dr. Klaus Naumann, Bayer, Leverkusen, Germany	2005	Dr. Robert Krieger, University of California, Riverside
1997	Dr. Fritz Führ, Jülich, Germany		Dr. Janice E. Chambers, Mississippi State University
	Dr. Izuru Yamamoto, University of Tokyo, Japan		Dr. Joel Coats, Iowa State University
1998	Dr. George Levitt, DuPont, Wilmington, Delaware	2006	Dr. Isamu Yamaguchi, Agricultural Chemicals Inspection Station, Tokyo Japan
	Dr. Leslie Crombie, University of Nottingham, England	2007	Dr. Gerald T. Brooks, West Sussex, UK
1999	Dr. Don Baker, Zeneca, Richmond, CA		Dr. Fredrick J. Perlak, Monsanto
	Dr. James Seiber, University of Nevada, Reno	2008	Dr. David M. Soderlund, Cornell University
2000	Dr. George P. Georghiou, University of California, Riverside	2009	Dr. R. Donald Wauchope, USDA-ARS (retired), Tifton, Georgia
	Dr. Herbert B. Scher, Zeneca		
2001	Dr. Donald Crosby, University of California, Davis	2010	Dr. Shinzo Kagabu, Gifu University, Gifu, Japan
	Dr. Ralph Mumma, Pennsylvania State University		



**CALL FOR NOMINATIONS**  
**INTERNATIONAL AWARD FOR RESEARCH IN AGROCHEMICALS**  
Sponsored by DuPont Crop Protection

**2013 Fall ACS National Meeting in Indianapolis, Indiana**

The ACS International Award for Research in Agrochemicals is given to a scientist who has made outstanding contributions to the field of agrochemicals at the international level. Their vision and sustained contributions will have opened new horizons for other investigators in their field and beyond.

- The **nomination letter** will include the following statement: "I hereby nominate [insert first, middle, last name] as a candidate for the ACS International Award for Research in Agrochemicals." It will also include the **nominee's birthplace, date of birth, citizenship, business address** and a **description** (200 – 1000 words) of the reasons why the nominee should receive this award, stressing the individual's major accomplishments.
- Include a **curriculum vitae** of the candidate that includes: places and nature of employment, professional affiliations, honors and awards received, and a list of publications and patents.

- Nominations often include **one or two letters of support**, although this is optional.
- Please provide 11 copies.

**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 in the spring of the following year.

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

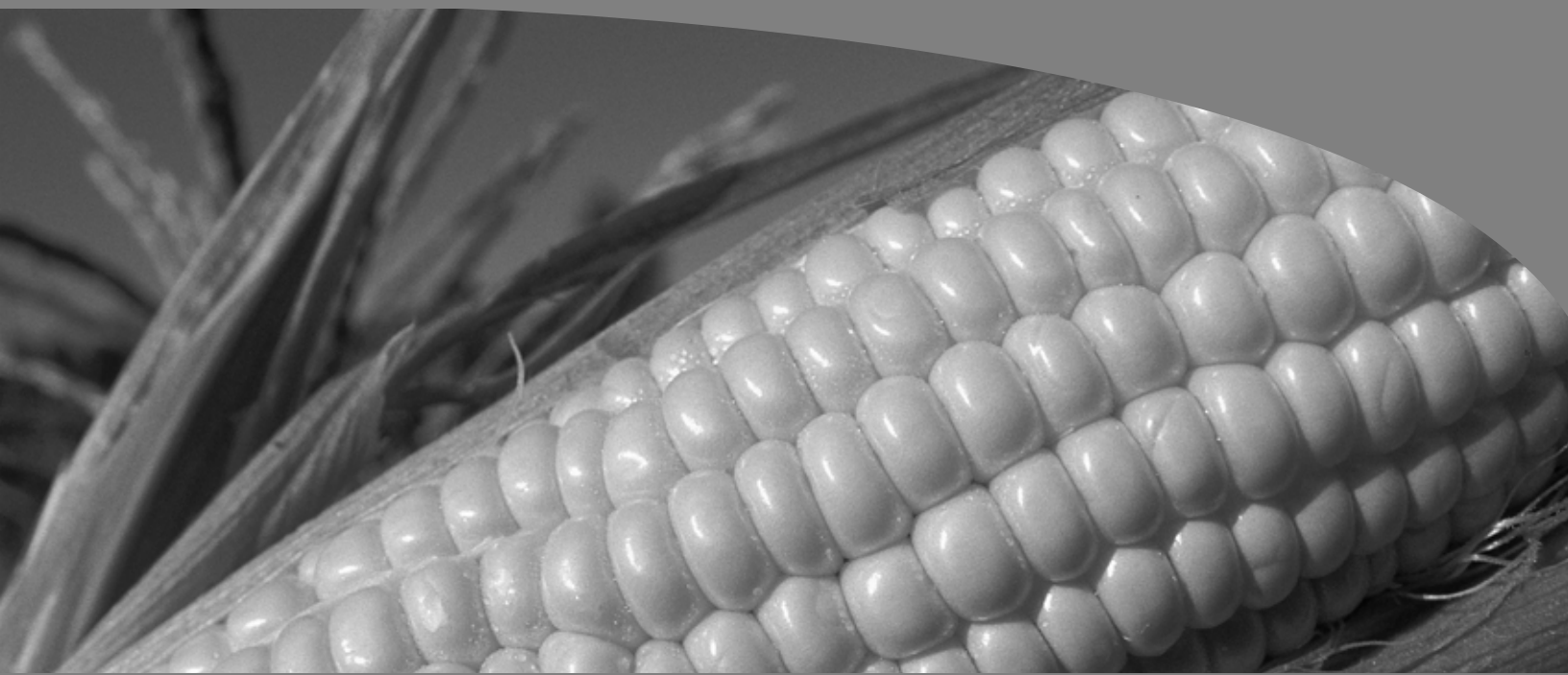
Please, return this completed form to:

Dr. James Seiber, Chair  
Food Science Department  
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The USDA-Agricultural Research Service (ARS) is seeking nominations for the 2011 Sterling B. Hendricks Memorial Lectureship Award. 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. Deadline is **November 3, 2010**.

The AGRO Division and the Agricultural & Food Chemistry Division (AGFD) 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.

**Nominees** will be outstanding senior scientists in industry, universities, consulting, or government positions. *Current ARS employees are not eligible*. The Award will be presented during an American Chemical Society National Meeting held in 2011 in Denver prior to the Lecture. Giving the presentation is a requirement of the honor.

The **Nomination Package** includes:

- A letter explaining the nominee's contributions to chemistry and agriculture,
- A current *curriculum vitae* (hard copy only)

Nomination letters may be sent electronically to:

Kim Kaplan, Lecture Coordinator  
kim.kaplan@ars.usda.gov

Hard copy nominations and *curriculum vitae* are to be submitted via courier to:

Kim Kaplan, Lecture Coordinator  
ARS Information Office  
Room 1-2253, Mail Stop #5128  
5601 Sunnyside Ave  
Beltsville, MD 20705  
301-504-1637 – phone

## PAST STERLING B. HENDRICKS MEMORIAL LECTURESHIP AWARD WINNERS

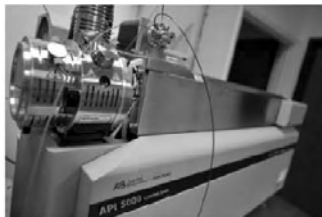
1981	Norman E. Borlaug, Nobel Laureate, International Maize and Wheat Improvement Center, Mexico City	1995	Winslow R. Briggs, Carnegie Institution of Washington
1982	Warren L. Butler, University of California, San Diego	1996	Hugh D. Sisler, University of Maryland
1983	Melvin Calvin, Nobel Laureate, University of California, Berkeley	1997	Ernest Hodgson, North Carolina State University
1984	Frederick Ausubel, Harvard Medical School and Massachusetts General Hospital, Boston, MA	1998	Martin Beroza, USDA-ARS, Maryland (retired)
1985	Alan Putnam, Michigan State University	1999	Bruce D. Hammock, University of California, Davis
1986	Ralph Hardy, Cornell University and BioTechnica International	2000	William S. Bowers, University of Arizona
1987	Mary-Dell Chilton, Ciba-Geigy Corporation, Research Triangle Park, NC	2001	Malcolm Thompson, USDA-ARS, Maryland (retired)
1988	Bruce N. Ames, University of California at Berkeley	2002	Ervin E. Leiner, University of Minnesota
1989	Sanford A. Miller, University of Texas Health Science Center at San Antonio	2003	Kriton Kleanthis Hatzios, Virginia Polytechnic Institute and State University
1990	Roy L. Whistle, Purdue University	2004	Robert L. Buchanan, Food & Drug Administration
1991	Peter S. Eagleson, Massachusetts Institute of Technology	2005	Donald L. Sparks, University of Delaware
1992	John E. Casida, University of California, Berkeley	2006	Stanley B. Prusiner, Nobel Laureate, University of California, San Francisco
1993	Philip H. Abelson, Deputy Editor, <i>Science</i> , and Scientific Advisor to AAAS	2007	Bruce E. Dale, Michigan State University
1994	Wendell L. Roelofs, Cornell University	2008	Fergus M. Clydesdale, University of Massachusetts, Amherst
		2009	Charles J. Arntzen, Arizona State University, Tempe
		2010	Chris Somerville, Director of the Energy Biosciences Institute, Berkeley





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# *International Union of Pure and Applied Chemistry*

A member of the International Council of Scientific Unions

**Advisory Committee on Crop Protection Chemistry**

## **Call for Nominations**

**IUPAC 2012 International Award for**

**Advances in Harmonized Approaches to Crop Protection Chemistry**

This award recognizes individuals in government, intergovernmental organizations, industry, and academia who have exercised personal leadership for **outstanding contributions to international harmonization for the regulation of crop protection chemistry**.

The award is administered by the IUPAC Advisory Committee on Crop Protection Chemistry, and is

presented on a biennial basis during even-numbered years in conjunction with an IUPAC-sponsored conference or special symposium.

Awardees receive a \$3,000 honorarium plus travel and per diem reimbursement to attend the award presentation ceremony. Corporate sponsorship for the award has been arranged with Dow AgroSciences.

Nominations will consist of:

- A **nomination letter** including the nominee's birthplace, date of birth, citizenship, business address, and a description (200-1000 words) of the reasons why the nominee should receive this award, stressing the individual's major accomplishments toward international harmonization for the regulation of crop protection chemistry.
- A **curriculum vitae** of the candidate that includes places and names of employment, professional affiliations, committee and working group assignments, and listing of relevant regulatory guidance documents, reports, and/or publications.
- One or more **letters of support**.

Nominations for the 2012 award are due **December 1, 2011**, and should be sent to:

Dr. John Unsworth, Chairman  
IUPAC Advisory Committee on Crop Protection  
Chemistry  
25 Vellacotts  
Chelmsford, Essex CM1 7EA  
UNITED KINGDOM  
Phone: +44 1245 440 056  
Email: unsworjo@aol.com

### **2010 IUPAC AWARDEE**

Denis J. Hamilton, Animal and Plant Health Service (retired)  
Queensland Department of Primary Industries, Brisbane, Australia.  
[www.iupac.org/publications/ci/2010/3204/iw3\\_hamilton.html](http://www.iupac.org/publications/ci/2010/3204/iw3_hamilton.html)

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## CALL FOR NOMINATIONS AGRO NEW INVESTIGATOR AWARD Sponsored by Dow Agrosciences

### 2011 Fall ACS National Meeting in Denver

The AGRO Division seeks nominations for the New Investigator Award to be awarded at the ACS meeting in Denver in August 2011. The purpose of the New Investigator Award is to recognize scientists who have obtained a doctoral degree and are actively conducting academic, industrial, consulting, or regulatory studies.

The Division is interested in work on all aspects of agrochemicals which 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.). The categorical areas of study related to agrochemicals are very broad and encompass environmental chemistry, toxicology, exposure assessment, risk characterization, risk management, and science policy.

Studies of veterinary pharmaceuticals and antibiotics are included in the Division's mission. The Division especially encourages submissions related to public health protection as well as crop, livestock, aquaculture, and wildlife protection.

AGRO is also interested in the environmental chemistry and effects resulting from agricultural production (e.g., soil processes, water and air quality) and in chemical products made from agricultural commodities and byproducts. This includes biofuels and bioproducts and the issues surrounding their production and use.

- **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 Meeting.** Thus, for 2011, applications will be considered from scientists who have obtained their doctorates no earlier than the year 2006.
- The award winner will be expected to deliver an oral presentation in their area of interest in one of the AGRO Program sessions.
- The award winner will receive a \$1000 honorarium, a commemorative plaque, one-year complementary membership in the AGRO Division, a meeting registration fee waiver, and reimbursement for travel expenses in association with the Denver meeting.

#### Applications for the New Investigator Award will consist of the following elements:

1. Submission of a maximum **five-page paper describing your research** or other work relevant to the broad mission of the AGRO Division. 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 AGRO Division.
2. Submission of a **150-word abstract** for the submitted paper to the ACS PACS abstract submission website. <http://abstracts.acs.org/>
3. Submission of at least **one letter of recommendation** from a current supervisory scientist (e.g., a business manager, a departmental chair, post-doctoral mentor).
4. For consideration of an award at the Fall ACS National Meeting in Denver, both the paper and letter of recommendation must be **submitted via email no later than March 21, 2011 to**  
Cathleen Hapeman, Organizer  
tel: 301-504-6451  
email: [cathleen.hapeman@ars.usda.gov](mailto:cathleen.hapeman@ars.usda.gov)

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*Special thanks to our sponsor for their generous contribution!*







# 2010 AGRO EDUCATION AWARDS AT SAN FRANCISCO

Sponsored by Bayer CropScience

*Congratulations to last year's winners!*

## First Place



**JOHN SIVEY** is a PhD candidate in the research group of Professor Lynn Roberts in the Department of Geography and Environmental Engineering at Johns Hopkins University. John's dissertation research examines the transformation mechanisms and fate of chloroacetamide agrochemicals and so-called

"inert" ingredients in model environmental systems and during drinking water chlorination. Prior to arriving at Hopkins, John received a BS in chemistry from Central Michigan University and an MS in environmental engineering and science from Clemson University. For his MS thesis (advised by Professor Cindy Lee), John investigated trends of polychlorinated biphenyl contamination in sediments of Lake Hartwell, SC. When he is not in the laboratory, John enjoys gardening, racquetball, and golf.

## Second Place



**JERRY TSO** is a Ph.D. candidate in Analytical Chemistry with Dr. Diana S. Aga at the Department of Chemistry, University at Buffalo, the State University of New York. He received his Bachelors degree from the University of California, Irvine. His current research focuses on the development of analytical techniques using

liquid chromatography tandem mass spectrometry for the trace analysis of antibiotics and hormones in the most challenging environmental matrices. The method developed by Jerry is being used to investigate the fate, transport, and toxicity of antibiotics and hormones in agricultural watersheds. On his spare time, he enjoys the outdoors, which include mountain biking, camping, and hiking in the Adirondacks. He also takes pleasure in tasting new foods from different cultures and attempts to recreate them in his own kitchen.

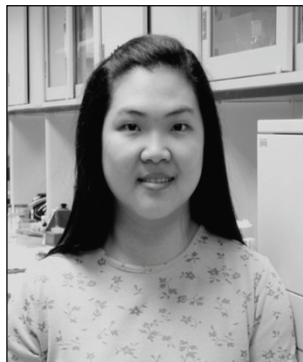
## Third Place



**JOSEPH STRYCHARZ** is a PhD student in the Animal Biotechnology and Biomedical Sciences with Dr. John M. Clark in the Department of Veterinary and Animal Sciences at the University of Massachusetts-Amherst. He earned his Masters degree from UMASS-Amherst in 2010. His masters research was

also performed under the direction of Dr. John M. Clark and was focused on determining multiple resistance mechanisms in a highly DDT-resistant strain of *Drosophila melanogaster*. Joseph's dissertation research will investigate the role of ABC-transporters and their ability to efflux insecticides using human body lice as a model organism. Joseph also loves following Boston sports teams and spending time with his friends and family.

