

## **November 2012**



## 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.

## SAS Members Event at SCIX 2012: The Mystery Train



SAS presented its fourth annual members event at SCIX 2012. Members enjoyed lunch while enjoying an excellent murder-mystery presentation entitled *The Mystery Train*. Professional actors and SAS members Katherine Bakeev, Gloria Story, Gary Hieftje, and John Wasylyk created a scene on a commuter train bound for Independence, MO in March, 1924 in which a murder occurred. SAS members solved puzzles and interrogated suspects to solve the mystery. An excellent time was enjoyed by all and congratulations to Gloria Story and the SAS Office for organizing this event.

Photos of this event are on page 2.

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### FREE Webinar:

Streamline your Chemical Analysis Lab using Next Generation FT-NIR







Comments to david.butcherATanalytchem.org



SAS Members Katherine Bakeev (above) and John Wasylyk perform in *The Mystery Train.* 



### Call for Nominations for the William G. Fateley Student Award

**About the William G. Fateley Award.** In 2010, the family and former group members of William G. Fateley, in conjunction with The Coblentz Society and The Society for Applied Spectroscopy, announced the formation of a Student Award to honor the career and life of William G. Fateley. The award consists of a \$1000 prize to the selected student(s) and a plaque. Winners are recognized and invited to present their research results during a special student award session at SCIX each year.

Although Bill Fateley passed away in 2009, he is still remembered as a larger-than-life figure in the spectroscopy community. Bill was a 1965 winner of the Coblentz Award and was highly regarded for his scientific contributions,

but also loved by many people for his humor, his generosity, and for never taking himself too seriously (and some may have thought he was a bit of an ornery cuss, and Bill was ok with that too). At Bill's memorial service at Kansas State University, many speakers spoke of Bill's quick wit and his unmistakable laugh. Nearly everyone had examples of how he had provided personal support. Whether it was a material gift (a beautiful handmade clock) or a simple positive word when one was needed, Bill was always helping and encouraging people throughout his life. Perhaps Bill's biggest impact was his



contributions to the social fraternity of international Spectroscopy in the pre-LinkedIn, pre-Facebook world. His long years of service to PITTCON, serving as Conference President in 1971, and to the Society for Applied Spectroscopy, serving as Editor of Applied Spectroscopy for 20 years, were a benefit to us all. The nominations window for William G. Fateley Student Awards is opens October 3<sup>rd</sup> – 1<sup>st</sup> February annually. Winners will be announced in late February each year.

Please consult <a href="http://www.coblentz.org/awards/william-g-fateley-student-award">http://www.coblentz.org/awards/william-g-fateley-student-award</a> for further information on eligibility, requirements, and points of contact for this and the Coblentz Society's other awards.

### **Call for Nominations for the Williams-Wright Award**

About the Williams-Wright Award. The Coblentz Society's Williams-Wright Award is presented annually to an industrial spectroscopist who has made significant contributions to vibrational spectroscopy while working in industry. The work may include infrared and/or Raman spectroscopy,

instrumental development as well as theory, and applications of vibrational spectroscopy. Government labs are not considered industry in this definition. No restrictions are placed on the selection of the Awardee because of age, sex, or nationality, but the Awardee must still be working at the time the award is presented. The award consists of a frame certificate and an honorarium. In order to ensure that the award is based on an independent evaluation of the candidate's achievements, the selection is made by a committee chosen by the Coblentz Society.



The Award is presented each year at the <u>Pittsburgh Conference</u> on Analytical Chemistry and Applied Spectroscopy. The Williams-Wright Award Symposium is held in honor of the awardee and immediately follows the presentation.

The nomination should clearly state the significance of the contribution made by the nominee, e.g., the introduction of novel methods, techniques or theories; innovative work in the field of vibrational spectroscopy; significant improvement on existing methods, theory or techniques; or important impact on the field of vibrational spectroscopy arising from the volume of contributions in a specific area. The nomination packet should include a resume of the nominee's career including a publication list. Seconding letters to the nomination are useful, but not necessary. Files on nominees will be kept active for three years, after which the candidate must either be renominated with an updated file, or the file will be closed. Nominations should be sent to the Chair of the Williams-Wright Award Selection Committee. Nominations close May 1<sup>st</sup>, 2013 for the 2014 award. Please send nomination packages (email is preferred) to:

2012-2013 Chair: Ms. Shawn Mehrens email: <a href="mailto:shawn.mehrens@pfizer.com">shawn.mehrens@pfizer.com</a>

## SAS Reports from the Executive Committee and Governing Board Meetings held at SCIX 2012

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#### PRESIDENT'S REPORT FACSS 2012 MARY KATE DONAIS

It has been a privilege to serve as President of the Society for Applied Spectroscopy during this year of significant change. I would like to express my sincerest appreciation to all of the dedicated Society volunteers, Journal staff, and International Office staff for their hard work and patience as we move into the future.

Journal. Mike Blades started as Editor-in-Chief of Applied Spectroscopy in July. With this came a change in the journal office to the University of British Columbia campus and appointment of a new Editorial Assistant, Kristen MacDonald. Upon Managing Editor Rebecca Airmet's recommendation, a part-time proofreader, Betsy Miller, was hired in May to be trained by Rebecca and lessen her workload. In August Rebecca submitted her resignation after many years of dedicated work for the Society. Kristen MacDonald has now stepped into the Managing Editor position with LeNelle McInturff filling in until an Editorial Assistant replacement can be hired. Upon Mike's recommendation, a change was also made to contract Allen Press to do the journal copy editing work. With Rebecca's departure, Betsy Miller will also leave her employment with the Society. Many thanks to the EC for their help and input in getting these important changes in place. FACSS. The relationship between FACSS and SAS was strengthened this year through continued and frequent communications and new involvement with the SCIX conference. Financial support for Focal Point authors to attend SCiX as invited speakers was provided to FACSS from the FACSS surplus funds allocated to SAS; these speakers will be highlighted in the SCIX program as Focal Point authors, providing increased publicity for Applied Spectroscopy and SAS. FACSS plans to invite select Focal Point authors for the 2013 conference and has agreed to work more closely with the journal in identifying those to invite. Some FACSS surplus funds were also provided to 2012 Program Chair Steve Ray for sponsorship of the conference spectroscopy sessions, again providing SAS with additional visibility and publicity at the conference. Lastly, I have been working with Steve Ray and 2013 Program Chair Mike George on ways to increase student attendance at the conference.

**Lippincott and Fateley Award Funds.** Discussions with Micky Myrick and Jim Rydzak were begun at Pittcon on how to increase the Lippincott and Fateley award endowments. Based on the success of a Coblentz luncheon at Pittcon this year, it was decided to plan a fundraising luncheon at SCIX. An online registration form was set up by Coblentz for prepayments and donations. The lunch will take place Wednesday, October 3<sup>rd</sup> with approximately \$25 per attendee going to these funds.

**Coblentz.** A verbal agreement was reached between SAS and the Coblentz Society for our International Office to store and ship the Coblentz Deskbooks with shipping charges being reimbursed by Coblentz. As well, the Coblentz conference booth will be stored at the Interntional Office and shipped by SAS to Pittcon and SCIX each year. The booth shipping costs will be reimbursed by the Coblentz Society. A document will be signed to formalize this agreement.

AIP. SAS was represented at the American Institute of Physics (AIP) Society Officer's Meeting by Katherine Bakeev in March in College Park, MD. SAS is an affiliate society of the AIP. They have 10 member societies, including OSA, all of whom were well represented, along with numerous staff members of AIP – which is not a membership-based organization. Three topics were discussed during this day-long meeting covering topics that are quite interesting for SAS:

- 1. Will small undergraduate STEM (Science, Technology, Engineering, Math) programs go extinct?
- 2. Strategic Planning for Professional Scientific Societies
- 3. Publication and Data Policy

**ICORS** (International Conference on Raman Spectroscopy). Support was provided to ICORS 2012 by FACSS and its member organizations through sponsorship of a lectureship at the conference. In exchange FACSS and its member organizations were provided the opportunity to have a table and distribute materials at the conference. SAS member Rina Dukor attended the conference and helped with these efforts. There was considerable, strong interest in forming a local SAS section in India with three top professors volunteering to become officers and many students wanting to join the Society.

SECRETARY'S REPORT
MICHELLE MEIGHAN
EXECUTIVE COMMITTEE BUSINESS MEETING MINUTES
SUNDAY, MARCH 11, 2012 (LAKE CONCORD ROOM)
HILTON ORLANDO
ORLANDO, FLORIDA

- I. Call To Order Mary Kate Donais
  The meeting was called to order by MK Donais at 8:39
- II. Roll Call Katherine Bakeev for Michelle Meighan

President Mary Kate Donais present President-Elect Katherine Bakeev present Past President Curt Marcott present Treasurer Paul Bourassa present Secretary Michelle Meighan via telephone Newsletter Editor David Butcher present Membership Coordinator Gloria Story present Web Editor Ron Williams present

Regional/Technical Section Affairs Coordinator David Heaps present

Parliamentarian John Wasylyk present
Student Representative Ryan Schmeling present
Journal Editor-in-Chief Peter Griffiths present
Journal Editor Mike Blades present

Office Staff

Executive Director Bonnie Saylor present
Managing Editor Rebecca Airmet present
Office Manager Stephanie locco present

Administrative Affairs Associate Victor Hutcherson present as needed

#### Guests

Ed MacMillan joined 9:30am lan Lewis – joined 11:30

III. Approval of Minutes from October 1, 2011 Executive Committee meeting

Peter Griffiths raises correction on wording around having the editors expenses

covered for 5 days.

Moved to accept the amended minutes by Curt, second by Paul. Passed

unanimously

IV. Reports – Please read the individual reports for details, as the notes below reflect only the meeting discussion on the actual reports.

Discussion on having reports distributed a week in advance of the meetings as opposed to too close to the meeting, so that everyone has time to read and review them in advance of the meetings. There was a suggestion to not wait until all of the reports are received to distribute to all. This may shame those who have not submitted to then submit theirs.

A. President Report Attached
B. Secretary – minutes Report Attached
C. Treasurer To Be Presented

Paul presents 2011 statement and highlights that we have a smaller deficit than we had budgeted. The auditor's report stated that treasurer should report to the board 4x per year, as opposed to the 2x per year that is now done.

D. Executive Director To Be Presented

2011 have 1694 members- which is higher than 2010. For 2012 we are already ahead of 2011 membership. Institutional journal subscriptions are down based on unaudited numbers.

E. Journal Editor Report Attached

The aims and scopes of the journal have now been published and should aid in the focus of the submissions. The number of focal point articles continues to grow. The impact factor (IF) has increased slightly, but it is still below the 2008 value. It does appear that the review papers are most cited. The long-term impact of Applied Spectroscopy articles is quite high. Peter discusses that there are some papers that are not cited, and it may be in the journal's interest to not publish as many of these. The editors have the goal of getting the IF above 2, and maintaining it at this level over the long term. The editors will be making a concerted effort to publish papers of spectroscopy in biology as this is truly a hot topic. The production improvements made in 2011 are projected to give us \$75K in annual savings in production costs. This is Peter's last report as Editor in Chief, and his contributions are acknowledged with a round of applause.

F. Newsletter Editor Report Attached

David Butcher reports on the newsletter and has said that having a committee has been helpful to provide content. He likes that the committee members have different background than he does, so therefore provide some information he may not have otherwise included.

G. Membership Coordinator To Be Presented

Lake Tahoe event at FACSS 2011 was a great success. At FACSS there were 90 new student members who joined thanks to the encouragement and support of Mike and Mary Carrabba.

H. Web Editor

To Be Presented

Ron Williams presents information he has garnered from Google Analytics to better understand who visits our website and what they are looking at. The data are from the first 2 months in 2012. The data clearly show that the website is being visited, and we can track the activities. A verbal report on the web site updates was provided by Bonnie Saylor. More details will be provided in the New Business section.

Tasks completed:

- Automated member renewal e-mails, faxes and mailings
- Corrected advertising presentation algorithm
- Automated section labels so sections can get their member list
- Automated uploading of journal xml files
- Auto-updated regional section contact details
- Advertising serves and click-through reports
- Database structure and speed optimization has been completed (phase 1)
- · Tasks In progress/planned
- Highlighted/changing presentation of current activities, services and news
- Development of data gathering process for featured members, tour speakers, regional, technical and student sections
- Mid-level content editor and access module

#### To do

- Automatic on-line credit card processing
- Contact response analysis based on Google Analytics
- Membership renewal type testing and targeted marketing
- Subscription data base forms & reports
- Accounting reconciliation reports
- Database structure and speed optimization (phase 2)
- Geographic allocation of members by regional section
- Automated section labels- geographically allocated non-members
- Access to committee reports
- Leadership & section access to reimbursement forms

Data on the click through related to the advertisers is available, and Ed MacMillan does look at this.

These analytics give us the potential to find out a lot about our site visitors. We need to consider how we will use this in the future. It also brings up the point that we need to create a privacy policy and to publish this clearly. Action: **Ron** 

Williams as the web editor will write a privacy policy for the SAS website and present this for approval.

We do sell membership lists and these needs to be made clear to members – perhaps added to our membership form. Many of these issues warrant further discussion and need to be taken up by the publications committee.

I. Student Representative

Report Attached

The student event is Monday March 12th at Dave & Busters and the flier was sent out in advance to all student members. No students were interested to be student ambassador for Winter Plasma conference. No marketing has yet been done for the student ambassadorship in 2012, and the idea was to have students who are ALREADY going to the conference and give them some financial support.

Student membership list was provided by the office.

J. Regional/Technical Section Affairs

Report Attached

Dave Heaps' report includes tables of membership in regional and technical sections. The regional sections membership list is only those who have chosen this in their membership application. The office does provide to the sections the contact info for all people who live in that geographical region, even if they are not paid to that section. How the numbers are reported are not a very good reflection of actual regional memberships. Discussion follows on regional members, and how to track/include people and whether it is now relevant to have these regional sections. Perhaps the regions themselves need to be redefined, or that the technical sections are now of greater interest than having regional sections. The definition of the technical sections and making them vital needs to be defined by this committee. Not all the technical sections have a chair. The website opens possibility to make better use of these sections and making them active. All technical sections are sent an annual questionnaire by SAS office to provide input on their activities, and the names of their officers.

