Journal Report to the SAS Executive Committee

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a. Accomplishments

Many of the projects discussed at Pittcon 2011 have been successfully implemented, while others are in progress and some new projects have been started.

Focal Point articles are now open access on the OSA Optics Infobase platform, beginning with the April 2011 issue. While we were unable to open up access to previously published material with OSA, that material *is* open on Ingenta.

The fall Coblentz Newsletter has been aligned with the issue of the journal that is distributed at FACSS (now the October issue). FACSS preliminary and promotional material is still published in the August issue, with a follow-up FACSS report in the December or January issue.

Paperless electronic workflow is in place, cutting approximately 8 business days out of the production cycle (out of approx 32 days, a 25% savings in time) as well as saving approximately $200 per issue in hard proof mailing costs.

While the mailing date was successfully moved up by 2.5 weeks, it has slipped back about by about ten days, due primarily to difficulty filling issues in a timely manner. Hard copies of issues are currently mailing about the 26th of each preceding month instead of during the first week of the same month.

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.

A new contract was also negotiated with Jonell Clardy of JAC Graphics for our covers and Focal Point figures. Based on the increased number of Focal Points published each year, the new contract should save us approximately $1800, or 40% over what the average projected cost would have been under the old agreement (~$2600/year instead of $4400/year).

Preprints are available on Ingenta approximately 4–8 weeks after acceptance. While we hope to reduce this schedule by two weeks, errors originating with the press mean that we have gone back to posting primarily second revisions instead of first revisions.

Posting of preprints is announced each month on the SAS members site on LinkedIn in an effort to increase the visibility of this benefit.

The new procedure of reviewing figures before acceptance of papers seems to be resulting in fewer figure remakes and has definitely resulted in improved quality and reduced cost of processing.

Rebecca has spent a great deal of time and energy this year on a new pre-editing system being developed by Allen Press. This service will eventually save 15 to 20 hours per month in labor time (on the SAS side). Currently, though, she is still putting in at least that many hours on project development. We are beginning to see benefits in terms of higher numbers of validated references and reduced time spent on repetitive editing tasks.

Rebecca is still working with Allen Press and Ingenta to post HTML versions of articles online, side by side with a PDF for download. She had previously projected that this would be accomplished by September of 2011. She still hopes to have this done before the end of 2011.

b. Publication Statistics

The statistics for the last five and a half years are shown below:

	2006	2007	2008	2009	2010	2011	Projected 2011
Submitted papers	183	175	174	165	176	136	[164]
Focal Point reviews	4	2	6	3	3	7	[9]
Notes	20	17	26	22	14	9	[12]
Rejects	63	50	65	67	86	43	[74]
Returns	54	75	90	80	38	19	[28]
Total articles printed	210	197	207	194	197	152	[182]
Total rejected	117	125	155	147	124	78	[117]
Papers received for Review	321	352	356	352	353	227	[340]
% Rejected	36.4	35.5	43.5	41.8	35.1	34.4	
Actual journal pages							
Total A pages	344	292	362	354	366	244	[366]
Total manuscript pages	1526	1442	1430	1442	1452	965	[1449]

The actual number of manuscript pages has stayed relatively constant over this six-year span, although the number of papers has decreased somewhat while the average length of the papers has increased. The largest change has been the number of Focal Point Review articles. Since the April issue, we have published one review article in every issue and this should continue into the foreseeable future. This should lead to an improvement in the Impact Factor (IF).

The IF for 2010 increased by 0.17, which is a good trend considering that all the changes that we have made this year would not affect the 2010 IF. A comparison of the performance of *Applied Spectroscopy* with its peer competitors is given below:

Journal	IF 2008	IF 2009	Change from 2008	IF 2010	Change from 2009
J. Anal. Atom. Spectrosc.	4.028	3.435	-0.59	4.372	+0.94
J. Biophotonics	-	1.158	-	4.240	+3.08
Appl. Spec. Revs	4.114	3.243	-0.87	3.913	+0.44
Spectrochim. Acta B	2.853	2.719	-0.13	3.549	+0.83
J. Raman Spectrosc.	3.526	3.147	-.38	3.137	-0.01
Vibrational Spectrosc.	1.810	1.931	+0.12	2.083	+0.15
Spectrochim. Acta A.	1.510	1.566	+0.06	1.770	+0.20
Applied Spectrosc.	2.062	1.564	-0,50	1.729	+0.17
J. NIR Spectrosc.	1.822	0.991	-0.83	1.570	+0.58
J. Mol. Spectrosc.	1.636	1.542	-0.09	1.497	-0.04

Clearly the biggest change in the past two years is the introduction of the *Journal of Biophotonics*. The rise in the number of manuscripts in the life sciences is greater than in any other field and the loss in a significant number of papers in this field is certain to have an effect on *Applied Spectroscopy*'s impact factor.

The work flow is shown in the following table:

2011														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**	
Original Manuscripts Submitted	24	33	27	23	30	29	28	33					227	
Revised Manuscripts Resubmitted	19	11	19	25	16	16	15	14					135	
Manuscripts Accepted Without Revisions	0	1	2	0	2	1	1	2					9	
Return with Revisions	13	20	23	13	18	17	14	20					138	
Manuscripts Rejected	9	8	11	5	10	11	6	18					78	
Rejected With Review	8	4	8	2	9	6	6	16					59	

Rejected Without Review	1	4	3	3	1	5	0	2					19	
Rejected After Revisions	1	1	3	0	4	0	0	0					9	
Requires Another Revision	2	2	2	5	4	2	3	1					21	
Accepted after Revisions	21	10	12	21	19	13	15	11					122	
Manuscripts Withdrawn	0	1	1	1	3	0	2	1					9	
Original Manuscripts Not Withdrawn	24	32	26	22	27	29	26	32					218	

c. "Issues"

The average number of days between the time a manuscript is submitted and the time that the first decision is sent to the authors was 45.3 days, a reduction of about 3 days from the previous year. As noted in last year's report, potential reviewers are usually contacted within three days of the receipt of a manuscript. Despite the fact that some people respond within a day, on the average, we learn whether someone has agreed or declined to review a paper in about a week. If someone declines, we have to go through the procedure again. For some topics, we sometimes contact as many as five different potential reviewers before we find someone willing to do the review. However, the biggest problem with the reviewing process is getting our more recalcitrant reviewers to send in their reviews in a reasonable time. When the original request is sent, they are asked to submit their review within three weeks. If no review has been received in that time, a "gentle reminder" is sent. This is repeated every two weeks until the review has been received. The end result is that it takes an average of six and a half weeks from receipt of a manuscript to the first decision.

Although some papers are rejected and a (very) few are accepted without change, most papers require major or minor revision. Minor revisions are usually made quickly but major revisions can take several months. As a result, last year the average time between receipt of a manuscript to the final decision was 62.3 days. This year this was reduced to 53.4 days. In part this improvement was due to the increased number of Focal Point review articles, which on average are accepted within two weeks of submission.

As noted above in the "Accomplishments" section, the cost of producing each month's issue has been reduced significantly while simultaneously making color printing more affordable. The availability of color at a reasonable cost for all contributed papers was expected to lead to an increase in the number of papers with color figures. However, the increase has not been as great as was forecast. Members of the society get free color as a member benefit. In

previous years, the cost of color figures was $600 per page. This has been reduced to $150 per article. Although this would seem like a good deal, a surprising number of authors opt to change their figures to black-and-white to avoid this charge. The option of becoming a member of the society has almost never been exercised. We are considering a follow-up editorial or an email blast to all past authors to raise awareness of the color figure benefit.

For the first nine issues of this year, the percentage of papers published from each continent was as follows:

North America	42.1%
Europe	25.4%
Asia (inc. Australia)	26.2%
South America	6.3%

In last year's report, we noted that the number and percentage of manuscripts submitted from the Peoples' Republic of China had dramatically increased in the past two years. For example in 2007/8, the percentage of published papers from the USA and the PRC were 42.7% and 5.1%, respectively. In 2009/10, the percentages changed to 39.5 and 11.3%. This situation presented a problem as it is often difficult to obtain knowledgeable reviews from Chinese scientists and as a result it put increased pressure on reviewers from Europe and North America. This year, the numbers have stabilized; for the first eight issues of 2011, the percentages were 42.1 and 10.3%, respectively. Our concerns on this issue are therefore alleviated.

