

AGRO Division Program Summary August 22-26, 2021 Qing Li, Program Chair; Leah Riter, Division Chair

All AGRO Sessions are virtual and may be accessed through the ACS Virtual Meeting Platform. All times are Eastern Time Zone (USA).

**Denotes award presentation in session.

NETWORKING EVENTS

Coffee Breaks

Sunday 8/22/21– Thursday 8/26/21, 10:00:00 AM - 10:30:00 AM (EDT) Enjoy coffee and casual conversation in a zoom setting. All AGRO enthusiasts are welcome!

Student and Post-Doc Virtual Networking Events

Sunday 8/22/21– Thursday 8/26/21, 4:00:00 PM - 4:30:00 PM (EDT) Visit with professionals in academia, industry, and government to discuss your career opportunities in the AGRO sector and future AGRO involvement.

AGRO Program Planning – Virtual Blues & Brews

Wednesday 8/25/21, 12:30:00 PM - 2:00:00 PM (EDT)

Share your ideas about future AGRO programming, learn more about organizing an AGRO symposium, and plan for the Chicago National Meeting in fall 2022 (Meeting theme: Sustainability in a Changing World). *Prizes, game activities, and more!*

AGRO Awards Virtual Social

Thursday 8/26/21, 12:30:00 PM - 2:00:00 PM (EDT) Celebrate all the AGRO award winners! Play games for valuable prizes.

AGRO Business Meeting

This meeting has been postponed to September. Watch the website and email blasts for date and time. All are welcome to attend

TECHNICAL SESSIONS

2021 ACS International Award for Research in Agrochemicals: Receptor / Channel Targets of Chemicals Controlling Insect & Nematode Pests, Vectors & Pathogens

Financially Sponsored by Corteva Agriscience Cosponsored by AGFD Organizers: John Clark, Kazuhiko Matsuda, Kazuhiko **Monday 8/23/2021, 10:30:00 AM - 12:30:00 PM – International Award, David Sattelle Monday 8/23/2021, 2:00:00 PM - 4:00:00 PM Monday 8/23/2021, 4:30:00 PM - 6:30:00 PM Monday 8/23/2021, 7:00:00 PM - 9:00:00 PM Tuesday 8/24/2021, 10:30:00 AM - 12:05:00 PM

Analytical Technologies in Agrochemistry and Strategies for Chiral Separation

Cosponsored by ENVR, AGFD

Organizers: Amand Chen, Maria Elena Cabusas, Pamela Jensen, Scott Krepich, Leah Riter, Minli Zhang, Lingshuang Cai, Chengli Zu, Mingming Ma

**Tuesday 8/24/2021, 2:00:00 PM - 3:35:00 PM -- Kenneth A. Spencer Award, Takayuki Shibamoto Tuesday 8/24/2021, 4:30:00 PM - 6:30:00 PM

Bioavailability & Environmental Relevance of Strongly Sorbed & Sequestered Chemicals

Organizers: W. Williams, Lai Gui, Xiao Huang, Marian Pointe Wednesday 8/25/2021, 10:30:00 AM - 12:30:00 PM Wednesday 8/25/2021, 2:00:00 PM - 3:55:00 PM

Bioisosteric Replacement & Scaffold Hopping in Crop Protection Research

Organizers: Peter Maienfisch, Clemens Lamberth

Sunday 8/22/2021, 10:30:00 AM - 12:30:00 PM Sunday 8/22/2021, 2:00:00 PM - 4:00:00 PM Sunday 8/22/2021, 4:30:00 PM - 6:30:00 PM Sunday 8/22/2021, 7:00:00 PM - 9:00:00 PM

Design, Conduct & Reporting of Studies to Measure Exposure to & Effects of Chemicals on Pollinators in the Environment: Can it be Both Practical & Realistic?