Curt Marcott moves to accept all reports as amended. Paul B seconds and this it passes unanimously.

V. National SAS Committee Reports

Report Attached A Awards B Constitution and Bylaws No Report

C. Nominating To Be Presented

D. Publications No Report E. Publicity No Report F. Tour Speaker Report Attached G. Meggers Award Report Attached H. Strock Award Report Attached I. Fellows Committee Report Attached J. Lippincott Award Report Attached K. Tellers No Report

Katherine moves to accept the committee reports with second by Dave Heaps. The SAS committee reports are accepted.

Delegate Reports

A. FACSS Report Attached B. Chemical Heritage Report Report Attached

SAS now has a large allocation from FACSS, which is money that can be used in support of FACSS program committees. It can be used for activities at FACSS. Curt moves to accept, Paul seconds. Unanimously accepted. VII. Unfinished Business

A. Applied Spec Ad Updates

Ed MacMillan

Ed submitted report on advertising sales (attached). 2011 was a good year for ads. His projections for 2012 are 260K( Jan 2012 had 66K revenue). He feels that we have to have more web presence to generate greater ad revenue. It is requested that the revenue be reported based on sources (newsletter, journal, website, etc) so that we can target our publication media appropriately. Ed would like the ability sell ads on the journal abstract page. This needs to be determined by the publication committee.

There is also discussion on BrightCopy – which did demo to the EC by web meeting on Feb 3rd.

There is interest from the journal staff in having the A pages available won the web with the advertisers info. A plan for this needs to be defined so that we can maximize our ad revenue.

> B. Student Ambassador Program Ryan Schmeling

This was discussed when Ryan presented his report. The marketing for the student ambassadorship should be open to their attending a smaller conference and they apply for this ambassadorship. The application can be advertised with a link for the Spectroscopist's calendar on the website, with marketing also on the website, newsletter, LinkedIn.

Mary Kate proposes to set a \$2K cap for annual funding of the student ambassadorship. Paul moves to accept, and seconded by Katherine. Approved unanimously.

C. Other Student Issues

Ryan Schmeling

Ryan is interested in creating more student chapters. Bonnie Saylor would like to assist and support him in his efforts for this. This can include more outreach to speak to them about activities that have been done by other chapters such as high school demos. How can the website benefit the student groups? More news/pictures of their events, student of the month, etc. Rvan can work with David Heaps to define what the website content for students should be. Students use the SAS Facebook page, and not so much LinkedIn, though there is also a SAS Student LinkedIn group.

D. 2013 PittCon Symposia

Mary Kate Donais

There are 2 sessions at 2012 Pittcon will be held on Thursday March 15th. For 2013 symposia proposed by Joel Harris: 50 years of Biological Vibraitonal Spectrocopy: A celebration of Ira Levin. Paul Farnsworth porposes a symposium on Atomic Spectroscopy. Both already have proposed speakers for these symposia.

E. FACSS Updates

Ian Lewis

There are nominations for 2 distinguished service awards for FACCS: Karmi Galle and Bruce Chase.

At FACSS Reno, the FACSS GB voted to set aside \$55K as allocation. SAS will get \$31,565.86 as the allocation from 2010 Raleigh mtg.

The 2011 Reno unaudited numbers are available. There is not expected to be an allocation from the Reno meeting.

Applications have been received from 3 organizations to join FACSS; North American Society for Laser-Induced Breakdown Spectroscopy (NASLIBS), Spectroscopical Society of Japan (SSJ), and American Electrophoreris Society (AES). The FACSS GB has developed an application so that all groups provide the same information, and they can be reviewed more readily.

SciX rebranding work continues. The SciX website launched on Feb 14th. The archive search for papers is not yet operating, but will be when the 2012 abstracts are included. About \$46K has been spent on these websites. The new website was developed by Ignite, and FACSS will buy their services to keep the web content updates. Branding now is FACSS presents SciX, and will change to SciX presented by FACSS in the future.

Efforts have been made to advertise the awards presented at SciX. SAS will provide word docs of the Meggers and Strock awards to Ian Lewis, so they can also be advertized by FACSS. FACSS is negotiating with Advanstar to use them to also promote the awards, which will also include podcasts. There are also discussions on hosting webinars on the conference highlights. Ian on behalf of FACSS thanks SAS for promoting SciX and its awards through our different media. SAS has done the most of any of the member societies in this arena. Michelle Meighan has done an excellent job for the social media networking for SciX.

The 2013 mtg will be in Milwaukee and 2014 in Reno. There is a proposed contract to have the SciX mtg in Reno. in 2017 and 2020. This is under consideration by FACSS. Sites in the Northeast are being investigated for 2015.

IRDG and Coblentz are cosponsoring a session at SciX 2012.

FACSS is looking to partner with their member organizations in advertising, and with this in mind, they are encouraging member societies to provide promo material for the RSC meeting inLondon in May.

FACSS is planning to offer \$2K to support a speaker at ICORS in Bangalore in August. FACSS-designated allocation money could be used for this.

lan sees potential to align some Focal Point articles with focal session from SciX. He looks at having the authors of some of the articles to then organize sessions in collaboration with SAS.

Working Lunch (old business/new business)

**New Business** VIII.

A. Lecture Sponsorship at ICORS

**Curt Marcott** 

Curt makes motion that SAS use \$1000K from our FACSS surplus funds to sponsor a lectureship at ICORS. Katherine seconds the motion. This is unanimously approved.

B. Undergraduate Travel Grant

Mary Kate Donais

The funds for this would come from the FACSS surplus funds. Curt moves to accept this, with second by Katherine. Passes unanimously.

C. Voting on Awards All

Meggers and Stock awards were voted for and approved by EC in advance of the EC meeting, so that these could be publicized by FACSS.

Motion by Curt and second by Katherine to accept the Fellows committee recommendations for awards to 10 nominees. These are accepted unanimously.

Award committee recommends Howard Mark for emeritus membership. Katherine moves to accept this, with second by Paul B. Accepted unanimously.

Katherine moves to accept Dave Butcher for Distinguished service award, with second by David Heaps, Accepted unanimously.

Katherine moves to accept recommendation of Joel Harris for the honorary membership award, with second by Curt. Accepted unanimously.

D. Voting on Officer Nominations

Candidates for president presented by the nominating committee are Ian Lewis and Pavel Matousek. Curt moves to accept these nominees, with second by Paul B. Accepted unanimously.

E. On Demand Store Options

Bonnie Savlor

Bonnie has learned of a company that can prepare "on-demand" items that they would then host and sell on their website, as a link from our own website. The discussion that follows indicates that there is interest in this, and Bonnie will research this further.

F. Website Additions

Bonnie Saylor/Mary Ann Ohlhoff

Mary Ann (via GoToMeeting) presents Excel spreadsheet of Website updates

Tasks completed:

- Focus: e-mail tracking codes for Google analytics. This was first used in the e-mail announcement of the March newsletter where in 2 version of it were sent to the randomly split databases, and response to the 2 different versions were analyzed.
- Potential uses of the e-mail tracking:
- Test various e-mail subject lines
- Test use of photos or graphics
- Test various membership promotion options
- Test announcement half-life
- Test response by list segment

Tasks In process/planned

Highlighted/changing presentation of current activities, services, and news

- Discussion follows on how to give more value to the newsletter announcements which now go out as plain text. There are opportunities to enhance this, and make it more valuable to readers to have teasers info and links to the content. This also opens up options for sellingadvertising.
  - G. Personalized Marketing Options

Bonnie Saylor/Mary Ann Ohlhoff

This is all part of the targeted e-mail that has been tested now with the March newsletter.

H. Journal Open Access/Cost of Knowledge

Peter Griffiths/ Rebecca Airmet

Subscription Models, Other

There is a current furor in the scientific publishing world and the recent announcement of Elsevier's net profits, relative to the price they are demanding for their journals, and the fact that they use free reviewers. The cost of knowledge website was established to protest the scientific publishing world's practices. This is creating great support for open access from such government-supported research agencies as NIH, USDA, etc. Open access though will have a negative impact for non-profit publications such as Applied Spectroscopy. The Journal Editors and managing editor need to look into the options to be considered for our journal moving forward. We may have to completely change our subscription model, and publication practices, which will impact our revenues and business practices.

E-books are presently viewed as an advertising benefit and not so much influencing the scientific content of the journal, nor benefiting our subscribers. This topic is now a lower priority issue for the journal to pursue, and investigation of this must include what platform we will be use for such e-books. The publications committee will take up this issue of e-books, and how the SAS should move forward on this. This needs to be thought of in terms of a member benefit. The SAS needs to look more at means to maximize our use of technology. This includes plans on web site content, and means of how we make these more technologically efficient. With this we also need to make better use of SAS resources (people, time and funds) to keep us current in our media content, logistical workings for this and marketing

I. Membership and Subscription Fees for 2012

Bonnie Saylor

Current membership rates are \$65 for on-line access and \$75 for print and access (more for non-USA). This has been the membership fee since 2007. Paul makes motion that we increase the membership by \$5 for all levels of membership, with second by Curt Marcott. Curt Marcott moves that we amend this to motion to increase the membership by \$5 for all levels of membership except students, with the increase to take effect from July 1, 2012. The amended motion is approved unanimously.

Our subscription rate increase is limited to the levels that OSA allows with our contract with them. Rebecca will need to research other items around the current market environment.

J. Audit Firms

Paul Bourassa

Three alternate firms have been looked at to replace the audit firm we have used for the past ~ 10 years. Our current firm, though doing this for us for so long, has only now raised issues on some of our practices, which have not changed over the course of their period as our auditors. The new firm Paul has chosen to do our audits is Rager, Lehman, and Houck, a mid-size firm with offices in Maryland and Pennsylvania.

K. Reimbursement for travel for Editors to attend SciX Peter Griffiths

The journal editors would like to have more days reimbursed. Motion proposed by Katherine is for the Society to pay for up to 7 nights for the Editor and Editor in chief of the journal to attend SciX and Pittcon if needed to perform their professional activities. Paul B seconds the motion, and the motion passes unanimously.

L. FACSS proposal to have podcasts of awards summaries and perhaps award talks hosted by Advanstar and Spectroscopy. Paul makes motion to endorse the podcasts hosted by Advanstar, with caveat that the awardee can choose personally to opt out. SAS also would like FACSS to request that Advanstar provide links back to our site from their site and the podcasts.

Curt seconds this. Passes unanimously.

Adjourn 3:53 Paul made motion to adjourn, with second by Curt. Meeting adjourned by MK Donais at 3:53.

#### TREASURER'S REPORT SCIX 2012 PAUL BOURASSA

SAS 2012 Budget v3

Ordinary Income/Expense	2012 Final Budget	2012 as of Aug 31	2012 Projections	2013 Proposed Budget
Ordinary Income/Expense				
Income				
4300 – Member Dues	100,000	80,658	90,000	95,000
4500 – Journal Income				
4505 – Subscriptions	500,000	509,342	510,000	510,000

4625 – Advertising	200,000	170,881	256,000	250,000
4630 – Reprints	500	4,623	5,000	5,000
4635 – Royalties	30,000	1,298	20,000	20,000
4650 – Other Jrnl Inc	5,000	868	1,500	1,500
Total 4500 – Journal Income	735,500	687,012	792,500	786,500
4800 – Chapter Income	0	50	50	0
4830 – General Contributions	6,000	6,895	6,895	6,000
4850 – Investment Income	1,000	685	700	700
4900 – Misc. Income	500	391	500	500
Total Income	843,000	775,691	890,645	888,700
Total moonie	0.10,000	110,001	000,010	000,100
Expense				
6000 – Salaries	302,400	201,148	310,000	210,000
6040 – Payroll Taxes	20,000	17,711	22,000	18,000
6060 – Personnel Benefits	12,000	8,724	10,000	9,000
6100 – Executive Comm	30,000	28,815	36,000	30,000
6150 – Governing Board	1,000	0	1,200	1,200
6170 – Membership Committee	1,000	0	1,000	1,000
6190 – Other Committees	2,000	0	1,500	1,500
0130 - Other Committees	2,000	<u> </u>	1,300	1,500
6200 – Journal				
6205 – Advertising	70,000	75,813	125,000	120,000
6210 – Publication	180,000	89,327	130,000	135,000
6220 – Operating	27,000	21,041	40,000	160,000
6240 – Postage/Shipping	300	119	300	300
6245 – Honoraria	25,000	14,567	25,000	25,000
6250 – Promotion	500	14,507	350	300
6265 – Travel	5,000	4,405	5,500	5,000
6275 – Online	14,000	13,575	13,600	14,000
6280 – Small Furniture/Equip	500	13,373	300	500
6285 – Back Issues	4,000	3,408	7,000	7,000
6288 – Media Liability Insurance	2,400	2,308	2,308	2,400
6290 – Editorial Board	700	2,308	1,000	1,000
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6295 – Miscellaneous Total 6200 – Journal	200 329,600	813 225,375	1,000 351,358	200 470,700
Total 0200 – Journal	329,000	225,575	331,336	470,700
6300 – Newsletter	1,000	500	1,000	1,000
6330 – Internet Services	88,400	49,822	88,400	64,000
6400 – Member Services	17,000	10,576	17,000	17,000
6600 – Awards	18,000	293	18,000	15,000
6650 – Sections	13,000	1,193	11,000	13,000
6700 – Conferences	5,000	5,845	8,000	8,000
6730 – Member Acquistion & Retention	1,000	0,043	0,000	0,000
6800 – Society Office	1,000	<u> </u>	0	0
6810 – Facilities	32,000	17,290	31,000	32,000
6825 – Insurance	6,000	6,520	6,600	6,700
6830 – Postage/Shipping	2,000	355	2,000	2,000
6835 – Fostage/Snipping	3,000	1,651	3,000	3,000
6840 – Printing, Dsgn, MI Prep	250	0	230	250
6845 – Dues & Subscriptions	2,500	2,346	2,400	2,500
6850 – Travel	11,000	9,314	12,000	11,000
6865 – Supplies	3,000	1,336	3,000	3,000
6870 – Equip/Furniture/Sftwr	5,000	7,438	8,500	7,500
6875 – Legal Fees	500	7,436 0	0,500	7,500
	9,000		10,000	
6880 – Auditors	11,000	150 5 710	10,000	10,000
6885 – Bookkeeper/ Pyrl Srvc		5,719	10,000	11,000
6890 – Employee Training	300	677		800
6899 – Miscellaneous	300	677	800	800
Total 6800 – Society Office	85,850	52,794	89,530	90,050
7000 – Financing Expenses	6,500	2,714	6,000	6,000

7200 – Depreciation	5,000	1,681	2,500	2,500
Total Expense	938,750	607,218	974,488	957,950
Net Ordinary Income	-95,750	168,473	-83,843	-69,250

## EXECUTIVE DIRECTOR'S REPORT FALL 2012 BONNIE SAYLOR

#### Membership

Total 2012 Membership to Date (*This number reflects anyone who was a member at any point in 2012*) 1,910 U.S. 1,375 Non-U.S. 535

Student 504 Non-Student 1.406

Total 2012 Membership to Date Within Grace Period (*This number reflects only those members who are within the renewal grace period of three months*)

1,699 (This number last year at this time was 1668)

U.S. 1,250 Non-U.S.449

Student 397 Non-Student 1,302

#### **Subscriptions**

2012 To Date 808

U.S. 488 International 320

2011 To Date 829

U.S. 395 International 434

#### **Members and Subscribers**

Membership appears to be holding pretty steady and is actually slightly up from this time last year. Considering the state of economy over the past few years, this is very positive. This is in large part due to our arrangement with OSA, our student promotions, and our website.

