

The SAS Spectrum Newsletter

The Newsletter of the Society for Applied Spectroscopy



September, 2009

FACSS 2009

TOMORROW'S ANALYTICAL SCIENCES TODAY!
The 36th Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies

October 18th – 22nd, Marriott Hotel Downtown, Louisville, KY

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 scientists across many disciplines for scientific exchange. This is accomplished through a world-class technical program, exhibition, and a variety of information networking opportunities.

NEW! Revolutionary RAMAN Spectrometer !
Introducing, for the 1st time ever, an instrument that combines:
RAMAN Microscopy, RAMAN and RAMAN OPTICAL ACTIVITY (ROA) Watch the unveiling at www.btools.com

LOCATION

FACSS 2009 will be held at the Marriott Hotel Downtown, 280 West Jefferson Street, Louisville, Kentucky 40202. The Marriott offers an excellent venue for technical sessions and networking in a stylish luxury hotel. Activities in the Louisville area include arts and sports museums, glassworks, shopping, hiking, and exploring Waterfront Park on the Ohio River. The hotel itself includes the following: BLU Italian-Mediterranean Grille and Bar, Champions Restaurant and Sports Bar, Starbucks, Pedway connections to Fourth Street Live!, Indoor swimming pool and whirlpool

HOTEL ACCOMMODATIONS

To make your hotel reservations, call the Marriott Hotel Downtown at (502) 627-5045 or (800) 533-0127. The rate is \$151 plus tax for a single or double occupancy room. Be sure to mention FACSS to receive the conference rate. Students: There are a limited number of rooms at a special student rate. Contact the FACSS office (505) 820-1648 for information.

FACSS WEDNESDAY EVENING EVENT

The Wednesday evening event is open to all conference attendees and will include a variety of foods as well as beverages. Louisville is known for its contribution to the sporting world: Participants can engage in friendly boxing, baseball, and basketball competitions or try their luck at the racetrack as the official bugler of the Kentucky Derby leads a Night at the Races. Attendees can even take home a piece of Louisville by participating in Maker's Mark bourbon tasting. After the races have all been run, be sure to kick back and relax with music and dancing.

STUDENTS

FACSS is dedicated to the development of its undergraduate and graduate student attendees. The conference offers support to students in the following ways.

- Annual SAS student poster session will be held Sunday October 18th.
- Poster prizes will be awarded to students during the Monday – Thursday FACSS poster sessions.
- The employment bureau offers an online job search and resume listings.
- Students are offered reduced rates for conference and workshop registration as well as housing.
- Complimentary registration for students who volunteer 4 hours to help at the conference.

Contact the FACSS office for details on housing and volunteering.

Comments to butcherATemail.wcu.edu



FACSS PROGRAM OVERVIEW



Sunday – October 18

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

Monday Morning – October 19



Plenary
Sustainable Growth through Sustainable Solutions, **Carina Alles**, *DuPont Engineering Research & Technology*

Symposia
The Future History of Atomic Spectroscopy
Coherent 2D Spectroscopy I
Biomedical Raman

Quantum Cascade Lasers
Vibrational Spectroscopy and Imaging of Pharmaceuticals
Advances in THz Spectroscopy and Imaging (System, Components, new techniques)
Addressing the Measurement Gap in Biopharmaceutical Development and Production – Complex Molecules, Complex Problems

Poster Session

Monday Afternoon – October 19

Symposia:

Chemistry in Art and Archaeometry
Microbiological Mass Spectrometry
Chemical Applications of Nanomaterials
Challenges for Raman
Chirality: Pharmaceutical Applications of VCD
Coherent 2D Spectroscopy II
Next Gen Separations: Non-Linear and Arrays I
Food Forensics
Exploring the Metallome - New Departures for Metal Analyses
Advances in THz Spectroscopy and Imaging (System, Components, new techniques)



