

August 2010



FACSS 2010

TOMORROW'S ANALYTICAL SCIENCES TODAY

The 37th Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies October 17th – 21st, Raleigh Convention Center, Raleigh, NC

SOCIETY FOR APPLIED SPECTROSCOPY NATIONAL MEETING

Attend the Leading Fall Conference on Analytical Chemistry and Spectroscopy

The FACSS Conference continues its proud tradition of bringing together leading international scientists across many disciplines for scientific exchange. This task is accomplished through a world-class technical program, exhibition, and a variety of informal networking opportunities.

FACSS member organizations include ACS — Analytical Division, American Society for Mass Spectrometry, ANACHEM, The Coblentz Society, International Society of Automation - Analysis Division, Royal Society of Chemistry, and the Society for Applied Spectroscopy. Membership in one of the member organizations entitles you to the member conference rate.

LOCATION

FACSS 2010 will be held at the Raleigh Convention Center, 500 South Salisbury Street, Raleigh, NC 27601. The convention center provides an open and airy venue, which is attached to the Marriott Hotel. Raleigh is a charming city that the founding fathers called the "City of Oaks," and they dedicated themselves to maintaining the area's wooded tracts and grassy parks. Raleigh boasts more than 4,300 acres of parkland and almost 1,400 acres of water, offering recreational activities year round. A nationally-acclaimed greenway system spans 41 miles, providing walking, jogging and hiking trails that connect many of the city's 150 major parks.

HOTEL ACCOMMODATIONS. FACSS has a block of rooms at the following two hotels.

Marriott Raleigh City Center Hotel

(connected to convention center) 500 Fayetteville Street Raleigh, NC 27601

For reservations call: 919-833-1120

Sheraton Raleigh Hotel

(adjacent to convention center)
421 South Salisbury Street
Raleigh, NC 27601
For reservations call:
919-834-9900 or 800-325-3535

When you make your reservation at either hotel, mention FACSS to receive the discounted conference rate of \$167 plus tax for single/double occupancy. The conference rate will be honored until September 24 or until the block is sold out.

STUDENTS: If you are looking for someone to share your room, contact the FACSS office and we will maintain a list of possible roommates.

AIR TRAVEL. The Raleigh-Durham airport is 14 miles from the hotels and convention center. Travel from the airport to downtown Raleigh can be arranged with the Super Shuttle, RDU Airport Taxi Service, or White Horse Transport. Visit the FACSS website for additional travel information.

WEDNESDAY EVENING EVENT. Analytical Chemistry....It is All Fun and Games at FACSS. Join us for an evening of food, beverage, music, dancing, and games. Challenge a colleague to a game of Battleship or test your knowledge in Trivial Pursuit. Prove you are the Mastermind of FACSS. If you prefer to be more active, there is always FACSS Twister. Everyone will be entered into a game of chance with raffle prizes being awarded throughout the evening.

WORKSHOPS. FACSS provides an excellent venue to enhance your analytical skill set by enrolling in workshops allowing you to become trained in new fields that can directly impact your career development and current occupation. Workshops will be offered on software use, spectroscopy, mass spectrometry, separation sciences, process analytical technology, chemometrics, LEAN design, statistics, and chemical imaging. **Students receive special discounted workshop rates.**

STUDENTS. FACSS is dedicated to the development of its undergraduate and graduate student attendees. Take advantage of the following opportunities.

- Reduced registration for both the conference and workshops
- Special workshop for undergraduates, Analytical Problem Solving for Undergraduates, no charge.
- SAS student poster session, Sunday, October 17
- Poster prizes awarded to students during FACSS poster sessions Monday through Thursday
- Employment Bureau
- Free Lunch and Employment Discussion, Monday, 12:30 pm. Hosted by SABIC Innovative Plastics. Contact FACSS to reserve a spot.
- Complimentary conference registration is available to students who volunteer 4 hours to help at the conference.

FOR INFORMATION AND REGISTRATION FOR THE CONFERENCE GO TO www.facss.org



FACSS PROGRAM OVERVIEW



Sunday - October 17

Afternoon 7:00 PM SAS Members Day at the Races Welcome Mixer and SAS Student Poster Session

Monday Morning – October 18

Plenary



Arthur F. Findeis Award for Achievement by a Young Analytical Scientist: Christy L. Haynes, University of Minnesota

