AGRO DIVISION
2015 NEW INVESTIGATOR AWARD FINALISTS
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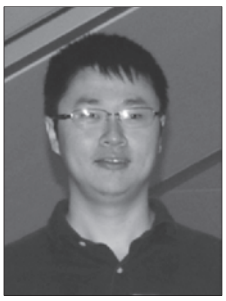

Dr. Weiying Jiang is a Research Scientist at California Environmental Protection Agency, Department of Pesticide Regulation. He conducts independent research to assess exposure risks of pesticides to humans, and develops mitigation tools to support government policies and regulations. He is leading a field study to monitor strawberry harvester exposure to pesticides, measure pesticide excretion over time, and develop mathematical models to predict the exposure. Dr. Jiang received his PhD in Environmental Sciences from University of California, Riverside under the supervision of Dr. Jay Gan. His dissertation research was to clarify the fate and transport behaviors of pesticides in urban and residential areas. His work identified the source of pyrethroids and fipronil in urban runoff, and he developed a wiping method to predict pesticide runoff potential from concrete surfaces.

SUNDAY, *Arlington Room*

10:30 – 12. NEW INVESTIGATOR AWARD FINALIST. New model to track strawberry harvester activity and predict pesticide exposure. **W. Jiang**, D. Richmond, B. Hernandez, S. Yanga

Dr. Fang Jia received her PhD in Environmental Sciences from the University of California, Riverside under the supervision of Prof. Jay Gan in 2014. Her PhD research focused on development and application of chemical tools to characterize the bioavailability of hydrophobic organic contaminants in the surface aquatic environment; and remediation of polluted sediments using carbonaceous materials and understanding the mechanisms that regulate the bioavailability. Her research achievements on the effects of black carbons on PBDE sequestration in sediments were highlighted as Research Brief on the website of National Institute of Environmental Health Sciences. Currently, she is a postdoctoral scholar in the Environmental Fate group of Bayer CropScience. She works as a GLP study director to support registration of crop protection compounds in the US or globally. She also supports proteomics work from the Bioscience Department of Bayer CropScience.

WEDNESDAY, *Back Bay Room*

9:45 – 279. NEW INVESTIGATOR AWARD FINALIST. Attenuating historically-contaminated sediments by black carbon amendments: Effects of sediment types and contact time. **F. Jia**, J. Gan

Dr. John Sivey received his PhD in Environmental Engineering and Chemistry from Johns Hopkins University under the direction of Dr. Lynn Roberts. After completing postdoctoral work at Towson University, Dr. Sivey's research group investigates the transformation mechanisms and fate of active and "inert" constituents of agrochemical formulations. His team also examines the chemistry and consequences of often-overlooked halogenating agents (e.g., Cl_2O, BrCl, and BrOCl) in solutions of chlorine-based disinfectants. In addition to teaching courses in analytical and environmental chemistry, Dr. Sivey enjoys teaching a course in Towson's Honors College entitled *The Polluted States of America.*

MONDAY, *White Hill Room*

8:55 – 88. NEW INVESTIGATOR AWARD FINALIST. Buffers as potential catalysts of hydrolysis and halogenation during agrochemical fate experiments in bench-scale reactors. **J.D. Sivey**, M. Burton, A.L. Roberts

Dr. Bartek Troczka received his PhD in medicine from Cardiff University, School of Medicine under the supervision of Dr. Alan Williams. Through collaboration between Dr. Williams and Dr. Lin Field and Dr. Emyr Davies from Rothamsted Research, the BBSRC agricultural research institute located in Harpenden, UK, Dr. Troczka's project was focused on understanding the molecular interaction of diamides, the new class of insecticides acting on a novel target, the ryanodine receptor. This involved cloning and expression of the receptor from target pest species and the monitoring and management of the emergence of resistance to diamides. After graduating in 2014, he is currently a post-doctoral research scientist under the supervision of Dr. Christopher Bass in the Insect Molecular Biology Group at Rothamsted Research exploring the molecular genomic tools in understanding differential bee toxicology to different classes of insecticides.

SUNDAY, *Georgian Room*

311:45 – 8. NEW INVESTIGATOR AWARD FINALIST. Insect ryanodine receptors as molecular targets for diamide insecticides. **B.J. Troczka**, A.J. Williams, M. Williamson, L.M. Field, P. Luemmen, E.T. Davies

The AGRO Division is grateful for the sustained support of the AGRO New Investigator Award

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