Organizers: John Purdy, Jennifer Collins, Annie Krueger, Tom Steeger, Katrina White

Thursday 8/26/2021, 10:30:00 AM - 12:30:00 PM Thursday 8/26/2021, 2:00:00 PM - 4:00:00 PM Thursday 8/26/2021, 4:30:00 PM - 6:30:00 PM

Early Career Symposium: Advances in Vector Control & Insecticide Science

Organizers: Edmund Norris, Aaron Gross, Daniel Swale

**Tuesday 8/24/2021, 10:30:00 AM - 12:30:00 PM -- Innovation Award, Jeffrey R. Bloomquist Tuesday 8/24/2021, 2:00:00 PM - 4:00:00 PM Tuesday 8/24/2021, 4:30:00 PM - 6:30:00 PM

Early Career Symposium: Chemical Communication between Living Organisms in Agricultural Systems Financially Sponsored by the journal, Agriculture

Cosponsored by ENVR, COMSCI

Organizers: Nurhayat Tabanca, Kelsey Fisher, Kelsey

**Wednesday 8/25/2021, 10:30:00 AM - 12:00:00 PM -- NIA Finalist, Gareth Thomas Wednesday 8/25/2021, 2:00:00 PM - 3:30:00 PM

Enhanced Agrochemical Applications through Surfactant, Formulation, & Colloid Technology Cosponsored by AGFD

Organizers: Solito Sumulong, Ricardo Acosta Amado, Sasha Kweskin, Susannah Banziger Tuesday 8/24/2021, 2:00:00 PM - 4:00:00 PM Tuesday 8/24/2021, 4:30:00 PM - 6:30:00 PM Environmental Fate, Transport, & Modeling of Agriculturally-Related Chemicals

Financially Sponsored by Stone Environmental, Inc. and Intrinsik Corp.
Cosponsored by ENVR
Organizers: Scott Jackson, Ralph Warren

**Monday 8/23/2021, 10:30:00 AM - 12:30:00 PM -- NIA Finalist, Marla Bianca
Monday 8/23/2021, 2:00:00 PM - 4:00:00 PM
Monday 8/23/2021, 4:30:00 PM - 6:30:00 PM
Monday 8/23/2021, 7:00:00 PM - 9:00:00 PM
**Tuesday 8/24/2021, 10:30:00 AM - 12:30:00 PM -- NIA Finalist, Zijiang Yang

Everywhere but the Crop Field: Exploring Pesticide Use & Usage

Cosponsored by ENVR Organizers: Leah Duzy, Tony Burd, Carlton, Ray Willard Thursday 8/26/2021, 10:30:00 AM - 12:30:00 PM Thursday 8/26/2021, 2:00:00 PM - 4:00:00 PM

Exposure: Approaches & Processes for Preventing, Detecting & Monitoring Agrochemical Contamination in the Environment

Cosponsored by ENVR

Organizers: Maura Hall, Joel Coats Sunday 8/22/2021, 10:30:00 AM - 12:30:00 PM Sunday 8/22/2021, 2:00:00 PM - 4:00:00 PM Sunday 8/22/2021, 4:30:00 PM - 6:30:00 PM

Feeding a Hungry World Amidst Varying Pesticide Regulations

Cosponsored by ENVR, AGFD, COMSCI Organizers: Heidi Irrig, Jane Stewart, Carmen Tiu Thursday 8/26/2021, 10:30:00 AM - 12:30:00 PM Thursday 8/26/2021, 2:00:00 PM - 4:00:00 PM Thursday 8/26/2021, 4:30:00 PM - 6:30:00 PM

Genome Editing in Agriculture: Leveraging New Breeding Tools to Improve Crops & Their Production

Financially Sponsored by ACS Journal of Agricultural Science & Technology Cosponsored by AGFD Organizers: Martin Ruebelt, Maria Fedorova

> **Tools and Traits -** Wednesday 8/25/2021, 10:30:00 AM - 12:20:00 PM **Regulations and Public Acceptance** - Wednesday 8/25/2021, 2:00:00 PM - 3:50:00 PM Wednesday 8/25/2021, 4:30:00 PM - 6:30:00 PM

Good Laboratory Practices (GLP): How to Conduct Studies Under the Regulatory Environment

Cosponsored by AGFD, ENVR Financially support by Society of Quality Assurance Organizers: Jennifer Cypher, Johanna Mazlo, Barb Munch, Kim Watson Monday 8/23/2021, 4:30:00 PM - 6:15:00 PM Monday 8/23/2021, 7:00:00 PM - 9:00:00 PM

Human Health Paradigms: Exposure, Risk Assessment & Policies for Agrochemicals

Cosponsored by AGFD

Organizers: Cheryl Cleveland, Michael Krolski, Cecilia Tan, Katoria Tatum-Gibbs Wednesday 8/25/2021, 10:30:00 AM - 12:20:00 PM Wednesday 8/25/2021, 2:00:00 PM - 3:50:00 PM Wednesday 8/25/2021, 4:30:00 PM - 6:15:00 PM Wednesday 8/25/2021, 7:00:00 PM - 8:50:00 PM