Our subscriber numbers in 2012 appear to be lower than this time last year, but we always get several more subscribers between now and the end of the year who want current year content. This is a downward trend, however, in the industry that we need to fight hard to reverse. The journal office is also working on this area.

#### **Corporate Sponsors**

We have been working to get more corporate sponsors this year. Currently we have 11 Platinum, Gold, 2 Silver, and 6 Contributing Sponsors. This a total of 19 which is 2 more sponsors over last year. However it must be noted that the number of platinum sponsors has increased to 11 over last year's 8.

#### Web Site

We have made strides to continue the website and data base management system upgrades. This is an ongoing process that takes a great deal of time and money, but is well worth the effort.

#### Strategic Planning

A Strategic Planning Committee was formed and met at PITTCON and via conference call last month. The goal of the committee is to come with new initiatives and new sources of income for the Society.

#### **Finances**

The budget has been prepared and will be presented by Paul Bourassa. The 2011 audit field work was completed last week. We are awaiting final reports from the auditors.

#### NEWSLETTER EDITOR'S REPORT DAVID BUTCHER AUGUST 26, 2012

Seven issues of the newsletter have been published since our last report, as detailed in the table below. To my knowledge, there have been no technical issues.

I would like to acknowledge the excellent contributions of the 2012 members of the Newsletter committee, Arindam Ganguly and Fred LaPlant. Both of these gentlemen have provided guidance and content for the Newsletter which have improved the quality and diversity of the news reported.

One change to the operation of the Newsletter involves the retirement of LeNelle McInturff. In addition to her excellent work on the journal, LeNelle formatted the Newsletter and was responsible for the wonderful style of the publication. I am attempting to continue her good work.

Ed McMillan has sold numerous advertisements for the Newsletter. I appreciate his excellent work in raising funds for SAS.

Issue	Topic
March 2012	Pittcon 2012
April 2012	Meggers Award Announcement
May 2012	Craver Award Announcement
June 2012	Baltimore-Washington Tour Speaker
July 2012	New York Section Tour Speaker
August 2012	Call for Nominations for Coblentz Society Awards
September 2012	Gerald S. Birth Award Announcements

#### MEMBERSHIP COORDINATOR'S REPORT SEPTEMBER 2012 GLORIA STORY

Due to scheduling conflicts and attendance issues, the membership committee meeting at PittCon 2012 was postponed until SciX 2012 (scheduled for Tuesday, the 2nd, at 8 AM). The coordinator presented the current information in the Executive Committee (EC) meeting held on Sunday, March 11th (see the membership report dated February 2012). Our 4th Annual SAS Day event, to be held from 11 AM to 3 PM Sunday September 30th of SciX 2012, is ready for us to solve a murder mystery over lunch. We'll provide transportation to and from the Sheraton, of course free drinks and food, plenty of fun at all our colleagues' expense, and we'll still be back in plenty of time to rest up before attending the 7 PM SAS Student Poster Session and SciX opening mixer.

The SAS LinkedIn Group continues to grow...from SciX 2011 through to this writing we've increased from 372 to 495 members "linked" with 83 "wannabees" currently requesting access. While it is difficult to extract exact numbers, requests to access this member benefit has definitely resulted in new memberships and renewals of expired ones. A lot of the latest members have been from our UK regional section! Heather Brooke used the site to encourage members to take advantage of the short courses being offered at SciX this year. Katherine Bakeev and Rina Dukor used the site to communicate about how SAS, the Coblentz Society, and ISA-AD provided support under the FACSS organization umbrella for ICORS 2012 held in Bangalore, India. There is a lot of interest in starting an India regional section, so it was very exciting that many of our members attended and shared about SAS and its mission with the attendees. Mark Henson posted the call for nominations for the 2013 Lippincott Award. Both Ellen Miseo and Luisa Profeta made interesting posts about gathering information on training courses and useful software packages. There were ideas flowing at previous membership committee meetings about collecting this information for our website content, but it is so difficult to keep the information current and comprehensive. It is topics like these that make the LinkedIn site a great supplement to our website content...everyone understands that the content is unsupervised (however, as managers, Fred and I can remove content if need be). For analytical chemists' pleasure, I'm sure, demographic data from the information members provide in their profiles can be graphed in four categories:

Seniority:	Location:
------------	-----------

Senior	36%	Greater Boston	9%
Manager	19%	Greater Philadelphia	5%
Entry	14%	Greater New York	5%
CXO	6%	Washington DC	4%
Owner	5%	Greater Minneapolis	4%
Director	5%	Greater Chicago	3%

Research	41%	Research	28%
Education	14%	Chemicals	15%
		Pharmaceuticals	10%
		Higher Education	10%
		Electrical	5%
		Biotechnology	5%

I would like to welcome my **new committee members**, Igor Kovalenko and Suresh Thennadil, and thank Janiece Hope and Karla McCain for their service. Igor will be a voice from our midwestern USA members and Suresh will be a voice from our UK regional section. If anyone has any suggestions/tasks that the committee should consider/take on, feel free to share with me (story.gm@pq.com).

#### STUDENT REPRESENTATIVE REPORT RYAN SCHMELING FALL 2012

Tasks from PittCon 2012

- Investigate a student ambassador from India to attend ICORS
- Investigate starting an India Student Chapter
- Contact student sections to see how student rep and office can assist

#### Results

- Instead of narrowing Student Ambassador program to one or two select conferences each the EC decided to
  have a general application for students to apply to be a Student Ambassador at smaller conferences they were
  attending.
- There are no students listed on the member database that are from India. Therefore I emailed Shyama Rath and Siva Umapathy, which are the both members of academic institutions in India. The email was inquiring if there any students that they knew of in their department that would be interested in joining SAS and starting up a student chapter. As of September 18th (~1 week after emailing) there has been no response from either faculty member.
- I also tried to get into contact with faculty members at several institutions in China. As of September 18th (~1 week after emailing) there has been no response from either faculty member.
- I emailed the students that are listed as officers of the student chapters on the SAS. Of the schools that had
  officers listed there was no response received. I then proceeded to email any student that was listed in the
  member directory with only one response from someone that has graduated and was not affiliated with the
  student chapter anymore. My final attempt to contact the student chapters was to email office staff of their
  respective chemistry office asking them to forward my email to the officers of the chapters, again no responses
  were received.

## AWARDS COMMITTEE REPORT SCIX 2012

#### DULA AMARASIRIWARDENA, ROBERT LASCOLA, AND MARC PORTER, AWARDS COMMITTEE MEMBERS

In evaluating the nominations for the SAS Graduate Student Awards, each member of the committee reviewed the nomination packages. There were 14 nominations. Each member ranked their top 5 nominees and provided this ranking and comments that were distributed among the committee electronically. Letters of recommendation, publication and presentation history, and excellence in scholarship were taken into consideration. The committee agreed that there were several worthy candidates, and a consensus was reached after a careful discussion of those deemed the most qualified. We recommend Ruchira Chatterjee (Rensselaer) and Nate Gomer (USC) as joint graduate student award winners.

## POEHLMAN AWARD REPORT SCIX 2012

MEMBERS: DAVID HEAPS, BENOIT IGNE, AND NANCY JESTEL

The Regional and Technical Section Awards Committee has selected the Cleveland Section as this year's winner of the Poehlman Award. The breadth of the activities and quality of the application are impressive. The section clearly is thriving and offers its members many valuable services. Their multi-pronged approach to programming ensures that members have ample professional development and networking opportunities while also providing important community service and educational programs to promote spectroscopy to children.

## SAS PUBLICITY COMMITTEE REPORT SCIX 2012

The committee have held one brainstorming conference call to date and the conclusions are summarized below along with the meeting notes. At this point it may make sense for the Exec. to 'triage' some of the ideas and provide a direction for the rest of the year. During SciX it would be useful to find out what resources are available to the committee to execute any suggestions deemed valuable by the Exec. Broadly speaking discussions have been around the topics of:

Evangelizing the society and its work globally

- Retaining Membership especially of the student body
- Increasing the perceived value of society membership
- Re building the standard PowerPoint slide deck.

#### Evangelizing the society and its work globally

Much of this is related to web presence, a digest of suggested actions below:

- 1. Begin a google adwords campaign. As long as we steer clear of the keywords bid for by the vendors then we should get very good value for money. For instance the cost per click through for the term 'SAS' is \$0.03 this would ensure a search for SAS highlighted our site and we are not mired in Scandinavian Airlines and Special Air Service hits. Those looking for the above unrelated sites are unlikely to follow our sponsored link and incur costs. The campaign can be limited to a specific cost per day and cost per click. Adword campaigns can be run in local languages and be limited to a specific target geographic area.
- 2. Content is key to exposure on social networks and now also to 'natural' google rankings. We need to expose more interesting content to social channels on a regular basis and link this back to our web site. Analytical Chemistry and our Newsletter contain a great deal of content, exposing this would pay dividends. We suggest that one of the staff be made our social content tsar. S/he would schedule the broadcast interesting excerpts on a regular basis using a distribution tool such as www.tweetdeck.com this would ensure that our social channels would remain primed with interesting and relevant information.
- 3. The LinkedIN group seems to be a lively forum is this an exclusive benefit to our members? Would making it an open group draw in more potential members to the fold.
- 4. The s-a-s.org web URL is torture to type we could consider purchasing some alias's and pointing them at our servers.
- 5. SAS Events at a local and national level should be listed in the 'diary' section of spectroscopy related publications such as Spectroscopy and Spectroscopy Europe. I noted that EAS and IRDC-Chambersburg are listed in Spectroscopy Europe but not SciX. We could even publicise local meetings in this way especially for sections which encompass a country like the UK.
- 6. If we are not already we could try to gain exposure at other societies events suggestions were ACS, SPIE and MRS conferences. This would mean setting up the booth or trying to provide program content under the auspices of SAS. Advertising in the program (iPhone) App may be effective as the demographic may be interested in our message. (Though I have to say vendors are finding this a less and less cost effective way to reach people)
- 7. Leveraging our academic faculty members to evangelize to gain student members do we have a program to do this? **Retaining Membership especially of the student body**

Ideas were less forthcoming; we think this revolves around cost, perceived benefit and exposure of our message and content in the channels students use.

- 1. Ensure that we engage our student users by signing them up on Facebook their University ID's won't continue but their FB accounts are eternal. Hopefully we can do this with content but perhaps we also should offer the option to log in to the s-a-s site via facebook ID's this is a relatively easy process.
- 2. Provide a scaled price range for students as they move in to work (or even a payment holiday)
- 3. Ensure we provide relevant content and opportunities for those starting out in their career perhaps some form of mentoring scheme.
- 4. Discounts for members if they set up payments by direct debit / standing order so that they automatically occur. We used this effectively to keep up membership rates of the Derbyshire Soaring Club here in the UK.

#### Increasing the perceived value of society membership

Ensure that members are aware what good value membership provides – and provide extra content for their current fees.

- 1. Continued Professional Development and Online Training There were suggestions last year that a certification program should be provided by the society if such certification were coupled with online training then this would be perceived as very valuable. There is a great example of this from the RSC http://spectraschool.rsc.org/. The RSC also provide a careers and continuing professional development programme http://www.rsc.org/education/careersandcpd/
- 2. Recording of some/all SciX sessions for controlled web access the technology to do this exists and is inexpensive. Really all this requires is a digital recorder per session connected to the microphone system. This would provide a wealth of useful information for the web site and much needed and sought after content for the web. An audio recording accompanying a slide deck would provide an insight at much less expense than video apparatus. Do we currently retain slide decks post SciX could we ask the session chairs to do so?
- 3. Vendor members would be keen to provide discounts and benefits in kind to the general membership it would be perceived by them as a reasonable advertising cost and it would be a tangible monetary benefit of joining the SAS a way of ensuring this was not seen as endorsement would need to be found.

#### Re-building the standard PowerPoint slide deck.

Currently the PowerPoint looks like a set of speaker notes – I am sure we can all imagine sitting in a room where someone stood at the front and read to us from the screen!

