AUTHENTICATION OF FOOD AND WINE SYMPOSIUM

Held in Conjunction with the American Chemical Society National Meeting
Division of Agricultural and Food Chemistry
San Francisco, CA
March 21-22, Moscone Center

For more information about the meeting, please see the ACS web site at:
http://www.acs.org/meetings

Authentication of foods, wines and beverages for varietal, country (or region)-of-origin, and processing conditions is becoming of increasing concern to consumers and regulators both in the US and internationally. As markets become more globalized and foods and beverages are sourced from many locations outside of the US, the need for information on product authenticity is becoming mandated either by legal regulations or by market demand. However, there are significant chemical and analytical challenges faced in confirming food authenticity and determining food adulteration. A two-day symposium at the upcoming American Chemical Society (ACS) national meeting in San Francisco (March 21-22, 2010) will provide up-to-date information on methods and applications of food and wine authentication. We have confirmed a number of national and international experts to speak at this symposium (see list below).

The symposium will highlight international research in the area of wine and food authentication and will increase industry awareness of the need for multidisciplinary research in this area. The audience for the symposium will be very broad-based and will include industry, government and academic scientists in the fields of food science, wine/beer/spirits chemistry, flavor and fragrance chemistry, nutraceuticals, etc. Based on previous work we have done in this area, we expect this symposium to generate a significant amount of interest from the news media.

Organizers: This symposium is jointly organized by the following scientists:
Prof. Susan Ebeler, UC Davis, Davis, CA USA
Dr. Gary Takeoka, USDA, ARS, Albany, CA USA
Prof. Peter Winterhalter, TU Braunschweig, Braunschweig Germany

Program and Confirmed Speakers
Session I: Overview and Analytical Methods
- Overview: Progress in Authentication of Food and Wine
  Dr. Susan Ebeler and Dr. Gary Takeoka
  Department of Viticulture and Enology, UC Davis and USDA-ARS WRRC Laboratory, Albany CA

- Scientific Approaches to Traceability in the Food Chain
  Dr. Reiner Wittkowski
  Bundesinstitut für Risikobewertung, Berlin, Germany
• NMR Studies in Food Authentication  
  Speaker: Dr. Roberto Consonni  
  Instituto per lo Studio de la Macromolecole, Milan, Italy

• DNA and Peptides as Molecular Markers for Assessing Food Authenticity  
  Prof. Dr. Stefano Sforza  
  University of Parma, Italy

• Using Chemometrics to Classify Samples and Detect Misrepresentation  
  Prof. Dr. Karl Siebert  
  Cornell University, Ithaca, NY

• Establishing Natural Product Content with the Natural Radiocarbon Signature  
  Dr. Bruce Buchholz  
  Lawrence Livermore National Laboratory, Livermore, CA

• Authentication Approach of the Chemodiversity of Grape and Wine by FTICR-MS  
  Dr. Régis Gougeon  
  University of Burgundy, Dijon, France

Session II: Authentication of Wine and Alcoholic Beverages
• Overview of Chemical Markers for Varietal Authentication of Red Wines  
  Prof. Dr. Dietrich von Baer  
  University of Concepcion, Concepcion, Chile

• Flavonol Profiles for Grape and Wine Authentication  
  Prof. Dr. Isidro Hermosín-Gutiérrez  
  University of Castilla-La Mancha, Spain

• Suitability of Grape-Derived Phenolic Compounds for Determining Wine Varietal Authenticity  
  Dr. Jim Kennedy  
  AWRI, Australia

• Authentication of Different Terroirs of German Riesling Using Sensory and Flavor Analysis  
  Prof. Dr. Uli Fisher  
  DLR Rheinpfalz, Neustadt a. d. Weinstrasse, Neustadt, Germany

• Authentication of Red Wine Vintage Using Bomb-Pulse $^{14}$C Signatures  
  Prof. Dr. Graham Jones  
  University of Adelaide, Australia

• Analytical and Multivariate Statistical Methods for Differentiation of Wines Produced with Oak Chips and Barriques
Dr. Magdalena Mueller  
Bavarian Health and Food Safety Authority, Würzburg, Germany