Metabolite & Process Impurity Identification for Agrochemical Discovery

Organizers: Mingming Ma, Lingshuang Cai, Chengli Zu, Minli Zhang Sunday 8/22/2021, 4:30:00 PM - 6:30:00 PM Sunday 8/22/2021, 7:00:00 PM - 9:00:00 PM

Nontarget Analyses & Emerging Contaminants: Implications for Agrochemical Risk Assessment Organizers: Robert Wauchope, Derek Muir, Elin Ulrich

Intro. to Technology & Agrochemical Case Studies - Thursday 8/26/2021, 10:30 AM - 12:30 PM Agrochemical Case Studies - Thursday 8/26/2021, 2:00:00 PM - 4:00:00 PM Resources, Developments and Implications for Agrochemical Risk Assessment - Thursday 8/26/2021, 4:30:00 PM - 6:30:00 PM

Off-Target: Measurement & Management of Pesticide Drift & Volatility

Financially Sponsored by Stone Environmental, Inc. and Intrinsik Corp. Cosponsored by AGFD, ENVR Organizers: Frederick, Salzman, Jeffrey Perine

Wednesday 8/25/2021, 4:30:00 PM - 6:00:00 PM

Wednesday 8/25/2021, 7:00:00 PM - 8:30:00 PM

Practical Residue Analytical Methods for the Analysis of Samples from Environmental & Consumer Safety Related Studies

Financially Sponsored by Journal of Agricultural and Food Chemistry Cosponsored by AGFD Organizers: Manasi Saha, Steve Perez, Michael Conway **Monday 8/23/2021, 10:30:00 AM - 12:30:00 PM -- JAFC Award, David Steiner Monday 8/23/2021, 2:00:00 PM - 4:00:00 PM

Process Research & Development in Crop Protection

Financially Sponsored by Corteva Agriscience Cosponsored by AGFD Organizers: Suhelen Vasquez Cespedes, Chao Wang, Helmars Smits Sunday 8/22/2021, 10:30:00 AM - 12:30:00 PM Sunday 8/22/2021, 2:00:00 PM - 4:00:00 PM

Sustainability in Agriculture: New Sources & Tools for the Development of Sustainable Crop Protection Solutions

Cosponsored by AGFD, ENVR Organizers: Brittany Rauzan, Martin Walsh, Arvind Jaganathan, Benjamin Nugent Sunday 8/22/2021, 10:30:00 AM - 12:30:00 PM Sunday 8/22/2021, 2:00:00 PM - 4:00:00 PM

Unmanned Aerial Systems (aka Drones): Pesticide Spraying & Other Agricultural Applications

Cosponsored by ENVR Organizers: Ross Breckels, Zhenxu Tang, Jeffrey Perine, Katrina White, John Whall Sunday 8/22/2021, 4:30:00 PM - 6:30:00 PM Sunday 8/22/2021, 7:00:00 PM - 9:00:00 PM

POSTERS

Sci-Mix

Organizer: Qing Li Monday 8/23/2021, 8:00:00 PM - 10:00:00 PM

Agricultural Advances & Applications in Human Health & Technology

Cosponsored by AGFD Organizer: Qing Li Tuesday 8/24/2021, 7:00:00 PM - 9:00:00 PM

Environmental Fate, Transport, & Modeling of Agriculturally-Related Chemicals

Cosponsored by AGFD Organizer: Qing Li Tuesday 8/24/2021, 7:00:00 PM - 9:00:00 PM

Pesticides, Pollinators, & Crop Protection

Cosponsored by AGFD Organizer: Qing Li Tuesday 8/24/2021, 7:00:00 PM - 9:00:00 PM

COSPONSORED SYMPOSIA

[AGFD] Sterling B. Hendricks Memorial Lectureship Symposium

[AGFD] AGFD JAFC Award Symposium

[ENVR] Toward Creating a Water-Energy-food Nexus Community of Practice: Symposium in honor of Prof. Rabi H. Mohtar

[ENVR] Sustainable Agriculture & Food Systems

[POLY] Fourth CME NASA Symposium: Chemistry for Reliable Human Space Exploration Cosponsored by CME, PRES