If we want to improve this then we need to build a storyboard – I suggest using the Beyond Bullet Points technique (http://beyondbulletpoints.com/) where we define the target audience, their role in the presentation, where they are today and where they want to be. Then we explain via the presentation how SAS provides the means to get them there. We then call out the key points we want to get across – and elaborate on those. Only once this is done do we start building slides – each slide will have a title illustrating the points we want to get across and an image to support it. This is not just a matter of graphic design – though access to graphic design and artwork resources will make the finished product look more professional. This site was recommended to me (http://www.presentermedia.com/) and I have run some of the old presentation through its template – the result is pretty – but still speaker notes on a page! Example in a commercial template – you may need to download to see animations etc.

https://docs.google.com/open?id=0BzX-oNJq-j9KcnB4eEVIeFNTVmM shortened: http://goo.gl/NY387
Original PowerPoint https://docs.google.com/open?id=0BzX-oNJq-j9KZ2ozdDJzX2hQWUU shortened: http://goo.gl/jegl8

#### REGIONAL AND TECHNICAL SECTION REPORT

**SCIX 2012** 

**CHAIR: DAVID HEAPS** 

**MEMBERS: BENOIT IGNE & NANCY L. JESTEL** 

Some of the main issues that face the regional sections are to engage the members, maintain a leadership, find a meeting structure that works for its members, and solving each regional section unique geographical problems. I had hope that growth with new regions and student chapters would excite members of inactive regions to become more active in their regional section and solve some of the above problems. I thought that after the formation of the United Kingdom Region and the growth of the student chapters that excitement would be more evident. A strong point to show that a different tactic needs to be applied is the Arizona Region and the ASU student chapter. Even with the formation of the student chapter in the region the total number of member of the regional section is zero (Arizona has 19 members).

The Regional and Technical Section Committee will now try to find leaders in each section. Each section has a method for calling for nominations for leadership and voting for new leaders that is based on their constitution. This is not a problem with the active regions and will not need any support but for the inactive sections this will take some work. A point of contact for each region will aid in any assistance that this committee can supply.

Next will be to investigate the cost of having a SAS controlled WebEx account or equivalent (not sure if Skype meets the needs). This would be to address some of the geographical and meeting structure issues. The best solutions to these local problems will come from the members of each region.

**Regional Section** 

		Feb-12	Sep-12	
1	Arizona	0	0	
2	Baltimore-Washington	26	50	
3	Chicago	33	62	
4	Cincinnati	6	14	
5	Cleveland	8	16	
6	Deleware Valley	12	27	
7	Detroit	8	10	
8	Houston	9	17	
9	Indiana	4	19	
10	Intermountain	6	7	
11	Kansas City	0	0	
12	Mid-Michigan	8	10	
13	Minnesota	10	24	
14	New England	40	67	
15	New York	19	48	
16	Niagara Frontier	2	4	
17	Northern California	21	33	
18	Ohio Valley	6	13	
19	Pacific Northwest	3	11	
20	Penn York	2	2	
21	Piedmont	18	34	
22	Pittsburgh	14	20	

27	United Kingdom	26	46	
Student (	Chapters			
		Feb-12	Sep-12	
1	Arizona State University	1	3	
2	Brigham Young University	1	4	
3	Iowa State University	N/A	2	
4	Truman State University	0	2	
5	University of Deleware	0	2	
6	University of Idaho	1	2	
7	University of Litah	1	2	

5

4

5

Regional Section

25

26

Rio Grande

Snake River

University of Wisconsin-Milwaukee

		Feb-12	Sep-12
1	Atomic Spectroscopy	78	158
2	Biotechnology	21	43
3	Chemometrics	53	96
4	Chirality	6	10
5	Fluorescence	28	55
6	Forensics	20	39
7	Imaging	37	81
8	Laser Sampling	6	20
9	Near-IR / CNIRS	35	62
10	NMR	0	12
11	Polymer Characterization	32	51
12	Process	22	51
13	Vibrational/Coblentz Society	174	290

In February 2012 we had: 321 members in Regional Section, 8 members in Student Chapters and 512 members in Technical Sections. In September 2012 we have: 596 members in Regional Section, 22 members in Student Chapters and 952 members in Technical Sections. I am not sure if this is a full measure of growth or how the information was collected from the database. Another possibility is how the person's records are entered. The SAS currently has 1699 members 56% belong to a Technical Section, 35% to a Regional Section and with about 9% (assuming little duplication) with no sub-affiliation within the SAS.

## SAS TOUR SPEAKER REPORT SCIX 2012

#### STEVE BARNETT, 2013 TOUR SPEAKER COORDINATOR

The 2012 Tour Speaker program was organized by Linda Kidder. The list of speakers with their talk titles was:

Fenella France Advanced Spectral Imagning of Heritage Materials

Yanan He Determination of Absolute Configuration of Chiral Molecules Using VOA

Jeff Sherman QLC Sources for FTIR

Devanand Luthria Comparison of Analytical and Data Preprocessing Methods for Spectral Fingerprinting

Mark Sullivan Solid-State Spectroscopy of Materials (Polymorphism)

Howard Mark NIR and Chemometrics: Handling Non-Linearity

Brian Marquardt Characterization of Crude Oil Products using Data Fusion of Process Raman, IR, & NMR Spectra

Dimitri Pappas Fluorescence Correlation

Alex Scheeline Dynamic Chemical Biology and the Instruments to Support its Study

Teaching, Learning, & using Spectroscopy with Commercial Off-the-Shelf Technology

Robert Shaw Combined Apertureless Near-Field SHG/AFM Imaging and Nanoscale Limit of Detection

Tuan Vo-Dinh Surface Enhanced Raman Scattering Detection and Tracking of Nanoprobes

The following presentations were made:

Fenella France New England Chicago Fenella France Cleveland **Howard Mark** Detroit Alex Scheeline Dimitri Pappas Intermountain Ohio Valley Alex Scheeline New York Mark Sullivan Baltimore-Washington Fenella France Alex Scheeline Minnesota St. Louis Alex Scheeline Milwaukee Student Section Fenella France Truman State University Student Section Mark Sullivan

There are currently 5 speakers who will be circulated to the Local Sections for Tour Speaker presentations in 2013. It is hoped that 1-2 additional speakers will be confirmed in the near future. The current speakers are:

#### 1. Jose Almirall, Florida International University

Forensic Applications of LA-ICP-MS and LIBS; How Does the Real CSI Miami Benefit from Applied Spectroscopy?

#### 2. Dan Gareau. Rockefeller University

"Melanin Spectroscopy, Theory and Practice for the Study and Detection of Skin Disease"

#### 3. Richard Hark, Juniata College

"Raman Spectroscopic analysis of pigments on works of art"

#### 4. Hans Ostoff, University of Calgary

"Quantification of nitrogen oxide reservoir species by diode laser cavity ring-down spectroscopy"

#### 5. Randy Vander Wal, Penn State University

Talk 1. "Combustion Particulate Detection and Analysis via a Micro-Glow Discharge"

Talk 2. "Micro-hollow Glow Discharge Plasma Identification of Volatile Organic Compounds"

Talk 3. "Breathing Jet Exhaust at the Airport - HRTEM and XPS Analyses"

#### CONSTITUTION AND BYLAWS COMMITTEE REPORT

**SCIX 2012** 

MEMBERS: CURT MARCOTT, KATHERINE BAKEEV, STEVEN REHSE

The Constitution and Bylaws Committee has been examining the current documents and modifying them to better reflect how things are actually being done. In particular, the name change of the FACSS meeting to SciX, the definition of student sections, as well as the increased use of the website, electronic voting, etc., have led to several changes.

## MEGGERS AWARD COMMITTEE REPORT SCIX 2012

The Meggers Award Committee has selected the following paper as the winner of this year's award:

"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 Michael S. Angel. The affiliations of the authors include the University of South Carolina, the University of Hawaii, and Lawrence Livermore National Laboratory.

## STROCK AWARD COMMITTEE REPORT SCIX 2012

The Strock Award will be presented to Dr. Ralph Sturgeon. Dr. Sturgeon has made tremendous contributions to the field of analytical spectroscopy and chemistry.

## REPORT OF THE ELLIS R. LIPPINCOTT AWARD COMMITTEE SCIX 2012

MEMBERS: MARKUS SIGRIST (CHAIR), BRUCE AULT, HUIB BAKKER, CARTALIN MIRON, KEITH NELSON, MASATOSHI OSAWA, LAURENCE ROTHMAN, JOHN P. SIMONS, SUNNEY X. XIE

The committee has selected Dr. Keith Nelson of the Massachusetts Institute of Technology for his innovations in the development of impulsive stimulated Raman scattering and its applications to the ultrafast vibrational spectroscopy of phonons and intermolecular liquid dynamics.

#### **TELLERS COMMITTEE REPORT**

**SCIX 2012** 

MEMBERS: CARL E. LONGFELLOW, BOIANA BUDEVSKA, PETER BUSH

299 votes were cast. The results are:

President-Elect: Ian Lewis
Governing Board Delegates: Michael Morris

Brandye Smith-Goettler

Karia McCain Geoffrey Coleman Robert Lascola

## REPORT ON SCIX COMMITTEE MEETINGS DURING PITTCON 2012 SCIX 2012

MARY KATE DONAIS, KATHERINE BAKEEV, AND CURT MARCOTT

We attended the FACSS Long-Range Planning and FACSS Governing Board meetings. John Wasylyk attended the Governing Board meeting as an SAS Delegate.

Long Range Planning: Aims are continuing to grow the meeting. Surveys from Reno indicate word of mouth and frequent changing of the meeting location are the best ways to get people to attend. There is much interest in having the 2015 meeting in New England but there is concern about higher hotel costs. Providence, Boston, and Baltimore were chosen as cities to investigate further with the understanding that higher hotel costs would no doubt result.

Governing Board:

- A number of by-law changes were approved related to the FACSS/SCIX name change and to change "Chairman" to "Chairperson."
- Three new member organizations were approved the American Electrophoresis Society, the North American Society for LIBS (contingent upon receiving nonprofit status), and the Spectroscopical Society of Japan (contingent upon receiving nonprofit status).
- Luisa Profeta was selected as the General Chair for 2014. Jose Almirall was selected as the Program Chair for 2014.
- Karmie Galle and Bruce Chase were selected for Distinguished Service Awards.
- 924 conferees attended SCIX in Reno. Registrations were the same compared to the previous year but exhibits were up. Allocation of surplus funds from Reno are unlikely.
- FACSS is continuing to expend considerable efforts and funds on marketing/rebranding and its website. A new website was launched.

Individual reports were given on SCIX 2012 Kansas City and 2013 Milwaukee. Efforts are being put into
increasing workshop attendance and improving the Employment Bureau. Group registration rates are being
explored. The North American Society for LIBS will have their own conference section starting in 2012.

## CHEMICAL HERITAGE FOUNDATION SAS DELEGATE REPORT SCIX 2012 DAVID S. TRIMBLE

The spring meeting of the Heritage Council and associated Instruments and Artifacts Committee were held on April 12, 2012. I was not able to attend due to a work conflict, but have included a brief summary of the meeting below, and attached the complete formal minutes for your review.

The Instrument and Artifacts Committee reported that ASMS is likely to display replicas of historically significant instruments at PITTCON 2013 in Philadelphia. Related, J.J. Thompson published his ground breaking monograph *Rays of Positive Electricity and their Application to Chemical* Analysis in 1913. As such, several plans are under consideration to mark 2013 as the centennial celebration of Mass Spectrometry.

The focus of the Heritage Council meeting was to discuss what might be the long term vision of the Beckman Center for the History of Chemistry. CHF President Tom Tritton framed the discussion by asking the following 5 questions:

- 1) Should the BCHOC employ senior scholars in addition to its current group of doctoral and early post-doctoral scholars?
- 2) If senior scholars are employed should they be permanent; that is on staff or rotating?
- 3) Should BCHOC be larger?
- 4) Should the scope of work for the BCHOC be expanded?
- 5) Should there be a specific thematic focus to the work of the BCHOC?

Ron Brashear presented an overview of the BCHOC and how its work integrates into the whole of the CHF. Carin Berkowitz followed up with greater details, including a brief summary of fellows/scholars who have worked at the CHF over time. Four fellows then presented their work to the Heritage Council to underscore the diversity or topic and professional experience presently working in the BCHOC:

Bruce Lewenstein – Presidential Fellow – "Public Engagement in Science and the History of Science at CHF" Christine Nawa – Charles C. Price Fellow, 2011-2012 – "Robert William Bunsen's Research Style and His Teachings" Melanie Kiechle – ACLS/Mellon Dissertation Fellow, 2011-2012 – "The Air That We Breathe"

Michelle Francl – Herdegen Fellow, 2011-2012 – "Sideline Science: Critical Commentaries in 19th-Century Journals and 21st-Century Blogs"

The members of the Heritage Council were unanimous in their praise of the meeting design in general, but more specifically of the value engaging presentations by the fellows. The remainder of the meeting focused on the material presented, rather than the questions posed by Dr. Tritton...

#### ALLEN PRESS ADVERTISING REPORT SCIX 2012 ED MACMILLAN

2012 is shaping up to be a good year for *Applied Spectroscopy* advertising sales. 2011 was an excellent year where we saw overall ad sales hitting a new high of over \$270k with revenues to the Society at just under \$200k. Going into 2012 we saw continued interest from the market leading to renewals at or above average. The chart below shows Q1-Q3 as holding fairly steady and if Q4 comes in 10% higher than what's booked we could finish the year at approximately the same figure as last year. By the end of October we should be able to see how the early renewals are coming along and by the end of November when we have closed the January 2013 issue this will give us an idea of the uptake. Overall I am very encouraged by the level of ad sales this year and can only hope next year to be in the same range.

The web results this year are also encouraging as we have seen an increase to just under \$20,000 for 2012. As discussed last year, it would be nice to see a new format develop for the eNewsletter and I have included an example of one of one of my eNewsletters. I think it would offer added value to the advertiser and increase the look and feel of the Spectrum. One major issue I ran into this year was reporting for a client. All the commercial eNewsletters will show how many open the newsletter received and how click throughs. Spectrum, because of its static nature, does not allow reporting which is a major disadvantage for potential advertisers.