Plenary
Quantitative Analysis Based on Imaging and Counting Single Molecules. **Joel Harris**, *University of Utah*

Tuesday Morning – October 20

Plenaries

Charles Mann Award for Applied Spectroscopy. Presented to **Pavel Matousek**, *Rutherford Appleton Laboratory*
ANACHEM Award. Presented to **E. Neil Lewis**, *Malvern Instruments*

Poster Session

Symposia

Sampling the World with Laser-Ablation and Atomic Spectrometry
Imaging and Mass Spectrometry
Next Gen Separations: Non-Linear and Arrays II
Super resolution linear and nonlinear microscopies
ANACHEM Award
Coherent 2D Spectroscopy III
NIR Spectroscopy in the Academic Setting
Progress in ICP-MS
Pharmaceutical Forensics
Practical Mid-Infrared Spectroscopy for the Real World I

Tuesday Afternoon – October 20

Poster Session

Symposia:

Hidden isotope ratio information - yours to discover with (MC-) ICP-MS
NIR spectroscopy/imaging in Pharma
Mann Award
Spectroscopy and Nanomaterials
Practical Mid-Infrared Spectroscopy for the Real World II
NeSSI - Application of Sensors for Increased Process Control
Chemical Imaging and Its Use in Forensic Science
Modern Elemental Speciation Analysis
Direct Ionization Mass Spectrometry

Wednesday Morning – October 21

Plenaries:

Applied Spectroscopy William F. Meggers Award. Presented to **Christian Pellerin**, *University of Montreal*
Lester W. Strock Award. Presented to **Nico Omenetto**, *University of Florida*

Poster Session

Symposia:

Strock Award
Ion Mobility Mass Spectrometry
Inorganic Nanoparticles for Biological and Biomedical Applications
Bio/Nano SERS
Chemometrics and Statistics: The Other Side of the Hill
MIR Imaging: ATR and More
Process Sensors for Improved Characterization and Control
Advanced Portable Instrumentation
X-ray Fluorescence

Wednesday Afternoon – October 21

Poster Session

Symposia:

FACSS Student Awards
Meggers Award
Pharmaceutical Raman
More Novel and Important Data Analysis Techniques for Analytical Science
Chemical Sensing by SERS
SAS Technical Session
Pharmaceutical Analysis: More than Chromatography
ICP-MS analysis - the prequel: how to get your sample into the ICP
Improving Laser-Induced Breakdown Spectroscopy through Fundamentals



FACSS PROGRAM OVERVIEW

Thursday Morning – October 22

Plenaries:

Coblentz Society Clara Craver Award. Presented to **Takeshi Hasagawa**, *Tokyo Institute of Technology*

Poster Session

Symposia:

New Developments in Atomic Spectrometry for the Life Sciences RSC
Multifunctional Nanostructure: Fabrication and Applications I
Fundamental Studies of the ICP: It's not as simple as we thought
Understanding Chemometrics
Mid-Infrared Spectral Imaging
Surface Plasmon Resonance: Nanomaterials, Instrumentation and Applications I
Applications of Fluorescence Spectroscopy and Related Techniques I
Raman Microscopy / Imaging I

Thursday Afternoon – October 22

Poster Session

Symposia:

Novel Sources and Applications in Plasma Spectrochemistry Craver Award
Multifunctional Nanostructure: Fabrication and Applications II
Spectral and Multiway Pattern Recognition
Raman Microscopy / Imaging II
Surface Plasmon Resonance: Nanomaterials, Instrumentation and Applications II
Forensic Applications of Image Analysis
Applications of Fluorescence Spectroscopy and Related Techniques II

