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

February 2011

SAS ORGANIZED TECHNICAL SESSIONS AT PITTCON

SUNDAY EVENING – March 13
SAS POSTER SESSION – Session 190
Sunday posters will be on display from 3:30 - 7:30 PM with authors present from 5:30 PM to 7:30 PM.
Room 412, Thomas B. Murphy Ballroom

(190-1 P) **Laser Beam Profile Influence on Double Pulse Laser Ablation**
VASILY LEDNEV - General Physics Institute, Segey Pershin, Vladislav Luk'yanchenko, Alexey F Bunkin

(190-2 P) **Dissolution Studies of Bismuth-Containing Stomach Relief Suspensions**
MARCUS A HARRISON - Kennesaw State University, Koether C Marina

(190-3 P) **New Method for Micro-FTIR Sample Preparation**
MARY L STELLMACK - McCrone Associates, Anna S Teetsov

(190-4 P) **Quenching of Naturally Occurring K-40 Cerenkov Radiation by Chromophores in Aqueous Solutions as Analytical Technique**
EDGAR A CORONEL - Universidad Mayor de San Andres

(190-5 P) **Induced Fluorescence Detection of Biological Warfare Agents Using Ultraviolet Light Emitting Diodes**
ERIC LYNCH - General Dynamics ATP

(190-6 P) **Analysis of Dye-Halide Interactions for the Development of an Aqueous Halide Indicator**
HEATHER ROBISON - The Ohio State University, J Clay Harris, Noel Paul

(190-7 P) **Anatomy of Human Hair: Considerations for Hair Analysis**
KATHRYN S KALASINSKY, Armed Forces Institute of Pathology

(190-8 P) **The Determination of Acid Dissociation Constants for Caffeine and Salicylic Acid Using UV/VIS Spectroscopy**
HAIFA KHAN - Kennesaw State University, Marina C Koether

TUESDAY AFTERNOON – March 15
SYMPOSIUM – Session 1030 – ***Alternative Mass Spectrometers for Elemental Analysis***
(Society for Applied Spectroscopy) arranged by Gary M Hieftje, Indiana University
Room 314 – Gary M Hieftje, Indiana University, Presiding

2:00 **Introductory Remarks - Gary M Hieftje**

2:05 (1030-1) **A New Time-of-Flight Mass Spectrometer for Glow-Discharge Analysis**
NORBERT JAKUBOWSKI - BAM, Agnez Tempez

2:40 (1030-2) **Distance-of-flight Mass Analysis: A New Tool for Atomic Spectrometry**
CHRISTIE G ENKE - University of New Mexico, Steven J Ray, Alexander W Graham, Elise A Dennis, Gary M Hieftje, David W Koppenaal, Charles J Barinaga, Anthony J Carado

3:15 (1030-3) **Development and Use of Orbital Trapping Techniques for Elemental Analysis**
DAVID W KOPPENAAL - Pacific Northwest National Laboratory, Anthony J Carado, Martin Liezers, Charles J Barinaga

3:50 (1030-4) **High-Resolution, High-Sensitivity Mass Analyzers for ICP-MS**
LOTHAR ROTTMANN - Thermo Fisher Scientific

4:25 (1030-5) **Array Detectors for Truly Simultaneous Mass Analysis**
GARY M HIEFTJE - Indiana University, Jeremy A Felton, Steven J Ray, Alexander W Graham, Gregory D Schilling, David W Koppenaal, Charles J Barinaga, Medona B Denton, Roger P Sperline

WEDNESDAY MORNING – March 16
SYMPOSIUM – Session 1330 – ***Infrared Spectroscopy at High Speed: From Milliseconds to Picoseconds (Society for Applied Spectroscopy)*** arranged by Peter R Griffiths, University of Idaho
Room 314 – Peter R Griffiths, University of Idaho, Presiding

8:00 **Introductory Remarks - Peter R Griffiths**

8:05 (1330-1) **Infrared Imaging of Cellular Processes in Real Time**
LISA M MILLER - Brookhaven National Laboratory, Megan W Bourassa, Randy J Smith

8:40 (1330-2) **Picosecond Time-Resolved Infrared Spectroscopy in Conventional and Supercritical Fluids**
MIKE GEORGE - University of Nottingham