Below are the projected advertising revenue numbers for 2012 alongside the actual numbers from 2011. For 2012 I have increased my number to \$263k but we may see that number rise slightly towards the \$270k mark making it a similar number to last year. The projected numbers are in italics. The numbers reflect the remitted paid invoices less AP commission for the 12 months starting January 2011 and ending December 2011. Any payment received after the 30<sup>th</sup> of

December 2012 will be paid in 2013. The total remittance for 2012 is an estimate and will depend on collected revenues

and how the end of year sales and collections end.

Net Revenue	2011	2012
Quarter 1	\$63,596.87	\$67,255.48
Quarter 2	\$75,261.12	\$62,680.99
Quarter 3	\$63,307.88	\$66,522.39
Quarter 4	\$72,354.47	\$66,310.39
Total Billed Revenue	\$270,573.33	\$262,769.25
Remittances to SAS	\$195,566.35	\$190,000.00

While the numbers for 2012 are promising the final outcome of several key factors will help shape the overall success of our efforts going into 2013. These include:

- At SCIX what is the overall mood of the vendors and attendees?
- Are there any innovations within the scientific/spectroscopy community that we can translate into ad sales (note Kathryn Kakeev sent me a NIR lead which appears promising)?
- Will there be more grant money made available from the government?

Any insights you can provide will be appreciated. SCIX is a good indicator for spectroscopy so look out for any innovations and let me know either in person or by email: emacmillan@allenpress.com.

Below is a list of advertisers for 2011 and 2012 (as of Aug 10):

2011 Advertisers 2012 Advertisers (so far)

Agilent Agilent Amptek Amptek

Andor Technology Andor Technology

**B&W Tek** B&W Tek **BaySpec BaySpec** BioTools **BioTools** Bruker Bruker CDI Pharma Energetiq\* Enwave Cobalt Light FDM\* Enwave FDM\* Horiba Fibre Photonics ICL

Hellma Kaiser
Horiba McCarthy Scientific

Infrared Analysis McPherson
ICL Ocean Optics
Kaiser Ondax

Laser World\* Pike Techologies

McCarthy Scientific Remspec
Ocean Optics Shimadzu
Ondax\* StellarNet
PerkinElmer\* Thermo Fisher
Pike WiTech

Pike WiTech
Princeton Inst. Avantes\*
Remspec

Renishaw Shimadzu Starna Cells StellarNet Thermo Fisher WiTech

In 2012 Applied Spectroscopy gained only 2 new advertisers and lost 5 from 2011. This was offset by an increase in ad spending in the renewing advertisers and although we have had encouraging noises from different quarters, ad spending has stalled at the \$270k mark. If the indicators are correct we can hope to see an increase of interest which will translate into more ad dollars and we can be hopeful some of the lost advertisers will come back with both trends leading to more revenue. Time will tell.

I look forward to another 5 years helping the Society through turbulent times.

#### Web Editor's Report 10/2012 Ron Williams

The following improvements have been made to the web site since our Pittcon meeting:

A new content management system that is more amenable to casual users has been installed. The presentation of the Journal pages on the web site has been updated and a new search engine that handles expanded content has been implemented. Our previous search engine was an older technology that was not being supported anymore. Office reports for member and financial tracking were also added.

Another significant problem over the summer was a crash at our host, Amazon Web Services. The way our contract is structured it is our responsibility to rebuild our site from backups whenever this happens. This is a very complicated process where many interacting software products must be installed in proper order with proper patches made. One of our future goals is to generate an automated process for these types of backups.

Other future improvements for the next cycle include implementing automated credit card processing system and transitioning the subscriber database to the cloud. We are working to implement of content features proposed at Pittcon, i.e. member of the month, featured author of the month, section activity highlights, etc and we are working on extracting information from committees. We will continue user testing of new content management system and are expanding the permissions module for volunteer use of content management system.

Data from Google Analytics is used to track web site usage. Figures 1 and 2 show the visitor flows for New and Returning Users respectively since the start of the calendar year. In both cases, as was true last year, the Journal is the primary landing site for new users and the home page is primary for returning users. For comparison in the same period last year there were 15.2K new users and 10.2K returning users for the same period last year. That is about a 50% increase in returning users and an increase of about 2K for new visitors.



Visitors Flow Jan 1, 2012 - Sep 20, 2012

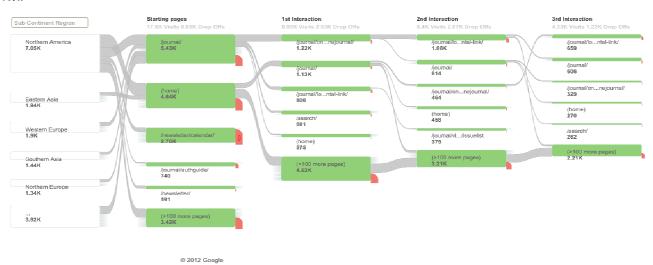


Figure 1: New Visitors Jan-Sept 2012



Visitors Flow Jan 1, 2012 - Sep 20, 2012

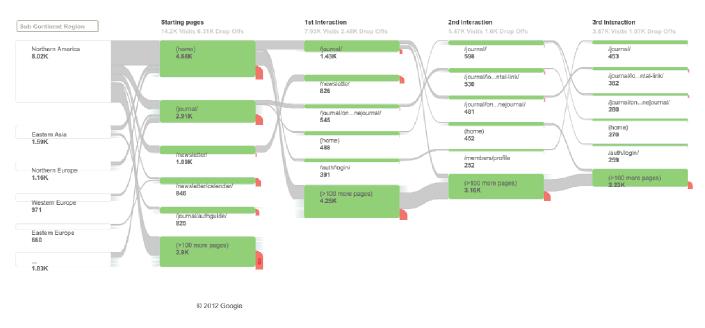


Figure 2: Returning Users Jan-Sept 2012

Finally we have developed a draft privacy policy that is attached for discussion. It is a relatively straightforward adaptation of such policies from other similar organizations.

#### **Journal Report to the SAS Executive Committee**

Michael W. Blades and Peter R. Griffiths, Journal Editors

Updated: September 25<sup>th</sup>, 2012

This is the first report to the SAS Executive Committee since the transition of the Editorial Office from the University of Idaho to The University of British Columbia.

Before beginning the report we would like to acknowledge the significant contributions that the former Managing Editor, Rebecca Airmet, made to the quality and success of the journal. Rebecca stepped down as the Managing Editor effective September 7<sup>th</sup>, 2012. Many changes in publishing occurred during her 12 year association with the journal and Rebecca was instrumental in making sure that the journal adapted to and embraced these changes. This was in addition to her role as production editor which enabled the society to roll out the journal each month on-time and produced as well as a journal can possibly be produced. Rebecca was known for her exceptional skills, dedication and relentless pursuit for perfection. She served with three Editors-in-Chief and her contributions will be keenly missed.

Rebecca will be succeeded by Kristin MacDonald who was initially hired on July 1<sup>st</sup>, 2012 as the Editorial Assistant to succeed LeNelle McInturff. Kristin holds a BA in Art and Anthropology, and an MSc in Geography. She served for three years as Editorial Assistant on *The Geographical Review*, a peer-reviewed publication of the American Geographical Society published by the Allen Press. She also spent three years as a Scientific Writing Consultant for Simon Fraser University students enrolled in the Master of Business Administration/Management of Technology program (MBA/MOT).

On July 1<sup>st</sup> of this year there was a reorganization in the editorial responsibilities for Applied Spectroscopy. Peter Griffiths and Michael Blades exchanged roles. Moving forward Blades will be Editor-in-Chief and Peter will be Editor. On behalf of the society Blades would like to thank Peter for his tremendous dedication and service as the Editor-in-Chief. The journal has continued to prosper and grow (see below) during his tenure and it is our good fortune that he has agreed to continue to serve as Editor. On a personal note Mike considers Peter is both mentor and friend!

During the three years that Peter served as Editor-in-Chief, there have been some important changes in the Journal. Since 1994, Applied Spectroscopy has been featuring review papers (called Focal Point Reviews) on different aspects of fundamental and applied spectroscopy. These peer-reviewed papers are intended to provide an introduction, overview, and perspective on the subject of the review. Significant effort has gone into increasing the number of reviews so that there is one per month. While we were not quite able to achieve that in 2012 we expect that in 2013, and going forward, this will be the case. In keeping with the mandate of the Society to "... advance and disseminate knowledge and information concerning the art and science of spectroscopy and other allied sciences .." all of the Focal Points are available on a completely open access basis. A complete list can be accessed, and copies of the papers downloaded at this web site: http://s-a-s.org/journal/compendium/.

In the June, 2011 issue we announced an exciting new change to the journal, "free color figures

for every author who is a full member of the Society for Applied Spectroscopy". In addition, non-members were able to take advantage of significantly reduced costs (\$150 per article) for printing color as well. We also more clearly defined the Aims and Scope of the journal so that we could better serve the applied spectroscopy community.

Along with the change in editorial responsibilities, there have also been some changes in Associate Editors and the Editorial Advisory Board (EAB). This is normal practice for a journal such as Applied Spectroscopy and it helps ensure that new ideas and perspectives are brought forward for the long-term benefit of the journal. Members of the EAB are an important communication link between the Editorial office and the journal's contributors and readers. EAB members actively participate in ways that contribute to the overall strength and quality, as well future direction of the journal, by assisting with editorial decisions and by engaging in discussions and making recommendations on the content and scope of the journal. We introduced the 2012 Editorial board in the October 2012 issue. Some are continuing members but there are also many new faces. In assembling the EAB there was a focus on diversity such that the members of this board would represent many different disciplines, backgrounds, and geographical locales. Above all, all are outstanding scientists. (See the EAB attachment at the end of this report)

We are convinced that the journal has improved in quality and international standing because of the efforts of the former EAB and we would like to thank them for their service and dedication to the journal.

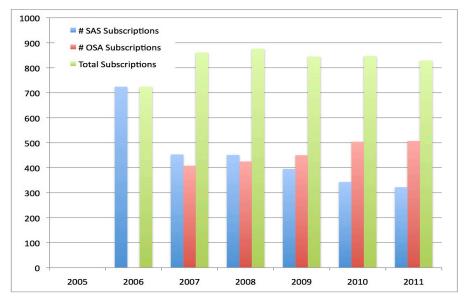
The following is a brief summary of the major changes, excluding the above, that have happened with the journal since the last national meeting in October 2011. Some of these were discussed in the March 2012 report and are so noted below.

- Beginning with the December 2011 issue, every article has been available to view in both PDF and HTML formats. The HTML format enables faster navigation through an article, includes thumbnail images of figures and tables that can be expanded for greater detail, and speeds up the download process without requiring space on your hard-drive. (in March 2012 report)
- Starting with the May 2012 issue, the format for references cited in Applied Spectroscopy was changed. The new reference format can be found in full in the "Information for Contributors to Applied Spectroscopy", which was published at the back of the January 2011 issue and is attached as an Appendix to this report. These guidelines can also be found online at (<a href="http://www.s-a-s.org/journal/authguide/">http://www.s-a-s.org/journal/authguide/</a>) and on the Ingenta Connect platform (<a href="http://tinyurl.com/7717pyw">http://tinyurl.com/7717pyw</a>). The new reference style incorporates changes, such as the inclusion of the title of all citations, that were voted on by the Editorial Board at FACSS 2011. It is also based on revised ANSI/NISO standards published in 2005 that were designed to provide standard citation styles for new types of electronic media. (in March 2012 Report).
- The role of the Focal Point Editors was absorbed by the Editor and EIC. Both Peter and I feel that having a Focal Point article in the journal is important both because it serves an educational role for the SAS and because it is part of our strategy to boost the number of citations to Applied Spectroscopy content. More below.

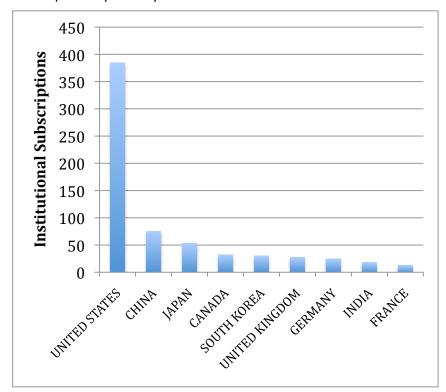
The remainder of the report is broken down into sections covering subscription information, production, web site, publication statistics, Impact Factor, review time, and download statistics. The report is primarily in the form of graphics which are intended to convey trends. It is hoped that these will also stimulate discussion.

#### **Subscription Information:**

The diagram below shows the number of institutional subscriptions for OSA and Ingenta. The diagram speaks for itself. The share of subscriptions handled by OSA has crept up over the past five years and the number handled by Ingenta has decreased. This summer SAS renewed the OSA contract after several months of negotiation. The significant changes is that there will be a change in the split of revenue, from 90:10 to 85:15 (SAS:OAS), from Individual Subscriptions in years 2 and 3 of the new contract.



Institutional subscriptions by country.



#### **Production costs:**

From the September 9, 2011 report, "The new production contract that was signed with Allen Press after approval at Pittcon 2011 has saved us an average of \$5000–\$6000 per month (\$60,000–\$72,000/year) with data on 4 issues. (Initial estimates were savings of \$50k–\$60k per year.) We expect this to remain consistent."

#### Actual:

Direct production invoice costs for the journal for the last 12 months were \$157,750 Direct production invoice costs for the journal 12 months preceding the changes \$240,750

Savings: \$83,000 per 12 month block.

#### Web site:

The Journal section of the web site was restructured so that web surfers looking for journal specific information would be able to find information about all aspects of the journal quickly and conveniently. A screen shot is provided below.





#### Inside Applied Spectroscopy:

#### September Highlights

The cover art this month shows pictures of Castel Viscardo, in Umbria, Italy, which is the subject of the paper on the application of a portable X-ray fluorescence spectrometer to articles of cultural heritage by Mary Kate Donais and her research group at St. Anselm's College.