SPECIAL EVENTS

- Sunday, Afternoon** **SAS Members Day at the Races**
7:00 PM **Welcome Mixer and SAS Student Poster Session**
- Monday, 8:00 AM** **PLENARY PRESENTATION**
Sustainable Growth through Sustainable Solutions. **Carina Alles**, *DuPont Engineering Research & Technology*
4:00 PM Quantitative Analysis Based on Imaging and Counting Single Molecules. **Joel Harris**, *University of Utah*
5:00 – 7:00 PM **Reception for Exhibition Opening**
- Tuesday, 8:00 AM** **Pavel Matousek**, *Rutherford Appleton Laboratory*; **Charles Mann Award for Applied Spectroscopy**.
E. Neil Lewis, *Malvern Instruments*; **ANACHEM Award**
6:00 PM **Raman Reception**
7:00 PM **Society for Applied Spectroscopy (SAS) Reception**
- Wednesday, 8:00 AM** **Christian Pellerin**, *University of Montreal*; **Applied Spectroscopy William F. Meggers Award**
Nico Omenetto, *University of Florida*; **Lester W. Strock Award**
5:00 PM **Wednesday Evening All Inclusive Event for all conferees**
- Thursday, 8:00 AM** **Takeshi Hasagawa**, *Tokyo Institute of Technology* ; Coblentz Society Clara Craver Award.

EXHIBITORS

The instrument exhibit is one of the focal points of FACSS. The exhibit opening on Monday evening, as well as 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 the opportunities below.

- **Sales or User Group Meetings:** There are a limited number of complimentary meeting rooms for an exhibitor to use for a sales or users group meeting on Sunday, October 18.
- **Hospitality Suites:** There are a limited number of complimentary rooms, which can be used for Exhibitor Hospitality Suites on Sunday, Monday, and Tuesday night. Exhibitor would be responsible for food and beverage.
- **What's Hot Vendor Symposium:** We would like to offer our exhibitors the opportunity to participate in the "What's Hot" Vendor Symposium which will be held during the lunch time hours during the conference week. You would 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.

Exhibit hours: Monday 5:00 – 7:00 PM, Tuesday and Wednesday 9:00 AM – 5:00 PM



WORKSHOP PROGRAM

WORKSHOPS

FACSS provides an excellent venue to enhance your analytical skill set by enrolling in Workshops and short courses 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, chemical imaging, and forensics. 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 below.

SUN (10/18)	MON (10/19)	TUES (10/20)	WED (10/21)
Analytical Raman Spectroscopy (Half day - AM)	Statistics for Analytical Chemists (Full day)	LEAN Design for the Laboratory (Full day)	Analytical Problem Solving for Undergraduates (Half day – AM; no charge)
Inductively Coupled Plasma – Mass Spectrometry (ICP-MS): Introduction (Half day - AM)	Infrared Spectral Interpretation: A Strategic Approach (Two days)		Near Infrared Spectroscopy: Measurement Principles and Interpretation (Full day)
Chemometrics without Equations (or Hardly Any) - Hands On (Two days – computers provided) <i>Conferees \$1,300; Students \$145, Non-conferees \$1,500</i>		Advanced Chemometrics without Equations –Hands On (Full day – computers provided) <i>Conferees \$675; Students \$125, Non-conferees \$775</i>	Practical Applications of Mass Spectrometry for Small Molecules (Full day)
Laser Ablation / Laser-Induced Breakdown Spectroscopy (Full day)		Raman Chemical Imaging Technologies and Methods (Half day - AM)	Forensic Analysis of Textile Fibers (Full day)
Terahertz Pulsed Spectroscopy and Imaging (Half day - PM)		Process Analytical Chemistry: Out of the Lab and Into the Pipe (Full day)	
Inductively Coupled Plasma – Mass Spectrometry (ICP-MS): Advanced Topics (Half day - PM)			

ACS IS SPONSORING THREE WORKSHOPS AT THE FACSS CONFERENCE.

- Methods Development, Validation Procedures, and Conformity Assessment in the Analytical Laboratory.
- Laboratory Safety
- NMR Spectral Interpretation and Organic Spectroscopy: A Problem-Based Learning Approach

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