

The SAS Spectrum Newsletter

The Newsletter of the Society for Applied Spectroscopy



September 2012



FREE Webinar:

Streamline your Chemical Analysis Lab using
Next Generation FT-NIR

Council For Near Infrared Spectroscopy Announces the Gerald S. Birth Award is Presented to Dr. Michael (Micky) Myrick

The Council For Near Infrared Spectroscopy (CNIRS) is proud to announce that this year's winner of the Gerald S. Birth Award for best work in diffuse spectroscopy published in 2010 to 2011 is Dr. Michael (Micky) Myrick. Dr. Myrick has worked on the development of an instrument for imaging forensic samples in the thermal infrared. The work is detailed in a series of 3 papers titled "Multimode Imaging in the Thermal Infrared for Chemical Contrast Enhancement". The three papers were published back-to-back in Analytical Chemistry (2010) 82: 8412-8420, 8421-8426 and 8427-8431.

Introducing the Agilent Cary 630 FTIR: DISTINCTLY BETTER (AND SMALLER) ROUTINE FTIR

The world's smallest, lightest, most robust benchtop FTIR is here. The NEW Agilent Cary 630 FTIR doesn't compromise on performance or precision. Instead, it proves that big things come in small packages. With 21 CFR compliance, revolutionary sampling accessories for liquid analysis, and permanently aligned optics, [reliable testing is in your hands.](#)

Part 1 described the instrumentation and methodology, Part 2 reported on simulation-driven design and Part 3 described how blood could be visualized on fabrics. The papers were co-authored with Heather Brooke, Megan R. Baranowski, Jessica N. McCutcheon and Stephen L. Morgan. The award, lecture and symposium were presented at the 16th International Conference on Diffuse Reflectance (IDRC) at Chambersburg, PA August 2012. The award included a trophy and honorarium sponsored by Unity Scientific, Inc.



The Worlds First...
Smart Spectrometer with USB 3.0





Michael Myrick received a B.S. degree in Chemistry at the North Carolina State University and was awarded his Ph.D. in Physical Chemistry at New Mexico State University for his work on energetics and dynamics of metal excited states. He was a postdoctoral associate of S. Michael Angel at Lawrence Livermore National Laboratory working on analytical spectroscopy applications. In 1991 he moved to the University of South Carolina, Columbia, SC, where he was promoted to Associate Professor in 1997 and Professor of Chemistry in 2003. He has been a visiting scientist at Lawrence Livermore National Laboratory from 1995 to the present.

Dr. Myrick is the author of more than 160 peer-reviewed or invited publications and invented multivariate optical computing. His patents in this area were licensed to Ometric Corporation, a startup company in Columbia S.C. in 2005. Ometric was sold in early 2011 to Halliburton Energy Services in Houston. He also currently serves as the President of the Coblenz Society for Vibrational Spectroscopy.

The Gerald S. Birth Award for an outstanding publication describing innovation in diffuse reflection or diffuse transmission spectroscopy is conferred by the CNIRS and sponsored by Unity Scientific Corp. in memory of Gerald Birth. The late Dr. Birth was the founder of the IDRC, now sponsored by the CNIRS. Dr. Birth also made many contributions to instrument technology related to diffuse reflection. It is fitting that the Birth Award this year is conferred upon Dr. Michael Myrick, who also has a deep interest in developing and using new techniques for spectroscopic measurements, as an aid to forensic science.

United Kingdom Regional Section of the SAS Holds its Second Technical Meeting at Imperial College London

Following its Inauguration in 2011, the UK Regional Section of SAS held its second one-day technical meeting in July 2012. The meeting was convened at Imperial College London in June 2012 and was hosted by Prof Sergei Kazarian and his team (<http://www3.imperial.ac.uk/vibrationalspectroscopyandchemicalimaging/news/ftirimagingsconference>). The central theme was FT-IR Spectroscopic Imaging focusing on New Trends and Emerging Applications. In total, 10 eminent speakers (from the UK and continental Europe) gave topical lectures on various aspects of FT-IR spectroscopic imaging ranging from applications in medicine to art. A highlight of the day was a presentation given by the SAS-sponsored Tour Speaker, Prof Heinz Siesler (Duisburg-Essen University, Germany) on vibrational spectroscopic imaging in polymer and pharmaceutical sciences. The well-attended meeting was notable for its high level of organization and friendly atmosphere as well as the high quality of presentations. Young spectroscopists constituted a good proportion of the audience and presented posters. We are particularly pleased to welcome 10 new student members among our ranks who joined the SAS on the day. At present the activity of this regional section over the year and half of its existence has contributed to nearly doubling of the membership of SAS within the UK region (currently standing at 139). The meeting was sponsored by Bruker, Agilent, SAS and Imperial College London.