## Honorable Mention



**ADCHAREE KARNJANAPIBOONWONG** is currently a Ph.D. candidate working under the supervision of Professor Todd Anderson in the Department Environmental Toxicology, Texas Tech University. She received a Bachelor's (1997) and a Master's degree (2002) in Environmental Science, both from Chulalongkorn

University, Thailand. Having worked in both industry and government in Thailand for five years prior to embarking the Ph.D. program at Texas Tech University in 2006, she is particularly interested in environmental soil and water quality concerns. Her doctoral work explores the long term fate of pharmaceuticals and personal care products (PPCPs) in the environment. Her research also includes the sorption of PPCPs in soils and the uptake of PPCPs into plants. In future she would like to work as a research scientist and continue focusing on the development of novel approaches for the remediation of organic and inorganic environmental contaminants in soil and water resources.



**CALL FOR APPLICANTS**  
**AGRO EDUCATION AWARDS**  
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**UNDERGRADUATE & GRADUATE STUDENT RESEARCH**

Support for Poster Presentations  
At the 2011 Fall ACS National Meeting in Denver

The AGRO Division has established an endowment fund in collaboration with Bayer CropScience that will be used to promote an understanding of the role of chemistry in agriculture. To address this goal, awards will be made through the Division's Education Committee.

Proposals are sought for the 2011 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 2011 Fall Meeting, which will be held August 28 – September 1, 2011 Denver, Colorado. Posters will be displayed in a special poster session of the ACS AGRO Division of Agrochemicals. First, Second and Third place winners will receive an additional cash award.

The subject of the presentation should pertain to the chemistry of the AGRO Division. Topics should relate to pest management chemistry including synthesis, metabolism, regulatory, biotechnology, delivery, risk assessment, resistance, residues, mode of action, fate/behavior/transport, and agronomic practices. The AGRO Division is also interested in chemical products made from agricultural commodities and byproducts, including biofuels and the issues surrounding their production.

**For more information, please contact the co-organizers:**

Dr. Marja Koivunen  
Marrone Bio Innovations  
2121 Second Street, Suite B-107  
Davis, CA 95618  
tel: 530-750-2800  
email: mkoivunen@marronebio.com

Dr. Diane Aga  
Chemistry Department, NSC 611  
University of Buffalo  
Buffalo, NY 14260  
tel: 716-645-4220  
email: dianaaga@buffalo.edu

**To apply, a graduate student should submit the following to be received no later than March 21, 2011 (PACS 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.  
<http://abstracts.acs.org/>

Submit item 3 as a Word or pdf file to  
Dr. Marja Koivunen at  
mkoivunen@marronebio.com

*Abstracts will be reviewed by the Education Committee.  
Submitters will be notified of their selection status in May 2011.*

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*Special thanks to our sponsor for their generous contribution!*



Bayer CropScience

# NOTES FROM THE PROGRAM CHAIR

*ALDOS C. BAREFOOT*

It may seem like only yesterday that we met in San Francisco, but it is already time to look to the future and plan your contribution to the AGRO program for 2011. AGRO continues its practice of programming at one meeting each year with a full slate of symposia planned for the 242<sup>nd</sup> National Meeting in Denver, August 28 – September 1.

The symposium topics illustrate the diverse interests of the AGRO membership from bioenergy, sustainability and biodiversity, to pesticide science topics that remain essential to predicting pesticide exposures, determining residues, conducting human and environmental risk assessments, and regulating pesticide use in compliance with laws governing air and water quality, and species protection. AGRO continues to look for innovative ways to collaborate with other ACS Divisions through two symposia jointly developed with the Environmental Chemistry Division: a symposium on the environmental fate of veterinary pharmaceuticals and a symposium on analytical methods. Topics on aspects of human risk assessment include drinking water exposures and pharmacokinetic modeling, while environmental exposure symposia consider air quality models, bioavailability, non-extractable residues, and model evaluation requirements. AGRO will also take up current issues and research trends through symposia on pesticide use on tribal lands, tools for sustainability, and the effect of the Endangered Species Act on pesticide regulation.

We also will celebrate the achievements of scientists involved in agrochemicals research through our award symposia. This year we honor Dr. George Lahm with the International Award for Research in Agrochemicals with a symposium on the discovery of new insecticides, fungicides, herbicides, and nematocides for use in crop protection and animal health. AGRO will also host the Sterling B. Hendricks Memorial Lecture sponsored by the USDA ARS. New investigators and students will be recognized with awards and grants for travel. Diana Aga and Marja Koivunen have enthusiastically stepped up to organize the AGRO Education Awards and they look forward to working with students on this year's poster session. The symposium and poster sessions are essential to the success of new researchers as they begin careers in AGRO related areas. We hope you will plan now to visit with students, post-docs and new investigators as they develop the contacts and research programs needed to meet the challenges faced by agriculture and public health in the decades to come.

The symposium organizers are already at work soliciting speakers, and additional symposia are welcome. Don't delay – the ACS Program and Abstract Creation System (PACS) **opens January 24, 2011; the closing date of March 21** will be here before you know it.

*See you in Denver!*



## **LIST OF SYMPOSIA** **242<sup>nd</sup> ACS National Meeting & Exposition** **August 28 – September 1, 2011** **Denver, Colorado**

### *Award Symposia*

#### **AGRO International Award for Research in Agrochemicals**

*Sponsored by BASF and DuPont*

Thomas Stevenson, DuPont Crop Protection  
302-366-5744, Thomas.M.Stevenson@usa.dupont.com

#### **Sterling B. Hendricks Memorial Award**

*Sponsored by USDA-ARS*

*Cosponsored by AGFD*

Stephen Duke, USDA-ARS  
622-915-1036; stephen.duke@ars.usda.gov

#### **AGRO New Investigator Award**

*Sponsored by Dow AgroSciences*

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

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

*Sponsored by Bayer CropScience*

Diana Aga, University of Buffalo  
716-645-4220, dianaaga@buffalo.edu  
Marja Koivunen, Marrone Bio Innovations  
530-750-2800, mkoivunen@marroneorganics.com

## Technical Symposia

### **Advances in Characterizing Exposures of Human and Ecosystems to Pesticides in Surface Waters**

Nick Poletika, Dow AgroSciences  
317-337-3476, npoletika@dow.com  
Charlie Crawford, USGS  
317-290-3333, cgcrawford@usgs.gov  
Bob Gilliom, USGS  
916-278-3094, rgilliom@usgs.gov

### **Agriculture and Air Quality: Emission Measurements and Models**

Sasha Hafner, USDA-ARS  
301-504-8904, sasha.hafner@ars.usda.gov  
Cody Howard, USDA-ARS  
301-504-5456, cody.howard@ars.usda.gov  
Ronaldo Maghirang, Kansas State University  
785-532-2908, rmaghir@k-state.edu  
Laura McConnell, USDA-ARS  
301-504-6298, laura.mcconnell@ars.usda.gov

### **Agrochemical Use on Tribal Lands in the United States: Understanding Benefits, Issues, and Cultural Influences**

Pat Holden, Waterborne Environmental  
703-777-0005, holdenp@waterborne-env.com  
Bob Gruenig, National Tribal Environmental Council  
505-242-2175, BGrueinig@ntec.org

### **Analytical Challenges for New Crop Protection Products**

*Cosponsored by ENVR*

Todd Anderson, Texas Tech University  
806-885-4567 ext. 231, todd.anderson@ttu.edu  
Kevin Armbrust, Office of the State Chemist - Mississippi  
662-325-3324, armbrust@mscl.msstate.edu

### **Bioenergy and Biochars: Production and Uses**

Tom Potter, USDA-ARS  
229-386-7073, tom.potter@ars.usda.gov  
Paul White, USDA-ARS  
985-872-5042, paul.white@ars.usda.gov  
Cathleen Hapeman, USDA-ARS  
301-504-6451, cathleen.hapeman@ars.usda.gov

### **Bioavailability of Pesticide Residues in the Environment**

Daniel Tessier, DuPont Crop Protection  
302-451-3596, daniel.m.tessier@usa.dupont.com  
Damian Shea, North Carolina State University  
919-515-4663, d\_shea@ncsu.edu

### **Endangered Species Act and Pesticide Regulation: Scientific and Process Improvements**

Kenneth Racke, Dow AgroSciences  
317-337-4654, kracke@dow.com,  
Jeff Jenkins, Oregon State University  
541-737-5993, jeffrey.jenkins@oregonstate.edu  
John Johnston, USDA-FSIS  
202-365-7175, john.johnston@fsis.usda.gov

### **Evaluating Agrochemical Aquatic Exposure Modeling in Relation to Risk Evaluator Needs**

Michael R. Barrett, US EPA  
703-305-6391, barrett.michael@epa.gov  
Mohammed Ruhman, US EPA  
703-605-0644, ruhman.mohammed@epa.gov  
Ronald Parker, US EPA  
703-305-5505, parker.ronald@epa.gov

### **Managed Ecosystems, Pesticides, and Biodiversity**

Aldos Barefoot, DuPont Crop Protection  
302 451-5856, aldos.c.barefoot@usa.dupont.com  
Peter Edwards, Syngenta Crop Protection  
0044-1344414158, peter.edwards@syngenta.com  
T. Bently Wigley, NCASI  
864-656-0840, wigley@clemson.edu

### **Modern Agriculture and Biotechnology – Tools for Sustainability**

Jeanette Van Emon, US EPA  
702-798-2154, vanemon.jeanette@epa.gov  
Patricia Rice, BASF Corporation  
919-547-2668, patricia.rice@basf.com  
Pamela Rice, USDA-ARS  
612-624-9210, pamela.rice@ars.usda.gov  
Ellen Arthur, Bayer CropScience  
913-433-5328, ellen.arthur@bayer.com

### **Non-Extractable Soil Residues and Its Effect on Risk Assessment**

Suresh Mislankar, Bayer CropScience  
913-433-5491, suresh.mislankar@bayercropscience.com  
Paul Francis Syngenta Crop Protection  
336-632-2093, paul.francis @syngenta.com  
Kalumbu Malekani, Smithers Viscient,  
k.malekani@smithers.com

### **Parameters for Pesticide QSAR and PBPK/PD Models Intended for Human Risk Assessment**

James B. Knaak, SUNY at Buffalo  
JBKnaak@aol.com  
Rogelio Tornero-Velez, US EPA  
tornero-velez.rogelio@epa.gov,  
Charles, Timchalk, Pacific Northwest National Laboratory  
charles.timchalk@pnl.gov

### **Veterinary Pharmaceuticals in the Environment**

*Cosponsored by ENVR*

George P. Cobb, Texas Tech University, Lubbock, TX;  
george.cobb@ttu.edu  
Laura L. McConnell, USDA, Beltsville MD;  
laura.mcconnell@ars.usda.gov  
Philip N. Smith, Texas Tech University, Lubbock, TX;  
phil.smith@tiehh.ttu.edu



**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*AGRO International Award for Research in Agrochemicals*

Symposium to Honor Dr. George P. Lahm  
for his Contributions to the Discovery of New Insecticides

Co-Sponsored by BASF Corporation & DuPont Crop Protection

**Purpose of the Symposium**

This symposium is being organized in recognition of the scientific achievements of Dr. George P. Lahm of DuPont Crop Protection in the field of insecticide discovery on the occasion of his being awarded the International Award for Research in Agrochemicals.

**Topics**

Recent progress in the discovery of new insecticides, fungicides, herbicides, and nematocides for use in crop protection and animal health will be reviewed.

The synthesis, design strategies and biological activity of these new areas of chemistry will be reviewed.

*For further information contact the organizers:*

Thomas Stevenson, DuPont Crop Protection, 302-366-5744, Thomas.M.Stevenson@usa.dupont.com

*Abstracts (150 words or less) must be submitted on-line at  
[abstracts.acs.org](http://abstracts.acs.org) by **March 21, 2011***



**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*Advances in Characterizing Exposure of Humans and Ecosystems  
to Pesticides in Surface Waters*

**Purpose of Symposium**

Several laws regulating pesticides (FIFRA, FQPA, SDWA, CWA, ESA) require estimates of concentrations in surface water over various periods of time to inform decision-making related to human exposure through drinking water and protection of aquatic life. These estimates are derived from environmental exposure models and monitoring data.

Depending on the type of human health or ecosystem effect under consideration, the appropriate time frame for exposure estimates can range from a single day to lifetime. Coupled with spatial variation, the range of scientific challenges in obtaining accurate exposure estimates is daunting. This symposium will examine progress and consider future directions.

**Suggested Topics**

- Modeling approaches
- Identification of vulnerable sites
- Monitoring study design
- Statistical inferences from existing data sets
- Relationships between drinking water sources and aquatic life habitat
- Coordination of monitoring programs

*For further information contact the organizers:*

Nick Poletika, Dow AgroSciences, 317-337-3476, npoletika@dow.com  
Charlie Crawford, USGS, 317-290-3333, cgcrawford@usgs.gov  
Bob Gilliom, USGS, 916-278-3094, rgilliom@usgs.gov

*Abstracts (150 words or less) must be submitted on-line at  
abstracts.acs.org by **March 21, 2011***





**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*Agriculture and Air Quality: Emission Measurements and Models*

**Purpose of Symposium**

Agricultural emissions include organic compounds from pesticide application; particulate matter from soil, machinery, and other sources; ammonia, odorous compounds, and other gases from animal waste; and volatile organic compounds (VOCs) from animal feed and other sources. These emissions affect air quality and therefore human and ecosystem health.

Complete characterization of agricultural emissions requires the use of multiple types of measurement technologies. Due to the formation of secondary pollutants such as ozone, understanding interactions between agricultural emissions and emissions from other sources is critical. Models are needed to predict emission, transport, and pollutant transformation at different scales.

The goals of this symposium will be to 1) facilitate information exchange and interaction between individuals working in these and other areas of agricultural emissions, and 2) encourage interaction between researchers who measure the effectiveness of new management practices and those who work to model emission processes. This will increase the pace of research advances and development mitigation strategies.

**Suggested Topics**

- Multi-disciplinary approaches to air quality research
- Measuring agricultural emissions
- Modeling of agricultural emission, transport, or transformation of pollutants
- Sampling or analytical methodologies to measure air pollutants
- Atmospheric chemistry of emitted agricultural pollutants
- Interactions between agricultural and urban or biogenic emissions
- Management practices to reduce emissions

*This symposium will bring together individuals from government, academia, and industry who are working to understand, to quantify, and to mitigate agricultural emissions and their effects on air quality.*

***For further information contact the organizers:***

Sasha Hafner, USDA-ARS, 301-504-8904, sasha.hafner@ars.usda.gov  
Cody Howard, USDA-ARS, 301-504-5456, cody.howard@ars.usda.gov  
Ronaldo Maghirang, Kansas State University, 785-532-2908, rmaghir@k-state.edu  
Laura McConnell, USDA-ARS, 301-504-6298, laura.mcconnell@ars.usda.gov

*Abstracts (150 words or less) must be submitted on-line at [abstracts.acs.org](http://abstracts.acs.org) by **March 21, 2011***



**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*Agrochemical Use on Tribal Lands in the United States:  
Understanding Benefits, Issues, and Cultural Influences*

**Purpose of Symposium**

This symposium will explore modern agricultural practices on tribal lands throughout the United States, including the use of agrochemicals, pest management, water quality monitoring and cultural aspects of pest management and control. In this symposium special attention will be given to how unique cultural influences of Indian tribes may impact ecological and human exposures from tribe to tribe.

One example would be those tribes whose basket weaving is culturally and/or economically significant, and where dermal and oral routes of exposure from constant handling and holding materials in the mouth may not be accounted for in typical evaluations of human health risk.

Papers on agricultural practices used on tribal lands and how these can vary from tribe to tribe, and region to region, and how agrochemical use on tribal lands differs from conventional agricultural practices will be presented.

