Optics Letters:

OSA Gets the Word Out on Optics — Fast

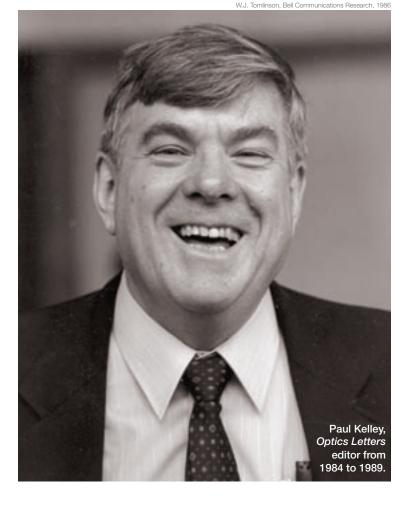
John N. Howard

By the mid-1970s, the Optical Society had entered a relatively stable period: *The Journal of the Optical Society of America* (JOSA) was running about 1,700 pages per year and slowly growing, and *Applied Optics* (AO) was developing even more rapidly at about 3,200 pages per year.

The Society itself had begun to grow again after weathering a grim recession from 1970 to 1972, during which it ran a deficit and experienced a slight dip in membership. OSA's Publications Committee was finally in a good position to consider making some improvements to the Society's journals.

One of the principal complaints that authors had about OSA's journals at that time was that they were too slow in processing letters. Researchers at the cutting edge of optical research into lasers, fiber optics and other emerging applications wanted a rapid mechanism for disseminating their results—not the slow process associated with formal peer review.

Well, there are some realities about the refereeing process that make shortening it a tall order. When an editor receives a manuscript and sends it to a couple of readers for opinions, at least one of them is likely to be unavailable due to teaching,



research or travel commitments. Although referees are asked to reply within two weeks, they routinely take twice that long. They are busy with their own work, which usually takes priority (understandably) over their voluntary contributions to the journals.

Moreover, the delays don't end after referees respond. Most referees suggest revisions—which means the manuscript must go back to the author for further work. Even if a referee were to be very prompt and request few changes, manuscript processing, galley proofing, printing and mailing require at least three months. What could OSA do to shorten this process?

The editor of *Applied Optics* tried introducing a "Rapid Communications" department into that journal. Here's how it worked: If a manuscript came in that was already sponsored by an OSA Fellow who was not from the same organization

as the author, the editor would regard that sponsor as the referee, and accept his or her endorsement in lieu of refereeing. The sponsor was identified under the title of the published Rapid Communication, so he or she would share the blame if the submission contained shortcomings.

This approach shortened the processing time by perhaps a month. Even so, most authors did not seem to like seeking their own sponsors, and Rapid Communications never became a widely used mechanism in *Applied Optics*.

In 1976, Douglas Sinclair became editor of JOSA. In an effort to promote prompt processing, he converted the Letters to the Editor department into "JOSA Letters." Each letter could be up to two printed pages, so that authors could use this forum to summarize and disseminate new research findings.

However, the change did not result in an increase in the number of letters

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submitted to JOSA. Authors of breakthrough papers seemed to prefer to publish them in *Applied Physics Letters*, *Electronics Letters* and *Optics Comunications*.

The members of the OSA Publications Committee carefully analyzed the editorial practices of these "letters" journals as well as the submissions they contained. It appeared, for example, that a few of the authors appearing in the European letters journals were avoiding similar American publications because most U.S. journals have page charges (even though such charges are voluntary). But a much larger fraction of authors seemed to be merely seeking fast but prestigious publication. If OSA could provide a decent alternative mechanism, perhaps many of those authors would move to the OSA journal.

Thus, *Optics Letters* was born. Publication was carefully planned to begin in July 1977 and continue monthly thereafter. Robert W. Terhune of the

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Ford Research Laboratories—who was a member of OSA's Publications Committee and instrumental in creating the journal—served as the first editor from 1977 to 1983. He was assisted by 12 associate editors and an editorial panel that comprised 57 U.S. and Canadian experts plus 24 others from overseas.

Just about every important group in optics research had an editorial representative on *Optics Letters*. And this panel was not simply a list of honorific names. It was a working group with whom the editorial staff communicated regularly—via telephone or express mail—about the suitability of manuscripts. Before

manuscripts were mailed out for review, an internal editor called the reviewer to make sure that he or she was ready and able to respond quickly.

Manuscripts for *Optics Letters* were strictly limited to three printed pages including tables and figures. No clever ruses were allowed (e.g., splitting a six-page paper into Part A and Part B). To ensure prompt publication, the entire editorial operation was managed by OSA's Executive Office. With speedy refereeing and processing, the time from submission to publication was brought down to three or four months—and this usually included a return of the manuscript to the author for

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ATTRIBUTE	COMMERCIAL QUALITY	PRECISION QUALITY	MANUFACTURING LIMITS	60643 60756
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DIAMETER (mm)	+0.00/-0.10	+0.000/-0.025	+0.000/-0.010	62036
CENTER THICKNESS (mm)	±0.150	±0.050	±0.025	65156
SAG (mm)	±0.050	±0.025	±0.010	67047
RADIUS (mm)	±0.2% & 5 fr	±0.1% & 3 fr	±0.0025 or 1 fr	68931
IRREGULARITY (fringe)	2	0.5	0,1	69154 71353
ASPHERIC PROFILE (microns)	±10	±1	±0.1	71729
WEDGE LENS (ETD, mm)	0.050	0.010	0.002	72438
WEDGE PRISM (TIA, arc min)	±3	±0.5	0,1	75035 7552
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Interestingly, the addition of *Optics Letters* to OSA's existing journals has not particularly altered the number or types of letters received by JOSA or AO.

suggested revision. This processing time is twice as fast as that for JOSA, *Applied Optics* and any other non-rapid journal.

The new letters journal was sent to all OSA members without additional charge for its first five years, and sent gratis for the first year to non-member organizations that already subscribed to JOSA or *Applied Optics*.

Having successfully founded the new journal and guided it through the early years, Robert Terhune resigned as editor in 1983 and turned his attention to the challenge of converting JOSA into two new journals: JOSA A and JOSA B. Paul L. Kelley of MIT's Lincoln Laboratory succeeded Terhune. Kelley served two

terms as editor of *Optics Letters*, from 1984 to 1989, and was followed by Peter W.E. Smith of Bellcore, who began his term in 1990. Anthony Johnson of the Center for Advanced Studies in Photonics Research served as the journal's editor from 1995 to 2001, after which Anthony Campillo of the Naval Research Laboratory took the helm. Campillo is the current editor of *Optics Letters*.

Optics Letters has grown rapidly, from thin initial issues of only 250 pages per year to 1,500 pages by 1990. Interestingly, the addition of this journal to OSA's existing journals has not particularly altered the number or types of letters received by and published in JOSA or AO.

The circulation of *Optics Letters* dropped slightly in 1982, when the free distribution to OSA members ended, but the journal has steadily regained readers ever since. It moved from a monthly to a twice-monthly publication schedule beginning in January 1989.

Today, the journal is operating comfortably as a full partner in the OSA family of publications. In 2002, OSA celebrated the 25th anniversary of *Optics Letters* at a special reception at its annual meeting that reunited past and present editors. The journal is consistently ranked by ISI as the premier peer-reviewed optoelectronics journal in the world; in 2004, it was once again cited as the most heavily cited journal in optics, along with *Optics Express*, another OSA journal.

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