Poster Session Symposia

The Findeis Award

Materials Characterization Using Vibrational Spectroscopy and Mass Spectrometry

Celebrating 30 Years of ICP-MS

Laser Induced Breakdown Spectroscopy

Novel But Important Data Analysis Techniques in **Analytical Chemistry**

Portable NMR and Hyphenation of NMR to Chromatography and Electrophoresis

Near and Mid-Infrared Imaging

Memorial to Don Sting

PAT in Biopharmaceutical and Pharmaceutical Industries

Emerging Areas in Raman Spectroscopy

Monday Afternoon - October 18

Symposia

Celebrating 30 Years of ICP-MS

The Findeis Award

Laser Induced Breakdown Spectroscopy

Chemometrics in Pharmaceutical Industry

Chromatography in the Pharmaceutical Industry

Ionic Liquids and Spectroscopy: A Green and Happy Marriage

Quantum Cascade Laser Applications

PAT: New Technology

Biomedical Raman Spectroscopy

Emerging and Non-Traditional Electrophoresis Techniques

Plenary



The Role of Analytical Chemistry and Spectroscopy in Drug Discovery and Development: Challenges and Opportunities, Uli Hacksell, ACADIA Pharmaceuticals

Tuesday Morning – October 19

Plenaries



Charles Mann Award for Applied Spectroscopy: Richard McCreery, National Institute for Nanotechnology, Canada



ANACHEM Award: Marc D. Porter, Nano Institute of Utah

Poster Session Symposia

JAAS: Highlighting Young Investigators in Atomic Spectroscopy

Chemometrics in Forensics

Headspace Analysis for Chemical Signatures

Dielectrophoresis and Related Techniques

ANACHEM Session

Atomic Analyses in the Pharmaceutical and

Neutraceutical Industry

Emerging Technologies for Standoff Detection for Homeland Security

Special Session to Honor William G. Fateley

Nanotechnology SAS Process Analytical Technology

Raman Microscopy and Imaging

Tuesday Afternoon – October 19

Symposia

Charles Mann Award

Chemistry in Art and Archaeology

Lasers in Analytical Chemistry 50th Anniversary

Chemometrics for Biological and Biomedical Spectroscopy

Special Session to Honor William G. Fateley

Practical Aspects of Chiral Analysis Using VCD and **RDOA**

Next Generation Spectroscopic Methods for the Analysis of Pharmaceutical Systems

MS Fundamentals and Gas-Phase Ion Chemistry Nanotechnology

ICPMS – A Lot More than Total Metals Analysis Tip Enhanced Raman Spectroscopy

Plenary



Celebration of 30 Years of ICP-MS, Robert S. Houk, Iowa State University

Wednesday Morning - October 20

Plenaries



Applied Spectroscopy William F. Meggers Award: Paul Gemperline, East Carolina University



Applied Spectroscopy Lester W. Strock Award: Kay Niemax, BAM

Poster Session Symposia

Bioanalytical Separation Science Two-Dimensional Correlation Spectroscopy Vibrational Spectroscopy at Work in the Pharmaceutical Industry Lester Strock Award NIR

Transfer and Implementation of Chemometric Model Optical Effects in IR Imaging

Terahertz Spectroscopy

Probing Interactions Between Biomolecules and **Nanomaterials**

Sustainability and PAT Applications

New SERS Architecture

Wednesday Afternoon - October 20

Plenary



FACSS Awards: Alex Scheeline, University of Illinois at Urbana-Champaign

Biomedical Applications of Spectroscopic Imaging Novel Sample Introduction Methods for ICP-MS and **ICP-OES**

Student Awards

Two Dimensional Correlation Spectroscopy Fundamental Studies and Exciting New Application of Glow Discharge Spectroscopy

Meggers Award Symposium Advances in MS Instrumentation

Terahertz Spectroscopy

Nanomaterials for Surface Plasmon Resonance Continuous Chemistry: From Synthesis, Engineering and Monitoring for Control

Applications of SERS

Thursday Morning - October 21

Plenaries



Coblentz Society Clara Craver Award: Presented to Boris Mizaikoff, University of Ulm, Germany



Ellis R. Lippincott Award: Presented to Martin Moskovits, University of California, Santa Barbara

Poster Session Symposia

Lippincott Award Symposium Plasmas for Atomic and Molecular Analyses Contributed Chromatography Memorial to Raul Curbelo H/D Exchange Mass Spectrometry Surface Plasmon Resonance: Instrumentation and **Applications** Micro-Reactors and Their Roll in Optimized

Chemistries Raman Spectroscopy in the Pharmaceutical Industry

Thursday Afternoon - October 21

Symposia

Craver Award Symposium

Atomic Spectroscopy Techniques for Solid Surface Analysis in Biology, Geology, and Astronomy

Drop Deposition and Dynamics

RSC, Analytical Division: Applications, Advances, and Deduction by Vibrational Spectroscopy

Chemometrics Applied to Air, Oceanography, Marine Life and Coastal Waters

Developments and Applications in Biological Mass Spectrometry

Surface Plasmon Resonance: Instrumentation and **Applications**

Pharmaceutical Raman

Biological and Biomedical Applications of Raman Spectroscopy

EXHIBIT

The exhibit is one of the focal points of FACSS. The exhibit opening on Monday evening and the Tuesday and Wednesday poster sessions and coffee breaks are held in the exhibit hall. As an exhibitor, you may take advantage of the following opportunities. Contact the FACSS office if you are interested in any of these opportunities.