Of 126 papers published in this period, the corresponding authors came from 25 different countries. *Applied Spectroscopy* is truly an international journal!

d. Download Statistics

The download statistics for Ingenta and OSA InfoBase usage for the calendar years 2005-2011 are as follows:

		2005	2006	2007	2008	2009	2010	2011 to date	2011 on pace
Ingenta	Content pages viewed:					78,849	104,882	*41,114*	*70,481*
	Abstracts viewed:					402,777	369,976	*263,681*	*452,024*
	Full-text downloads:	47,672	58,843	51,673	48,370	40,167	40,608	*18286*	*31,347*
OSA	Full-text downloads:	-	-	68,248	63,148	66,502	87,236	*56,767*	*85,150.5*
Total Full text downloads		47,672	58,843	119,921	106,518	106,669	127,844	*75,053*	*116,498*

As the table shows, the number of full-text downloads from Ingenta has stabilized at about 40,000 after decreasing yearly since 2006. This drop has been offset by an increase in the numbers from the Optical Society of America InfoBase system. And those numbers have continued to increase in 2010 by a substantial margin. In 2008 there were 63,148 downloads of Applied Spectroscopy articles through Optics InfoBase, which increased to 66,502 in 2009 and 87,236 for 2010. OSA has told us that most of the downloading activity involves access to InfoBase through an institutional subscription. Downloads through personal subscriptions or through download benefits (50 complimentary downloads) are generally much lower. It is likely that institutions have access to either OSA or Ingenta so this may be just a matter of how the institutions use search methodology to point to the journal source.

Full text downloads by country for Ingenta and OSA.

The table below is a summary of the number of full text downloads by country for the top dozen or so. OSA numbers are only available for 2011. The most interesting thing in the table is the data for China, Russia, and India. The table doesn't really show it very well but the top five download countries for AS on OSA are USA, China, Russia, Japan, and Taiwan.

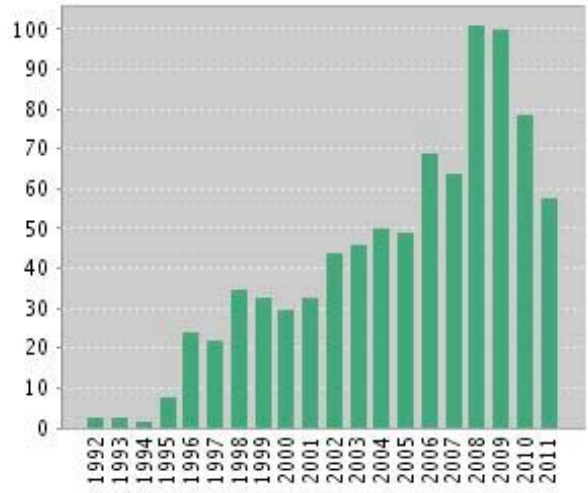
	Ingenta			
Country	2009	2010	2011 (through July)	OSA (2011 through August)
USA	22,790	27,988	10,677	19,193
Canada	2,631	3,418	1,287	1,619
Germany	1,823	1,404	798	1,401
United Kingdom	2,437	1,362	666	2680
Italy	851	767	262	177
Spain	753	642	327	610
Japan	1,044	607	436	2883
Sweden	947	472	227	278
Taiwan	774	466	217	2768
Austria	336	405	202	94
Netherlands	674	331	253	1125
France	475	293	186	1775
China	20	27	84	8607
Russia		20	3	3194
India		9	36	2283
Brazil		188	115	1803