**Suggested Topics**

- Historical and current use of agrochemicals on tribal lands.
- Integrative pest management practices on tribal lands.
- Environmental monitoring of pesticides on tribal lands.
- Groundwater and surface water issues such as tribal water quality and mapping.
- A comparison of agrochemical use on tribal lands versus agricultural production on other land in the same region.
- Endangered species issues and agrochemical use on tribal lands.
- Lessons from tribal agricultural producers that may beneficially influence other producers in the same region.
- NPDES permitting issues on tribal lands
- “Working Effectively with Tribal Governments” in the context of agricultural practices on tribal lands.
- Unique exposure pathways (ecological and human) for Indian tribes from agrochemical use due to cultural practices.

***For further information contact the organizers:***

Pat Holden, Waterborne Environmental, 703-777-0005, holdenp@waterborne-env.com  
Bob Gruenig, National Tribal Environmental Council, 505-242-2175, BGruenig@ntec.org

*Abstracts (150 words or less) must be submitted on-line at  
abstracts.acs.org by **March 21, 2011***





**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*Analytical Challenges for New Crop Protection Products*  
*Cosponsored by ENVR*

### Purpose of Symposium

Recent developments in biochemistry and genetics have allowed far superior targeting of crop protection chemicals to control pest species. These improvements allow chemical application rates to be reduced significantly. Furthermore, gene insertion into crops allows plants to produce natural toxins that repel or kill pests. Nevertheless, concerns regarding impacts on non-target must be addressed. Such evaluations require toxicity testing in several species and dissipation studies in several media. Human exposures and allergic responses have emerged with the advent of crops that fall into the category of genetically modified organisms (GMOs).

Analytical challenges are significant when addressing exposure to new crop protection chemicals. Improvements in detection limits and analysis of transformation products are required to quantify new synthetic pesticides adequately. Techniques to isolate and quantify toxins from GMOs also require more efficient and precise methods.

### Suggested Topics

- Improvements in quantification of formulated products
- Sample preparatory processes
- Instrumental capabilities
- Study designs
- Specialized SPE sorbents
- Preparative HPLC
- Improved mass spectrometer detection
- Improved data processing

*For further information contact the organizers:*

Todd Anderson, Texas Tech University, 806-885-4567 ext. 231, todd.anderson@ttu.edu  
Kevin Armbrust, Office of State Chemist, Mississippi, 662-325-3324, armbrust@mscl.msstate.edu

*Abstracts (150 words or less) must be submitted on-line at*  
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**CALL FOR PAPERS**  
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*Bioenergy and Biochars: Production and Uses*

**Purpose of Symposium**

Biofuels and bioproducts production and use are providing new revenue sources for growers, playing an increasingly important role in gaining independence from foreign oil, and have the potential to decrease greenhouse gas production.

Pyrolysis of biomass generates biooil, syn gas, and biochar, the latter may be used as a soil amendment and serve as a carbon sink.

Energy is required to produce the raw materials, to process and to convert the materials to useable products, and to transport raw and finished products. Life Cycle Analysis (LCA) tools are needed to determine whether biofuels use and their production have net positive or negative environmental and/or economic effects.

In addition, changes in land use could have broad long term effects on the environment as fallow fields, conservation reserves, and marginal lands are converted to bioenergy feedstock crop production. Potential substitution of bioenergy for food crop production raises food security concerns worldwide.

**Suggested Topics**

- Environmental concerns associated with bioenergy feedstock production – raw material production and post harvest – such as soil loss through erosion, greenhouse gas emissions, water quality, and air quality
- Agronomic practices that address environmental concerns of bioenergy feedstock production
- Generation and optimization of biochar production
- Use of biochars in agricultural production and effects on soil and water quality and on agronomic practices (e.g., pesticide and fertilizer efficacy and fate)
- Quantifying biochar carbon sequestration
- LCA model development quantifying input requirements necessary to induce positive environmental and economic effects
- Changes in air quality associated with the use of biofuel versus petroleum-based fuels
- Use of byproduct streams to generate biofuels, energy, and/or biochar

*For further information contact the organizers:*

Tom Potter, USDA-ARS, 229-386-7073, tom.potter@ars.usda.gov

Paul White, USDA-ARS, 985-872-5042, paul.white@ars.usda.gov

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

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**CALL FOR PAPERS**  
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*Bioavailability of Pesticide Residues in the Environment*

**Purpose of the Symposium**

Analysis of pesticides in environmental samples traditionally involves measurement of solvent extractable residues. For hydrophobic pesticides in particular, this approach results in residue concentrations that are not representative of the amount of pesticide bioavailable (i.e., freely dissolved) to organisms residing in the various environmental compartments. This confounds evaluation of ecotoxicological responses and, ultimately, environmental risk assessment.

In recent years, novel analytical approaches have been developed to distinguish net bioavailable residues of anthropogenic compounds from gross residue concentrations in various environmental matrices. This symposium will bring together interested individuals in agrochemicals, analytical and environmental chemistry, ecotoxicology and regulatory science to explore:

- 1) analytical approaches that selectively extract bioavailable residues from water, sediment or soil;
- 2) ecotoxicology studies that incorporate measures of bioavailable residues; and 3) the risk assessment and regulatory implications of articulating measures of bioavailability in environmental analysis and ecotoxicology.

**Suggested Topics**

- Novel extraction methods for pesticides & other organic compounds
- Novel extraction media for pesticides & other organic compounds
- Analysis of sediment pore water or soil interstitial water
- Ecotoxicological responses relative to bioavailable vs. total concentrations of pesticides & other organics
- Theoretical vs operational definitions of “bioavailable”
- Risk assessment approaches to incorporate the concept of pesticide bioavailability
- Regulatory implications of risk assessments based on pesticide bioavailability

*For further information contact the organizers:*

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Damian Shea, North Carolina State University, 919-515-4663, [d\\_shea@ncsu.edu](mailto:d_shea@ncsu.edu)

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**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
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**Denver, Colorado**

*Endangered Species Act and Pesticide Regulation:  
Scientific and Process Improvements*

**Purpose of Symposium**

Recently FIFRA-related regulatory decisions have been challenged to fully implement key provisions of the Endangered Species Act. Early EPA efforts related to effects determinations and consultations with the U.S. Fish and Wildlife Service or National Marine Fisheries Service have highlighted a number of scientific issues which require resolution. In addition, consultations which have occurred have experienced significant procedural issues requiring attention.

Efforts are underway within EPA, the Federal Services, industry and academia to identify appropriate scientific and process improvements and the purpose of this symposium is to bring together key stakeholders to report on progress and debate future directions.

**Suggested Topics**

- Determining species location and potential overlap with pesticide use
- Pesticide exposure estimates
- Hazard characterization (indirect effects, sub-lethal effects, mixtures)
- Developing and implementing endangered species protections
- Role of state endangered species protection plans
- Effective and economically feasible mitigation options
- Case studies of recent effects determinations and consultations
- Baselines and differentiating effects of pesticides versus other stressors
- Balancing efficiency and transparency in the ESA process

*For further information contact the organizers:*

Kenneth Racke, Dow AgroSciences, 317-337-4654, [kracke@dow.com](mailto:kracke@dow.com),  
Jeff Jenkins, Oregon State University, 541-737-5993, [jeffrey.jenkins@oregonstate.edu](mailto:jeffrey.jenkins@oregonstate.edu)  
John Johnston, USDA-FSIS, 202-365-7175, [john.johnston@fsis.usda.gov](mailto:john.johnston@fsis.usda.gov)

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**CALL FOR PAPERS**  
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**Denver, Colorado**

*Evaluating Agrochemical Aquatic Exposure Modeling  
in Relation to Risk Evaluator Needs*

**Purpose of Symposium**

This symposium will cover the recent advances made in evaluating and improving aquatic exposure models with respect to the informational needs of risk evaluators that use the models for developmental and regulatory decision-making.

The focus of this symposium is on research designed to improve the utility of agrochemical aquatic exposure models for providing the types of predictions required in decision-making in business and regulatory settings.

**Suggested Topics**

- Defining the nature of the predictions needed and the acceptable and unacceptable prediction errors with respect to intended uses
- Temporal and spatial resolution of prediction data needed for current model applications and identifying data that meet these needs
- Identifying and reducing limitations on model input and evaluation data such as:
  - Pesticide / other agrochemical usage distribution in time and space.
  - Land use and practice.
  - Agrochemical application methods
  - Weather – Implications of the reliance on historical data
  - Soil and hydrogeologic data critical elements for exposure prediction
  - Use of monitoring data to evaluate model performance – understanding the limitations of these data for this purpose
- Improvements of fate / chemistry data sets to evaluate model performance
- Statistical evaluation issues
- Techniques for separation of model limitations due to input data inaccuracies from inherent limitations to accurately predict exposure

***For further information contact the organizers:***

Michael R. Barrett, US EPA, 703-305-6391, [barrett.michael@epa.gov](mailto:barrett.michael@epa.gov)

Mohammed Ruhman, US EPA, 703-605-0644, [ruhman.mohammed@epa.gov](mailto:ruhman.mohammed@epa.gov)

Ronald Parker, US EPA, 703-305-5505, [parker.ronald@epa.gov](mailto:parker.ronald@epa.gov)

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*Managed Ecosystems, Pesticides, and Biodiversity*

**Purpose of Symposium**

Agriculture and forestry face increasing challenges to meet the burgeoning demand for food, fuel and fiber products grown in sustainable systems that deliver biodiversity, water quality, and soil quality, ie environmental services.

Pesticides are tools for intensification of agricultural and forest management, and their use may be turned to managing biodiversity along with more focused and active management of the landscape. This session intends to explore some of the effects and options for use of pesticides and habitat management within intensive systems with examples from both forestry and agricultural uses in temperate and tropical climates.

**Suggested Topics**

- Managed ecosystems and their contributions to support of biological diversity
- Role of pesticides in managed ecosystems
- Effects of pesticides on plant communities in field margins, and adjacent natural areas
- Responses of biological diversity to pesticides used to enhance productivity in managed ecosystems
- Uses of pesticides to enhance biological diversity in managed ecosystems (e.g., control of invasive species, creation of habitat features)
- Strategies/technology for minimizing unintended consequences of pesticide use in managed ecosystems
- Biodiversity in tropical agricultural systems
- Effect of invasive plant management on biodiversity in forest ecosystems

*For further information contact the organizers:*

Aldos Barefoot, DuPont Crop Protection, 302 451-5856, [aldos.c.barefoot@usa.dupont.com](mailto:aldos.c.barefoot@usa.dupont.com)  
Peter Edwards, Syngenta Crop Protection, 0044-1344414158, [peter.edwards@syngenta.com](mailto:peter.edwards@syngenta.com)  
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**Denver, Colorado**

*Modern Agriculture and Biotechnology – Tools for Sustainability*

**Purpose of Symposium**

A sustainable society is one that can meet its needs while preserving natural resources for future generations. Key components of this goal are production of a robust food supply while protecting human health and the environment, conserving precious resources, and balancing economic viability.

Population growth will continue to challenge 21st century agriculture. Ensuring adequate food, fiber, and fuel for the growing worldwide population (estimated to reach 3 billion by 2050) will require increased crop yields on less cultivated land, strain our limited natural resources, and increase the need for continued advancement in more sustainable solutions through sound science.

This symposium intends to explore advancements in biotechnology and modern agriculture (including science-based research and regulations, innovations and new methodologies) as tools for addressing these sustainability challenges

**Suggested Topics**

- Sustainability – current science-based technologies, innovations, and the path forward
- Biotechnology tools and methods to enhance or monitor agricultural sustainability (e.g. drought and disease tolerant crops, support ecosystem health)
- Agrochemical innovations
- Sustainability from field to fork
- Stewardship, best management practices, and natural resource conservation
- Life Cycle Assessment (LCA) and modeling
- Metabolomics/proteomics and other methods to enhance/sustain nutritional values of food
- Biodiversity and ecosystem services
- Science-based research, policy, and regulation
- Success stories and real-world examples

*For further information contact the organizers:*

Jeanette Van Emon, US EPA, 702-798-2154, vanemon.jeanette@epa.gov  
Patricia Rice, BASF Corporation, 919-547-2668, patricia.rice@basf.com  
Pamela Rice, USDA-ARS, 612-624-9210, pamela.rice@ars.usda.gov  
Ellen Arthur, Bayer CropScience, 913-433-5328, ellen.arthur@bayer.com

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*Non-Extractable Soil Residues and Its Effect on Risk Assessment*

**Purpose of Symposium**

This symposium will provide an opportunity for scientists to share methodology used to characterize bound agrochemical residues in soil. This will lead to a better understanding of the potential long-term impact of these residues on water quality and ecological exposure.

**Suggested Topics**

- Use of analytical methods to extract and characterize the soil bound residues.
- Use of spectroscopic methods to identify the exact nature of the bound residues
- Movement of bound residues into ground or surface water
- Impact of bound residues on exposure assessments
- Bioavailability of bound residues to plants and other organisms.

*For additional information contact the organizers:*

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Kalumbu Malekani, Smithers Viscient, k.malekani@smithers.com

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**CALL FOR PAPERS**  
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**Denver, Colorado**

*Parameters for Pesticide QSAR and PBPK/PD Models*  
*Intended for Human Risk Assessment*

**Purpose of Symposium**

The purpose of the symposium is to update the scientific community in the development of the parameters required by pesticide PBPK/PD models and their application in model development, simulation, and risk assessment. Pharmacokinetic/pharmacodynamic modeling has been demonstrated to be the key process for relating exposure and response.

A number of models have been written and published for organophosphorus, carbamate and pyrethroid pesticides. Technical aspects of model development such as: 1) parameter development (i.e., physiological/biochemical constants and pharmacodynamics) and 2) model development and simulation/validation have hindered acceptance of PBPK modeling as a means of establishing risks.

**Suggested Topics**

- Gastrointestinal absorption ( ACAT model: permeation constants)
- Skin absorption (kp: permeation constants, metabolism)
- Metabolism (metabolic pathways, metabolites: physical/chemical properties, elimination)
- Tissue/blood partition coefficients/parent/metabolites (experimental, mechanistic and QSAR models)
- Liver/tissue Enzymes ( Vmax, Km for CYPs, carboxylesterases, OP-oxonases, etc)
- Target enzymes (AChE, BuChE, CE) and systems
- Neurotoxicity (pharmacodynamics: modified ion channels, inhibition rate constants, ...)
- QSAR models for predicting PBPK/PD model parameters
- PBPK/PD models for predicting risks

*For further information contact the organizers:*

James B. Knaak, SUNY at Buffalo, (716) 829-2800, JBKnaak@aol.com  
Rogelio Tornero-Velez, US EPA, tornero-velez.rogelio@epa.gov,  
Charles, Timchalk, Pacific Northwest National Laboratory, charles.timchalk@pnl.gov

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**CALL FOR PAPERS**  
**242<sup>nd</sup> ACS National Meeting & Exposition**  
**August 28 – September 1, 2011**  
**Denver, Colorado**

*Veterinary Pharmaceuticals in the Environment*

*Cosponsored by ENVR*

**Purpose of Symposium**

Join us in a multiday symposium to discuss important aspects of veterinary pharmaceuticals in the environment. Our program will span a wide range of topics.

We have a dynamic set of presiders to focus these sessions. The topics presented in this symposium will serve as the foundation for a round table discussion that will occur the afternoon of the final day of the symposium. All of information presented in the session will then be considered in a meeting of an advisory board to be convened soon after the symposium.

