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Journal of AOAC International (*JAOAC*) Special Issue on Representative Sampling for Food and Feed Materials: A Critical Need for Food/Feed Safety

A special collection of papers on all aspects of food and feed safety sampling—to be used in risk assessment, process control in a food/feed manufacturing environment, foodborne disease outbreaks, and regulatory compliance—is now available as an open access publication on the *Journal of AOAC International*'s (*JAOAC*'s) website. Visit http://aoac.publisher.ingentaconnect.com/content/aoac/jaoac for 11 fully refereed papers in the March/April 2015 issue.

These papers are the result of a groundbreaking trans-Atlantic collaboration between researchers, samplers and regulators from Europe and the United State, a true first within the sampling world. The authors gathered for a week in Windsor, Colorado in October 2014 to collaborate and write.

The papers in this Special Guest Editor Issue introduce the Theory of Sampling (TOS) as relevant for all aspects of food and feed safety sampling—the principles governing representative sampling apply universally. The papers are written and composed to interact with each other, providing a comprehensive, yet compact overview of the criteria that must be followed to ensure representative sampling.

The guest editors were: **Kim H. Esbensen**, Geological Survey of Denmark and Greenland, and Aalborg University, Denmark; **Claudia Paoletti**, European Food Safety Authority Parma, Italy; and **Nancy Thiex**, Thiex Laboratory Solutions, and Agricultural Materials section editor for the Journal.

The target audience includes all food/feed protection personnel: field sampling operators, academic and industrial scientists, laboratory personnel, companies, organisations, regulatory bodies and agencies that are responsible for sampling, as well as their project leaders, project managers, quality managers, supervisors and directors. In the United States alone, there are an estimated 45,000 federal, state and local food/feed regulatory personnel, not including industry or laboratory personnel.

"We hope to trigger a long overdue discussion and awareness regarding the need for global harmonization of representative sampling approaches for food and feed commodities", it is stated in the section's introduction. "As a collection, these papers represent a leap forward with respect to a valid sampling-plus-analysis approach for the entire food and feed area. A highpoint concerns the extended framework in which TOS remain the essential tool, the formal system definition, revolving around the concept of Decision Units (a new issue not often considered in TOS)".

The SGE issue includes the following contributions:

- "Food and Feed Safety Assessment: The Importance of Proper Sampling" by **Harry Kuiper** and **Claudia Paoletti**.
- "Towards a Unified Sampling Terminology: Clarifying Misperceptions" by **Nancy Thiex**, **Kim H. Esbensen** and **Claudia Paoletti**.
- "A Systematic Approach to Representative Sampling" by **Charles Ramsey** and **Claas Wagner**.
- "Sample Quality Criteria" by **Charles Ramsey** and **Claas Wagner**.
- "Materials Properties: Heterogeneity and Appropriate Sampling Modes" by **Kim H. Esbensen**.
- "Theory of Sampling—Four Critical Success Factors Before Analysis" by **Claas Wagner** and **Kim H. Esbensen**.
- "Quality Control of Sampling Processes—A First Foray; From Field to Test Portion" by **Kim H. Esbensen** and **Charles Ramsey**.
- "Considerations for Inference to Decision Units" by **Charles Ramsey**.
- "Distributional Assumptions in Agricultural Commodities—Development of Fit-for-Decision Sampling Protocols" by **Claudia Paoletti** and **Kim H. Esbensen**.
- "Critical Practicalities in Sampling For Mycotoxins in Feed" by **Claas Wagner**.
- "Considerations for Sampling Contaminants in Agricultural Soils" by **Charles Ramsey**.



Transatlantic Special Section taskforce, October 2014, Windsor, Colorado (left to right): Nancy Thiex (Thiex Laboratory Solutions); Kim H. Esbensen (Geological Survey of Denmark and Greenland & ACABS Research Group, University of Aalborg); Charles Ramsey (EnviroStat, Inc.); Claas Wagner (Wagner Consultants); Claudia Paoletti (European Food Safety Authority, Parma, Italy). The authors brought strong opinions and traditions from very different fields to the meeting and had to work hard to reach a consensus, but met with success in the end. Although at one time widely different terminology usages and traditions almost had to be resolved by the American way to solve disputes in the Wild West (see front cover).

- "Considerations for Sampling of Water" by **Charles Ramsey**.

The open access Special Guest Editor Issue is available online at http://aoac.publisher.ingentaconnect.com/content/aoac/jaoac.

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