Most Downloaded Full-text Articles for Aug 2009 to Jul 2011 (Ingenta):	
	Number
Appl Spectrosc (v64n5s5) - Micro- and Macro-Attenuated Total Reflection Fourier Transform Infrared Spectroscopic Imaging (2010)	371
Appl Spectrosc (v63n9s7) - Confocal Raman Microscopy: Performance, Pitfalls, and Best Practice (2009)	160
Appl Spectrosc (v64n9s6) - Teaching, Learning, and Using Spectroscopy with Commercial, Off-the-Shelf Technology (2010)	149
Appl Spectrosc (v63n12s7) - Application of the Kubelka-Munk Correction for Self-Absorption of Fluorescence Emission in Carmine Lake Paint Layers (2009)	114
Appl Spectrosc (v63n12s5) - Mining the Information Content Buried in Infrared and Near-Infrared Band Shapes by Temporal, Spatial, and Other Perturbations (22009)	109
Appl Spectrosc (v65n5s6) - Review of the State-of-the-Art of Laser Ablation Inductively Coupled Plasma Mass Spectrometry (2011)	104
Appl Spectrosc (v65n4s5) - Fluorescence Correlation Spectroscopy: A Review of Biochemical and Microfluidic Applications (2011)	102
Appl Spectrosc (v65n2s5) - Confocal Raman Microspectroscopic Study of the Molecular Status of Carotenoids in Tomato Fruits and Foods (2011)	85
Appl Spectrosc (v31n4s1) - A Review of the Theory and Application of Coherent Anti-Stokes Raman Spectroscopy (CARS) (1977)	82
Appl Spectrosc (v63n11s5) - The Infrared Spectral Signatures of Disease: Extracting the Distinguishing Spectral Features Between Normal and Diseased States (2009)	81

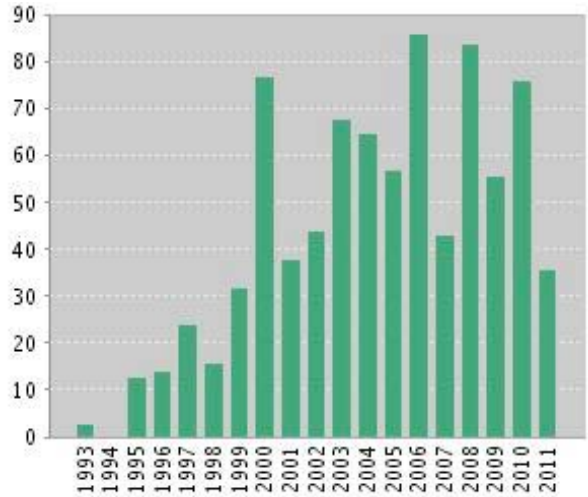
Note that just about all these articles were Focal Point Reviews

Most Cited Articles in 2010:

Title: STANDARD NORMAL VARIATE TRANSFORMATION AND DE-TRENDING OF NEAR-INFRARED DIFFUSE REFLECTANCE SPECTRA
Author(s): BARNES RJ; DHANOA MS; LISTER SJ, APPLIED SPECTROSCOPY Volume: 43 Issue: 5 Pages: 772-777
Published: JUL 1989 Cited:79