**Suggested Topics**

- Veterinary Pharmaceutical Effects on Biochemical Processes
- Veterinary Pharmaceutical Effects in Ecosystems
- Transport of Growth Promoters in the Environment (A)
- Behavior of Growth Promoters in the Environment (B)
- Analytical Methods to Quantify Veterinary Pharmaceuticals

*For further information contact the organizers:*

George Cobb, Texas Tech University, 806-885-4567 ext. 226, george.cobb@tiehh.ttu.edu  
Laura L. McConnell, USDA, Beltsville MD, 301-504-6298, laura.mcconnell@ars.usda.gov  
Philip N. Smith, Texas Tech University, Lubbock, TX, 806-885-4567 ext. 316, phil.smith@tiehh.ttu.edu

*It is the organizers desire to publish an ACS text from these proceedings.*

*If you are willing to participate in that activity, please note that in your inquiries to us.*

*Abstracts (150 words or less) must be submitted on-line at  
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<b>Metabolism and Kinetics:</b>	Goat, hen, rat and plant metabolism, PK/TK, ADME and tissue distribution, <i>in vitro</i> and <i>in vivo</i> biotransformation, 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:</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. Environmental monitoring (air and water). Tobacco pyrolysis.
<b>REACH Program:</b>	Product chemistry, substance identification, environmental fate.

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Website: www.ptrl-europe.de

**Website: [www.ptrlwest.com](http://www.ptrlwest.com)**

**Good Science, no surprises**

# AGRO Program Committee Report

In addition to the program Division Officers and Executive Committee members, the Program Committee is made up of standing and volunteer members. Standing Members include the Awards, Communications, Education, and International Outreach Committee Chairs. 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 Al Barefoot or one of the Division Officers.

A list of standing topic areas (p. 25) was established which reflects better the broader areas of agricultural research being addressed by AGRO. These topics will be part of each AGRO program 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.**

## Future ACS National Meetings & Expositions

241<sup>st</sup> ACS National Meeting & Exposition  
March 27-31, 2011  
Anaheim, California

242<sup>nd</sup> ACS National Meeting & Exposition  
August 28-September 1, 2011  
Denver, Colorado

243<sup>rd</sup> ACS National Meeting & Exposition  
March 25-29, 2012  
San Diego, California

244<sup>th</sup> ACS National Meeting & Exposition  
August 19-23, 2012  
Philadelphia, Pennsylvania

245<sup>th</sup> ACS National Meeting & Exposition  
April 7-11, 2013  
New Orleans, Louisiana

246<sup>th</sup> ACS National Meeting & Exposition  
September 8-12, 2013  
Indianapolis, Indiana

247<sup>th</sup> ACS National Meeting & Exposition  
March 16-20, 2014  
Dallas, Texas

248<sup>th</sup> ACS National Meeting & Exposition  
August 24-28, 2014  
San Francisco, California

249<sup>th</sup> ACS National Meeting & Exposition  
March 22-26, 2015  
Denver, Colorado

250<sup>th</sup> ACS National Meeting & Exposition  
August 16-20, 2015  
Boston, Massachusetts

251<sup>st</sup> ACS National Meeting & Exposition  
March 13-17, 2016  
San Diego, California

252<sup>nd</sup> ACS National Meeting & Exposition  
August 21-25, 2016  
Philadelphia, Pennsylvania

253<sup>rd</sup> ACS National Meeting & Exposition  
April 2-6, 2017  
San Francisco, California

254<sup>th</sup> ACS National Meeting & Exposition  
September 10-14, 2017  
St. Louis, Missouri

255<sup>th</sup> ACS National Meeting & Exposition  
March 18-22, 2018  
New Orleans, Louisiana

256<sup>th</sup> ACS National Meeting & Exposition  
August 19-23, 2018  
Boston, Massachusetts

257<sup>th</sup> ACS National Meeting & Exposition  
March 31-April 4, 2019  
Orlando, Florida

258<sup>th</sup> ACS National Meeting & Exposition  
August 25-29, 2019  
San Diego, California



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- PE5, EXPRESS PRZM/EXAMS
- Vegetative buffer modeling
- SWAT
- RZWQM, LEACHP

## Field Studies

- Community drinking water monitoring
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  - Simulated rainfall runoff
  - Edge-of-field runoff and in-stream monitoring
- Regional groundwater monitoring

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Chris Stone, President / 802.229.6433

John Hanzas, Field Services / 802.229.1877

Michael Winchell, Spatial Analysis / 802.229.1882

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# Programming & Outreach Activities

## 2011 – 2014

Activity/Event	Leader(s)	Status	Actions Required
48 <sup>th</sup> Florida Pesticide Residue Workshop July 17-20, 2011 St Pete Beach, Florida	Kevin Armbrust Steve Lehotay	<ul style="list-style-type: none"> <li>Program areas listed at web site flworkshop.com</li> </ul>	<ul style="list-style-type: none"> <li>Check website for abstract deadline flworkshop.com</li> </ul>
43 <sup>rd</sup> IUPAC World Chemistry Congress July 30-August 7, 2011 San Juan, Puerto Rico	Laura McConnell Ken Racke	<ul style="list-style-type: none"> <li>AGRO-sponsored symposium included in program</li> </ul>	<ul style="list-style-type: none"> <li>Abstract submission open</li> </ul>
242 <sup>nd</sup> ACS National Meeting August 28-September 1, 2011 Denver, Colorado	Al Barefoot	<ul style="list-style-type: none"> <li>Call for Papers available on AGRO website</li> </ul>	<ul style="list-style-type: none"> <li>Submit abstracts by March 21, 2011 at the ACS website abstracts.acs.org</li> </ul>
<b>Activities 2012 – 2014</b>			
5 <sup>th</sup> Pan-Pacific Conference on Pesticide Science Tsukuba, Japan July 8-12, 2012	H. Matsumoto Steve Duke Jim Seiber John Clark	<ul style="list-style-type: none"> <li>Meeting under development with Pesticide Science Society of Japan as lead</li> </ul>	<ul style="list-style-type: none"> <li>Check Pesticide Science Society of Japan website for updates <a href="http://www.soc.nii.ac.jp/pssj2/eng/index.html">http://www.soc.nii.ac.jp/pssj2/eng/index.html</a></li> </ul>
49 <sup>th</sup> Florida Pesticide Residue Workshop July 2012 St Pete Beach, Florida	Kevin Armbrust Steve Lehotay	<ul style="list-style-type: none"> <li>Program under development</li> </ul>	
244 <sup>th</sup> ACS National Meeting August 19-23, 2012 Philadelphia, Pennsylvania	John Clark	<ul style="list-style-type: none"> <li>Symposia planning at Blues and Brews on Wednesday August 31, 2011 in Denver</li> </ul>	<ul style="list-style-type: none"> <li>Submit symposia proposals (in Call for Papers format) to John Clark by November 1, 2011 for inclusion in Spring 2012 PICOGRAM</li> </ul>
246 <sup>th</sup> ACS National Meeting Indianapolis, Indiana September 8-12, 2013	2012 Vice Chair	<ul style="list-style-type: none"> <li>Symposia planning at Blues and Brews on Wednesday, August 22, 2012</li> </ul>	<ul style="list-style-type: none"> <li>Submit symposia proposals (in Call for Papers format) to 2012 Vice Chair by November 1, 2012 for inclusion in Spring 2013 PICOGRAM</li> </ul>
248 <sup>th</sup> ACS National Meeting & 13 <sup>th</sup> IUPAC Pesticide Congress San Francisco, CA August 24-28, 2014	2013 Vice Chair Laura McConnell Ken Racke	<ul style="list-style-type: none"> <li>Follow progress on website <a href="http://www.iupac2014.org">www.iupac2014.org</a></li> </ul>	<ul style="list-style-type: none"> <li>Sign up for email updates at website <a href="http://www.iupac2014.org">www.iupac2014.org</a></li> </ul>

## Standing Program Topics

- 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
- Synthesis of Bioactive Compounds
- Residue and Metabolism Chemistry
- Advances in Agrochemical Residue and Metabolism Chemistry
- Human and Animal Health Protection: Veterinary Pharmaceuticals, Antimicrobials, Worker Protection Products
- 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



# Report from the Florida Pesticide Residue Workshop

Submitted by Kevin Armbrust

The Florida Pesticide Residue Workshop (FPRW) was held on July 18-21<sup>st</sup>, 2010 at the Tradewinds Island Grand in St Pete Beach, Florida. The meeting began with a Town Hall Forum on Sunday afternoon, featuring a timely discussion of the Gulf Oil Spill and the analytical methods used for the analysis of polycyclic aromatic hydrocarbons (PAHs) in seafood. The presence of PAHs in seafood forms the basis of reopening gulf coast waters to commercial and recreational fishing in light of the oil spill and was well attended.

The meeting featured three days of oral technical presentations within symposia including a general session entitled "Cream of the Crop Technical Talks" (which is a great way of saying general papers!!). In addition, the meeting featured a forum on Mass Spectrometry, posters presented each day, a full vendor exhibition and free vendor sponsored breakfast and luncheon seminars on technical topics. The AGRO division was given a booth at the exhibition, and we distributed copies of the *PICOGRAM* and information on the upcoming Pan Pacific Conference and the joint meeting at the ACS meeting in San Francisco in 2014 of the IUPAC Congress of Pesticide Chemistry and the division of AGRO.

The meeting was very well attended with 297 registrants representing 18 countries from 6 continents and hosted 36

exhibitors including all of the major instrument manufactures. The program committee chaired by Steve Lehotay from the USDA/ARS put on a dynamite program. There were 30 oral presentations delivered by renowned speakers, over a third of whom were international, and represented Industry, Academia, Non-governmental Organizations (NGOs), State and US Government (including FDA, EPA and USDA). High praise was given to the technical quality of the talks and posters and most attendees expressed excitement about returning next year.

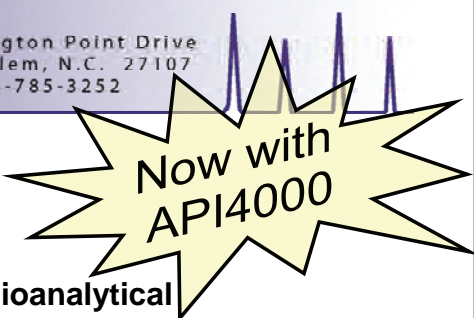
This was the first meeting of the FPRW organized by ACS meetings. Much of the success of this meeting was attributed to advertising and organization by ACS and Flagworks, a strong technical program, use of surveys to improve the meeting, an active collaboration with the Latin American Pesticide Residue Workshop (LAPRW) and the European Pesticide Residue Workshop (EPRW) for advertising in programs, and dedicated organizing and program committees and volunteers.

Flagworks, the organizing board of the FPRW has signed a 5 year agreement to hold this meeting at the Tradewinds. This is one of the few meetings that provides focused in-depth discussion of technical details involved with pesticide and contaminant residue chemistry and that is conducive for networking amongst peers involved with this work. The meeting is a great value given the information provided. My staff always bring back new techniques and make contacts that assist them in their daily operations. The next meeting will be July 17-20<sup>th</sup> in 2011. We hope to see everyone there!!

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# 48th ANNUAL FLORIDA PESTICIDE RESIDUE WORKSHOP

*July 16-20, 2011  
TradeWinds Island Resort  
St. Pete Beach, Florida*



Information and online registration at  
[www.FLworkshop.com](http://www.FLworkshop.com)  
May 1 deadline for talks and June 1 for posters

## ***Oral sessions to include:***

- Analytical methods and innovative technologies for pesticide and other chemical residues in foods and environmental matrices
- Analytical methods for veterinary drug residues
- Sample preparation methods
- Mass spec instrumental methods, techniques and problem solving
- International programs in residue analysis
- Environmental & Seafood sample analysis related to Gulf oil spill
- Analysis of unknowns
- Monitoring programs and priorities
- Regulatory issues

## ***Short Courses on Saturday to Sunday, July 16-17th***

**Poster sessions to be held each morning in the Exhibits area  
A prize will be given for the top poster as voted by the attendees**

Manuscripts related to the meeting will be considered for publication in a special section of ***Journal of Agricultural and Food Chemistry***

**Vendor sessions will be held Sun. evening (7/17) and during breakfasts and lunches each day during the event**

Notes: There will be an informal forum on technical and managerial issues from 1:30-4:30 pm on Sunday afternoon.

The meeting ends at 5 pm on Wednesday this year.



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*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*

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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



# LAPRW 2011

## 3<sup>rd</sup> Latin American Pesticide Residue Workshop Food and Environment

Montevideo, Uruguay. May 8 - 11, 2011

### INVITED SPEAKERS :

Amadeo R. Fernandez-Alba  
Andre de Kok  
Annemieke Farenhorst  
Antonio Valverde  
Caroline Harris  
Eloisa Dutra Caldas  
Horacio Beldomenico  
Horacio Heinzen

Ionara R. Pizzutti  
Jairo Guerrero Dallos  
Laura MacConnell  
Lutz Alder  
Mette Erecius Poulsen  
Michelangelo Anastasiades  
Paula Medina Pastor  
Ronald Parker

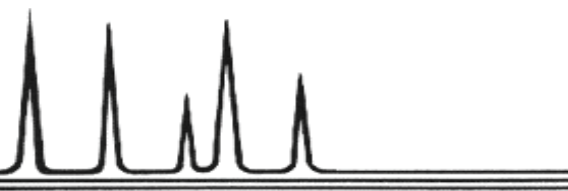
Sergio Nanita  
Sonja Masselter  
Steven Lehotay  
Tom Hardy  
Vincent Hanot



You are welcome to our event in Montevideo, URUGUAY in 2011 !

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# The Fifth Pan Pacific Conference on Pesticide Science

5th PPCPS

**Tsukuba, Japan,  
July 8–12, 2012**

## ***Goals***

The conference will focus on new developments, modern, forward-oriented research, innovative technologies and solutions in pesticide science. The conference will give pesticide scientists from the Pan Pacific regions and others the opportunity to present and to discuss their newest research results.

## ***Language***

The official language will be English.

## ***Further Information***

Information on registration fees, accommodation, submission of abstracts, deadline, etc. will be provided with the 2nd circular and call for papers in March 2011.

## ***Location of Conference***

Tsukuba International Conference Center,  
Tsukuba, Ibaraki, Japan  
<http://www.epochal.or.jp/>  
*Tsukuba city is located 60 km northeast of central Tokyo and 50 km northwest of Narita International Airport.* Tsukuba is one of the leading science cities of the world where nearly 18,000 researchers at a total of 300 government and private research organizations engage in scientific and technological researches.

