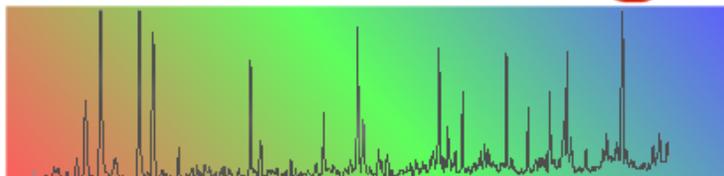




SAS-Chicago



April Meeting

Thursday, April 26, 2018

The April meeting will be held at the Holiday Inn, located at 1000 Busse Road, Elk Grove Village, IL 60007. See the map on the last page.

Social Hour: 6:00 PM

Dinner: 6:30 PM

Speaker: 7:30 PM

ICP SPECTROSCOPY: SOMETHING OLD, SOMETHING NEW

R. S. Houk, Ph.D.

*Professor, Department of Chemistry
Iowa State University, Ames IA 50011*

This talk will survey the development of analytical atomic spectroscopy since the advent of atomic absorption in the early 1960s. It will emphasize the history of the inductively coupled plasma (ICP) for both atomic emission and atomic mass spectrometry. Current status and recent developments in both ICP spectroscopies will be surveyed. The latter include interesting applications such as a) detection and sizing of inorganic nanoparticles, b) application of specialized ICP time of flight mass spectrometers for analysis of metal tags on single biological cells, and c) use of ICP magnetic sector MS for discovery of new superheavy elements. Possible areas of improvement in ICP-MS will be suggested.



Please make your dinner reservations for the upcoming meeting by email at sas.chicago1@gmail.com, using our online form <http://www.sas-chicago.org/Online%20Registration%20at%20Elk%20Grove%20Holiday%20Inn.htm> or by calling Slav Stepanovich at 847-421-2056. Leave **your name, company affiliation, a telephone number, the number of reservations and your choice of entree**. Please call by **noon Friday, April 20th**, so that proper arrangements can be made with the restaurant. Credit card payments must be made via PayPal. Use the Donate link on the registration page prior to the meeting. Only payment by cash and check will be accepted at the meeting. Contact us if you can't attend; the SAS is charged for no-shows.

Entree choices: Smothered Chicken, Cedar Plank Salmon or Jim Beam Flatiron Steak

Dinner Cost - Members: \$30

Students and Unemployed Members: \$10

Non-members: \$30

Robert Samuel Houk, Ph.D.

R. S. Houk was born in New Castle Pennsylvania and attended Shenango Area High School. He received the B. S. in Secondary Education from Slippery Rock State College in 1974 and the Ph.D. in Analytical Chemistry from Iowa State University (ISU) in 1980. His major professors were V. A Fassel and H. J. Svec. His dissertation described the first results from coupling an analytical ICP to a mass spectrometer. He was a postdoctoral associate at the Ames Laboratory USDOE and then joined the faculty in the Chemistry Department at ISU in 1981. He is presently Professor of Chemistry and an Associate of the Ames Laboratory. His research is in analytical atomic spectrometry, especially ICP-MS, and also in laser ablation electrospray ionization mass spectrometry. He and his students published a number of papers that were either first or among the first to demonstrate many of the key instrumental developments in ICP-MS, especially cool ICPs, collision cells, low-flow nebulizers, desolvation, LC-ICP-MS, and GC-ICP-MS. He also published important papers on fundamental studies of the ion extraction process in ICP-MS and in ICP atomic emission spectrometry, especially axial viewing and vacuum ultraviolet spectroscopy. Houk has served on the editorial boards of the Journal of Analytical Atomic Spectrometry and Spectrochimica Acta Part B. He has won a number of awards including the Winter Conference Award in Plasma Spectrochemistry (2018), the ACS Awards for Chemical Instrumentation (1993) and Spectrochemical Analysis (2012), the Maurice F. Hasler Award (1993), the Lester W. Strock Award (1986), and the Anachem Award from the Association for Analytical Chemistry, Detroit ACS Section (2000). He is a Fellow of the Society for Applied Spectroscopy. Approximately 48 students have received either the M.S. or Ph.D. degrees under his supervision.

Elk Grove Holiday Inn, 1000 Busse Road, Elk Grove Village, IL, Phone 847-437-6010