- Influence of the Storage in Oak Barrels on the Aroma Blueprint of Red Wine Made from Dornfelder Grapes  
  Dr. Stephanie Frank  
  Technical University of Munich, Germany

- Characterization of the Key Aroma Compounds in Brandies from Different Origins  
  Prof. Dr. Peter Schieberle  
  Technical University of Munich, Germany

- Mezcal: The Other Agave Drink  
  Prof. Dr. Mercedes Lopez  
  University of Irapuato, Mexico

Session III: Authentication of Food

- Authentication of Caffeinated Beverages  
  Prof. Dr. Uli Engelhardt  
  Technical University of Braunschweig, Braunschweig, Germany

- Authentication of Saffron Spice (*Crocus sativus L.*)  
  Prof. Dr. Ana Sánchez  
  Universidad de Castilla-La Mancha, Albacete, Spain

- Can Consumers Trust Salmon Production Method Labels Through the Use of Chemical Profiling?  
  Prof. Dr. Kevin Hobbie  
  Oregon State University

- Quality and Authenticity Control of Fruit-Derived Products  
  Dr. Andreas Schieber  
  University of Alberta, Edmonton, Canada

- Authentication of Fruit Juices by Spectroscopic Techniques  
  Dr. Monica Giusti  
  The Ohio State University

- Authentication of Fruit Juices Derived from *Morinda citrifolia* (noni)  
  Dr. Sebastian Tolle and Prof. Dr. Peter Winterhalter  
  Technical University of Braunschweig, Braunschweig, Germany

- Authentication of Fruit-Juice Aroma-Evaluating Re-aromatization  
  Dr. Carolin Wolter
Wesergold Getränkeindustrie GmbH & Co. KG, Rintein, Niedersachsen, Germany

- Phenolic Compounds as Markers for the Authentication of Sherry Vinegars: A Foresight for High Quality Vinegar Characterization
  Prof. Dr. M. Carmen Garcia-Parrilla
  University Sevilla, Sevilla, Spain

Session IV: Authentication of Botanicals and Ingredients
- Herbal Reference Standards and the Authentication of Botanicals
  Dr. Michael Schwarz
  PhytoLab GmbH & Co. KG, Vestenbergsgreuth, Germany

- Detecting the Components of Botanical Mixtures by Single-Strand Conformation Polymorphism Analysis
  Dr. Ann M. Hirsch
  UCLA, Los Angeles, CA

- Identity and Authenticity Control of Complex Raw Materials in the Flavor Industry
  Dr. Andreas Degenhardt
  Symrise, Holzminden, Germany

- Authentication of Foods Enriched with Plant Sterols/Stanols and their Esters
  Prof. Dr. Karl-Heinz Engel
  Technical University of Munich, Freising, Germany

- Varietal Screening of Quercetin in Onions (*Allium cepa L.*) and Onion Waste Materials for Authentication in Food Fortification
  JiHyun Lee and Prof. Dr. Alyson Mitchell
  University of California, Davis, Davis, CA

- Multiresidue Pesticide Analysis of Ginseng and other Botanical Dietary Supplements
  Dr. Jon Wong
  US Food and Drug Administration, Center for Food Safety and Applied Nutrition, College Park, MD

- Evaluation of Disposable Pipette Extraction (DPS) for the Rapid Determination of Melamine and Canuric Acid in Food
  Dr. Alex Krynitsky
  US Food and Drug Administration, Center for Food Safety and Applied Nutrition, College Park, MD

Sponsors:
American Chemical Society Division of Agricultural and Food Chemistry
College of Agriculture and Environmental Sciences, University of California, Davis
Department of Viticulture and Enology, University of California, Davis
California Association of Winegrape Growers
Constellation Wines US
DAAD (German Academic Exchange Service/Deutscher Akademischer Austausch Dienst)
ETS Laboratories
E&J Gallo Winery
Mars Botanical/Mars, Inc.
PhytoLab GmbH & Co. KG
Symrise AG