MARINE AND FRESHWATER TOXINS
2009 TASK FORCE MEETING, SYMPOSIA AND POSTER PRESENTATIONS

Join us in Philadelphia - Attend Timely Symposia (listed below) **the Natural Toxins Poster Session and our Task Force Meeting**

Please see the 2009 Annual Meeting Website at http://www.aoac.org/meetings1/123rd_annual_mtg/main_2.htm for Registration, Poster Submission, Meeting Schedule, and General Information (To attend TF Meeting Please RSVP James_Hungerford@hotmail.com)

Call for Posters - Submit by June 24, 2009 - See website above for instructions
Please note that you must first register for the annual meeting, and when submitting you should use the poster category *Detection and Measurement of Natural Toxins*)

MARINE AND FRESHWATER TOXINS:
BIOSENSORS AND BIOCHEMICAL TOOLS

Biosensors and biochemical tools for the marine and freshwater toxins have generated extensive interest and remain the subject of much research. What determines their success or failure? In principle these tools could advance seafood safety, and even form the basis for primary monitoring methods if they proved rugged enough and compared favorably with existing officially approved and accepted methods. Speed and ease of use form the mantra for their development and in the case of functional assays can directly reflect health risk via response. Ranging from various forms of immunoassays to enzymatic assays and even membrane/receptor-based assays and cell-based assays, these novel tools bring new capabilities and also new challenges in their development and practical application. This session will examine the needs for these biosensors and biochemical tools, strategies for their development, and their performance in the field. Speakers include those developing, evaluating, and potentially applying these assays.

CO-CHAIR: Lei Bao, Director of Mycotoxins and Marine Toxins Laboratory, Shan Dong Import-Export Inspection and Quarantine Bureau of China
CO-CHAIR: James M. Hungerford, Research Chemist, U.S. FDA - ORA

Benjamin A. Suarez-Isla, University of Chile, Santiago, Chile

The Need for Biosensors and New Field Methods - Electrophysiological and MBA from a Recent Outbreak of PSP in Chile

Stacey M. Etheridge, U.S. FDA - CFSAN, USA
Need and Current Capabilities for Detecting PSP Toxins - Biosensors, Test Kits, and Separations

Emanuel Hignutt, Jr., State of Alaska Environmental Health Laboratory, USA
The Alaskan Experience in Exploring Alternative Methods for PSP Toxins

James M. Hungerford, U.S. FDA - ORA, USA
Exploring Immunochemical and Enzymatic Screening Tools for Histamine

Oral Poster Presentation:
Atsushi Yoshino, Tropical Technology Center Ltd, Okinawa, Japan
Single Laboratory Validation Study on the DSP Assay Kit Using Recombinant PP2A

MARINE AND FRESHWATER TOXINS:
MOVING AHEAD IN THE REAL WORLD VIA VALIDATION AND IMPLEMENTATION

What is required of an official method by the users of that method to advance actual monitoring, and what is the international impact of official method approval? These are critical questions that help our toxin community decide on future efforts. A recent example is discussed, an alternative official method for the PSP toxins (OMA 2005.06). Once this method was reviewed and approved by the Marine and Freshwater Toxins Task Force and the OMB of AOAC, it was immediately the object of multiple training courses, EU directives, and Codex Alimentarius reviews. Now implemented within the UK, it was first subjected to method refinements and analyte extensions which boosted its practical application. It was also modified in the US for forensic application. Other aquatic toxins, such as the okadaic acids and the ciguatoxins are, like the saxitoxins responsible for PSP and cyanotoxins impacting water safety, a worldwide problem and accordingly this session will include a group of speakers chosen to give a global view. Experts will discuss methods available now for these many and varied toxins, validation efforts, future needs, the critical need for reference materials, and factors driving implementation.

CO-CHAIR: James M. Hungerford, Research Chemist, U.S. FDA - ORA, USA
CO-CHAIR: Andrew D. Turner, Senior Analytical Chemist, CEFAS, UK

Takeshi Yasumoto, Okinawa Science and Technology Promotion Center, Japan
Marine Biotoxin Monitoring in Japan

Michael A. Quilliam, National Research Council of Canada
Certified Reference Materials for Monitoring Marine and Freshwater Toxins

Lorna Murray, Food Standards Agency Scotland, UK

Applying Modern Shellfish Toxin Methodology: PSP Monitoring of Scotland's Shellfish under EU 854/2004

Andrew D. Turner, CEFAS, UK
Analyte Extension, Refinement, and Implementation of AOAC 2005.06 OMA for PSP Toxins

Oral Poster Presentation:
Jeffrey M. van de Riet, Canadian Food Inspection Agency
Practical Application of the Post Column Oxidation Method for the Analysis of PST to the Analysis of Lobster Hepatopancreas: The Road to Regulatory Approval