PURDUE
UNIVERSITY

Analytical Chemistry Seminar

Tuesday, April 19, 2022
3:30 PM, WTHR 320

Procter and Gamble Presentation


Ian Henry, Ph.D.


Tim Baker, Ph.D.


Jason Price, Ph.D.

"A UHPLC-PDA-CAD-HRMS Platform for Comprehensive Identification and Quantitation of Constituents in Complex Mixtures for Safety Risk Assessments" by *Jason Price, Ph.D*

Abstract

To support in silico assessments that guide the need for more expensive in vitro or in vivo safety studies, we have developed a comprehensive approach to identify and quantitate the constituents of complex mixtures (including natural products and extracts of assembled products and polymers). The methodology utilizes separation by UHPLC, followed by UV, charged aerosol detection (CAD) and high-resolution mass spectrometry (with MS/MS and MS^3). CAD provides quantitation for analytes where analytical reference standards are not available. Quantitation is facilitated by the addition of an inverse gradient stream which compensates for the known sensitivity of the detector to mobile phase composition. The identification of unknown compounds is accomplished using high resolution mass spectrometry to obtain molecular formulae coupled with database searching. The value of orthogonal data (e.g., UV absorbance spectra) to aid compound identification will also be highlighted.

"M or T? Overview of the World's Largest Consumer Products Company and the Journey of a Mgmt-Track Analytical Chemist in R&D" by *Ian Henry, Ph.D.*

Abstract

Brushing teeth. Washing hair. Showering. Shaving. Caring for your baby. Cleaning the house. Doing the dishes, and the laundry. At Procter & Gamble we make the products that help make these moments a little easier. At the world's largest consumer products company we have extraordinary technical breadth and depth in technologies that impact our lives every day. Ever wonder what the career journey in the consumer products industry looks like for a Ph.D. Analytical Chemist who chose the management route? In this presentation we'll share an overview of the company and its business units from the lens of a Ph.D. analytical chemist. We'll also discuss key technical areas we recruit and current opportunities across the company.