## ***Contact***

Keep yourself informed and visit the PSSJ web site to check on conference developments and news.  
<http://wwwsoc.nii.ac.jp/pssj2/>

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## ***Congress Committee***

*The 5th Pan Pacific Conference on Pesticide Science  
is jointly organized by the  
Pesticide Science Society of Japan  
and the  
AGRO Division of the American Chemical Society*

Chair

Hiroshi Matsumoto, University of Tsukuba, Japan

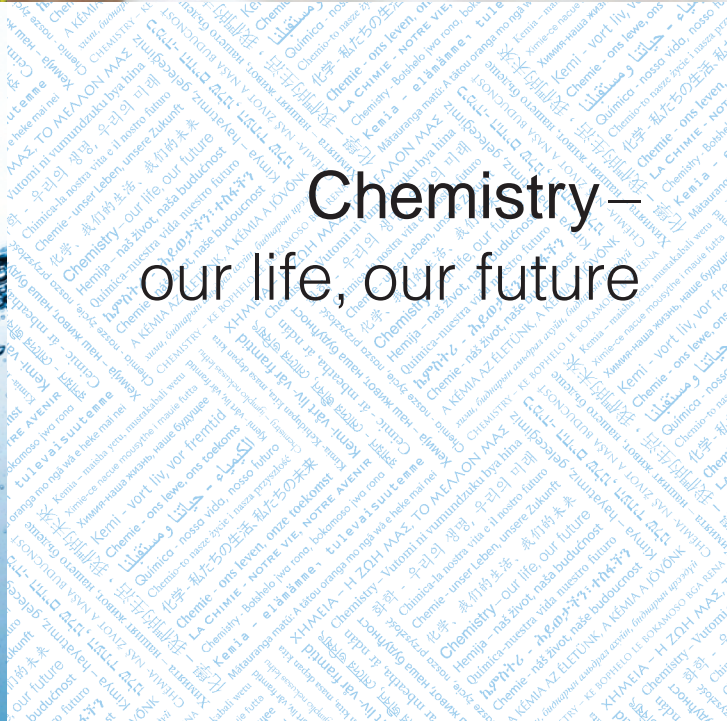
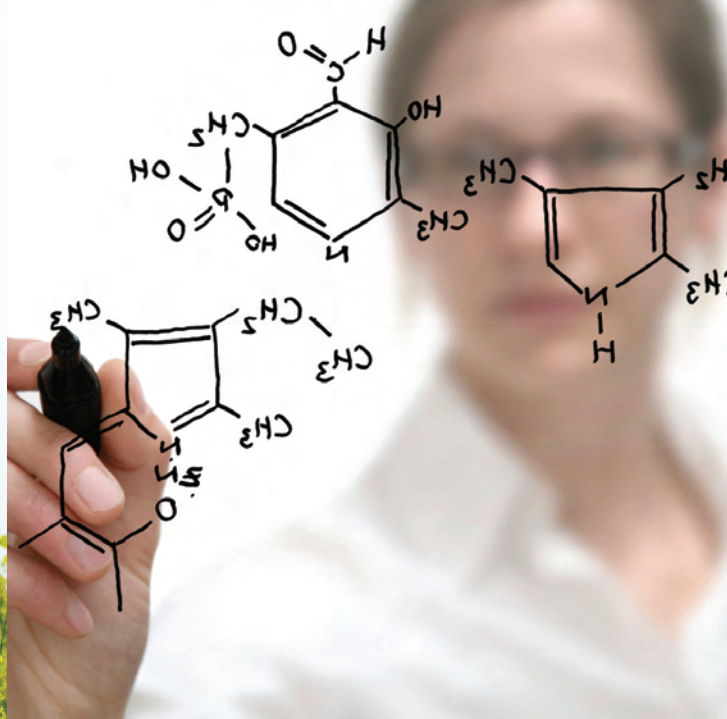
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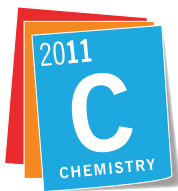
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# 13<sup>TH</sup> IUPAC CONGRESS OF PESTICIDE CHEMISTRY CROP, ENVIRONMENT, AND PUBLIC HEALTH PROTECTION: TECHNOLOGIES FOR A CHANGING WORLD

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## MAJOR TOPIC AREAS WILL INCLUDE:

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# **ACS National Meeting & Expo**

## **AGRO Division**

### **Spring 2010**

**A synopsis compiled by Nancy Ragsdale**

The American Chemical Society (ACS) held their 239<sup>th</sup> National Meeting & Exposition on March 21 – 25, 2010 in San Francisco, CA; the meeting theme was "Chemistry for a Sustainable World". Approximately 12,500 technical papers were presented. **AGRO accepted 360 abstracts, exceeding the Division's previous abstract record, for 24 symposia.**

#### **International Award**

Prof. Shinzo Kagabu, the principal discoverer and father of neonicotinoid insecticides received the International Award for Research in Agrochemicals. This award, presented by AGRO and co-sponsored by BASF Corporation and DuPont Crop Protection, recognized Prof. Kagabu's discoveries, developed by Bayer, and the background he laid for a family of compounds from several companies. Following the award presentation he spoke on "Discovery of imidacloprid and afterward development: View from strategic molecular design". A symposium on strategic molecular design of neonicotinoid insecticides followed. Kagabu received his Masters from Tohoku University, Japan, and his PhD from Freiburg University, Germany. He first prepared imidacloprid in 1985 when he was a researcher in Nihon Tokushu Noyaku Seizo (now Bayer CropScience, Japan). While he was in this laboratory he also discovered another neonicotinoid, thiacloprid, and the rice blast fungicide, carpropamid. Kagabu moved to an academic research position at Gifu University, Japan, where he continued neonicotinoid research as well as fundamental research on cyclopropane chemistry. His studies have resulted in 150 papers and patents. He has received two Pesticide Science Society of Japan Awards; the Japanese Minister of Agriculture, Forestry, and Fishery Award; and the Otto Bayer Medal in Germany.

#### **Sterling B. Hendricks Memorial Lectureship**

This award, sponsored by USDA-ARS with co-sponsors AGRO and the Agricultural and Food Chemistry Divisions, was presented to Prof. Chris Somerville in recognition of his outstanding contributions to the chemical science of agriculture. He is Director of the Energy Biosciences Institute, which is a research institute at the University of California (UC) Berkeley, Lawrence Berkeley National Lab and at the University of Illinois Urbana-Champaign. He is the Philomathia Professor of Alternative Energy at Berkeley. Previously he held positions at Stanford as Professor and Director of their Carnegie Institution for Science, and Professor at the Michigan State University Dept. of Energy Plant Research Laboratory. Prof. Somerville was the first chair of the Arabidopsis Genome Initiative, an international collaboration that completed the first plant genome sequence. Most of his research contributions are related to biosynthesis and modification of membrane and storage lipids and the biosynthesis of polysaccharides with the most recent focus on

determining basic mechanisms of cellulose biosynthesis. Prof. Somerville is a member of the US National Academy of Sciences, the Royal Society and the Royal Society of Canada. He has received many scientific awards including the Gibbs and Schull Awards (American Society of Plant Biologists), the Mendel Medal (Genetics Society), the Hopkins Medal (Biochemical Society), and the Khumo Award (Plant Molecular Biology Society). Prof. Somerville's lecture was entitled "Development of cellulosic biofuels".

#### **Symposium and Celebration in Honor of Prof. John Casida**

Since 1951 Prof. John Casida, his alumni and colleagues have contributed an enormous body of knowledge to agrochemical toxicology. AGRO held a symposium and celebration to honor him for his leadership and contributions to the chemistry, metabolism and mode of action of agrochemicals and also to recognize his 80th birthday. Prof. Casida holds the William Muriece Hoskins Chair in Chemical and Molecular Entomology at UC, Berkeley. He received his PhD from the University of Wisconsin, Madison. He is a member of the US National Academy of Sciences, the European Academy of Sciences and the Royal Society. He has received numerous awards, and his research has resulted in 31 patents and almost 800 publications. This wealth of knowledge continues to provide a basis to determine the commercial viability and potential impact of pesticides on human health and the environment. The symposium that followed Prof. Casida's presentation, "Exploring insecticide neurotox and detox", highlighted research on agrochemical insecticide classes, target sites, and potential environmental impacts.

#### **New Investigator Award**

Dr. Kyong Sup Yoon received the New Investigator Award presented by AGRO and sponsored by Dow AgroSciences. This award recognizes scientists who have obtained a doctoral degree and are actively conducting academic, industrial, consulting or regulatory studies related to aspects of agrochemicals. Dr. Yoon received his PhD from the University of Massachusetts, Amherst, and is currently an adjunct assistant professor in the Dept. of Natural Resources and Conservation at that university, where he is laboratory manager under Prof. J. Marshall Clark's supervision. His research focus is on elucidation of the specific binding site of a pyrethroid insecticide on a subunit of mammalian G-protein and on a subunit of the rat voltage-sensitive sodium channel. His presentation addressed action of decyanoazidofenvalerate on the rat sodium channel.

#### **Student Awards**

AGRO gave 17 Education Awards to help undergraduate and graduate students defray costs of attending and presenting posters in AGRO during the ACS meeting. Posters were displayed and judged in a special poster session; first, second and third place winners received additional cash awards.

#### **ACS Team Innovation Award**

This award, sponsored by the ACS Corporation Associates (a link between ACS and chemical and allied industries), serves "to highlight the value and importance of technical teams and

teamwork to the chemical and allied industries by recognizing a multidisciplinary team for successfully moving an innovative idea to a product now in commercial use". The award recipients, from DuPont Crop Protection, were:

**Mr. Daniel Cordova**

**Dr. John H. Freudenberger**

**Dr. Thomas P. Selby**

**Dr. Thomas M. Stevenson**

Because their teamwork led to successful crop protection chemicals, they gave their award talks in an AGRO session devoted to advances in the discovery of new agrochemicals. They discussed the discovery of the new, broad-spectrum insecticide Rynaxypyr®, an anthranillic diamide which acts at the ryanodine receptor to block a non-voltage-gated intracellular calcium channel in the partially open state thus affecting calcium release.

### **Spencer Award**

The Kansas City Section of the ACS annually sponsors the Spencer Award, which is given for outstanding achievement in food and agricultural chemistry. **Dr. George P. Lahm**, DuPont Crop Protection, received this award in October, 2009 in Kansas City. Because of the scope of Dr. Lahm's research and the limited audience that heard his award address, AGRO invited him to repeat his presentation, "Evolution of the diamide through isoxazoline insecticides", at the national meeting. Dr. Lahm has received numerous awards including DuPont Fellow, DuPont's highest technical rank, and the Lavoisier Medal, DuPont's highest technical award for lifetime contributions.

### **Symposia**

Fourteen oral symposia were held in addition to sessions associated with the preceding awards. There were also three poster sessions, which included general topics, the student award posters, and poster presentations associated with a number of the symposia. The following provides a brief synopsis.

- **Pesticide Mitigation Strategies for Surface Water Protection:** Scientists addressed the latest research in this area as well as the challenges and opportunities in getting adoption and implementation of mitigation measures.
- **Contemporary Food Safety Issues: Mitigating Risks from Production to Processing:** Presentations included detection and analysis of disease-related entities, techniques to reduce risks of contaminants during processing, packaging and shelf life, and development of more environmentally benign materials to treat food sources.
- **Invasive Species: Is Chemistry up to the Task?:** This symposium focused on successes as well as failures in the battle against invasive pests in agriculture with an emphasis on the importance of chemicals to prevent pest establishment.
- **Understanding Greenhouse Gases from Agriculture:** An understanding of baseline levels,

contributing factors and complex episodic cycles driving greenhouse emissions was the focus of this symposium.

- **Increasing the Utility of Terrestrial Field Dissipation Data:** Topics ranged from international harmonization of study guidelines; climate, soil types and design considerations in comparing data; and use and comparison of models in predicting residues in California groundwater.
- **Push for Greener Formulations: Evolving Regulatory Framework for Inerts and Co-Formulants:** Presentations addressed the move to new technologies and greener formulations in response to evolving regulation and data requirements.
- **Advances in Biofuels & Bioproducts: Life Cycle Analysis (LCA) & Sustainability:** This symposium included presentations related to LCA tools needed to determine net positive or negative environmental effects and also sustainability issues.
- **Comparing Conventional and Biotechnology-Based Pest Management:** Scientists addressed various considerations that can be used in overall efforts to compare and contrast approaches for environmental risk assessment, IPM, resistance management and discovery.
- **Pesticides in Urban Settings/Aggregate Human Exposure:** This symposium included presentations related to use of pesticides, IPM, exposure factors and exposure reduction.
- **Pesticides and Urban Water Quality: Monitoring, Modeling, and Mitigation:** Presenters discussed recent advances in source identification, sampling/analytical methodology, transport mechanisms, and fate-transport modeling.
- **Efficient Application of Pesticides for Sustainable and Effective Crop Protection:** This symposium focused on identification of problems in addition to newer technologies that may improve applications and safety while reducing drift.
- **Emerging Contaminants in California's Coastal and Estuarine Ecosystems:** Presentations were made on occurrence, sources, fate and impact of a variety of anthropogenic chemicals.
- **Modern Chiral Pesticides: Enantioselectivity and its Consequences:** This was the third Agrochemical Division symposium on chiral pesticides, and the focus was on environmental impact, transformation, metabolism and toxicity of single- or enriched-enantiomer products.
- **Assessing Exposure of Pollinators to Systemic Pesticides:** Presenters addressed assessment of hive/pollen/nectar, interpretation of data, pesticide residues and improvement of risk assessment.



# Glyphosate Resistance in Crops and Weeds: History, Development, and Management

Vijay K. Nandula (Editor)

978-0-470-41031-8 • Hardcover • 344 pages • August 2010 • \$99.95

## Presents the latest technology and strategies for managing glyphosate-resistant weeds

Glyphosate-resistant (GR) crop technology has revolutionized crop production in many parts of the world, offering such benefits as reduced fuel costs and improved soil conservation; however, GR weeds are becoming one of the most pressing problems in crop protection, threatening the sustainability of glyphosate and GR crop technology. This book details the development of glyphosate resistance, offering interdisciplinary approaches for managing GR weeds and reducing their spread.

*Glyphosate Resistance in Crops and Weeds* features contributions from leading experts in the many disciplines needed to fully understand GR crops and weeds. The authors have reviewed and analyzed all the latest research findings as well as the latest technologies developed to manage GR crops and weeds. Coverage includes:

- Developmental processes of first and subsequent generations of GR crops
- Separate chapter on the economic impact of GR weeds
- Strategies for effectively managing glyphosate resistance
- Regional management issues surrounding GR weeds around the world
- Genetics and genomics of glyphosate resistance
- Methods of testing for glyphosate resistance

References guide readers to the primary literature for further investigation of individual topics. A compilation of commonly used terms in herbicide resistance and their definitions is also provided.

With the productivity and health of croplands threatened around the world by GR weeds, this review of glyphosate resistance is essential for agricultural chemists, weed scientists, plant scientists, crop consultants, and agronomists.

**VIJAY K. NANDULA, PhD**, is an assistant research professor at Mississippi State University. His current research focuses on monitoring, documenting, and characterizing the herbicide-resistant weed populations in Mississippi, centering on their level of resistance, mechanisms, multiple resistance, and biology.

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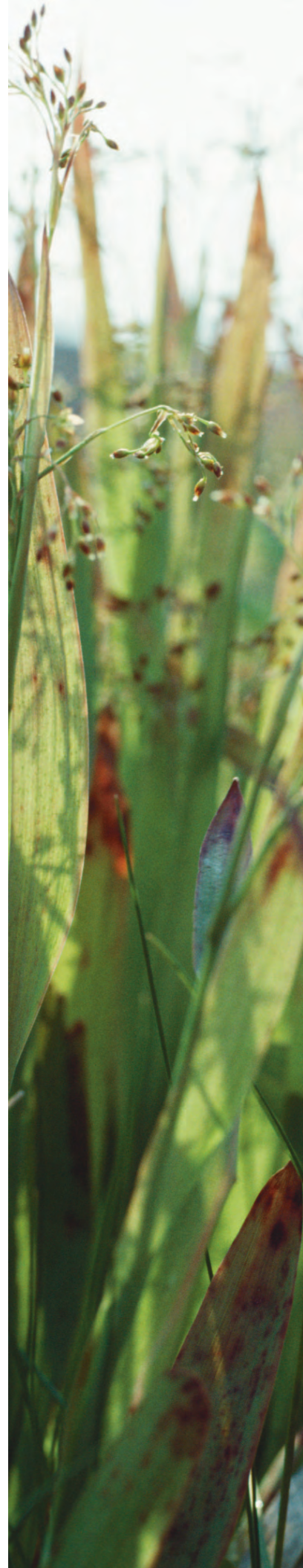
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<b>Division Chair</b>			
Kenneth D. Racke	317-337-4654		kracke@dow.com
<b>Program Chair</b>			
Aldos C. Barefoot	302-451-5856	FAX: 302-451-5941	aldos.c.barefoot@usa.dupont.com
<b>Vice Chair</b>			
John M. Clark	413-545-1052	FAX: 413-545-2115	jclark@vasci.umass.edu
<b>Secretary</b>			
Liliana Schwartz	302-451-5842	FAX: 302-451-5943	liliana.schwartz@usa.dupont.com
<b>Treasurer</b>			
John J. Johnston	202-365-7175		john.johnston@fsis.usda.gov
EXECUTIVE COMMITTEE MEMBERS			
<b>2009 – 2011</b>			
Steve Duke	stephen.duke@ars.usda.gov	Laura McConnell	laura.mcconnell@ars.usda.gov
Cathleen Hapeman	cathleen.hapeman@ars.usda.gov	Sharon Papiernik	sharon.papiernik@ars.usda.gov
Keri Carstens	keri.carstens@pioneer.com	<b>2011 – 2013</b>	
Ann Lemley	atl2@cornell.edu	Julie Eble	julie.eble@criticalpathservices.com
Chris Peterson	cjpeterson@fs.fed.us	Scott Jackson	Scott.jackson@basf.com
<b>2010 – 2012</b>		Pamela Rice	pamela.rice@ars.usda.gov
Todd Anderson	todd.anderson@tiehh.ttu.edu	Jim Seiber	jnseiber@ucdavis.edu
Rodney Bennett	rodney.bennett@jframerica.com	Keith Solomon	ksolomon@uoguelph.ca
Allan Felsot	afelsot@tricity.wsu.edu		
COUNCILORS			
<b>2009 – 2011</b>		<b>Alternates</b>	
Jeanette Van Emon	vanemon.jeanette@epa.gov	Rodney Bennett	
Don Wauchope	don_wauchope@citcom.net	Barry Cross	
FERT Program Committee			
William Hall, <b>Chair</b>	863-428-5099	bill.hall@mosaicco.com	
Nominating Committee			
Ellen Arthur, <b>Chair</b>	913-433-5328	FAX: 913-433-5389	ellen.arthur@bayercropscience.com
Kevin L. Armbrust	662-325-3324	FAX: 662-325-7807	armbrust@mscl.msstate.edu
John J. Johnston	202-365-7175	john.johnston@fsis.usda.gov	
Awards Committee			
James Seiber, <b>Chair</b>	530-752-1465	jnseiber@ucdavis.edu	
Members			
John Casida	Robert Hollingworth	Willis Wheeler	
Fritz Fuehr	Ralph Mumma	Izuru Yamamoto	
Bruce Hammock	Nancy Ragsdale		
Ernest Hodgson	Don Wauchope		
Membership Committee			
Dan Stout, <b>Chair</b>	919-541-5767	FAX: 919-541-0905	stout.dan@epa.gov
John J. Johnston	202-365-7175	john.johnston@fsis.usda.gov	
Communications Committee			
Cathleen Hapeman, <b>Chair</b>	301-504-6451	FAX: 301-504-5048	cathleen.hapeman@ars.usda.gov
Members			
Tim Ballard – email newsletter	Laura McConnell – Ads/Website Coordinator	Jay Gan – Abstracts Editor	
	Sharon Papiernik – Awards Coordinator		
Finance Committee			
Joel Coats, <b>Chair</b>	jcoats@state.edu		
John J. Johnston, <b>Ex Officio</b>	john.johnston@fsis.usda.gov		
Kevin Armbrust	Al Barefoot	Barry Cross	
Scott Jackson	Terry Spittler		