- Sales or Users Group Meetings There are a limited number of complimentary meeting rooms for an exhibitor to use fora sales or users group meeting on Saturday, October 16, and Sunday, October 17.
- "What's Hot" Vendor Symposia We would like to offer our exhibitors the opportunity to participate in the "What's Hot" Vendor Symposia which will be held during the lunch time hours of the conference week. You will have approximately 7 10 minutes to present information about your products and services. These oral slots will be assigned first come, first serve. The presentation times will not conflict with any other oral technical symposia.
- **Complimentary Hospitality Suite** Rooms are available to our exhibitors on a complimentary basis. Exhibitors are responsible for the food and beverage costs.

Exhibit Hours

Monday 5:30 – 7:30 pm; Tuesday 9 am – 4:30 pm; Wednesday 9:00 am – 3:00 pm

FOR INFORMATION AND REGISTRATION FOR THE CONFERENCE GO TO WWW.FACSS.ORG



WORKSHOP PROGRAM



WORKSHOPS

FACSS provides an excellent venue to enhance your analytical skill set by enrolling in Workshops allowing you to become trained in new fields that can directly impact your career development and current occupation. Workshops will be offered on software use, spectroscopy, mass spectrometry, separation sciences, process analytical technology, chemometrics, LEAN design, statistics, and chemical imaging. Special discounted student rates for workshops. A full description of the workshops offered can be found at www.facss.org

Workshop fees valid through 8/29	half day	full day	2 day
Conferees:	\$315	\$625	\$1,250
Students:	\$50	\$75	\$95
Non-Conferees	\$415	\$725	\$1,450

After August 29, all half day courses increase by \$50. All other courses increase by \$100. There is no change in the student rate.

Costs for courses that utilize computers are noted	bel	ow.
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SUN (10/17)	MON (10/18)	TUES (10/19)	WED (10/20)
Analytical Raman	,	LEAN Design for the	Analytical Problem Solving
Spectroscopy		Laboratory	for Undergraduates
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(Half day - AM)		(Full day)	(Full day; no charge)
Inductively Coupled Plasma	Principles of Infrared		Statistics for Analytical
- Mass Spectrometry (ICP-	Spectral Interpretation		Chemists
MS): Introduction	(Two days)		(F. II do. ()
(Half day, AM)	(Two days)		(Full day)
(Half day - AM) Raman Chemical Imaging		Intro to Quantitative	Practical Applications of
Technologies and Methods		Analysis	Mass Spectrometry for
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(Half day – AM)		(Full day)	Oman Molecules
(rian day riin)		(i all day)	(Full day)
Chemometrics without		Advanced Chemometrics	Hands-On Chemometric
Equations (or Hardly Any) -		without Equations –	Analysis with the
Hands On		Hands On	Unscrambler®
(Two days – computers		(Full day – computers	(Full day – computers
provided)		provided)	provided)
Conferees \$1,300, Students		Conferees \$675, Students	Conferees \$675, Students
\$145, Non-conferees \$1,500		\$125, Non-conferees \$775	\$125, Non-conferees \$775
Business Fundamentals for		Process Analytical	
Scientists and Engineers		Chemistry: Out of the Lab	
(F. II do.)		and into the Pipe	
(Full day)		(Full day)	
What Modern Near-IR		NIR Chemical Imaging	
Spectroscopy Can Do For		itiit Olieliiloai ililagilig	
You		(Half day - PM)	
		(13.1.33)	
(Full day)			
Real-Time Fluorescent			
Analysis			
(Half day, DM)			
(Half day - PM) 2D Correlation			
Spectroscopy			
Specia oscopy			
(Half day - PM)			

ACS is sponsoring three workshops. Register for the following workshops directly with ACS.

Practical Approaches to Patents and Other Forms of Intellectual Property (1 day)
NNR Spectral Interpretation and Organic Spectroscopy: A Problem-Based Learning Approach (2 day)
Laboratory Safety (2 day)

To register for an ACS course go to https://facss.org/facss/workshops_list.php and then click on the ACS course.

August Historical Events in Spectroscopy by Leopold May, Catholic University

August 6, 1960

Fifty years ago on this date, the first publication on the first working laser was published in the paper "Simulated Optical Radiation in Ruby" by Theodore H. Maiman in *Nature*, 197, 494 (1960).

August 4, 1928



Jeanette Grasselli Brown, a researcher in infrared spectroscopy, was born on this date. She is an honorary member and served as the President of SAS in 1973. In 1985 she received the Garvan Medal from the American Chemical Society.

August 18, 1947

Hewlett Packard was incorporated on this day.

Comments to butcherATemail.wcu.edu