The SAS Spectrum Newsletter
The Newsletter of the Society for Applied Spectroscopy
April 2012

2012 WILLIAM F. MEGGERS AWARD ANNOUNCED

SAS is pleased to announce the winner of the 2012 William F. Meggers Award for the outstanding paper in *Applied Spectroscopy*: "Raman Spectroscopy Using a Spatial Heterodyne Spectrometer: Proof of Concept" by Nathaniel R. Gomer, Christopher M. Gordon, Paul Lucey, Shiv K. Sharma, J. Chance Carter, and S. Michael Angel.

The award will be presented at the 2012 SAS National Meeting (SciX 2012 – presented by FACSS) in Kansas City, MO [Sept 30 – Oct 5].

The Society would also like to recognize three other excellent papers as runners-up for the award:

"Confocal Raman Microspectroscopic Study of the Molecular Status of Carotenoids in Tomato Fruits and Foods," by Paul D. Pudney, Luisa Gambelli, Michael J. Gidley.

"Synthesis and Characterization of Gold Nanoparticles Coated with Ultrathin and Chemically Inert Dielectric Shells for SHINERS Applications," by Jian-Feng Li, Song-Bo Li, Jason R. Anema, Zhi-Lin Yang, Yi-Fan Huang, Yong Ding, Yuan-Fei Wu, Xiao-Shun Zhou, De-Yin Wu, Bin Ren, Zhong-Lin Wang, Zhong-Qun Tian.

"Dependence of Signal on Depth in Transmission Raman Spectroscopy" by Pavel Matousek, Neil Everall, David Littlejohn, Alison Nordon, Matthew Bloomfield.

FACSS in Conjunction with JPAG, RSC MSG and the IRDG Presents a Joint Symposium on "Advances in Raman Spectroscopy in Pharmaceutical Analysis" on 17 May 2012

A one-day joint symposium organized by FACSS, the Joint Pharmaceutical Analysis Group (JPAG), the Royal Society of Chemistry Molecular Spectroscopy Group (RSC MSG), and the Infrared & Raman Discussion Group (IRDG) on "Advances in Raman Spectroscopy in Pharmaceutical Analysis" will be held at The Royal Society of Chemistry, London on Thursday, 17 May 2012.

Raman spectroscopy has found favor in pharmaceutical analysis because it is nondestructive, requires minimal sample preparation, and gives clear spectra for identification. This symposium brings together the advantages of the latest techniques of Raman Imaging, in situ sampling, Transmission and Spatially Offset Raman Spectroscopy and their applications, as well as the use of hand-held instruments. This includes the identification of APIs, differentiation of polymorphs, crystalline form and hydrates, the reverse engineering of products, identification of counterfeits, quantification of APIs in products and uses in PAT to ensure a quality output. This program demonstrates a breadth of successful Raman applications spanning the R&D field, API development, scale-up, and manufacturing, as well as drug product formulation development, characterization, and product assay. Poster presentations, a student prize, and an exhibition of Raman instruments add to the value of the symposium.

Additional information about this symposium is available at

http://www.jpag.org/?p=meetings&r=9&lang=EN&sid=20120309221842809659

http://www.rsc.org/ConferencesAndEvents/conference/alldetails.cfm?evid=109595

Information on SAS, FACSS and its member organizations plus information on the other sponsoring bodies co-organizing this symposium as well as information about the SciX 2012- presented by FACSS conference will be distributed to the attendees.

FACSS announces that Dr. Don. Pivonka has been named the recipient of the 2012 Charles Mann Award for Analytical Raman Spectroscopy

The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) is pleased to announce that Dr. Don Pivonka has been selected as the recipient of the **2012 Charles Mann Award.**

The Charles Mann Award is presented to an individual who has demonstrated advancement(s) presented at FACSS (now SciX- presented by FACSS) in the field of applied Raman spectroscopy and/or demonstrated dedication to the advancement of the conference's Raman spectroscopy program and/or the ASTM Raman subcommittee.