9:15 (1330-3) **Ultrafast IR Photon Time of Flight**
ERIC B BRAUNS - University of Idaho

9:50 (1330-4) **Time-Resolved Infrared Spectroscopy Using Focal Plane Arrays**
JOHN F RABOLT - University of Delaware

10:25 (1330-5) **Stopped-Flow Studies of Inorganic Reactions with an Ultra-Rapid-Scanning FT-IR Spectrometer**
PETER R GRIFFITHS - University of Idaho, Matthew Reback, Rachel Faulkner, Thomas E Bitterwolf

SAS Meetings at Pittcon – Locations to Be Determined

Sunday March 13
Executive Committee Meeting, 8:00 a.m. – 4:00 p.m.

Monday March 14
Editorial Board Meeting, 8:00 a.m. – 10:00 a.m.
Publications Committee, Noon – 2:00 p.m.

Special Dues Discount Offer For SAS Members — Join The Optical Society Of America (OSA)!

SAS Members are invited to join OSA at a special discount of 50% off the cost of annual dues ($60 USD for individuals and $17 USD for students).
To join OSA, simply check the box on the online or print membership form.

An OSA Membership provides valuable industry news and professional development resources through:

- Free subscriptions to *Optics & Photonics News* (OPN) and *Physics Today*
- 50 free downloads from OSA's archive of journals and conference proceedings, Optics InfoBase, which includes spectroscopy-related content from *Applied Optics*, *Optics Express*, *Optics Letters* and many more of OSA's highly cited journals!
- Five free OSA Technical Group designations - choose from over 40 options, including Applied Spectroscopy, Tissue Imaging & Spectroscopy and more!
- Substantial discounts on OSA journal subscriptions
- Registration discounts for conferences and special-focus meetings such as: Optical Molecular Probes, Imaging, and Drug Delivery, April 3-7, 2011, Monterey, CA; the CLEO Conference, May 1-6, 2011, Baltimore, MD; Applied Industrial Optics: Spectroscopy, Imaging, & Metrology; Hyperspectral Imaging and Sounding of the Environment; and Fourier Transform Spectroscopy, July 10-14, Toronto, CA.
- Special professional networking, information and career resources
- Grants, awards and member recognitions, for example: OSA, SAS and the Coblentz Society co-sponsor the Ellis R. Lippincott Award, which recognizes contributions to vibrational spectroscopy. SAS's William F. Meggers Award also recognizes outstanding work in spectroscopy.

View the full list of OSA Member benefits and services.

February Historical Events in Spectroscopy

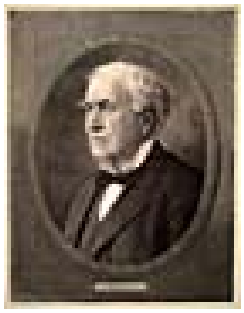
by Leopold May, Catholic University

February 1946 — The first issue of Bulletin of the Society for Applied Spectroscopy (precursor of *Applied Spectroscopy*) was published in 1946.

February 3, 1890

Paul Hermann Scherrer, who co-invented the Debye-Scherrer X-ray technique for studying the structure of polycrystalline materials, was born on this date. He obtained crystallographic evidence that simple salts are composed of charged species in the solid state, observed the fibrous structure of celluloses, determined the structure of various complex salts and proved they were in accordance with the ideas of Werner.

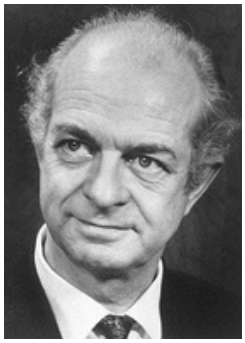
February 11, 1847



Thomas A. Edison, the inventor with over 1000 patents, was born on this day. Among his inventions was the incandescent lamp.

February 16, 1955 F. P. Bundy, H. T. Hall, H. M. Strong, and R. H. O. Wentoff announced the synthesis of diamonds at GE Research Laboratories on this day.

February 28, 1901



Linus C. Pauling, who received two Nobel Prizes, was born on this date. He received the Nobel Prize in Chemistry in 1954 for his research into the nature of the chemical bond and its application to the elucidation of the structure of complex substances. The Nobel Prize in Peace was awarded to him in 1962.

Comments to david.butcherATanalytchem.org