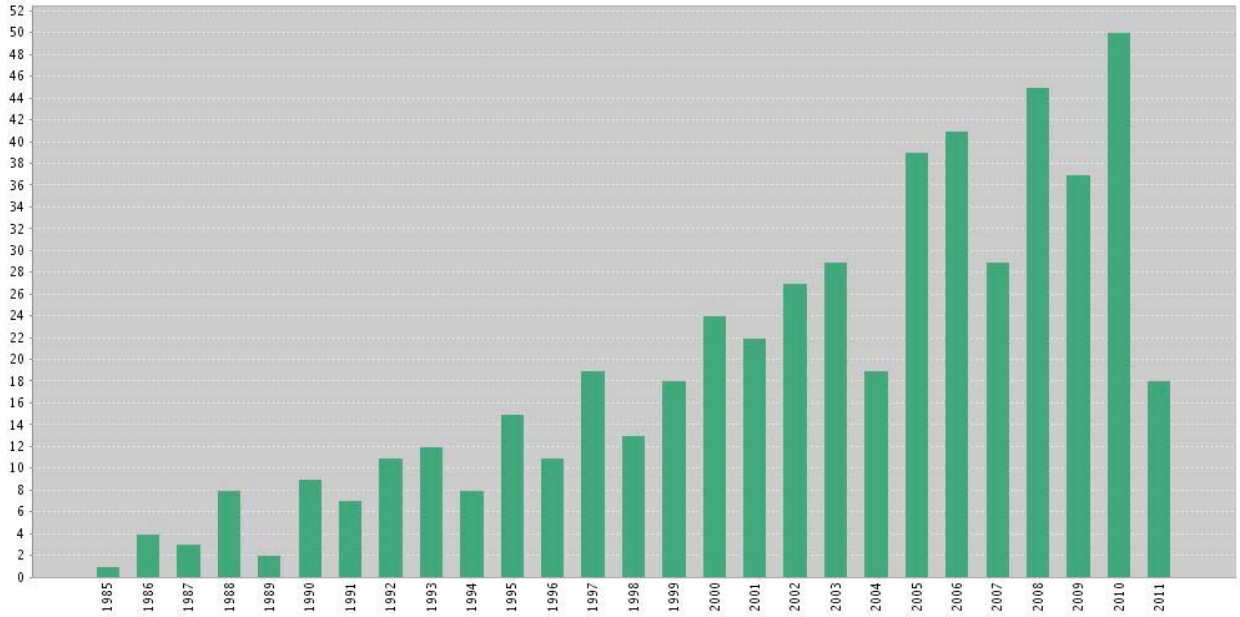


Title: GENERALIZED 2-DIMENSIONAL CORRELATION METHOD APPLICABLE TO INFRARED, RAMAN, AND OTHER TYPES OF SPECTROSCOPY
Author(s): NODA I, APPLIED SPECTROSCOPY Volume: 47 Issue: 9 Pages: 1329-
Published: SEP 1993 Cited: 76

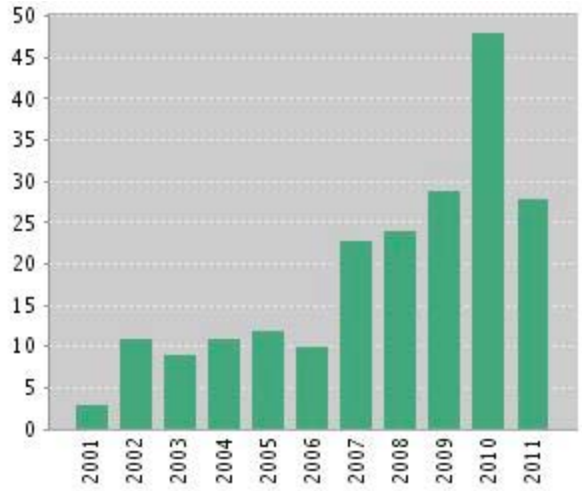


Title: LINEARIZATION AND SCATTER-CORRECTION FOR NEAR-INFRARED REFLECTANCE SPECTRA OF MEAT

Author(s): GELADI P; MACDOUGALL D; MARTENS H, APPLIED SPECTROSCOPY Volume: 39 Issue: 3 Pages: 491-500
Published: 1985 Cited: 50



Title: Interval partial least-squares regression (iPLS): A comparative chemometric study with an example from near-infrared spectroscopy
Author(s): Norgaard L; Saudland A; Wagner J; et al., APPLIED SPECTROSCOPY Volume: 54 Issue: 3 Pages: 413-419
Published: MAR 2000 Cited: 48



Title: Automated method for subtraction of fluorescence from biological Raman spectra
Author(s): Lieber CA; Mahadevan-Jansen A, APPLIED SPECTROSCOPY Volume: 57 Issue: 11 Pages: 1363-1367
Published: NOV 2003 Cited: 34

Note: In each case, the number of citations in the first two years was low; thus their contribution to the Journal's impact factor would have been low. Clearly the impact of papers should not only be measured in the short term (which is obviously what the Impact Factor measures), but also their cumulative effect in the long term.