

Proceeding Along

In a place of honor on the top shelf of my bookcase sits a row of blue books. Some are pristine, but several are dog-eared with use. One, to my lasting pride, has my name on the spine. These are my Blue Books: my MRS Proceedings.

The MRS Proceedings have an illustrious heritage, and they have been a critical piece of the Materials Research Society for many years. In the early days of MRS, they were both the chief record of the meetings and the financial bulwark of the Society. The Proceedings had a very high author participation (>65%), and so provided a complete (and very valuable) snapshot of an entire field. Almost all sold well, both to meeting attendees and to libraries. In the early 1980s, the average print run for each volume was over 500, with the best-sellers going well over this. MRS's best-sellers include the 1987 high- T_c volume (Vol. 99, 1500 copies), the 1990 *Better Ceramics through Chemistry IV* (Vol. 180, 1100 copies), and the 1988 thin-films book (Vol. 130, 1000 copies). These Blue Books obviously met a great need in the community. In addition, the profits from the Proceedings were an essential element of MRS's financial operations through the 1980s, producing enough cash to help hold down meeting registration fees. Even in the 1990s, the Society could count on the Proceedings to average >65% author participation and print runs averaging >500.

However, this strong history of the Proceedings runs counter to some background trends in scientific publishing. The book-on-the-shelf approach to scientific literature looks increasingly endangered. With the advent of electronic publishing, the ISI *Science Citation Index* is all-important, and its rules for listing publications specifically exclude proceedings. This makes proceedings papers harder to find, and their value for many users is less than that of "real," or "archival" (indexed), articles. (If the work is found and correctly cited, citations to proceedings will usually appear in an author's citation index. This is critical, as the citation index is a yardstick by which many institutions try to quantify scientific merit for purposes such as promotion and tenure.)

As a consequence of these and other trends, the level of author participation in MRS Proceedings has fallen from well



"The MRS Proceedings have an illustrious heritage... and 560,000 downloads"

David J. Eaglesham

over 65% (as recently as 1995–1999) to below 50% (2000–2003). The sales of printed books have dropped by about a factor of two, which is a result of competition and the decision by the Society several years ago to make on-line access to all Proceedings papers free to MRS members. Since the costs are largely fixed, this has transformed the "print" Proceedings from a money-spinner into an activity that breaks even at best.

However, the Proceedings appear to have a new lease on life through newly available library subscriptions as well as member access. Over 12,000 papers are presently posted on the MRS publications Web site (www.mrs.org/publications/epubs/proceedings/). Almost half of the papers posted to date on the Web site (5,000 papers) have been downloaded at least 30 times. Given that the average scientific paper is cited only a handful of times (~12 times for U.S. papers), that statistic seems to say that the e-Proceedings are important to members (Web crawler activity is filtered out). There was a total of 560,000 downloads in 2004 alone, averaging 48 per paper, or 43 per member. Annual downloads of individual papers frequently run to hundreds of hits for a single paper. This may increase with

search engines that do not discriminate against Proceedings, such as Google Scholar (<http://scholar.google.com/>).

The MRS Board has recently decided to take action on the printed publications against this overall background. The data indicate that the (electronic) content in the Proceedings seems to be increasingly valuable, and the hard-copy Blue Book seems to be of value only to some symposia. It seems clear that MRS should migrate toward e-Proceedings, but it is also important to recognize that the printed Proceedings still have considerable value in some communities. Recent Proceedings that are notable successes in traditional Blue Book form include Vol. 713 on nuclear waste management (2002), which captured the symposium well (76% of authors) and has already run over 250 copies. The Board's decision was that the crucial issue for an MRS Blue Book is that it be truly representative of the symposium, based on author participation. This separates the question of whether a Blue Book is valuable from the issue of whether it is profitable. A threshold was accordingly set, based on minimum participation level. At the 2004 MRS Fall Meeting, this minimum was set at 50%, but the intention is to continue to raise the minimum participation level over time. The goal is for MRS to publish printed Proceedings only when they are representative of the symposium at the meeting. We believe that these will be the communities that most value the hard copies of the book. We hope that those symposia who choose not to publish a Proceedings under these constraints can work to try to bring out their content in e-Proceedings on the MRS Web site and, if they wish, through a special issue of a journal (such as the *Journal of Materials Research*) or by providing links to other archival sites. The hope is to reserve the Blue Book option for those communities that have a need for the traditional model, where the progress in the whole field is summarized in a single place in one excellent book. Thus, the Blue Books can reclaim their rightful place on the top shelf of those who use the Proceedings as a ready reference, while the e-Proceedings can grow to serve their own communities.

DAVID J. EAGLESHAM
2005 MRS President

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