



" Analytical Plasma Source Mass Spectrometric Analysis for Nutrition and Toxicology "

by
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Wednesday, October 18, 2006
7:30 PM Marshfield Clinic
Laird Center, Room 50

Inductively coupled plasma mass spectrometry (ICP-MS) has been applied with increasing frequency in the biomedical studies of nutrition, drug metabolism, and toxicology. ICP-MS provides reliable isotope ratio determinations and superior metal concentration sensitivity. When combined with compound separation technology as part of the sample introduction phase, ICP-MS enriches the tools available for studies of human metabolism and heavy metal poisoning. Stable isotope analysis methods for biological materials are well established with conventional approaches. These methods, an extensive literature database, and valuable applications with conventional isotope techniques can be extended by ICP-MS. Nutritional, pharmacological, and toxicological models of animals and humans can be expanded with the data throughput of ICP-MS. Examples will be described to illustrate the role of ICP-MS in nutrition, toxicology, and biomedical research.

About the Speaker

Ramon Barnes is director of the University Research Institute for Analytical Chemistry, Professor Emeritus of Chemistry at the University of Massachusetts, editor of the ICP Information Newsletter (1975-), and chairman of the Winter Conference on Plasma Spectrochemistry (1980-). He received a Ph.D. in analytical chemistry from the University of Illinois, Champaign/Urbana, in 1966, an A.M. in chemistry from Columbia University, New York, in 1963, and was a post-doctoral research fellow at Iowa State University, Ames, in 1968 and 1969. He served as an Army Captain at NASA Lewis Research Center, Cleveland, from 1966 to 1968. From 1969 to 2000 he taught analytical chemistry and maintained an international research program at the University of Massachusetts, Amherst.

Prior to the meeting, a 5:45 PM mixer and dinner will be held at the China Chef, 233 S. Central Ave.. After dinner, the talk will be in Room 50 of the Laird Center at the Marshfield Clinic (map on the next page.)

For reservations contact Carmen Wiley at 715-387-7904 or (email: wiley.carmen@marshfieldclinic.org) by 5 PM on Tuesday October 17.
