The SAS Spectrum Newsletter
The Newsletter of the Society for Applied Spectrscopy

September, 2008

SAS Members Prominently involved in FBI Anthrax Investigation

Two long term SAS members played a key role in the scientific research performed to investigate anthrax spores mailed in 2001. As reported in Chemical and Engineering News (*FBI's Anthrax Analysis,* Volume 86, August 25, 2008, p. 6), Vahid Majidi, at the FBI Weapons of Mass Destruction Directorate, and Chris Hassell, FBI Laboratory Director, played key leadership roles in this investigation. The research was performed by a large team of FBI and non-FBI scientists with diverse expertise. The work allowed the identification of a suspect responsible for mailing the letters containing anthrax. The research team is planning to publish as much of the results as possible in peer-reviewed journals. Congratulations to Vahid and Chris for the outstanding contributions to this project.

FACSS SESSIONS HONORING GARY HIEFTJE

SAS is proud to sponsor two special sessions at FACSS honoring Gary Hieftje on Tuesday, September 30. Organized by John Olesik, these sessions highlight Gary's outstanding contributions to atomic spectroscopy over 40 years (details below). We hope to see you at these symposia, as well as the special 50th Anniversary Wine and Cheese reception on Tuesday evening!

TUESDAY, SEPTEMBER 30, 10:15 AM
40 Years of Atomic Spectroscopy Innovation: A Tribute to Gary Hieftje

Mechanistic Study of Analyte Excitation and Matrix Effects in Inductively Coupled Plasma-Atomic Emission Spectrometry; George Chan, Gary Hieftje; Indiana University
Near Surface Depth Profile Analysis; Kim Marshall, Charles Maul, Diane Goodman; LECO Corporation
Mapping Argon Metastable Atoms in an ICP-MS using Absorption Depletion Imaging; Paul Farnsworth, Nicholas Taylor, Haibin Ma; Brigham Young University
Gary Martin Hieftje: Four Decades of Innovation and Excellence in Analytical Chemistry; Gary Horlick, University of Alberta
Analytical Laser Spectroscopy - An Amazing Journey; Rick Russo; Lawrence Berkeley National Laboratory
Some Remaining Questions, Challenges and Potential Advances in ICP-OES and ICP-MS; John Olesik, Patrick Gray, Josh Dettman, Elodie Linard, Anthony Lutton; The Ohio State University

TUESDAY, SEPTEMBER 30, 3:00 PM
40 Years of Spectroscopy Innovation: A Tribute to Gary Hieftje
Symposium Organizer; John Olesik

Sensor Arrays Based on Molecularly Tailored Xerogel Platforms; Frank Bright; UB, SUNY
Base Stacking A T DNA and LNA - Structure and Dynamics Studied using Raman and fs-Transient Absorption Spectroscopies; Robin Turner, Stanislav Konorov, Georg Schulze, Chris Addison, Charles Haynes; University of BC
Simultaneous Molecular and Elemental Mass spectrometry for Comprehensive Elemental Speciation Analysis; Steven Ray, Duane Rogers, Gary Hieftje; Indiana University
Nanos Gigantum Humeris Insidentes: Approaches for Sensor Development in the 21st Century; Radislav Potyrailo; GE Global Research
Research in the AAA Problems; Robert Lodder; Spherix Inc.
Developing Chemical Instrumentation using Microelectronics Fabrication Tools; J. Michael Ramsey; University of North Carolina at Chapel Hill

PIEDMONT SECTION SAS STUDENT TRAVEL

Piedmont Section SAS Travel Awards are available to SAS Student Members in the Piedmont Section to present their research at the SAS National Meeting, FACSS (**http://facss.org**). Oral and poster presentations are eligible; students must be the presenting author. In order to be eligible for a travel award, the student and research director must both be members of the Piedmont Section of the Society for Applied Spectroscopy. Membership application materials are available on the web at **http://www.s-a-s.org/renewal-application.htm**, or by contacting the SAS Office at 301-694-8122, Fax 301-694-6860, Postal address: 201 B Broadway Street, Frederick, MD 21701-6501, email: **officeATs-a-s.org**. Travel awards are limited to $500, only one student per research director will be supported, and the university must be located within the Piedmont Section. The Piedmont Section includes universities located in the following states: Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee. Eligible expenses include student conference registration, student travel, student accommodation, and student meals. Receipts are required for all expenses.

Applications consist of (1) a completed application form (available from **butcherATemail.wcu.edu**), (2) a copy of the abstract, (3) a letter of acceptance of the paper from FACSS, and (4) a letter of support from the student's research director. Applications are due on September 5, 2008. The entire application must be submitted electronically to Professor David Butcher at **butcherATemail.wcu.**

SEPTEMBER HISTORICAL EVENTS IN SPECTROSCOPY BY LEOPOLD MAY CATHOLIC UNIVERSITY

September 1, 1877 Francis W. Aston who introduced the mass spectrograph in 1919, was born on this day. In 1922, he received the Nobel Prize in Chemistry for his discovery by means of his mass spectrograph, of isotopes, in a large number of non-radioactive elements, and for his enunciation of the whole-number rule.

September 10, 1892 Arthur H. Compton did research in cosmic and X-rays for which he received the Nobel Prize in Physics in 1927 for his discovery of the effect named after him. He was born on this day.

September 25, 1941 National Technical Laboratories (forerunner of Beckman Instruments) announced the UV-visible Beckman Spectrophotometer model DU on this date.

Further history items can be found at http://faculty.cua.edu/may/SpectHist.htm.

Comments to butcherATemail.wcu.edu