More info...

#### Recent Top Downloaded Papers

Review of Super-Resolution Fluorescence Microscopy for Biology

Surface-Enhanced Raman Scattering (SERS) and Surface-Enhanced Resonance Raman Scattering (SERRS): A Review of Applications

Laser-Induced Breakdown Spectroscopy (LIBS), Part II: Review of Instrumental and Methodological Approaches to Material Analysis and Applications to Different Fields

Remote Raman Spectroscopy for Planetary Exploration: A Review

#### **Publication Statistics:**

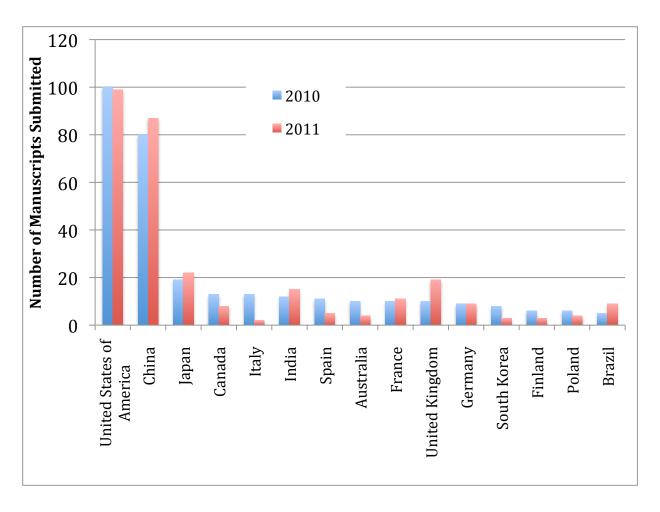
The table below has statistics on the manuscript flow for the years 2009-2012.

The numbers on manuscript flow have been fairly steady over the past 3 years. We expect that 2012 will exceed 2011 both with respect to the number of manuscripts submitted (total and revision), number of pages published, and number of Focal Point articles published.

				2012	2012
	2009	2010	2011	(Aug 28)	(on Track)
Original manuscripts submitted	382	371	356	241	362
Revised manuscripts submitted	260	262	208	190	285
Manuscripts accepted without revision	7	7	14	9	14
Return with Revisions	201	223	206	151	227
Manuscripts rejected	123	124	109	81	122
Rejected with review	66	86	80	50	75
Rejected without review	57	38	29	31	47
Rejected after revision	9	15	9	13	20
Manuscripts requiring a second revision	65	54	37	43	65
Manuscripts accepted after revision	224	224	179	155	233
Manuscripts withdrawn	23	13	13	9	14
Original manuscripts not withdrawn	359	358	343	232	348
Total manuscripts submitted (original &					
revision)	642	633	564	431	647
Total papers published	196	200	177	131	197
Rejection Rate (%)	32.2	33.4	30.6	33.6	33.6
Breakdown by manuscript type					
Focal Point	3	3	9	7	10
Accelerated Papers	4	4	0	0	0
Submitted Papers	166	179	156	107	
Spec Techs	11	6	4	9	
Notes	11	8	8	8	
Total manuscript pages	1442	1452	1440		~1500

#### Submissions by country

The graphic below shows the breakdown of submissions in 2010 and 2012 by country of origin for the top 15 countries. The number of submissions from China have increased steadily over the past 5 years and this trend is expected to continue in the future.



#### Time for Review:

The review time statistics are provided in the table below:

Average Days from Date Received to Associate Editor Secured	2.68	2.93
Average Days from Date Received to First Reviewer Secured	9.71	10.43
Average Days from Date Received to Final Reviewer Secured	24.02	20.47
Average Days from First Reviewer Secured to Final Review Returned	42.69	35.49
Average Days from Final Review Returned to Final Decision	2.82	2.57
Average Days from Received to Decision Rendered	55.22	48.49

In the table above one can see that rate limiting steps are the *securing reviewers* and *waiting for both reviews to be returned.* Our goal is to get the *Average Days from Received to Decision Rendered* to under 40 days. It should be kept in mind that these are averages. There are some manuscripts that have been waiting for 90 or 100 days for a decision to be rendered. In most case it is the "Days from First Reviewer Secured to Final Review Returned" that is the cause. We are dedicated to putting in special effort so that no manuscript is "in the system" for more than 45-50 days. We will do this by being more dogged in securing overdue reviews and to assigning extra reviewers once a threshold has been reached.

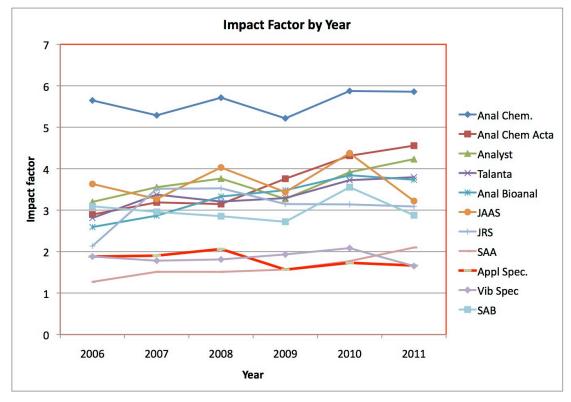
#### **Impact Factor:**

The 2011 Impact Factor (IP) decreased very slightly in 2011 relative to 2010.

Appl. Spec.	Pubs	Impact Factor
2006	208	1.879
2007	197	1.902
2008	207	2.062
2009	196	1.564
2010	200	1.729
2011	177	1.663

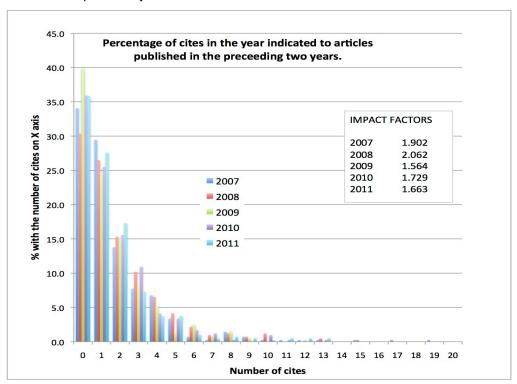
This is somewhat disappointing but it is too early to expect some of the changes that have been implemented (increased number of FP's and Open Access to these and free color figures for members) recently to have influenced the impact factor. The average number of citations per FP article (contributing to the IP) is 3.8. In each of 2009 and 2010 we published 3 FP's. In 2011 we published 9 and we are on track to publish 10 in 2012. Our target for 2013 is to have a Focal Point in every issue which should increase the number of citations and boost the impact factor. I am pleased to report that the 11 FP's published in 2010 and 2011 have already received 45 cites in 2012 ( an average of 4.1 per paper) and we still have 3 – 4 months left to garner more cites. Our aggressive focus on FP's is clearly going to pay some dividends.

The figure below shows the yearly trend for Applied Spectroscopy and other analytical science journals

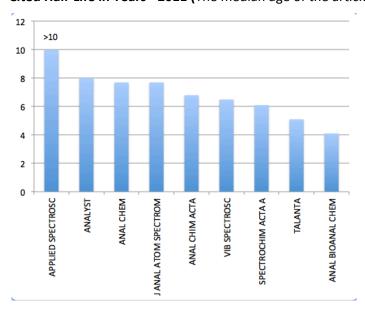


While we can certainly influence the impact factor to some extent by increasing the "Review Article" (Focal Point) content of the journal the real issue continues to be the fraction of articles published in Applied Spectroscopy that do not receive any citations.

A summary figure is provided below that that number is currently in the range of 30 to 40 %. The total fraction receiving cites below the IP is in the range of 60%. We would like to reduce the number of accepted papers by, roughly 2 per issue and up the rejection rate in the process. I am hoping to accomplish this by increasing the "Rejected Without Review" on the basis of the Aims and Scope of the journal.



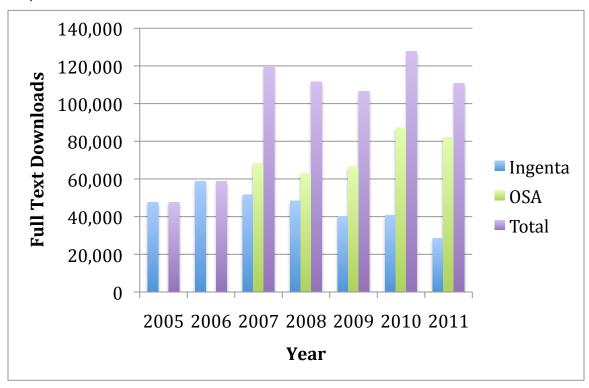
Cited Half-Life in Years - 2011 (The median age of the articles that were cited in the JCR year.):



#### **Downloads Statistics:**

	2005	2006	2007	2008	2009	2010	2011	2012 (Aug 31)	2012 (on track)
Content pages viewed:					78,849	104,882	74,668		
Abstracts viewed:					402,777	369,976	453,630		
Full-text downloads from Ingenta	47,672	58,843	51,673	48,370	40,167	40,608	28,583	17,277	25,916
Full-text downloads from OSA	0	0	68,248	63,148	66,502	87,236	82,197	49,952	74,928
Totals	47,672	58,843	119,921	111,518	106,669	127,844	110,780		100,844

#### Graphical Version of the above:



Top 15 Downloaded Articles - Ingenta (January 2012-August 31, 2012):

Vol	Iss	Article Title	D'loads
65	9	Review of Super-Resolution Fluorescence Microscopy for Biology	776
65	8	Surface-Enhanced Raman Scattering (SERS) and Surface-Enhanced Resonance Raman Scattering (SERRS): A Review of Applications	365
66	4	Laser-Induced Breakdown Spectroscopy (LIBS), Part II: Review of Instrumental and Methodological Approaches to Material Analysis and Applications to Different Fields	344
66	2	Remote Raman Spectroscopy for Planetary Exploration: A Review	176
66	5	Fourier Transform Infrared Spectrochemical Imaging: Review of Design and Applications with a Focal Plane Array and Multiple Beam Synchrotron Radiation Source	161
65	11	Multidimensional Raman Spectroscopic Signatures as a Tool for Forensic Identification of Body Fluid Traces: A Review  Determination of Absolute Configuration of Chiral Malagulas Using Vibrational Oction A Stigiture	129
65	7	Determination of Absolute Configuration of Chiral Molecules Using Vibrational Optical Activity: A Review	115
66	1	Far-Ultraviolet Spectroscopy in the Solid and Liquid States: A Review	112
64	5	Micro- and Macro-Attenuated Total Reflection Fourier Transform Infrared Spectroscopic Imaging	109
65	12	Vibrational Spectroscopy with Neutrons: A Review of New Directions	106
66	3	A Review of Advances in Deep-Ocean Raman Spectroscopy	96
65	5	Review of the State-of-the-Art of Laser Ablation Inductively Coupled Plasma Mass Spectrometry	87
65	4	Fluorescence Correlation Spectroscopy: A Review of Biochemical and Microfluidic Applications	57
66	8	Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) for Quantitative Analysis in Environmental and Life Sciences: A Review of Challenges, Solutions, and Trends	57
57	1	Quantitative Analysis Using Raman Spectrometry	52

Top 10 Downloaded Articles - OSA (January 2012-August 31, 2012):

Article Title	Full-Text Downloads
Fourier Transform Infrared Attenuated Total Reflection Analysis of Human Hair: Comparison of Hair from Breast Cancer Patients with Hair from Healthy Subjects Vol. 59, Issue 1, pp. 26-32 (2005)	1438
Laser-Induced Breakdown Spectroscopy (LIBS), Part II: Review of Instrumental and Methodological Approaches to Material Analysis and Applications to Different Fields Vol. 66, Issue 4, pp. 347-419 (2012)	440
Surface-Enhanced Raman Scattering (SERS) and Surface-Enhanced Resonance Raman Scattering (SERRS): A Review of Applications Vol. 65, Issue 8, pp. 825-837 (2011)	273
Review of Super-Resolution Fluorescence Microscopy for Biology Vol. 65, Issue 9, pp. 967-980 (2011)	263
Fluorescence Correlation Spectroscopy: A Review of Biochemical and Microfluidic Applications Vol. 65, issue 4, pp. 115-124	227
Far-Ultraviolet Spectroscopy in the Solid and Liquid States: A Review Vol. 66, Issue 1, pp. 1-25 (2012)	220
Fourier Transform Infrared Spectrochemical Imaging: Review of Design and Applications with a Focal Plane Array and Multiple Beam Synchrotron Radiation Source Vol. 66(5):475-91 (2012)	211
Determination of Absolute Configuration of Chiral Molecules Using Vibrational Optical Activity: A Review Vol. 65(7):699-723 (2011)	196
A Review of Advances in Deep-Ocean Raman Spectroscopy Vol 66(3):237-49 (2012)	186
Multidimensional Raman Spectroscopic Signatures as a Tool for Forensic Identification of Body Fluid Traces: A Review Vol. 65, Issue 11, pp. 1223-1232 (2011)	173

#### Things to consider:

On the upper left hand side of the cover is the phrase, "An International Journal of Spectroscopy." I'd like something more distinctive in that spot if there are going to be words. There is probably some reason it was placed there in the past having to do with broadening the scope or appeal of the journal a few decades ago.

Proposed. "Original research and review articles, both fundamental and applied, covering all aspects of spectroscopy."