Don Pivonka received his Ph.D. in analytical chemistry from Kansas State University, under the direction of Dr. Robert C. Fry. While at Kansas State, Don received several research awards including the Phillips Petroleum Fellowship Award as the outstanding researcher in the graduate chemistry program. Don was the inaugural recipient of the Tomas Hirschfeld award presented at the 1987 Pittsburgh Conference. In his professional career, Don spent 5 years at Hercules, Inc. (1987-1992) where he used vibrational spectroscopy to further the understanding of polymer processes and performance. In 1992, Don joined Imperial Chemical Industries (ICI) and through a series of mergers, Don's role transitioned from ICI to Zeneca (1993) and finally to AstraZeneca (2000). Don's research focus accordingly shifted from specialty chemicals to pharmaceutical research. Within pharmaceutical discovery, he has been a leader in application of infrared and Raman spectroscopy as it applies to the understanding of solid phase reaction mechanisms and kinetics of solid phase combinatorial synthesis. He has also championed novel applications of Raman spectroscopy for understanding relationships between the electronic properties of drug candidates and their ligand/receptor interaction in biological systems. This work has resulted in the discovery of various novel drug candidate molecules across a diverse range of central nervous system receptor targets. In 2011, Don joined Incyte Pharmaceuticals as a senior principal chemist working in the Chemistry, Manufacturing and Control (CMC) division. Don holds numerous publications and book chapters pertaining to applications of Raman spectroscopy in pharmaceutical research. He has presented numerous invited/plenary lectures worldwide and was co-editor of the J. Wiley & Sons book titled "Applications of Vibrational Spectroscopy in Pharmaceutical Research and Development."

The Charles Mann award for Applied Raman Spectroscopy was instituted in 2002 by FACSS following the untimely death of Professor Charles (Charlie) Mann. Professor Mann was a well-known and long-standing member of the faculty of Florida State University (FSU). Professor Mann and his faculty colleague, Professor Tom Vickers, contributed significantly to the development of analytical Raman spectroscopy via publications, participation at numerous meetings including FACSS, and participation in the ASTM sub-committee on Raman spectroscopy E13.08. Professor Mann's research areas covered from the fundamental including data analysis (chemometrics and databases), quantitative Raman, and instrumental understanding to the applied, polymers, inorganics, etc.

The award includes an honorarium, an engraved plate, a Plenary lecture at the SciX meeting, and a special session honoring the contributions of the awardee. The Award Plenary lecture will be given at FACSS's SciX conference, which in 2012 will be held in Kansas City from September 30 - October 5, and will be followed by a presentation at the traditional Tuesday evening Raman reception.

Nominations are now open for FACSS's 2013 Charles Mann award which will be presented at SciX- presented by FACSS in 2013 in Milwaukee, WI. Entries for the 2013 Charles Mann award can be made via submission to the FACSS International / SciX conference office (PO Box 24379 Santa Fe, NM 87502/Phone: (505) 820-1648/Fax: (505) 989-1073/facss@facss.org) and addressed to the "Charles Mann Award Committee". Nominations should include a nominating letter, candidate's CV, and support letters as deemed necessary. There are no restrictions placed on the occupation of the nominees as can be shown by reviewing past recipients who have come from industry, academia, national laboratories, and instrument companies. Nominations will be accepted until September 1, 2012.

Third Asian Spectroscopy Conference **by Curtis Marcott, Light Light Solutions**

The Third Asian Spectroscopy Conference was held at Xiamen University in Xiamen, China, November 28 – December 1, 2011. Pictured above are the ten student poster award winners (holding certificates) standing in the front row with the organizers. This meeting aims to bring together scientists working on various aspects of optical spectroscopy from all countries in the Asian and Pacific regions to enable stimulating discussion and exchange of information. It is hoped that students from these regions will gain immensely from participating in this meeting and interacting with international experts. A total of 323 scientists attended, 207 of whom were from China.

Additional Asian attendees were from Japan (43), Chinese Taipei (16), India (14), Korea (12), Singapore (10), Turkey (2), Australia (1) and Russia (1). The distinguished list of Plenary Speakers included Professor Richard N. Zare (Stanford University), Professor Richard Van Duyne (Northwestern University), Professor Hiro-o Hamaguchi (University of Tokyo), and Professor Siva Umapathy (Indian Institute of Science). The conference was organized by Professor Zhong-Qun Tian of Xiamen University.

April Historical Events in Spectroscopy

by Leopold May, Catholic University

April 1, 1972 — Julian Stone reported in *Applied Physics Letters* on a new type of fiber made of quartz and filled with tetrachloroethylene that may be able to carry light.

April 7, 1795 — A new law established the metric decimal system in France on this day.

April 15, 1874

Johannes Stark, a researcher in electric currents in gases, spectroscopic analysis, and chemical valency, was born on this date. In 1919, he was awarded the Nobel Prize in Physics for his discovery of the Doppler Effect in canal rays and the splitting of spectral lines in electric fields.

April 21, 1774

The discoverer of optical activity, Jean-Baptiste Biot, was born on this day.

April 23, 1958

Max K. E. L. Planck, who was born on this day, introduced the quantum theory in 1900. He received the Nobel Prize in Physics in 1918 in recognition of the services he rendered to the advancement of Physics by his discovery of energy quanta.

Additional historical events can be found at Dr. May's website, http://faculty.cua.edu/may/SpectHist.htm

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