# *Officers and Committees of the AGRO Division*

(Continued)

Hospitality Committee			
<b>Coffee Hour</b>			
Patricia Rice	919-547-2668	FAX: 919-547-2850	patricia.rice@basf.com
Jim Brady	336-643-1158	Cell: 336-708-0097	jfbrady@bellsouth.net
Julie Eble	610-558-3001		Julie_eble@criticalpathservices.com
Joe Massey	662-325-4725	FAX: 662-325-8742	jmassey@pss.msstate.edu
<b>Social Hour</b>			
Aldos Barefoot	302-451-5856	FAX: 302-451-5941	aldos.c.barefoot@usa.dupont.com
Jeff Jenkins	541-737-5993	FAX: 541-737-5001	jeffrey.jenkins@orst.edu
Bylaws Committee			
Rodney Bennett	610-878-6476		rodney.bennett@jrfamerica.com
Patron Relations Committee			
Scott Jackson, <b>Co-Chair</b>	919-547-2349	FAX: 919-547-2407	scott.jackson@basf.com
Del Koch, <b>Co-Chair</b>	573-443-9003		kochd@abclabs.com
Laura McConnell	301-504-6298	FAX: 30-504-5048	laura.mcconnell@ars.usda.gov
Future Special Conference Committee			
John M. Clark, <b>Chair</b>	413-545-1052		jclark@vasci.umass.edu
Robert Hollingsworth			
Public Relations Committee			
Jeff Jenkins, <b>Chair</b>	541-737-5993	FAX: 541-737-5001	jeffrey.jenkins@orst.edu
<b>Members</b>			
Ann Lemley	James Seiber		
Education Committee			
Diana Aga, <b>Co-Chair</b>	716-645-4220		dianaaga@buffalo.edu
Marja Koivunen, <b>Co-Chair</b>	530-750-2800		mkoivunen@marroneorganics.com
John Bourke, <b>Investment Coordinator</b>			
Cathleen Hapeman, <b>New Investigator Award Organizer</b>	301-504-6451	FAX: 301-504-5048	cathleen.hapeman@ars.usda.gov
<b>Members</b>			
David Barnekow	Barry Cross	Glenn Miller	
John M. Clark	Vincent Hebert	Judd O. Nelson	
Joel Coats	Ann Lemley	William Ridley	
AGRO Program Committee			
Officers, Executive Committee, Councilors, Volunteer Members (see below), and Standing Members (Awards, Communications, Education, and International Outreach Committee Chairs)			
Joe Massey	jmassey@pss.msstate.edu	Steven A. Ripp	saripp@utk.edu

## *Past Chairs of AGRO Division*

1969	Donald G. Crosby	1983	G. Wayne Ivie	1997	Willis Wheeler
1970	Elvins Y. Spencer	1984	Robert M. Hollingsworth	1998	Judd O. Nelson
1971	Wendell Phillips	1985	John Harvey, Jr.	1999	Richard Honeycutt
1972	Philip C. Kearney	1986	Henry J. Dishburger	2000	Ann T. Lemley
1973	Roger C. Blinn	1987	James N. Seiber	2001	Jeffery Jenkins
1974	Charles H. Van Middlelem	1988	Paul A. Hedin	2002	Terry D. Spittler
1975	Henry F. Enos	1989	Gustave K. Kohn	2003	Jeanette Van Emon
1976	Julius J. Menn	1990	Willa Garner	2004	Rodney Bennett
1977	James P. Minyard	1991	Guy Paulson	2005	Allan Felsot
1978	Gerald G. Still	1992	Joel Coats	2006	R. Donald Wauchope
1979	S.K. Bandal	1993	Larry Ballantine	2007	Laura L. McConnell
1980	Jack R. Plimmer	1994	Nancy N. Ragsdale	2008	John J. Johnston
1981	Marguerite L. Leng	1995	Don Baker	2009	Kevin L. Armbrust
1982	Gino J. Marco	1996	Barry Cross	2010	Ellen Arthur

# Minutes from the AGRO Division Business Meeting

## 239<sup>th</sup> ACS National Meeting San Francisco, California

March 21, 2010; 5:00pm – 9:00pm  
Moscone Center, Room 3011 West Building  
5:00 pm Sharp

**Chair – Ellen Arthur**

### **Mission**

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

### **Vision:**

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.

## **GENERAL**

### ***I. Secretary Report – Liliana Schwartz***

- The Secretary's report was presented at the 238<sup>th</sup> ACS Meeting in Washington, DC.
- Washington, DC Minutes Report was prepared and distributed.
- 2009 AGRO Annual Report was submitted to ACS.
- Business meeting was scheduled. Food ordered, conference room reserved.
- Award plaque for 2010 Chair was handed to the 2010 AGRO Chair.

### ***II. Nominating Committee Report – Ellen Arthur (presented for K. Armbrust)***

Two candidates have agreed to run for the position of 2011 Vice Chair. Dr. Diana Aga from SUNY Buffalo and Dr. John Clark from the University of Massachusetts, Amherst. Bios from both are available. Additionally 8 candidates have been recruited to run for the 2012-2014 EC. Two additional candidates that had initially agreed to run withdrew their nominations, thus two more candidates are currently being recruited to round out the ballot. The candidates that have agreed to run for the executive committee are Dr. Ashli Brown, Dr. Julie Eble, Dr. Jay Gan, Dr. Amirith Gunsekara, Dr. Scott Jackson, Dr. Glenn Miller, Dr. Keith Solomon, and Dr. Pamela Rice.

### ***III. Bylaws Committee Report – Ellen Arthur (presented for Rod Bennett)***

Rod is working on the by-law revisions and he will soon have them available for the Executive Committee review. Once received, it will be submitted to ACS through appropriate channels.

### ***IV. Councilor's Reports – Jeanette Van Emon and Don Wauchope Washington, DC 2009***

- The Council met August 19, 2009 at the Washington, DC national meeting. The meeting was opened by President Thomas Lane. President-Elect Joseph Francisco reported that his theme for the 2010 spring meeting is "Chemistry for a Sustainable World." Symposia entitled "Frontiers in Material Chemistry," and "Re-Definition of the Kilogram" as well as symposia on energy sustainability and new alternative energy options are being organized for the spring meeting. The theme for the fall meeting is "Chemistry for Preventing and Combating Disease," which will include the symposium "Excellence and Rigor in Undergraduate Chemistry Education from a Global Perspective."
- Board Chair Judith Benham listed key Board achievements during the last three years as follows: a robust strategic plan, engaging the entire Society in initiatives on sustainability; enhanced Board emphasis on policy; strengthened international profile of ACS; strengthened the Board's relationship with the Council; and creation of the Board-Presidential Task Force on Education. She stated that the status of ACS finances is strong, and is holding up well.
- Executive Director and CEO Madeleine Jacobs reported that despite the troubled economy, the ACS continues to provide members with more valuable programs and services than any other scientific society in the world. The use of SciFinder continues to increase in corporate, academic and government laboratories worldwide. ACS Publications Division launched the all-digital 2009 ACS Symposium Series and the ACS Symposium Series Archives this summer.

- The Budget and Finance Committee reported that the Society is projected to end the year with a net contribution from operations of \$11.2 million due in large part to contingency plan actions.
- Economic and Professional Affairs has made available new resources for job seekers, including self-study guides, career videos, video interviewing, and online manuals for the job search process.
- Chemical Safety reported that in January 2009, the committee published the third edition of the *Chemical Safety Manual for Small Businesses*.
- Communities Activities reported on another successful Chemists Celebrate Earth Day program with the theme "Air – The Sky's the Limit." Plans are underway for the 2010 celebration "Plants – The Green Machines."
- The International Activities Committee continues to take an active leadership role in the International Year of Chemistry (2011), planning through its task force, with representation from IUPAC as well as serving as ACS as an inclusive point of contact for several committees and stakeholders of the Society.
- Public Relations & Communications provided an update on the society's new logo and tagline "Chemistry for Life." The Chemistry Ambassador program was introduced. There are five ways one can be a chemistry ambassador and raise awareness for science and chemistry in the community.

#### V. Treasurer's Report – John Johnston

	7/31/2008	12/31/2008	7/31/2009	12/31/2009
Checking Acct.	8,893	16,826	65,226	20,948
Investments				
Spectrum Income	173,566	122,309	137,856	147,130
Prime Reserve	1,310	1,322	1,328	1,324
Educational	380,902	270,581	317,627	350,440
ACS Investment Pool	25,936	21,096	21,681	24,007
Total Investments	581,714	415,308	478,492	522,901
Total Assets	590,607	432,134	543,718	543,849

#### AGRO DIVISION STRATEGIC PLAN

**Goal 1:** *Enhance the membership experience by providing innovative programs, educational products, mentoring, and career services and opportunities for professional development and recognition.*

##### I. Awards Committee Report – Jim Seiber

ACS Fellows Program opened nominations for 2010 Fellows on March 1. Nominations will close on Friday, May 7, 2010.

##### II. BASF Sponsored Award – Scott Jackson

Currently, the ACS International Award for Research in Agrochemicals is co-sponsored by BASF and DuPont every

Please check [www.acs.org/chemistryambassadors](http://www.acs.org/chemistryambassadors) for more information. We were also informed of the ACS Weekly PressPac that includes research summaries from ACS journals. The report ACS Now More Than Ever can be found at [www.acs.org/now](http://www.acs.org/now).

##### San Francisco, CA 2010

- At the Divisional Enhancement Subcommittee (03/20/10) five Innovative Project Grant proposals were discussed. Four proposals were funded for a total of \$27,500.
- The full DAC met on 03/21/10. The estimated attendance for the San Francisco meeting is greater than 20,000 attendees, breaking the previous record of >18,000 for the city. There are 120-122 concurrent sessions which is a record and over 12,000 papers which is another record. The MPPG is not programming in Boston (Fall 2010) due to the overlap with the Presidential symposia. The theme for this meeting is Chemistry for a Sustainable World and for Boston Chemistry for Preventing and Combating Disease. The theme for the Philadelphia meeting (Fall 2012) was just approved as Materials for Health and Medicine. There are no monetary incentives for Divisions to follow the theme but there is a lot of free advertising.
- The ACS expects to record and post 300 presentations from each of the two national meetings this year, with the number increasing in 2011 to 300-500. A task force is working on how to identify which presentations to be recorded and posted.

year. In the future, BASF will alternate with DuPont when granting this award.

##### III. Communications Committee Report / Website Update – Laura McConnell (presented for Cathleen Hapeman)

- PICOGRAM Fall 2009
  - Printing - ~\$13,000; Mailing - ~\$1400 (No Int'l)
  - 156 pages
  - 14 Full Page Ads, 7 Half-page ads (\$4250)
  - 2 Complimentary Full Page ads for Platinum Sponsors
  - Gratis ads to IUPAC Congress, Brazil Wksp, Nat'l Ag Library, Rev Env Tox and Chem

- PICOGRAM Spring 2010
  - Printing ~\$14,000; Ship to SF \$600; Mailing will cost ? (Yes Int'l)
  - 170 pages
  - 13 Full Page Ads, 9 Half-page ads (\$3800)
  - 5 Complimentary Full Page ads for Platinum Sponsors
  - Gratis ads to IUPAC Congress, FI Pest Workshop, Nat'l Ag Library, *Rev Env Tox Chem*
- PICOGRAM Fall 2010 will be a small issue, no abstracts, Call for Symposium proposals
- PICOGRAM Spring 2011 – New strategic planning meeting outcomes and Denver Call for Papers
- Reduced individual mailings for Fall 2009 and Spring 2010 since PICOGRAM distributed at the meeting, then mailed to remaining members.
  - Approach allows for more updated info since the printing deadline is closer to the meeting. (Room assignment info)
  - More maps were included in this issue
- New website [www.agrodiv.org](http://www.agrodiv.org) initiated in 2008 with Innovative Grants funding from ACS.
  - Funding will likely be gone in early-mid 2010.
  - Site was upgraded with a new interface in late January to allow for us to make the most of our own updates.
  - Content from PICOGRAM is also posted on the Website ASAP along with the PICOGRAM itself. Fall 2009 issue downloaded >900 times
  - Links to ACS Books now available
  - Updated Sponsorship info with dollar amounts
  - Content from DC meeting still in progress. Make content from meetings more available – summaries of symposia, abstracts, and powerpoints.
  - More information for symposium organizers
  - Post AGRO operating manual

#### **IV. AG-LIST Serv – Tim Ballard**

A server problem developed in mid-February that resulted in some AG-LIST messages not being delivered to all members on the list while multiple copies were delivered to others. The list-serve has been taken off-line and the password changed (in case it was hacked into). One option under consideration is to move the list-serve to the same company that now hosts our division web page ([www.agrodiv.org](http://www.agrodiv.org)). Laura McConnell is looking into this possibility. AGRO will soon be launching a new email communication system to replace AG-LIST for important updates on upcoming events and opportunities.

#### **V. Membership Committee Report – Dan Stout**

Based on total AGRO numbers, the division increased through 2009. A division precipitous drop in membership occurred in January of 2009 of about 200 members. Currently, the total membership – of 1271 members - is comparable to the division's 2006 membership.

#### **VI. Education Committee Report – John Johnston**

Educational Committee includes three programs: Student Travel Grant Research Poster Symposium, New Investigator Award, and Student Lunch.

##### **Student Travel Grant Research Poster Symposium**

- Sixteen students have been awarded AGRO Division travel grants to present their research posters at the ACS National Meeting in San Francisco.
- Nine universities are being represented.