#### Focal Points "In the Pipeline"

Manuscript Submission	Scheduled Issue	Authors	Title
In process	November	Meiping Zhao	Nucleic Acid Fluorescent Probes for Biological Sensing
In process	December	Curtis Marcott et al.	AFM-IR: Combining Atomic Force Microscopy and Infrared Spectroscopy for Nanoscale Chemical Characterization
In process	January or February	Li Yan	Ellipsometry
In process	January or February	Satoshi Kawata	Nanoplasmonics
September 2012	March - May	Mustafa Culha	Surface-enhanced Raman Scattering: An Emerging Label-free Detection and Identification Technique for Proteins
November 15th	March - May	Jonathan M. Irish	Mass Cytometry
December 2012	March - May	Rick Russo and Vassilia Zorba	Near-Field Optics for Ablation Chemical Analysis
Accepted	March - May	Costanza MILIANI	Vibrational Spectroscopies for Non-invasive In-situ Analysis of Cultural Heritage Materials: a Review
	June	Russ Alger	Quantum Dots
		Bernhard Lendl	Quantum Cascade Lasers
		Tony Parker and Michael Towrie	Time-resolved infrared spectroscopy
		Volker Deckert	Tip-Enhanced Raman Spectroscopy
		Andy Sommer	Spatial resolution in microspectroscopy
		Steven Bell	Label-free DNA analysis
		Zhiwei Huang – National University of Singapore	Pushing the frontier in biomedical Raman endospectroscopy into real-time diagnosis of pre-cancer and cancer

#### APPLIED SPECTROSCOPY EDITORIAL ADVISORY BOARD

#### ASSOCIATE EDITORS



Frank V. Bright

Frank V. Bright holds the A. Conger Goodyear Chair in Chemistry, is a SUNY & UB Distinguished Professor at the University at Buffalo, The State University of New York and an

expert in fluorescence spectroscopy. He has coauthored over 300 publications (*H*-index: 47), delivered nearly 900 scientific lectures, and holds 11 patents. Examples of Professor Bright's awards/honors include the following: 3M Non-Tenured Faculty award (1988-'91), Buck-Whitney Medal (1999), SUNY Chancellor's Award for Excellence in Teaching (2000), Applied Spectroscopy Gold Medal (2003), Akron Award (2003), A.A. Benedetti-Pichler Microchemistry Award (2005), Jacob F. Schoellkopf Medal (2007), and, 2010, election as a Society for Applied Spectroscopy Fellow.



John H. Kalivas

John H. Kalivas is a Professor in the Department of Chemistry at Idaho State University. The author or coauthor of over 95 professional papers, book chapters, and books, he is member

of Sigma Xi, the Society for Applied Spectroscopy, and the Council on Undergraduate Research and serves on the Editorial Board of the *Journal of Chemometrics*, *Talanta*, and *Analytical Letters*. Dr. Kalivas received the B.S. degree (1978) in chemistry from California Polytechnic State University, San Luis Obispo, and the Ph.D. degree (1982) in chemistry from the University of Washington, Seattle.



#### Sergei Kazarian

Sergei G. Kazarian is Professor of Physical Chemistry at the Department of Chemical Engineering of Imperial College London. Professor Kazarian is a Fellow of the Royal Society of

Chemistry. After obtaining his PhD in Physical Chemistry from the USSR Academy of Sciences in

Moscow in 1987, he held research positions in the UK and the USA. He joined Imperial College London in 1998. Professor Kazarian has co-authored more than 160 journal publications and he serves on the editorial board of Vibrational Spectroscopy. His research encompasses the fields of molecular spectroscopy (including FT-IR spectroscopic imaging, tip-enhanced Raman scattering and confocal Raman microscopy), microfluidics, supercritical fluids, ionic liquids, polymeric and biomedical materials, intermolecular interactions and pharmaceuticals. A large part of his recent research focuses on the development of new approaches and applications of ATR FT-IR spectroscopic imaging.



#### **Pavel Matousek**

Pavel obtained his MSc and PhD degrees in physics from the Czech Technical University (Prague, Czech Republic). Since 1991, he has worked at the Rutherford Appleton Laboratory (Oxford, UK) in the area of vibrational

spectroscopy. He pioneered the concepts of Kerr-gated spectroscopy, Spatially Offset Raman Raman Spectroscopy (SORS) and introduced transmission Raman spectroscopy into pharmaceutical analysis. Pavel has published over 170 peer reviewed articles and filed over 10 patents. His honours include 2009 Charles Mann Award for Applied Raman Spectroscopy (FACSS) and 2002 and 2006 Meggers Awards from the Society for Applied Spectroscopy (SAS). He sat on numerous SAS' committees and acted as the Program Chair of FACSS 2011 (Reno, NV). Pavel is a Fellow of the Royal Society of Chemistry, a Fellow of the Society for Applied Spectroscopy, a Fellow of the Science and Technology Facilities Council, a visiting professor at the University College London and a founding director of Cobalt Light Systems.



Yukihiro Ozaki

Yukihiro (Yuki) Ozaki was born in Sakai, Japan in 1949. Yuki obtained his Ph.D. (1978) in chemistry from Osaka University. After he spent two and a half years at the National Research Council, Canada as a research associate, he joined the Jikei University School of Medicine in Tokyo in 1981. In 1989 he moved to Kwansei Gakuin University. Currently, he holds a position of professor in the Department of Chemistry, School of Science and Technology. Yuki has been an associate Editor of Applied Spectroscopy since 2009 and a member of the editorial board of Journal of Raman Spectroscopy, Journal of Molecular Structure, Vibrational Spectroscopy. Yuki's research program has been concerned with basic studies and applications of far ultraviolet (FUV), infrared (IR), Raman, and near-infrared (NIR) spectroscopy. Yuki received many awards including the 1998 Tomas Hirschfeld Award, the 2001 EAS Award for Achievements in Near Infrared Spectroscopy, the Spectroscopical Society of Japan Award (2002), Gerald Birth Award of International Conference Diffuse Reflectance Spectroscopy, and the Japan Society for Analytical Chemistry Award (2008).



#### Richard E. Russo

Dr. Russo is founder and scientific director of the laser material interactions group at the Lawrence Berkeley National Laboratory. His group has advanced the development of laser ablation for

chemical analysis, with a 30 year contribution to fundamental and applied research, and over 230 refereed scientific publications. Fourteen students have received their PhD degree under his direction at the University of California, Berkeley. Dr. Russo also is president and founder of Applied Spectra, Inc. The company manufactures analytical instruments using LIBS and Laser Ablation with ICP-OES and ICP-MS. Among many accomplishments, his Laboratory and company team recently won a 2012 R&D100 Award on LAMIS (Laser Ablation Molecular Isotopic Spectrometry) for measuring isotopes at atmospheric pressure in a single laser pulse.



#### **Robin Turner**

Professor Robin Turner earned his Ph.D. degree from the University of Alberta in 1990 under the joint supervision of Jed Harrison (Chemistry) and Bob James (Electrical Engineering). His

dissertation research involved biosensor technology development based on electrochemical methods. He joined the Faculties of Science and Applied Science at The University of British Columbia (UBC) in 1990 with joint appointments in the Michael Smith (formerly Biotechnology) Laboratories and Electrical Computer Engineering. Since 2004, he has also held an Associate Member appointment in the Department of Chemistry. His general research activities include the development of optical techniques and related signal processing and chemometric methods for biomolecular spectroscopy. He specializes in Raman and resonance Raman spectroscopy and their applications in biochemistry. biotechnology, and biomedical engineering. In addition to the SAS, he is a member of the Chemical Institute of Canada (CIC) and the American Chemical Society (ACS).



#### Meiping Zhao

Meiping Zhao is currently professor of chemistry at Peking University, Beijing, China. She received her Bachelor's Degree in 1990 and Master's degree in 1993,

both from Peking University, China. Then she began her research career in the Department of Chemistry at Peking University. From 1997-1998, she was a visiting scholar at the University of Amsterdam and then the Energy Research Centre of the Netherlands. In 2002, she received her PhD and was promoted to associate professor at Peking University. In 2010, she was promoted to full professor at College of Chemistry and Molecular Engineering at Peking University. Since 2002, Prof. Zhao has taken charge of six research projects funded by the NSF of China and two research projects funded by the Ministry of Science and Technology of China. She has published over eighty peer-reviewed research papers. Her current research interests mainly focus on the development of novel fluorescence-based fluorescent DNA probes, immunosensors and in vivo fluorescence imaging on a microfluidic chip.

#### EDITORIAL ADVISORY BOARD



#### **Katherine Bakeev**

Dr. Katherine A. Bakeev is the Chief Scientist for CAMO Software Inc., applying her knowledge of spectroscopy and data analysis to solving diverse problems and teaching. She has

many years of industrial experience in the electronics,

chemical and pharmaceutical industries. Her fields of experience include near-infrared spectroscopy and other spectroscopic tools for on-line analysis (PAT), as well as polymer science and chemometrics. She is the editor of the book Process Analytical Technology: Spectroscopic Tools and Implementation Strategies for the Chemical and Pharmaceutical Industries, now in its second edition. She is the recipient of the 2007 Craver Award in Applied Vibrational Spectroscopy. Katherine has been a member of the Society of Applied Spectroscopy (SAS) since 1993, having served as national secretary of the organization from 2009-2011. She will serve as the SAS president in 2012. She has served on the publication and nominating committees, and serves on the Editorial Board of the journal Applied Spectroscopy.



#### Rohit Bhargava

Professor Rohit Bhargava is the Bliss Faculty Scholar and an Associate Professor, Engineering and Beckman Institute for Advanced Science and Technology, at the University of Illinois at Urbana-

Champaign. Rohit received dual B.Tech. degrees (in Chemical Engineering and Polymer Science and Engineering) from the Indian Institute of Technology, New Delhi, and his doctoral thesis work at Case Western Reserve University was in the area of polymer spectroscopy. Subsequently, he worked as a Research Fellow at the National Institutes of Health in the area of biomedical vibrational spectroscopy. Research in the Bhargava laboratories focuses on fundamental optical theory vibrational spectroscopic imaging, developing new instrumentation, application of spectroscopic imaging to biomedical and polymer problems, and numerical analyses. Rohit's work has been recognized with several research and teaching awards, including Applied Spectroscopy's Meggers Award, and he is routinely nominated to the list of teachers ranked "excellent" at Illinois.



#### **Bruce Chase**

Dr. Chase's research interests are in the area of structure/property/ process relationships in polymeric materials, electrospinning polymer nanofibers, high strength polymeric fibers, IR/Raman

spectroscopy, and vibrational sum frequency generation spectroscopy of polymeric films and fibers.

In collaboration with Professor John Rabolt, he has developed planar array infrared spectroscopy, a new approach to IR measurements. In collaboration with Professor Matt Doty, he is expanding the use of ultrafast laser techniques for both time resolved spectroscopy (transient absorption and photoluminescence) and tunable infrared laser measurements. Dr. Chase spent 34 years in the Central Research Department at DuPont before joining the Department of Materials Science and Engineering at the University of Delaware in 2009.

#### Mustafa Çulha



Professor Mustafa Culha obtained his Ph.D. degree in chemistry under the supervision of Prof. Michael Sepaniak at the University of Tennessee-Knoxville in 2002. He then joined Prof. Vo-

Dinh's research group as a post-doctoral researcher at Oak Ridge National Laboratory (2002-2003) before joining the Schering-Plough Corporation, NJ as an investigator. In 2004, he accepted a faculty position in the Genetics and Bioengineering Department of Yeditepe University, Istanbul, Turkey. He is currently involved in active teaching and research there. His current research interests include elements of chemistry, medicine, biology, materials science, photonics, nanoscience and nanotechnology. His uses the spectroscopic techniques such as surface-enhanced Raman scattering (SERS) to shed light onto livingnonliving interactions and to develop novel detection and diagnostic tools for medical and biomedical applications. He is the author of more than 55 papers in international refereed journals, and several book chapters and patents in the areas of analytical and bioanalytical chemistry, and nanotechnology. He is also the editor of a special issue on Surface-enhanced Raman Scattering in the Journal of Nanotechnology.



#### Max Diem

Max Diem, PhD, is Professor in the Department of Chemistry and Chemical Biology, at Northeastern University. He received his undergraduate education at the Universität Karlsruhe, Germany, and his PhD at the University of

Toledo, OH. After postdoctoral fellowship with L. Nafie at Syracuse University, he rose through the academic ranks at the City University of New York

(1979-2005) and has been Professor of Chemistry at Northeastern University since 2006. He held a Guest Professorship in Lehrstuhl Biophysik at the Ruhr Universität Bochum, Germany, in 2011. The research in Prof. Diem's laboratory centers on the development of spectral methods to diagnose and screen for disease. To this end, two complimentary spectroscopic methods are utilized, confocal Raman micro-spectroscopy, and infrared spectral imaging microscopy, in conjunction with multivariate statistical methods. Both spectral methods detect subtle, yet reproducible variations in the biochemical composition of human cells and tissue sections when progressing from normal to diseased states. These spectral changes are subsequently correlated to pathological and cytological results using supervised methods of multivariate analysis. Prof. Diem has published 2 books, 9 refereed book chapters, ca. 170 refereed papers and 7 patents.



#### Neil Everall

Neil gained his BSc in Chemistry (1981) from the University of York, UK and his PhD (1986) from the University of Durham, UK, and he is currently employed by Intertek-MSG, where he

develops vibrational spectroscopic techniques to solve research, production and application problems for the chemicals, materials and life-science industries. He also carries out fundamental research, for example on confocal Raman microscopy and Raman photon migration. He has authored ~85 journal articles and numerous book chapters, he was an Associate Editor of Wiley's "Handbook of Vibrational Spectroscopy" and co-edited Wiley's "Vibrational Spectroscopy of Polymers: Principles and Practice" (2007). His research has been recognized by the Meggers Award (2002 & 2006), the Williams-Wright Award (2003), and the 2007 Mann Award. He is a Fellow of the Royal Society of Chemistry and the Society of Applied Spectroscopy. Neil served as European Associate Editor for Applied Spectroscopy from 2000-2012.



#### Marcia Ferreria

Prof. Márcia M. C. Ferreira is full professor at the Chemistry Institute-University of Campinas, (UNICAMP), Brazil. She received a BSc. in Chemistry from Universidade de Brasilia-Brazil in

1974 and a MSc. degree from New York University

(USA) in 1979. Her PhD is from University of Campinas, 1984, in the field of Quantum Chemistry and she worked as a post-doctoral fellow in the field of Chemometrics at University of Washington (Seattle-USA) during 1993-1995. Prof. Ferreira is the head of the Laboratory of Theoretical and Chemometrics (LAQTA) at UNICAMP, has been activities involved in educational promoting chemometrics nationwide, in Latin America and worldwide having advised 20 plus PhD thesis in this field. She was the organizer of the 10th International Conference of Chemometrics in Analytical Chemistry (CAC-10) held in Brazil in 2006. Her research interests encompass the development of chemometric methods, and its manifold applications to spectroscopic and chromatographic data, computational chemistry of biological related problems (molecular/drug design and QSAR/QSPR), and structure correlation.



