

The AOAC method validation pathway: Setting standards for methods and demonstrating compliance to defined method requirements

John Szpylka

A Mérieux Nutri Sciences Company, USA

AOAC International has implemented a new pathway for recognizing methods as official methods of analysis. This interactive pathway integrates the development of defined method performance requirements with an expanded role of an assigned expert review panel (ERP). This presentation will review the process including the new tools being used to assess a method's performance.

The pathway begins with a panel of stakeholders defining an analytical method's requirements so that analytical results address current needs. An ERP is then created and assigned to review candidate methods against those requirements. Methods can then be recognized as official first action if acceptable. The ERP then monitors the method's real-world performance during a two year period. During this evaluation period, the ERP collects information on the method's reproducibility, its performance in a working environment, identifies any safety concerns, and also other in-use factors. The mechanisms to evaluate the method's performance are flexible and allow for new approaches to determine a method's reproducibility and practical performance needs. Methods recommended for final action status by the ERP are sent to the AOAC official methods board for final review.

Biography

John Szpylka is the Director of Chemistry N.A. with Silliker, Inc., a Mérieux Nutri Sciences Company. He is responsible for identifying and implementing the ever expanding scope of chemistry testing needs for the food industry. He has been active in the identification and development of new & improved methods of nutritional analyses for use in product development and quality assurance. Before joining Silliker in 2012, he was a principal scientist with a major food company for 21 years where he developed methods for food testing, managed lab areas within the analytical department, lead the project resulting in the laboratory obtaining ISO 17025 accreditation, and worked on product introductions. He is the immediate past chair of the AOAC Official Methods Board, and has served as chair of the Methods Committee on Food Nutrition, chair of the AOAC Technical Division on Laboratory Management, and chair of the AOAC Analytical Laboratory Accreditation Criteria Committee. He received his doctorate in analytical chemistry from the Ohio State University after receiving a B.S. in chemistry from Rensselaer Polytechnic Institute.

john.szpylka@silliker.com