##### **New Investigator Award**

The winners are: Kyong Sup Yoon from University of Massachusetts, Amherst on "Action of the pyrethroid insecticide decyanoazidofenvalerate on rat Nav1.8 sodium channel expressed in *Xenopus* oocytes"; Dhana Raj Boina, University of Florida, on Insecticide susceptibility, acetylcholinesterase sensitivity and levels of detoxifying enzymes in field populations of the Asian citrus psyllid, *Diaphorina citri* Kuwayama" and Daniel K. Nomura, Scripps Research Institute on "Annotating the role of monoacylglycerol lipase in the brain and in cancer".

##### **Student Lunch**

Insights from recent graduates who are currently in professional positions, Keri Carstens (Pioneer) and Jason Sandahl (USDA/FAS) are going to be presented on Wednesday.

#### **VII. Hospitality Committee Report – Jim Brady, Joe Massey, Julie Eble, and Pat Rice.**

Pat reported that for the San Francisco meeting:

- \$3000 was collected from 15 companies (for Coffee Lounge).
- AGRO Division Awards and Social takes place on Tuesday 6:00-8:00pm at Moscone Center – Room 2020 West Building.

#### **VIII. Strategic Planning Committee Report -- Laura McConnell**

Strategic planning meetings held in 2005 and in 2008 have helped to revitalize our division. Also,

- Has provided a structure for our division to be productive and guide the allocation of resources
- Has increased the quality and quantity of programming at multiple venues
- Has increased our international visibility
- Appears that our membership is increasing over time rather than decreasing.
- It is time for some reflection, refocusing, and evaluation of what has worked and what else is needed.

#### **IX. 2011 Strategic Planning Meeting Proposal – Laura McConnell**

A new strategic meeting is proposed for January 2011.

Potential Benefits:

- Bring in young leaders and include them in the process
- Recharge our strategic planning committees and ideas.
- Build on our current successes and correct problems



guidelines, including eligibility requirements, and instructions for submitting a nomination are available on the ACS web. Each Division may nominate twice as many individuals as there are Councilors from the Division (e.g., if a Division has four Councilors, then it may submit up to eight nominations on behalf of the Division). The primary nominator must be an Officer or Councilor of the Division. However, letters of recommendation from the secondary nominators need not be from the Division. If the Chair is not the primary nominator, he/she must provide written endorsement of the nomination.

#### **XV. Biotechnology Secretariat Steering Committee – Ellen Arthur**

Ellen has asked for an AGRO volunteer.

**Goal 2:** *Foster constructive interactions among diverse communities to provide solutions to agricultural, public health and environmental concerns.*

#### **I. Florida Pesticide Workshop – Ken Racke**

Kevin Armbrust: The Florida Pesticide Residue Workshop July 2009 in St. Pete Beach Florida. There were 240 attendees, 46 papers over 3 days and 40 different vendors representing all of the major instrument manufactures and suppliers of analytical commodities. All attendees will be given complimentary 1 year memberships in AGRO to encourage future membership in the division. The meeting next year will be held July 18<sup>th</sup> to the 21<sup>st</sup>, 2010 in St. Pete Beach Florida and will be managed by ACS meetings. It will feature sessions on international opportunities for collaboration as well as chemical issues related to food safety.

Steve Lehotay is asking AGRO officers for a clarification concerning AGRO involvement with FPRW. As a background, in March of 2009, an agreement was signed between ACS meetings and FlagWorks, the nonprofit organization that sponsors FPRW. Kevin Armbrust made the introductions of FPRW organizers to ACS Meetings & Expositions Dept. FPRW is paying ACS \$50 per registrant, or about \$10,000 if 200 attend as last year. We hope to get 250 this year. Is this a discounted fee, and if so, is AGRO paying the difference (or otherwise this involvement entails “Co-Sponsorship by AGRO”)?

Several FPRW organization members voiced their support of full AGRO co-sponsorship. We are willing to put the AGRO and ACS logos on the FPRW website and “co-sponsored by AGRO” on the meeting info, but thus far, we’ve been putting “entered into an agreement with AGRO” “(or with ACS)” because we are not sure what AGRO has provided. FPRW is offering to provide AGRO/ACS a free exhibition booth. The booth materials will have to be arranged and some representatives of AGRO/ACS will have to come to the meeting to manage the booth. FPRW welcomes AGRO participation at the meeting. Check out the website [www.flworkshop.com](http://www.flworkshop.com).

Can AGRO clarify in an email response what AGRO has provided, will provide, and/or wishes to gain from its involvement with FPRW? I recollect that there was discussion of AGRO gaining members, and members need not be ACS members, but I don’t know what came of that. Steve thanks for the free full page ad in the PICOGRAM and links on the web-page. FPRW is also grateful for the meeting announcement in C&E News.

**MOTION:** We pursue further interaction and officially sponsor Florida Pesticide Workshop. Motion passed.

#### **II. Future Special Conferences Committee Report – John Clark and John Johnston**

##### **Pacifichem December 2010 – John Johnston**

The 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem) will take place in Honolulu, Hawaii, USA, December 15 - 20, 2010.

More than 215 symposia are planned for this event.

##### **AGRO Symposia at Pacifichem 2010**

##### **International Food Safety Issues & Opportunities**

(Saturday, Dec 18)

International trade of food commodities is reliant upon alignment of safety standards of trade partners. Agreement (harmonization) of acceptable maximum residue levels (MRLs) of pesticides, drugs and other contaminants in vegetable and meat products helps to minimize trade barriers. The analytical methodology to quantify such residues and contaminants in foods also needs to be harmonized in order to ensure consistent monitoring and enforcement of regulations. Alignment of exposure and risk analysis approaches facilitates the development of regulatory standards for pesticides, drug residues and contaminants in foods. Analytical methodology, risk assessment approaches, risk analysis results, and current toxicology and chemistry based issues which are pertinent to the safety and trade of imported foods and agricultural products are invited.

##### **Rodenticide-Based Opportunities for Protection of Agriculture, Ecosystems & Public Health** (Friday, Dec 17)

Rodents cause significant damage to agriculture, native ecosystems and vector zoonotic diseases with significant negative public health impact. Development and application of chemistry based techniques for management of pest rodents is particularly challenging as selectivity is paramount - non-target impacts on other mammalian or avian species are unacceptable. This symposium will focus on synthesis, formulation, metabolism and environmental chemistry aspects of rodenticides. Techniques for estimating, monitoring and minimizing non-target impacts will be presented. Opportunities for applying chemistry based rodenticides to protect agriculture, native ecosystems and public health will also be presented.

For more information on the AGRO Pacifichem 2010 symposia see [www.pacifichem.org](http://www.pacifichem.org) or contact John Johnston at [John.Johnston@fsis.usda.gov](mailto:John.Johnston@fsis.usda.gov).

**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.*

**I. Public Relations Committee Report – Jeff Jenkins**

- The Agrochemicals Division of the American Chemical Society (ACS) will present its International Award for Research in Agrochemicals to Dr. Shinzo Kagabu, Professor, Gifu University, Japan.

Dr. Kagabu will be honored at the 239th ACS National Meeting in San Francisco, CA. With over 160,000 members, the ACS is the world's largest scientific society. The BASF Corporation and DuPont Crop Protection co-sponsored award presentation on March 22nd marks the beginning of an Agrochemicals Division one-day symposium.

While at Bayer CropScience, Japan, Dr. Kagabu may be best known for his discoveries within one of the newer classes of insecticides – the neonicotinoids. Discoveries include the insecticides imidacloprid and thiacloprid, and the anti-rice blast fungicide carpropamid. Neonicotinoid insecticides are known for excellent control effectiveness and safety to people and the environment. Worldwide this chemical class accounts for more than one-fifth of the total insecticide market. Imidacloprid is also the preeminent insecticide for flea control on companion animals.

- The Agricultural Research Service (ARS), U.S. Department of Agriculture's primary research agency, the Agriculture and Food Chemistry Division, and Agrochemicals Division of the American Chemical Society (ACS) will award Dr. Chris Somerville with the 2010 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. Somerville has published more than 200 scientific papers and patents in plant and microbial genetics, genomics, biochemistry, and biotechnology. He is a member of the US National Academy of Sciences, The Royal Society of London, and the Royal Society of Canada. He has received the American Society of Plant Biologists Gibbs and Schull award, the Genetics Society Mendel Medal, the Biochemical Society Hopkins medal, the Plant Molecular Biology Society Khumo Award. He currently shares the Balzan Foundation Prize with Elliot Meyerowitz (Caltech). In addition, he has cofounded three companies, Mendel Biotechnology, LS9 Inc, and Poetic Genetics.

**III. Update on Brazil Workshop – Laura McConnell**

Funds were utilized to support the travel of two AGRO leadership members to attend the 3rd International Workshop on Crop Protection Chemistry in Latin America in Rio de Janeiro in early November 2009. Three other AGRO leadership members also attended utilizing other funding available from their employers or from IUPAC. The workshop

was successful in attracting ~250 scientists from South America, Central America and other countries. AGRO established a table at the meeting and provided copies of our newsletter, the PICOGRAM, answered questions about AGRO and ACS, and also distributed some ACS books which were brought as samples. Connections with Brazilian Chemical Society ABQ (another sponsor of the workshop) will likely continue into the future.

**II. IUPAC 2011 Meeting in Puerto Rico - Laura McConnell**  
2011 is the International Year of Chemistry.

IUPAC has a congress every 2-yrs. Next meeting is in Puerto Rico, between July 30<sup>th</sup> and August 7<sup>th</sup>, 2011. Currently, there are five Nobel Laureates in Chemistry confirmed as Plenary Lectures. ACS has three slots for proposals. AGRO is going to put one proposal with AGFD and IUPAC.

**III. IUPAC Proposal 2014 – Ken Racke, Laura McConnell, Don Wauchope, et. al.**

The 2009 AGRO meeting in DC agreed for a group to develop a proposal, seek early ACS and IUPAC feedback.

Proposed Dates

August 24-28, 2014 (in conjunction with ACS Nat'l)

Proposed Theme

Crop, Environment, and Public Health Protection:  
Technologies for a Changing World

Estimated Attendance

1500 +/- 200

Location and Venue

San Francisco, CA, in one of the ACS meetings hotels

Main Scientific Topics

- o Discovery, Mode of Action, Resistance Management
- o Biotechnology
- o Non-Crop Uses
- o Environmental Fate and Ecological Impacts
- o Food Residues and Human Exposure
- o Regulation, Stewardship, and Delivery Systems

Benefits

- o IUPAC gains a reliable partner for the Congress and returns to the region of its greatest success
- o ACS AGRO gains increased national and international visibility and influence for its programs
- o Financial risks to ACS AGRO are minimized by choosing to organize the Congress as the AGRO program for the national meeting

Risks

Will increase the complexity of planning and execution for the 2014 ACS AGRO program.

**MOTION:** AGRO agrees to organize the 13th IUPAC International Congress of Pesticide Chemistry as part of the ACS national meeting in San Francisco during August 24-28, 2014 and establishes a planning committee to be co-chaired by Laura McConnell and Ken Racke. Motion passed.

Respectfully submitted,

*Liliana Schwartz*

- The proposed time is January since:
  - It is generally a slow time for many people.
  - We have held the last two S.P. meetings in Jan
  - It is far enough out for folks to plan
  - Will allow for enough time to finish development of the plan in order to launch at the Denver meeting and to include in the PICOGRAM
  - Doesn't conflict with other ACS activities (Leadership summit?)
- Last meeting in 2008 was approximately \$13K for 10 people to travel to Washington DC for two nights. The meeting in 2011 is expected to cost between \$13 and \$16K.

**MOTION:** To have a New Strategic Planning Meeting in January 2011. Motion passed.

#### **X. National Programming Meeting - Ellen Arthur, Ken Racke, and Al Barefoot**

Ken presented a proposal for co-sponsorships for AGRO at the ACS meetings. The benefits of co-sponsorship are:

- Increases visibility of the AGRO brand with ACS membership
- Provides a way for AGRO members to participate in meetings where AGRO will not program.
- Builds cooperation with sister Divisions
- Provides financial benefits for the ACS Divisional allocation budget

The costs associated are related to the needed publicity via e-mails, website, PICOGRAM, etc. It may require financial sponsorship (\$500/session). Examples of AGRO co-sponsorships are:

- With Agricultural and Food Chemistry Division (AGFD) Boston, Fall 2010 (Aug 22 – 26)
  - Small wonders: peptides for disease control
  - Isolation and characterization of natural products
  - Free-radicals and antioxidants
- Anaheim, Spring 2011 (Mar 27 – 31)
  - AGFD international year of chemistry
  - Effects of agricultural practices on bioactive compounds
  - Tolerant crops
  - Agronomics chemistry of natural resource: Local production vs organic, production cost vs marketing
- Environmental Chemistry (ENVR)
- Graduate Student Symposium Planning Committee (GSSPC) partially sponsored by Chemical Education (CHED)

**MOTION:** For AGRO to co-sponsor programming at the Boston (Fall 2010) and Anaheim (Spring 2011) ACS meetings with sister Divisions AGFD and ENVR, including financial support. Motion passed.

#### **XI. National Meeting Programming in Denver 2011 – Al Barefoot**

ACS Theme of the Denver meeting is: "Chemistry of Air, Space and Water". The core programming will include:

- International Award
- New Investigator Award

- AGRO Student and Poster session
- Sterling Hendricks Memorial Lecture.
- Some of the symposia ideas are:
  - Agrochemical Risk Communication
  - Advances in Bioenergy and Bioproducts
  - Advances in Estimation of Human Exposures via Drinking Water
  - Evaluating Agrochemical Aquatic Exposure Models
  - Analytical Challenges Associated with New Pesticide Classes
  - Characterization of Non-extractable Residues
  - Managed Ecosystems, Pesticides and Biodiversity.
  - The Significant Residue: Determining Pesticide Bioavailability in the Environment
  - Toxicological Relevance of Trace Environmental Residues: Is There Any?
  - Veterinary Pharmaceuticals: Environmental Fate Considerations
  - Formulations and Efficacy of Agrochemical Delivery Systems
  - Post-Application Volatility of Pesticides and Human/Environmental Exposure Assessment
  - Modeling Agricultural Emissions
  - Considerations for use of biocides in spacecraft
  - Developments in biocidal products
  - Regulatory evaluation of biocidal products
  - Pest control standards during spacecraft construction

#### **XII. MPPG Update and Future Themes – Al Barefoot**

MPPG goals are:

- Increase multidisciplinary programming/co-sponsorships
- Raise visibility of ACS in general public
- Stimulate ideas for programming on topical issues
- Broaden the appeal of ACS among non-member scientists
- Encourage programming outside the usual topics

It is a voluntary program. Helpful to divisions facing challenges in finding symposium topics. Divisions are free to participate.

Themes for future meetings are:

- Boston – Chemistry of Preventing & Combating Disease
- Anaheim – Chemistry of Natural Resources
- Denver – Chemistry of Air, Space & Water
- Philadelphia – Materials for Health & Medicine.

#### **XIII. Future AGRD meetings: 2012, 2013, 2014 and beyond – Ellen Arthur and Ken Racke**

Ken presented AGFD future programs and the organizers for Boston Fall 2010, Anaheim Spring 2011, Denver Fall 2011, San Diego Spring 2012, Philadelphia Fall 2012, and beyond 2012.

#### **XIV. ACS Fellow Program – Ellen Arthur**

After a very successful first year, the ACS Fellows Program opened nominations for 2010 Fellows on March 1. Nominations will close on Friday, May 7, 2010. Program

# Minutes from the AGRO Division Executive/Business Teleconference

August 5, 2010; 1:00pm – 4:30pm CST

Chair – Ellen Arthur

## **I. Introduction to call – Ellen Arthur**

## **II. Election Results – Kevin Armbrust**

Liliana to send letters to candidates by mid September; Kevin will call all candidates.

- Vice-Chair - John Clark
- Secretary - Liliana Schwartz
- Treasurer - John Johnston
- Executive committee 2011 -2013 - Pam Rice, Jim Seiber, Scott Jackson, Keith Solomon, Julie Eble

## **III. By-Laws Revision – Rodney Bennett**

Rod not present on call Ellen will call Rod and follow this through.

