

# UPDATES ON ELEMENTAL IMPURITIES ANALYSIS OF PHARMACEUTICAL AND NUTRACEUTICAL PRODUCTS

An informative technology based discussion on the new USP and ICH regulations

## COMING TO A CITY NEAR YOU!

### Locations:

#### August 25, 2015

Agilent Technologies  
201 Hansen Court, Suite 108  
Wood Dale, IL 60191

#### August 26, 2015

Boulder Marriott  
2660 Canyon Boulevard  
Boulder, CO 80302

#### August 27, 2015

Double Tree by Hilton  
Salt Lake City Airport  
5151 Wiley Post Way  
Salt Lake City, UT 84116

Register Here

[www.agilent.com/chem/  
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Control of impurities, including elemental (inorganic) contaminants, has always been a concern in the development and production of pharmaceutical and nutraceutical products, and dietary supplements.

ICH Q3D and USP<232> define the target analytes and limits based on toxicological data rather than method capability, and require the quantitative determination of individual metal concentrations, in place of the current sulfide precipitate test in USP<231>. Chapter <2232> of the US Pharmacopoeia build upon chapter <232> for the the “Big Four” analytes and only targets dietary supplements.

The reference analytical methods suggested in USP<233> are ICP-MS and ICP-OES, replacing USP<231>’s colorimetric analysis. The fifteen target analytes in USP<232> include the “Big Four” highly toxic elements: arsenic (As), cadmium (Cd), mercury (Hg) and lead (Pb), which are controlled at the lowest level in pharmaceutical products.

Environmental contaminants and inorganic catalysts should be limited in drug products and must be measured if they may have been introduced during the formulation process, or as a result of the production processes.

Join us for a morning to discuss:

- The latest updates and requirements
- Techniques for measuring tough samples
- Tips to achieve the lowest sensitivity
- Next steps in meeting the upcoming requirements

All in an environment where you can network and collaborate with your peers. We will have application scientists available to answer your specific questions.

*See next page for Agenda.*



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## AGENDA

8:30 a.m.	Registration and Breakfast
9:00 a.m.	Introduction and latest updates on USP and ICH : The latest on USP Chapters <232>, <2232>, and <233>
9:30 a.m.	Innovative ICP-MS and ICP-OES solutions for elemental impurity analysis
10:30 a.m.	Break
10:45 a.m.	Discussion on Software and Compliance
11:15 a.m.	Demystifying ICH Q3D and USP <232>/<233>: Thoughts on sample preparation using microwave digestion – presented by Milestone
12 noon	Lunch and Open Discussion
1 p.m.	Adjourn



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