The section is also proud to welcome its first Corporate Sponsor, Acal BFi UK Ltd.



SAS speakers at the United Kingdom meeting: from the left – Prof. Heinz Siesler (SAS Tour Speaker, Duisburg-Essen University, Germany), Prof. Sergei Kazarian (meeting host and organizer, Imperial College London, UK), Prof Bernhard Lendl (Vienna University of Technology, Austria), Prof. Nicholas Stone (Exeter University, UK) and Prof. Pavel Matousek (UK SAS Section Chair, Rutherford Appleton Laboratory, UK)

FACSS Welcomes Three New Member Organizations

The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) is pleased to announce that at the recent Governing Board meeting in March three new member organizations, namely the AES Electrophoresis Society, the Spectroscopical Society of Japan (SpSJ), and the North American Society for Laser Induced Breakdown Spectroscopy (NASLIBS), have been accepted into the federation as full member organizations.

The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) is an organization designed to further the interests of analytical chemistry and spectroscopy on behalf of its member organizations. In 1973, FACSS was founded as a federation of member organizations for the exchange of ideas at the forefront of analytical sciences.

With the addition of the AES Electrophoresis Society, the Spectroscopical Society of Japan (SpSJ), and the North American Society for Laser Induced Breakdown Spectroscopy (NASLIBS), to the federation's existing member organizations [Division of Analytical Chemistry of the American Chemical Society, American Society for Mass Spectrometry (ASMS), ANACHEM, the Coblenz Society, the International Society for Automation (ISA) – Analysis Division, the Royal Society of Chemistry (RSC) Analytical Division, and the Society for Applied Spectroscopy (SAS)], FACSS is now 10-member societies strong. This expansion reflects a unique element of FACSS and its annual North American meeting, SciX, in that all areas and aspects of analytical chemistry and spectroscopy are welcome, bringing together leading scientists from among many disciplines for scientific exchange.

FACSS believes that the addition of these three member organizations will enhance its ability to serve the analytical chemistry and spectroscopy community.

Joint Outreach in Asia and SAS First Regional Section in Asia

A collaborative initiative of FACSS, the Society for Applied Spectroscopy, the Coblenz Society, and the International Society for Automation (ISA) – Analysis Division led to a major outreach in Asia. The federation and its member organizations jointly sponsored several sessions at the 23rd International Conference on Raman Spectroscopy (ICORS) which was held in Bangalore, India on August 12 – 17, 2012. This was the second time that ICORS has been held in Bangalore (1978 & 2012). Bangalore is the home to both the Indian Institute of Science [IISc] (the location of ICORS 2012) and the Raman Research Institute. Sir C.V. Raman, the discoverer of the Raman effect, was the first Indian Director of the IISc serving in that role from 1933-1937 and many of his Raman's spectroscopic studies were conducted there. ICORS is a biannual conference held at locations around the world. The 23rd ICORS meeting was chaired by Professor Siva Umaphathy, had over 600 registered attendees and was notable for the very high quality of presentations and exceptionally generous hospitality of the organizers and the hosting institution.

The federation and its member societies utilized this timely opportunity to extend their outreach into this part of the world that is strong in scientific excellence but represents only a small fraction of the above societies' membership. A special plenary award lecture sponsored and named the FACSS/SAS/Coblenz/ISA Award Plenary Lecture was given by Professor Hugh Barr (Gloucestershire Royal Hospital, Gloucester, UK) who provided a fresh perspective on cancer diagnosis from an angle of a practicing cancer surgeon (please see the photograph below). The high potential of emerging spectroscopic techniques for objective cancer diagnosis contrasted by the performance of existing diagnostic methods was discussed along with existing barriers for the entry of these new methods into national health services. A brief introduction of the sponsoring societies and FACSS and their missions was presented prior to the lecture by Prof. Pavel Matousek.



