

JOSA, 1961–1983

John N. Howard

OSA's first journal, the Journal of the Optical Society of America (JOSA), had been launched in 1917. Under the stewardship of a series of competent editors, it enjoyed growing popularity among authors and readers, even in the face of competition from an increasing number of specialized journals. JOSA's first four decades were chronicled in a column published in the September 2002 issue of OPN.

Deane Judd, who succeeded Wallace Brode as editor of JOSA, served only one term. He had accepted the position of editor somewhat reluctantly in 1960, as he was approaching the age at which he could retire from his job at the National Bureau of Standards (NBS). Judd was planning to devote his post-retirement years to writing technical papers; he also held positions on several committees engaged in work in the area of color perception, his own particular field of interest. Since he had discovered that the editorship demanded more time than he had expected, Judd was pleased to learn that David L. MacAdam of Eastman Kodak Company—also an expert on the science of color, as well as a longtime OSA stalwart—was willing to serve a stint as editor of JOSA. MacAdam had been the first OSA Lomb Medalist (1940) and had served as president of the Society in 1962. (He would go on to receive OSA's Ives Medal in 1974.)

MacAdam served four terms at JOSA's helm, from 1964 to 1975. As an editor, he was considered somewhat of an activist: he insisted, for example, on SI preferred units and terminology, including metric units. He scrutinized authors' grammar, ruthlessly excising dangling participles. A few authors who believed their timeless prose should never be altered were upset, at least initially, by this treatment. But a much larger percentage found MacAdam's assistance useful and considered working with him a learning experience. In any case, over the course of the 12-year period, even the most difficult authors had to learn to defer to MacAdam's will.



David MacAdam, editor of JOSA from 1964 to 1975, with his colorimeter for the determination of "MacAdam ellipses."

In 1976, MacAdam was succeeded by Douglas C. Sinclair of the Institute of Optics in Rochester. Sinclair would serve through 1978. (In recommending him for the position, the OSA Publications Council described him as "youthful" and "energetic," quite a compliment since MacAdam himself had been known for his seemingly boundless energy.) For the most part, Sinclair continued the refereeing and manuscript processing systems used by his predecessors. In an effort to respond to complaints that manuscript processing—even for letters—was too slow, he revamped the letters section, renaming it "JOSA Letters" and stipulating that contributions were not to exceed two printed pages in length. Letters in the new section were also accompanied by 50-word abstracts. But perhaps Sinclair's principal innovation was the introduction, on an occasional basis, of topical issues devoted almost

entirely to papers on a selected feature topic. In preparing the topical issues, Sinclair was assisted by a guest editor.

As editor, MacAdam scrutinized authors' grammar, ruthlessly excising dangling participles.

There was a special issue on speckle in optics in November 1976; the following year, there were feature issues on adaptive optics, submillimeter waves and electrophysiological techniques in vision.

The feature issues, and in particular the practice of inviting guest editors active in exciting areas of optics to organize them in their own fields of expertise, were part of an effort to help JOSA

catch up in size to *Applied Optics*, by now a much bigger and more lively journal. To promote the features, Sinclair had the audacity to occasionally delete from JOSA's cover the Society's traditional logo (an illustration, adapted from Newton, of light dispersed by a prism). On the covers of such issues, the OSA logo was replaced by a box in which the topic of the feature was announced.



During the tenure of Joseph Goodman of Stanford University, who served as editor from 1979 to 1983, manuscript processing at JOSA was moved in-house. The OSA Board of Directors was convinced that staff had sufficient experience to take on the job.

In 1979, Sinclair was succeeded as JOSA editor by Joseph W. Goodman of Stanford University. (Goodman would serve until the end of 1983, when he resigned to finish writing a book, *Statistical Optics*.) Operation of the journal under Goodman continued more or less as before, although as editor he expended particular efforts to attract manuscripts in the exciting new areas of optical processing, optical computing and optoelectronics. He also made use of occasional feature issues—five in five years—to cover topics such as optical phase conjugation, photoacoustic spectroscopy and signal recovery.

The major change that occurred during Goodman's tenure was in how manuscripts were processed. The American Institute of Physics (AIP) had produced JOSA for OSA since 1931, but in late 1980, the Society's Board of Directors decided there was enough in-house competence to bring copy editing and manuscript preparation into OSA itself.

Since about 1970, OSA staff had produced bound digests of the extended abstracts of papers presented at OSA topical meetings. In 1975, staff had also started to produce *Optics News*, a quarterly magazine which contained Society news, announcements and the programs of upcoming meetings. In

1977, another turning point occurred with the inauguration of *Optics Letters*, a journal for the rapid publication of short communications. By 1981, the Board was convinced that OSA staff was sufficiently experienced to produce JOSA as well. An immediate result of bringing production into OSA was that the issues of the journal began to reach members during the course of the same month listed on the cover. AIP was a large organization engaged in publishing a number of journals; over the years, its size and the range of its interests had been seen as contributing to delays in publishing JOSA.

With the appearance of volume 73 in 1983, JOSA was phased out to make room for its successors, JOSA A and JOSA B, which first appeared in 1984. The new journals were considered a second series; each appeared under its own name as Vol. 1, No. 1.

Thus ended, after 66 years, the story of a publication which in its time was without doubt the world's leading optics journal. Between its appearance in 1917 and the end of the first series in 1983, JOSA published 63,429 pages of text, mostly technical articles but also meeting programs, OSA directories, Ives lectures, book reviews and Society news.

John N. Howard (howards@gis.net) is founding editor of *Applied Optics* and retired chief scientist of the Air Force Geophysics Laboratory.