

## Fluid Fertilizer Technology Workshop Speaker Summaries

Sheraton Tampa Riverwalk Hotel  
Tampa, FL, CA  
December 8-9, 2009

With input from various people and organizations across the Southeast U.S., an excellent slate of speakers from across country has been assembled for this workshop. In addition to very informative presentations from these speakers, the workshop agenda allows ample time for questions, discussion and input from all of those in attendance. Please go to [www.fluidfertilizer.com](http://www.fluidfertilizer.com) for registration information and the complete agenda.

### **Fluid Fertilizer Solutions and Opportunities. Armando Campos, Nutrient Technologies, LLC.**

*Armando owns Nutrient Technologies, an agricultural consulting company, and lives on Winter Park, FL. Armando has considerable experience with Florida agriculture, fluid fertilizer utilization at the farm level and the fluid fertilizer industry as a whole. His focus will be on the tremendous opportunities for fluids and how we need to market the value that we bring to the growers in the Southeast.*

### **Southeast/Global Fertilizer Outlook and Trends: 2010 and Beyond. Jeff Brown, The Mosaic Company.**

*Jeff is an economist for The Mosaic Company and lives in Plymouth, MN. In this session, he will provide us a short review of the past year, a snapshot of the current fertilizer industry situation and comments on what might be expected in the coming years.*

### **Local Plant Operation/Maintenance Issues. Todd Scobie, Murray Equipment, Inc.**

*Murray Equipment is a manufacturer and distributor specializing in liquid handling equipment. Todd Scobie has much experience in the fluid fertilizer business and will address local fluid fertilizer plant production operational and maintenance issues necessary for maintaining an efficient and profitable operation.*

### **Florida Nutrient Criteria Issues; A Precedent For the Rest of the Nation? Jeff Brown, Law firm of Oertel, Fernandez, Cole, & Bryant, P.A.**

*Jeff is an attorney with the law firm of B Oertel, Fernandez, Cole, & Bryant, P.A. and practices in the area of Environmental Law and Land Use Law. Prior to joining the firm, he was a senior attorney at the Florida Department of Environmental Protection. He will discuss Florida nutrient criteria issues and how this might affect Florida – and the rest of the country.*

### **Storage Tank Failures and Maintenance. Phil Bureman and Dr. Craig Meyers, Nalco.**

*Phil Bureman is Nalco's technical consultant for Chemicals and Biofuels and lives in Olathe, KS. Dr. Craig Myers is a research scientist at Nalco's headquarters in Naperville, IL. This session will cover proper monitoring of fertilizer storage tanks, performing necessary maintenance and evaluating the ramifications of tank failure.*

### **Advanced Production Systems For Citrus. Dr. Arnold Schuman, University of Florida.**

*Dr. Schumann is an Associate Professor of Citrus Nutrition at the Citrus Research and Education Center near Lake Alfred, FL. Dr. Schumann's program has recently focused on the use site specific management and precision technologies to more efficiently manage citrus by through the use of best irrigation practices and fertilization technologies. His time will be spent on improved management for Florida citrus.*

### **Properties, Characteristics, Salt-out of Precipitate Formation of Common Fluid Fertilizers. Dale Leikam, Fluid Fertilizer Foundation.**

*Dale Leikam is President of the Fluid Fertilizer Foundation and lives in Manhattan, KS. This session will cover various characteristics and properties of several common fluid fertilizer products. Included will be a few demonstrations, definitions and storage/housekeeping issues.*

**Compatibilities and Formulation Of Various Fluid Products (CaTS, MgTS, KNO<sub>3</sub>, etc.). Mike Orr, Specialty Products Consulting.**

*Mike Orr has considerable experience with all aspects of the fluid fertilizer industry. After previously providing technical expertise for several major fluid fertilizer companies, Mike now consults on fluid fertilizer production across the U.S. He has considerable experience in fluid fertilizer production operations, formulation and troubleshooting various fluid fertilizer product compatibility issues.*

**Urea Volatilization; Mechanisms, Magnitude and Management. Dr. David Kissel, University of Georgia.**

*Dr. Kissel is Professor and Director of the Agricultural & Environmental Services Lab in Athens, GA. His major areas of research now include N mineralization from organic matter, fertilizer crop response, soil acidification and liming. He is a well known international expert on potential urea ammonia volatilization having conducted considerable research on conditions required for urea volatilization and the mechanisms involved.*

**Fertigation/Maintenance of Irrigation Systems. Bryan Hobbs, BB Hobbs Company.**

*BB Hobbs is a leader in irrigation and fertigation technology specializing in drip and solid set automated systems. Headquartered in Darlington, SC, Bryan also operated across the Southeast, including Florida. In addition to irrigation/fertigation system maintenance, he will discuss water and fertigation management techniques that typically improves yields, enhances quality and increases efficiency.*

**Production Issues For Fluid Products (e.g. urea, K<sub>2</sub>CO<sub>3</sub>, KNO<sub>3</sub>, etc.). David Carson Chemical Dynamics and David Plank, The Andersons.**

*Both David Plank and David Carson have considerable experience in managing the operation of fluid fertilizer production facilities. Also, they are recognized leaders for managing compatibility/formulation issues in Florida and the Southeast U.S. In addition to general production issues - order of addition, supplemental heat requirements, mixing time and other issues brought up by the attendees will be covered.*

**Specialty Fertilizer Law and Other Issues. Mary Hartney, Florida Fertilizer & Agrichemical Association.**

*Mary is the President/Executive Director of the FFAA and lives in Winter Haven, FL. Mary is very active in state, regional and national forums relating to crop production and environmental production. Mary will spend time visiting with us on the Specialty Fertilizer Law and other issues important to Southeast agriculture.*

**Micronutrient Sources & Performance: Where They Fit. Alan Robinette, Tetra Micronutrients.**

*Alan is the Eastern U.S. Sales/Technical Manager for Tetra Micronutrients and has over a quarter century experience in the micronutrient industry. This session will discuss various micronutrient forms and where they fit in terms of methods of application, agronomic effectiveness and compatibility with various fluid fertilizers.*

**Foliar Nutrient Application Update and Opportunities. Vatren Jurin, Brandt Consolidated Inc.**

*Vatren Jurin is a Technical Service Manager/Agronomist for Brandt Consolidated, Inc. and has considerable experience in irrigated and crop nutrition in the U.S. and in many overseas countries. Vatren will cover foliar nutrient applications in general, with an emphasis on micronutrients and potassium.*

**Modern Products, Techniques and Equipment. Dr. Glendon Harris, University of Georgia.**

*Glendon Harris is an Associate Professor and Extension Agronomist for the University of Georgia and works out of Tifton GA. Dr. Harris concentrates his efforts in soil fertility, byproduct utilization and conservation tillage. In this session, Glendon will visit on various new crop nutrition products, techniques, equipment and innovations for Southeast agriculture.*