



2006 in Review

In February, following a tradition set by my predecessor, Brian Thompson, I provide a report to SPIE members and readers of this journal on its status at the beginning of 2007. The browser-based manuscript handling system, Peer X-Press, is now firmly in place. We have added a criteria-based evaluation in place of an “Excellent-to-Poor” rating system.

Our next effort toward improving the journal will be the incorporation of multimedia attachments to papers accepted for publication. Currently, color figures, submitted in TIFF, PostScript, EPS, or PDF formats, are accepted for inclusion in the journal record. Most authors provide color images for the electronic version of the journal, but do not insist on color in the printed edition because the cost of color printing is high. Since most of our members receive the electronic edition, their copy is, in some sense, more complete and valuable than the print version. In addition, a reader has the ability to access and search the *Optical Engineering* archive.

Each year there is an improvement in the sophistication of recording data and generating sequential images derived from those data. Until now, there was no way to transmit and archive this information. By the end of this year, perhaps sooner, video and audio files will be accepted in the following formats: QuickTime nonstreaming video (.qt or .mov), AVI (.avi), MPEG (.mpg or .mp4),

Table 1 Major statistics for 2002–2006 and percentage changes from 2005.

	2002	2003	2004	2005	2006	2006 vs 2005
Number of journal pages	3360	3672	3164	3750	3920	+4.5%
Number of technical pages	3210	3514	3023	3630	3802	+4.7%
Number of papers published	420	487	422	515	525	+1.9%

and DV (.dv) for video, and PCM (.pcm), WAV (.wav), AIFF (.aif), and MP3 (.mp3) for audio. The specific submission requirements will be available in the multimedia guidelines that will be published as part of the Author Information that is available at the *Optical Engineering* web site.

The number of papers published last year hit another all-time high, although the increase was quite modest compared to last year. This year 525 papers were published, a 2% increase. Based upon the figures given in Table 1 for the past five years, it would appear that 2004 was an anomaly. I have tried to discern a trend in our publication statistics over the years, but I have given up. My own rough evaluation of the papers as I see them when I am assigning Associate Editors to handle the papers is that the number of papers is increasing, but the quality of papers is staying the same or maybe even diminishing.

Last year was the first time in a long time that there were no special sections published in this journal (Table 2). As I stated last year, I believe the emphasis should be directed to attracting significant papers that will serve the community. I have limited special section topics to those that have not been strongly represented in the journal or are “hot” topics that our readers should be aware of. Currently there is one special section, Optical Metrology in

Table 2 Regular vs. special section papers for 2003–2006 and percentage changes from 2005 (including *OE Letters*).

	2003	2004	2005	2006	2006 ratio	2006 vs 2005
Regular papers published	448	318	478	525	100%	+9.8%
Special papers published	39	104	37	0	0%	–100%
Regular papers received	781	912	875	826	-	–5.6%
Special papers received	68	121	6	21	-	+250%

Table 3 Outcomes of papers acted on in 2005 and 2006 (regular papers only; *OE Letters* not included).

	2003		2004		2005		2006	
Accepted	332	57.05%	317	48.32%	497	63.0%	410	58.8%
Declined/ Closed/ Transferred	248	42.61%	331	50.46%	287	36.4%	279	40.0%
Withdrawn	2	0.34%	8	1.22%	5	0.6%	8	1.2%
Total	582	100%	656	100%	789	100%	697	100%

the Transportation Industry, scheduled for May. Proposals for specials are welcome and will be carefully considered.

I note that the greatest number of submitted papers in a year occurred in 2004. Since then the number has dropped about 5% per year. Whether this is good or bad, I cannot say. One of the cardinal rules of research publishing is that the author is free to send the paper to whatever journal will provide the best audience. So we have no control over the input. (The second rule is that the journal is responsible for determining if the paper sent to it is worth the trouble.)

After dropping to an acceptance rate of below 50% in 2004, the ratio of accepted papers to those submitted increased dramatically to 63% the next year. Then, last year it returned to the level of 2003 (Table 3). This may be due to some efforts that the Board of Editors has put in place to tighten the standards for acceptable papers. It is my intention in the year to come to examine the quality of papers, particularly those that are not wrong, but neither are they significant.

In contrast to the regular submissions, the acceptance rate for *OE Letters* has risen to 45% (Table 4), up from 38% last year. The number of acceptances did not change, but the number that were declined was smaller. In the case of *OE Letters*, my rough evaluation as the letters cross my desk is that the papers are of a higher caliber than the regular submissions. Those authors who meet the stricter criteria for publishing an *OE Letter* benefit not only from rapid publication (see Table 7 below), but also their papers will be published as Open Access documents, so that anyone visiting the SPIE web site can download them.

As evidenced in Table 5, there has been a dramatic increase in the papers published by authors from Asia, and a slow decline in papers from North America and Western

Table 4 *OE Letters* statistics for 2003 to 2006.