## **IV. Feedback from the FL Pesticide Residue Workshop 2010 – Kevin Armbrust**

Next year's meeting to be held July 17 to 20, 2011; organizing committee will put together brochure in place for AOAC meeting end of September. PICOGRAM to include brochure – Kevin to get this to Cathleen; she needs after end of Sep.

Vote for continued co-sponsorship by AGRO passed.

## **V. Status of Plans for ACS Meeting in Denver, Fall 2011 – Al Barefoot**

Tentative program distributed via email. Some ideas from Blues and Brews and others.

ACTION REQUIRED: Take a look at program and confirm your organizer commitment. Al will send a note to all potential organizers to get titles, etc. He expects that initial program request will be due to PICOGRAM (and ACS potentially) in December 15.

Template sent for symposium announcement to get from organizers. These can go into PICOGRAM directly; files need to be a \*.doc file and not a pdf.

## **VI. Sterling Hendricks Award, Denver, Fall 2011 – Steve Duke**

Deadline for nomination Nov 3. Anyone can nominate. All award nominations – reminder to be sent to membership by Jim Seiber reminder to AGRO; Steve Duke will ask AGFD to send reminder; Steve will be arranging a conference call in near the future to discuss Hendricks nomination.

## **VII. Awards – Jim Seiber, Steve Duke, Scott Jackson, Al Barefoot.**

- Need nominations for Division and ACS Fellow awards. Congratulations to Jim Seiber who will receive the ACS Fellow Award.

- International Award – BASF / Dupont to have discussion about splitting Award into two separate Awards.

ACTION REQUIRED: meeting to be planned by Al Barefoot with Scott Jackson and Jim Sieber.

## **VIII. Korean Society of Biological Chemistry – Jim Seiber**

Jim will be attending the 50<sup>th</sup> Anniversary of the Korean Society of Biological Chemistry Aug 24 to 26, 2010. Will take a letter from AGRO Division to congratulate them; would like to take AGRO materials to distribute.

ACTION REQUIRED: Cathleen Hapeman will send Jim Seiber IUPAC2014 promotional items.

## **IX. Pan-Pacific Meeting 2012 – John Clark**

Pesticide Science Society of Japan will host the Pan-Pacific 2012 meeting at the University of Tsukuba, Japan.

John Clark met with Hiroshi Matsumoto, the current chair; they want to know our level of involvement in this process; we voted to be part of the process; if we decide to cosponsor, then our logo can be used; and perhaps we can send a student or two for poster competition; travel money for international travel is not there. AGRO took all financial risk for 4th Pan Pacific; AGRO solicited for funds that covered all that registrations didn't cover.

J Seiber indicated that we should volunteer to help organize this. Suggest Phillip Lee to be involved. Meeting likely July 8-12, 2012. K Racke would like to see this meeting go forward as well. Offer funding to support speakers \$15K fixed rate to support travel for some of our AGRO memberships – e.g., students for poster competition; keep AGRO as co-organizer. K Armbrust suggested that an innovative grant should be applied for to cover travel support – role of co-conf chair. Steve Duke volunteered as co-program chair / conference co-chair needed. Jim Seiber volunteered as co-conf chair. We are looking for them to take lead. John Clark will draft a letter of agreement prior to communication with Matsumoto. Al Barefoot will provide historical documents from last meeting.

Motion: Stephen Duke Co-Program Chair; Jim Seiber Co-Conference Chair; \$15K for speakers and travel support for Co-chairs with total of \$25K – Motion Passed

## **X. Pacificchem 2010 – John Johnston**

To be held in Hawaii in Dec 2010; occurs every 5 years. AGRO is organizing two symposia for this meeting: International Food Safety Issues & Opportunities and Rodenticide-Based Opportunities for Protection of Agriculture, Ecosystems & Public Health. List of symposia and accepted talks have been circulated. Cathleen will send John promotional items for IUPAC2014.

## **XI. IUPAC-ACS Chemistry Congress - Puerto Rico 2011 – Laura McConnell**

Innovative grant was funded; IUPAC Congress to be held July 30 to August 7 in San Juan Puerto Rico ([www.iupac2011.org](http://www.iupac2011.org)) Planning will begin in September to identify speakers.

Conference call to be held next month to start process of selecting speakers for the symposium – 2 days with accompanying poster session. SETAC Global voted to contribute \$4K for symposium. Contact Laura with interest

**XII. IUPAC - San Francisco 2014 – Ken Racke**

- Bid was accepted for AGRO to host in San Francisco in 2014. First circular developed; website activated; logo developed; pens and pins made. Booth at 12th IUPAC in Melbourne where information and promotional materials were distributed.

- Recruited individuals to help with 2014; good promotion in Australia. Just over 1100 participated in Australia’s IUPAC. Have requested an official report from Australian IUPAC – including lessons learned; good coop from office of International Affairs

- Innovative Grant submitted for promotional efforts; ACS Meetings Department to get back to us on plan. Expanded list of individuals for program committees or organizing symposia.

- Organizing Committee Teleconference to be planned by Ken and early call for innovative symposia. Check out website: [www.IUPAC2014.org](http://www.IUPAC2014.org).

**XIII. Strategic Planning Meeting - Laura McConnell**

2011 Attendees so far: Ken Racke, Ellen Arthur, Aldos Barefoot, Vice Chair (John Clark), Steve Duke, Keri Carstens, Jay Gan, Laura McConnell, Troy Anderson, Ashli Brown, Marja Koivunen. Changing dates to Jan 19 to 21, 2011, to be held at the Omni Hotel in Fort Worth, TX.

ACTION REQUIRED: Laura to check with facilitator to ensure dates will work; Ellen will then check with attendees. Survey

**XVI. Treasury Report – John Johnston**

Johnston took over Jan 2010; summary of costs for 2010 in report that was circulated. Jeannette Van Emon will ensure that ACS receives this report. John recently withdrew \$18K to keep checking account afloat. Have captured all income for San Francisco meeting – some checks were received before end of 2009.

will be sent to all members prior to meeting; also to attendees a survey prior to meeting.

**XIV. PICOGRAM – Cathleen Hapeman**

Fall 2010 PICOGRAM will only be electronic. It will not have call for papers in it only a table of symposia for Denver. Will include New officers; student winners; announcement for various awards; will be sent out via email. The next PICOGRAM hardcopy will be end of January with call for papers. Will also include Nancy Ragsdale’s summary for San Francisco

ACTION: Sept 30, 2010 materials to Cathleen for PICOGRAM; IUPAC Australia summary by Ken to Cathleen; Kevin to provide summary of Florida meeting

**XV. AG-LIST – Laura McConnell**

- List from AG-LIST plus list of emails from membership list all entered into new system. New system will send out messages and allow recipients to opt out of receiving the emails. They can also have email address changed to divert to another email.

- Innovative Grant proposal was submitted to update email marketing system to update website. Should offset expenses.

- We get charged by no. of emails that we send. We should go to a single email per month with a deadline for the monthly email to go out in a Newsletter format.

- Give Laura feedback on test email. Chair should review monthly before going out. Last Wed month will go out; Wed before deadline for content. Chair can log in at any time to view this. Tim Ballard has expressed interest to manage this.

	7/31/2008	12/31/2008	7/31/2009	12/31/2009	6/30/2010
Checking Account	8,893	16,826	65,226	20,948	5,482
Investments					
Spectrum Income (TR Price)	173,566	122,309	137,856	147,130	135,654
Prime Reserve (TR Price)	1,310	1,322	1,328	1,324	1,324
Education Trusts (JP Morgan)	380,902	270,581	317,627	350,440	306,066
ACS Investment Pool	25,936	21,096	21,681	24,007	0
<b>Total Investments</b>	581,714	415,308	478,492	522,901	443,044
<b>Total Assets</b>	590,607	432,134	543,718	543,849	448,526

**XVII. Financial Committee – Joel Coats, Kevin Armbrust**  
Kevin provided historical documents. Finance Committee consists of Joel Coats (Chair), Al Barefoot, Terry Spittler, Kevin Armbrust, Scott Yates, Ann Lemley, John Johnston (Ex Officio).

ACTION: Joel and John will discuss income picture; then he will line up a meeting of the committee to put together next year's budget. Draft by Sep 30 of 2011 Budget with a follow-up meeting in October.

**XIX. Proposal to Move Council to Tuesday during National Meetings – Ellen Arthur.**

Response needed for ACS. ACS concerned that if the meeting is moved, then folks will leave meeting earlier. A straw vote was sent out among councilors. 50% supported move; 32% opposed; remaining undecided.

ACTION: Jeanette to take lead on responding to ACS on how this will impact AGRO. Due to ACS by Aug 22. Terry

Spittler would like meeting to remain on Wed. J Clark this should be no imposition for Councilor to stay til Wed noon. In spirit of even programming, makes sense to leave it on Wednesday. Folks will be leaving early if held on Tuesday. Attendance would suffer. Forward comments to Jeanette.

**XX. Western Regional Meeting – Jeanette Van Emon**

AGRO gave \$500 support for this meeting. They are up for a ChemLuminary Award as a result of the meeting.

**XXI. Innovative grant proposal with ENVR – Laura McConnell**

George Cobb of ENVR put one in for joint symposium with AGRO vet pharma in environment – for Denver Meeting.

**XXII. Passing of the Chair Position to Ken Racke – Ellen Arthur**

Ellen: Mallet is now activated and Ken is now in charge!!! Thanks to all. It's been great working with you. Looking forward to more of the same. Best wishes!

## AGRO Councilors' Report – Boston 2010

Don Wauchope and Jeanette Van Emon

It's not as much fun to attend an ACS meeting when AGRO is not programming. We miss seeing our friends and enjoying the excellent symposia that AGRO is known for. Nevertheless, your faithful Councilors represented you at the Boston Councilor's meeting. Jeanette also attended the Divisional Activities Committee (DAC) meeting as a member and also performed her duties on the DAC subcommittee, Innovative Projects Grants. AGRO was successful in obtaining money again this year from the grants program. However, the inside scoop is that competition is getting stiffer and we must become even more innovative! Since AGRO members always rise to a challenge this should not be an issue. Don sat in as an observer at the Council Policy meeting, the Committee on Nomenclature, Terminology and Symbols, and the Long-Range planning committee of the ENV Division. Jeanette also served on two ACS Presidential Committees.

At Council we cast a vote we believe you will approve. The one really controversial item on the Agenda was a "Discussion Item--Should Council Meetings be Moved to Tuesdays at the ACS National Meetings?" that was followed by a "straw vote." There are many Councilors who attend ACS meetings mainly to take part in Committees that are held on the weekend before the meeting so the move to Tuesdays would potentially shorten their trip. After some vigorous (and sometimes amusing) discussion the vote was about 2/3 against the idea. The negative response was centered on the further isolation of Thursday sessions, and the potential for more people to leave on Tuesday (after the Councilor

meeting) instead of the mass exodus seen on Wednesday. Many Councilors also felt it would be difficult to attend scientific sessions as the meeting week would essentially be "compressed". Your Councilors voted with the majority. This was a "straw vote" however. Each Division was asked by ACS to answer a questionnaire regarding moving the Councilor meeting from Wednesday to Tuesday prior to the Boston Councilor Meeting. In consultation with Ellen Arthur, Jeanette completed the questionnaire and filed it with ACS. Jeanette and Don attended the Division Councilors Caucus where this issue was debated in detail. Moving the Councilor meeting date is troublesome for the smaller Divisions as attendance at the technical sessions would probably be impacted.

Overall your Society appears to be doing well. We have weathered the economic times--apparently due to very sound financial management--and the Society seems vigorous and active in many areas, especially outreach. The renovated ACS web presence is very useful and attractive and the offering of selected talks from the meetings on the web has been very successful.

AGRO got a little cultural exposure at the Council meeting: Don has become the fanfare player to call the Councilors to order. Some of you know Don has a twin brother who is a professional trombone player in Boston so a horn/trombone duet was arranged. It was fun and President Francisco acknowledged the music from AGRO.

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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.



# Welcome to AGRO

*CHEMISTRY for and from AGRICULTURE*

## Mission

*To promote knowledge benefiting society through advancements in agricultural, public health, and environmental sciences and technologies.*

## AGRO DIVISION MEMBERSHIP APPLICATION

ACS Member # (if applicable) \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

Employer/Affiliation: \_\_\_\_\_

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

\_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Country, Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

### Membership Categories (check one):

- ACS member** \$12 (add AGRO membership to existing ACS membership)
- National Affiliate ACS member** \$14 (add AGRO membership to existing National Affiliate ACS membership)
- Student ACS member** \$5 (Add AGRO membership to existing ACS student membership)
- Non-ACS member** \$14 (AGRO membership only, no ACS membership)

**AGRO Division**      **Total Cost**    \$ \_\_\_\_\_

### Please check one:

Bill Me  Cash  Check  Visa/Master Card  American Express

Card number: \_\_\_\_\_

Expiration date: \_\_\_\_\_

**Signature:** \_\_\_\_\_

*(Signature is required regardless of method of payment)*

### Mail to:



American Chemical Society  
Member and Subscriber Services  
PO Box 182426  
Columbus, Ohio 43218-2426

**Phone:** 800-333-9511, **Fax:** 614-447-3671, **E-mail:** service@acs.org

### Division Membership Questions?

Contact: Dan Stout, US EPA, 919-541-5767, stout.dan@epa.gov



## MEMBERSHIP SERVICES

### New! Email Newsletter

The AGRO has initiated a monthly email newsletter designed to keep members informed about what is happening in our Division. Content will include calls for papers announcements, awards opportunities, information on elections, career opportunities, new AGRO publications and other timely announcements.

If you are an AGRO member, you are already enrolled in our email newsletter service. If you are not currently receiving the newsletter, you can sign up on our webpage, [www.agrodiv.org](http://www.agrodiv.org), by clicking on the button that says "Subscribe to our Newsletter". The newsletter will come out on the first Tuesday of each month.

Members can submit items to be included by the last Tuesday of the month to:

[updates@agrodiv.org](mailto:updates@agrodiv.org)

***You may unsubscribe at any time.***

Each issue has an opt-out link where members can remove their email address from the list.

The AGRO email newsletter is open to all professionals who have an interest in agrochemicals and the AGRO Division. You do not have to be a division member to join.

Companies who are interested in advertising in our email newsletter should send an email to Laura McConnell at [laura.mcconnell@ars.usda.gov](mailto:laura.mcconnell@ars.usda.gov)

The cost is \$50 per ad which includes a 120x120 pixel image with a weblink and subtitle if desired.

### Support Your Division! ADVERTISE IN THE *PICOGRAM*

The *PICOGRAM* is published twice a year and is an important communications instrument of AGRO. One issue each year will also contain the national meeting abstracts for the AGRO Division. The *PICOGRAM* is mailed to over 1200 division members. Another 300 – 400 copies are distributed at each national ACS meeting. Ad costs for the *PICOGRAM* are:

Full Page	16.5 cm x 22.9 cm 6.5" x 9"	\$500 1st Time \$400 Subsequent Issues
Half Page	16.5 cm x 11.4 cm 6.5" x 4.5"	\$250 1st Time \$200 Subsequent Issues

Electronic ad copy in Adobe Acrobat (.pdf) or Word format sized to fit the page must be submitted prior to the following deadlines: December 15th for the Spring Issue and May 15th for the Fall Issue. Billings for ads come from Laura McConnell, Ad Manager on behalf of the Treasurer of the AGRO Division after the issue of the *PICOGRAM* appears.

Submit ad copy via email to:

Dr. Laura L. McConnell  
USDA-ARS  
10300 Baltimore Ave.  
Bldg. 007, Rm. 225, BARC-W  
Beltsville, MD 20705  
301-504-6298  
[laura.mcconnell@ars.usda.gov](mailto:laura.mcconnell@ars.usda.gov)

# PICOGRAM V. 79



CHEMISTRY  
*for and from*  
AGRICULTURE

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