#### Kathleen Gough

Professor Kathleen Gough obtained her PhD in 1984 (University of Manitoba) on overtone vibrations of aromatic molecules. She was a Research Associate at the National Research Council in Ottawa in the Henry

Mantsch group, under Dr. William Murphy, and an NSERC postdoctoral fellow in theoretical chemistry with Prof. Richard Bader (McMaster University), before accepting a faculty position in the Chemistry department at Brock University. She is presently a Professor of Chemistry at the University of Manitoba, where she is co-PI in the Spectrochemical Imaging Laboratory, using infrared and Raman spectroscopic imaging to study the composition of heterogeneous materials. Biological studies include CNS tissue in Alzheimer's disease and ALS, the role of nutritional fatty acids in retinal health, development of scar tissue in wound healing, discovery of secondary metabolites in fungi and lichen, and responses of sea ice algae to climate change. Some other interests include analysis of layered polymer coatings and blended polymers, as well as weathering in minerals. In research supported by NSERC, CIHR, MHRC and Western Economic Diversification, she has developed protocols for analysis of IR and Raman vibrational spectra and for spectrochemical imaging of cells and tissues. As an active user of synchrotron FTIR since the late 1990's, she has conducted experiments at many synchrotron light sources, including the Canadian Light Source and most recently atthe IRENI end station, Synchrotron

Radiation Center, U. Wisconsin-Madison, to analyze spectrochemical images of CNS tissue and to develop live cell imaging. The research goal is to bring FTIR, Raman and SERS spectrochemical imaging into mainstream practice by enabling characterization of the chemistry and biochemistry of systems at biologically relevant length and time scales.



#### **David Hahn**

David W. Hahn received his BSME (1986) and PhD (1992) degrees from LSU. Following graduation, he was an NRC Research Associate at the US FDA, Center for Devices and

Radiological Health (1992-1994), working on lasertissue interactions, and then a member of the technical staff at Sandia National Laboratories (1994-1998). David joined the University of Florida in 1998, where he is currently Knox T. Millsaps Professor and Department Chair in the Mechanical and Aerospace Engineering Department. David's ongoing research activities focus on laser-tissue interactions, laser-based diagnostics and biosensing, solar-thermal chemistry, and laser-induced breakdown spectroscopy (LIBS).At UF, he received the College of Engineering Teacher/Scholar of the Year Award, and the Doctoral Student Advisor/Mentor of the Year Award. David received the 2011 Lester W. Strock Award from the Society for his work on LIBS. He currently serves as an Associate Editor for Applied Spectroscopy, and is a member of the Editorial Board for Spectrochimica Acta Part B.



#### **Thomas Huser**

Thomas Huser is a Professor of Physics at the University of Bielefeld, Germany, where he heads the Biomolecular Photonics Group. He is also Adjunct Professor in the Department of

Internal Medicine at the University of California, Davis. From Nov. 2005 – May 2011 he served as Chief Scientist for the Center for Biophotonics at UC Davis. From 2009 –2011 he was also a Visiting Professor in the Department of Physics and Technology at the University of Tromsø, Norway. Until 2005, he was a Group leader for Biophotonics at Lawrence Livermore National Laboratory in Livermore, CA. He first joined Lawrence Livermore National Laboratory in 1998 as a postdoctoral researcher and became a staff scientist in

2000. Dr. Huser obtained his Ph.D. in Physics from the University of Basel, Switzerland. His research is devoted to the application of single molecule fluorescence spectroscopy, super-resolution optical microscopy, and vibrational spectroscopy to biomedical problems at the single cell level.



#### Javier Laserna

Javier Laserna is Professor of Analytical Chemistry at the University of Malaga – Malaga, Spain. He graduated in Chemistry at University of Granada and received his PhD from the

University of Málaga in 1980. He did postdoctoral work with Jim Winefordner at University of Florida for two years from 1986 to 1989. He has been titular member of the IUPAC Commission V.4 on Spectrochemical and other Optical Procedures for Analysis, from 1996 to 2001 and head of the Office for Technology Transfer of the University of Málaga, 1994-1997. He has been president of the Spanish Society for Applied Spectroscopy (SEA), 2001-2004 president of the Working Group Spectrochemical Analysis of the Spanish Royal Society of Chemistry (RSEQ), 1998-2001. He is coinventor of 6 patents held by the University of Malaga and has published over 250 papers plus 5 books and book chapters. He was section editor for Raman Spectroscopy of the Encyclopedia of Analytical Chemistry, John Wiley & Sons, 2000. Prof. Laserna's current research interests include the use of lasers in chemical analysis, laser-induced plasma spectroscopy; time-of-flight mass spectrometry; secondary ionization mass spectrometry; surface analysis using laser ablation with optical and ion detection, imaging remote techniques; laser chemical analysis; instrumental solutions for chemical analysis in the industry; on-line analytical methodology; fieldable analytical instrumentation; development spectroscopic instrumentation; analysis of energetic materials; development of sensors for CBNRE threats; lasers for Cultural Heritage; and materials analysis. By the end of 1990's, he succeeded in demonstrating large-scale optics standoff laser induced breakdown spectroscopy for analysis of distant objects. Later this technique has been used in the analysis of explosives and in space exploration. He has given numerous invited plenary and keynote talks and is member of the advisory board of several scientific journals. Prof. Laserna was awarded with the RSEQ National Award for Research in Analytical Chemistry in 2009 and the

SEA National Award for his research career in Applied Spectroscopy in 2010.



#### **Bernhard Lendl**

Bernhard Lendl is the head of the working group on Process Analysis and Vibrational Spectroscopy at the Vienna University of Technology. He

started his studies in Chemistry at the Vienna University of Technology in 1987. He performed his diploma work as an ERASMUS fellow already at the Department of Analytical Chemistry in Córdoba (Spain) under supervision of Prof. M. Valcárcel. After that he returned to Vienna where he received his master of science in 1993. During his PhD thesis, which he performed at under the supervision Prof. R. Kellner at the Vienna University of Technology he investigated the coupling of Flow Injection Analysis to Infrared Spectroscopy. He finished his PhD in 1996 ("Development of the Principles of Miniaturised Flow Injection Analysis Systems with FTIR-Spectroscopic Detection"). He continued his carrier as an assistant professor at the Vienna University of Technology focusing mainly on miniaturized automated flow systems (FIA, SIA) with vibrational spectroscopic detection. In 2001 he received his professorship in Analytical Chemistry from Vienna University of Technology. Beside his work at the Institute he dedicates a lot of time to international conferences and committees. In 1998 he chaired the AIRS III conference in Vienna. At his home laboratory at the Vienna University of Technology he is leading the Marie Curie Training Site ADVIS (Advanced and Applied Vibrational Spectroscopy) finalized by the European Union. He is currently member of the editorial boards of Vibrational Spectroscopy and Applied Spectroscopy. In 2002 he received the Fritz Pregl award of the Austrian Academy of Sciences. In 2003 he was awarded the Fritz Feigl award of the Austrian Society of Analytical Chemistry.



#### Anita Mahadevan-Jansen

Anita Mahadevan-Jansen is Orrin H. Ingram Chair in Engineering, Professor of Biomedical Engineering and Professor of Neurological Surgery in the Department of Biomedical

Engineering at Vanderbilt University. She completed her B. Sc. at Bombay University in 1988 and her PhD at the University of Texas at Austin in 1996. Her research interests include applications of optical techniques for in vivo detection of tissue pathologies and physiology, cancer diagnosis, guidance of therapy and monitoring using fluorescence, reflectance and Raman spectroscopies as well as optical imaging.



#### **Curtis Marcott**

Curtis Marcott is currently a Senior Partner at Light Light Solutions, a spectroscopic consulting firm. A former research fellow at Procter & Gamble, Curt was the 2011 President of the Society of Applied Spectroscopy

and is a member of the Editorial Advisory Board of Applied Spectroscopy. He is a past member of the editorial advisory boards of Analytical Chemistry and Vibrational Spectroscopy, the A-page advisory panel of Analytical Chemistry, and the board of managers of the Coblentz Society. He served as program committee chairman for the 2009 FACSS Conference and the International Conference on Advanced Vibrational Spectroscopy (ICAVS-6). Dr. Marcott received the 1993 Williams-Wright Award from the Coblentz Society for achievement in vibrational spectroscopy, was named the 2001 Cincinnati Chemist of the Year, and is an Adjunct Professor of Chemistry at Miami University in Oxford, OH. Curt obtained his PhD in Chemistry from the University of Minnesota in 1979.



#### Larry Nafie

Laurence A. Nafie received his Ph.D. from the University of Oregon in 1973, on Raman theory, followed by a postdoctoral associate at the University of Southern California, where he

confirmed the discovery of infrared vibrational circular dichroism (VCD). In 1975 he joined the Chemistry faculty at Syracuse University and pursued a research program in VCD and Raman optical activity (ROA) until his retirement in 2010. He was awarded the Coblentz Award (1981), the Bomem Michelson Award (2001), and the Meggers Award (2001), and the SAS Distinguished Service Award (2007). He was President of SAS in 2003 and was named an SAS Fellow in 2008. He has over 290 publications and several patents. Currently he is Emeritus Distinguished Professor at Syracuse University and Editor-in-Chief

of the Journal of Raman Spectroscopy. In 2011 he published a comprehensive book on VOA entitled Vibrational Optical Activity: Principles and Applications



#### Michael J. Pelletier

Mike is an Associate Research Fellow in the QbD Methods Development group at Pfizer. His work involves the identification and development of new spectroscopic technologies,

applied Raman and NIR spectroscopy, and PAT for process understanding. Prior to that he was a Principle Engineer at NASA's Jet Propulsion Laboratory where he won funding for, and led, in-situ analysis projects involving microfluidics and Raman spectroscopy. He was awarded the Williams Wright Award and the Charles Mann Award for vibrational spectroscopy and has over 100 publications and invited presentations, including 6 patents, several book chapters, and a book on Raman spectroscopy. Mike is a Fellow of the Society for Applied Spectroscopy.



#### Aldo Romani

Aldo Romani, graduated in Chemistry at the University of Perugia in 1987, PhD in Chemistry in 1992. At present he is a Research Professor at the Chemistry Department of the

University of Perugia. Research activity concerns both basic and applied subjects principally involving characterization of the excited states of organic molecules by means of the parameters that govern their radiative and non-radiative processes spectroscopic techniques in absorption and emission. These techniques have been also applied, for not destructive diagnostic purposes, in the field of the cultural heritage, leading to innovative new spectroscopic instruments and methods development, mainly working for the Center of Excellence SMAArt (Scientific Methodologies applied to Archaeology and Art). He has authored about 90 scientific papers in international journals concerning the photochemistry and photophysics of aryl-ketones, photochromic compounds, organic colorants and the spectroscopic characterization of archeological and historian-artistic materials.

## Heinz Siesler



Heinz W. Siesler is an Emeritus Professor at the University of Duisburg-Essen, Germany, where he works since 1987. His main research interests focus on the

application of vibrational spectroscopy to chemical and polymer research, analysis and process control. He has written more than 200 publications (including three monographs) in this field of research and presented more than 250 lectures worldwide. He held guest professorships at Kwansei Gakuin University, Sanda, Japan, University of Nagoya, Japan, Ecole Superieure de Physique et de Chimie Industrielle, Paris, France, and University of Innsbruck, Austria. He received the 1994 EAS Award, the 2000 Tomas Hirschfeld Award and the 2003 Buechi Award in near-infrared spectroscopy. Prior to his academic position he gained extensive industrial experience as section head in molecular spectroscopy and thermal analysis (1974-1987) in the Corporate R&D Department of Bayer AG, Germany. He also worked as lecturer at the University of Witwatersrand, Johannesburg, South Africa (1972-1974) and as post-doc at the University of Cologne, Germany, after receiving his PhD in Chemistry from the University of Vienna, Austria, in 1970.

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#### Siva Umapathy

Umapathy Siva is a J C Bose Fellow Professor of the Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore, India and also an Honorary Professor at the Department of

University of Nottingham, Chemistry, United Kingdom. He received his BSc degree and MSc degree from University of Madras, India and a PhD in Physical Chemistry, from University of Otago, New Zealand in 1986. After being a SERC Fellow at the Rutherford Appleton Laboratory, Oxfordshire and University of York, United Kingdom, from 1986 to 1990, he joined the Indian Institute of Science. He is a member of the Editorial advisory board of the Journal of Raman Spectroscopy and the Journal of Biophotonics. He is also member of International Steering committee on Raman Spectroscopy (ICORS), international steering committee on Time resolved Vibrational Spectroscopy (TRVS). Presently he is also the Chairman of the steering committee on Asian Spectroscopy Conference (ASC). His research

activities include applications of Raman and Infrared microscopy to biology, medicine and materials, resonance Raman and time resolved Raman spectroscopy, computational and simulation studies, and ultrafast time resolved absorption and stimulated Raman spectroscopy.



#### Peiyi Wu

Peiyi Wu was born in Wuxi, China in 1968. Dr. Wu obtained Ph.D. (1998) in chemistry from University Essen, Germany under the supervision of Professor H. W. Siesler. Currently, he holds a position of professor and has been

Chairman in the Department of Macromolecular Science, Fudan University(Shanghai, China) since January 2005. Dr. Wu's spectroscopic research involves the application of infrared (IR), Raman, and near-infrared (NIR) spectroscopy to polymers, nanostructures and bio-related samples. He and his coworkers have published over 100 scientific papers in refereed journals in the areas of physical and material chemistry