	2003	2004	2005	2006	%
Letters received	124	118	131	120	
Letters published	36	39	50	50	
Accepted	39	41	50	49	44.5%
Declined	77	69	80	61	55.5%

Europe. Of the 525 papers published this year, more than half were written by Asian authors. This is, I think, the first time in a long time that one region accounted for the majority of papers in this journal. At the same time that the submissions from non-English-speaking countries rose, I have rejected only a handful of submissions for poor English in the past two years.

With the advent of e-First, early publication of papers online, the introduction of color figures, and now preparation for multimedia content, the journals staff at SPIE (their names are listed on the masthead) has performed admirably. They are a smart, savvy group of women, who monitor the paper submissions with an awareness of the potential for plagiarism and double-publication violations. They also serve as advocates for authors when the papers are taking too long to review. I consider myself lucky to have such support in this enterprise of our Society. They are pleasure to work with.

Table 6 provides an overview of the activity within the journals office for *Optical Engineering*. For years there have been major increases in every aspect of the journal: reviewers, reviews, and revisions. This year, there was a modest drop in papers submitted, but the activity for these same categories dropped substantially. Because papers submitted in a prior year get reviewed in the current year, it is not possible to sort out these year-to-year trends, but

Table 5 Number of papers published by region of first author in 2003 through 2006.

Region	2003	2004	2005	2006
Africa	0	2	5	4
Asia	211	172	212	283
Australia	8	3	5	5
Eastern Europe	7	13	28	12
Middle East	15	14	10	15
North America	161	142	152	136
South/Cent. America	3	4	3	2
Western Europe	82	72	100	68

Table 6 Activity of the editorial office in 2005 and 2006 (regular papers only, including *OE Letters*).

	2005		2006	
	Number	% change vs 2004	Number	% change vs 2005
Reviewers selected	5427	+60.1%	4029	-26.3%
Reviews received	1931	+34.7%	1564	-20.3%
Revised manuscripts received	716	+62.7%	604	-17.0%
Papers returned to authors for revision	697	+23.4%	642	-8.6%

certainly this interruption in a long-time trend is noteworthy. It will be interesting to see what happens next year.

Two measures that we monitor carefully are the times to review a paper and to publish it. To an author, the only time that matters is the duration between submitting the paper and seeing it published. But the process consists of two distinct phases, review and publication. The first is determined chiefly by the reviewers, the second by the copy editing, typesetting, and printing process, although the latter does not have as large an effect as it did before e-First was introduced.

The review phase has remained fairly constant at 9 to 10 weeks with the exception of 2004 (Table 7). This was

Table 7 Journal performance for reviews and publication time.

	2002	2003	2004	2005	2006
Average time for review (weeks):					
Regular papers	8.9	8.4	11.4	9.5	9.8
<i>OE Letters</i>	3.6	4.4	6.7	5.1	5.0
Average time acceptance to publication (months):					
Regular papers	6.4	5.8	5.6	5.8	7.4
<i>OE Letters</i>	3.0	3.2	3.4	2.3	2.4

perhaps due to the change over to the browser-based Peer X-Press review system. But how does one explain the one and a half month increase in our publication time? The answer, I think, lies in the first set of statistics that I discussed, the increase to over 500 papers per year for the past two years. The size of the printed journal restricts the number of papers per issue. Over the past few years, the production process has improved, but the papers in the publication queue get larger. Since only 40 to 45 papers can be published in each issue, the time to publish increases.

One way to remedy this problem is to become more selective in choosing papers. The drop in the acceptance rate from 63% to 59% is a step in the right direction. During the coming year I intend to review the reviewing and decision processes to determine what changes could be made to raise the acceptance standards, while providing a fair evaluation of the papers submitted to this journal.

Our research cannot progress unless we publish our work and our work cannot be published until knowledgeable referees have reviewed it. So the peer reviewers are important to us both as authors and readers. I thank all of you who served as reviewers this past year. I trust you will continue to be part of this remarkable combination of our technology and our humanity.

I want to thank the members of the Board of Editors for their contributions toward maintaining these standards. Their names and affiliations are also listed on the masthead. I want to thank Jennifer Ricklin, who was responsible for papers in the area of atmospheric optics. On occasion I addressed her as St. Jennifer for her careful, courteous, and patient work on a number of papers. Her area is now covered by Patti Gillespie of the Army Research Lab. Also, to assist Casimer DeCusatis, who has single-handedly taken care of fiber optics and communications, I have asked Benjamin Dingel of Nasfine Photonics to assist in this area. I am fortunate to be able to work with such a great group of people. Thank you all.

Postscript to my October editorial, "A Prison Cell"

As I finished this editorial, Apple was announcing their version of the cell phone. A bit pricey, but it meets all of the objections to my current device and provides some additional features I never even considered.

Donald C. O'Shea
Editor