

**MRS** Bulletin

## The art of the scientific paper

Writing scientific papers is essential for researchers. It is what we do on a day-to-day basis to inform the community of the results of our thinking and our experiments. It is the way we let colleagues in our sub-field know of breakthroughs, new results, and incremental advances. Peer review ensures quality, and the correct journal and editorial processes allow for credibility and value.

Given the importance of disseminating our research, it is remarkable how unprepared most of us are for writing articles as we begin our careers. Most of us as graduate students are offered no formal training in writing, and we depend on our advisor, professors, fellow students, colleagues, and reviewers as we muddle our way through our first paper. For those of us who are not native-English speakers, this task is even more daunting. Eventually, with experience, we get better at it. Some of us have an inherent talent for writing that is reflected in the papers we publish. A few of us become outstanding writers, even if this is confined to scientific papers, and a subset of us move on to popular science writing.

We are scientists and researchers, not professional writers. We don't have to be brilliant at prose. Our papers don't need to be literary masterpieces. But there is something to be said about a well-crafted, clearly written paper. Every now and then, we come across a paper that excels in hitting all the marks—the motivation for the work, the results, and the conclusions effortlessly stand out. This is especially valuable if the subject of the paper is outside our field of expertise. A good scientific paper does not need complex language. Simple sentence constructs and clear language go a long way in making the reader understand what we are trying to say.

But more than good writing, the craft of storytelling can make a paper outstanding. Of course, the science must be compelling and excellent, but a scientific article can be more than the dry

telling of facts and conclusions. It can be made more interesting by imagining a storyline, interjecting mystery into the narrative, and revealing the surprise conclusions. This requires more thought and more deliberate use of certain storytelling strategies, but these are not difficult to learn nor need they be time-consuming. The outcome could be a paper that is read and cited more, expanding its reach.

In his memoir on the art of writing, Stephen King said, "Writing is about getting happy." Writing scientific papers can be about more than increasing the number of publications we have published or another step in our research career. A well-written paper that is read by many, referenced in subsequent papers, and mentioned in presentations can bring a sense of immense satisfaction and joy.

Which brings me to the **MRS Bulletin Postdoctoral Publication Prize**. This is a new prize, supported by the Jiang Family Foundation, instituted to recognize a postdoctoral researcher or fellow (defined as at least six months post-PhD, but no more than five years post-PhD) not only for their research achievements and future potential, but also for their interest in scientific writing, communications, and publications. In addition to a cash prize, the award recipient will be offered the opportunity to publish in *MRS Bulletin*. Both nominations and direct applications are accepted, and the deadline is July 31. We welcome your application if you are a postdoc, or your nominations for your postdocs. For additional information, see page 444 or visit [www.mrs.org/bulletin-prize](http://www.mrs.org/bulletin-prize).

*MRS Bulletin* is committed to advancing scientific communication, supporting and encouraging postdoctoral researchers, and providing opportunities for the next generation of scientific communicators. The *MRS Bulletin* Postdoctoral Publication Prize has been instituted in this spirit.

**Gopal R. Rao**  
Editor, *MRS Bulletin*  
[rao@mrs.org](mailto:rao@mrs.org)

**Application  
Deadline**

5:00 pm (ET)  
July 31, 2017

[www.mrs.org/  
bulletin-prize](http://www.mrs.org/bulletin-prize)