As noted above, the ICORS sponsorship represents an international out-reach activity by SAS, the Coblenz Society, ISA AD, and FACSS. In 1972, FACSS was founded as a Federation of member organizations for the exchange of ideas at the forefront of analytical sciences. Over the last forty years, FACSS has maintained five critical objectives to realize the Federation's goals: (1) Education and Training; (2) Advancement of Knowledge; (3) Advancement of Technology; (4) Social and Profession Peer Networking; and (5) Promotion and Enabling Interests of Member Organizations. As early as 1974, in a report about the formation of FACSS, it was stated that "funds accruing from the meeting (FACSS (now SciX) conference) will be used in the advancement of analytical chemistry and spectroscopy in the form of fellowships and grants to graduate students and faculty members as well as assistance to regional meetings with the same objectives." The ICORS sponsorship, championed jointly by Dr. Curt Marcott (past-president of SAS) and Dr. Ian R. Lewis (FACSS Governing Board chair and past-president of the Coblenz Society), is in line with this stated goal and represents the first activity of FACSS and its member societies in supporting a meeting in Asia.

As noted above, the ICORS sponsorship represents an international out-reach activity by SAS, the Coblenz Society, ISA AD, and FACSS. In 1972, FACSS was founded as a Federation of member organizations for the exchange of ideas at the forefront of analytical sciences. Over the last forty years, FACSS has maintained five critical objectives to realize the Federation's goals: (1) Education and Training; (2) Advancement of Knowledge; (3) Advancement of Technology; (4) Social and Profession Peer Networking; and (5) Promotion and Enabling Interests of Member Organizations. As early as 1974, in a report about the formation of FACSS, it was stated that "funds accruing from the meeting (FACSS (now SciX) conference) will be used in the advancement of analytical chemistry and spectroscopy in the form of fellowships and grants to graduate students and faculty members as well as assistance to regional meetings with the same objectives." The ICORS sponsorship, championed jointly by Dr. Curt Marcott (past-president of SAS) and Dr. Ian R. Lewis (FACSS Governing Board chair and past-president of the Coblenz Society), is in line with this stated goal and represents the first activity of FACSS and its member societies in supporting a meeting in Asia.

At ICORS, information on the different member organizations, member application forms, and program information on the SciX conference presented by FACSS, was made available at a literature table and board located in the Exhibition area. The literature table and board were staffed by volunteers. The photograph below shows several of the student volunteers at ICORS.



A parallel initiative of the Society for Applied Spectroscopy (SAS) led by Dr Rina Dukor (former SAS president), prior to and at the meeting, succeeded in laying the first founding blocks for the establishment of the first Regional Section of SAS in Asia, Indian Regional Section. The section founding committee consists of Prof. Umapathy, Prof. Arunan and Dr Ramesh. This step follows on discussion from 2011 involving Professor Umapathy and then SAS president Curt Marcott. It is anticipated that the foundation of this Regional Section will further extend the outreach of SAS in this dynamic part of the world.

SciX 2012 – The National Meeting of SAS

FACSS
PRESENTS

SciX
2012



It is a little over a month before the SciX 2012 meeting opens in Kansas City, Missouri (September 30th to October 5th). SAS will be co-organizing the Sunday poster session, will be presenting the William F. Meggers and Lester W. Strock awards, will be holding a Sunday members-only day, a student event, and the annual Members' Wine & Cheese awards reception plus sponsoring and organizing a number of technical sessions. SciX 2012 will also provide the venue for the Society's annual Governing Board meeting. New for 2012, SciX will be hosting several of Applied Spectroscopy's Focal Point authors in a special session that highlights dynamic scientific areas which have appeared recently in the Society's journal. SAS is also sponsoring a number of undergraduate travel awards to assist these researchers attend SciX and present their research.



For those who are attending SciX and haven't booked at the conference hotel yet (Sheraton Kansas City at Crown Center - pictured) – remember to book before **September 10th** and save \$75 on the hotel rate.

Over 100 technical symposia will form the core of the conference and SciX 2012 is still accepting, on the conference website, contributed poster presentations and registrations to allow everyone an opportunity to present their latest research (www.scixconference.org).

SciX 2012 is the 39th annual North American meeting of FACSS, the 51st National Meeting of SAS, and sees the 10 member societies of FACSS come together for a great conference focused on **scientific exchange**.

[Comments to david.butcher@analytchem.org](http://david.butcher@analytchem.org)