

## What Graduate Students Want to Know

There have been several recent occasions where I was asked, often together with other editors of sister design journals, to elaborate on JMD and its processes as an archival journal. Topics vary but usually include questions on what is the journal's scope, how you get your paper accepted, and how you write good reviews. In the Q&A following these sessions, the majority of questions come from graduate students in the audience who are thinking about their own work and are trying to "learn the ropes."

In JMD, I have addressed many of these topics in various editorials over the past several years (see, http://asmejmd.org/editorials.php). But it is always timely to share thoughts with graduate students who are entering the scientific publication arena. These thoughts may be more broadly useful but at least any pedantry to experienced authors would not be intentional.

Journals may have apparently similar or overlapping scope. How do you pick a journal to send your work? There are many factors here at play. Some are: Quality, community, matching, and timeliness. There are various numerical scores broadly based on countable citations touted as quality metrics. While useful, they have obvious limitations as they are biased by the vagaries of commercial indexing and purposeful "tuning." To check for real quality you must read the articles and judge for yourself; ask your professors and other experts you respect; and look for where other prominent contributors publish their own work. This leads us to thinking about your desired community. You need to decide which company you want to keep! These are the people whose work you like and whom you wish to know your own work and hopefully value it. In the long run, the people in your selected community will define you, like it or not. They will offer you advice, job opportunities, recognition, and friendship-often lifelong. Matching the scope of a journal to the topic of your work is another obvious criterion. There is some lattitude there, as a paper can be written in ways more closely tailored to a particular community and journal. How long it takes to complete the review and eventually publish it is also an increasingly important factor: Promotions and even awarding PhD degrees in some institutions may depend on just a few months' difference. Our JMD pledge to complete each paper review within six months (we were at a 4.2-month average in 2010) is very important, and I am often reminded of it!

How do you get a paper accepted? All good papers have the same characteristics: They have something interesting to say; they say it clearly and simply; they say it with knowledge and in the context of previous published work; they do not claim more than they should, and they point the inevitable weaknesses. My most

common advice is: One paper, one point. Keep it simple, keep it focused. Oh, and one more thing: Say it well! Write carefully and make sure every word has a reason for being used. This makes everybody happier and predesposes the reviewers positively. Many published papers, including in JMD, could be 20-30% shorter and thus more attractive. When selecting a journal, look at all the information provided on scope, format, etc., and take it seriously. Most questions I get are already answered in our websites, and many requests I make to authors are already explicitly articulated at these sites. Finally, take the reviewers' feedback seriously, in good faith, and at face value. Even when you believe a review is offensive, incompetent or unfair, there is something to learn from it. Use it and improve your work. Construct a firm but polite rebuttal document indicating how you addressed each point of each reviewer in the revised manuscript. At the end, it is your job as an author to make your work interesting and appealing.

Oftentimes, a journal paper is first born as a conference presentation. The general principle is that a journal paper comprises a complete, fully investigated, "archival" body of work—something that would be still informative and interesting to read many years later. A conference paper is an early communication of an idea. It meets a lower barrier to acceptance, may include some work in progress and be somewhat exploratory. While quality should still be high, a conference paper in a sense provides the background for a meaningful discussion of the work during the conference. In this spirit, it is often a good idea to present your work at a conference, extract as much feedback as you can from other researchers there, and use this experience to improve and finalize the work in an archival form suitable for a journal. While the age of instant access to all documents has affected our traditional sense of archiving, the philosophical distinction between a conference paper presented for idea exchange and a journal article intended as a permanent record still stands.

The best training for writing good papers is to learn how to review the papers of others. Professors often ask graduate students to do reviews. Make sure you do a concsientious job and discuss your draft review with your advisor. Write a review putting yourself in the authors' shoes. There is much to learn this way from both good and not so good papers. If you do the review under your advisor's name or jointly, make sure your advisor mentions this to the journal editor, so you can gradually get yourself into the "system." You may be surprised how long editors remember the reviewers' work.

**Journal of Mechanical Design** 

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SEPTEMBER 2011, Vol. 133 / 090201-1

Finally, if an academic career is your goal after graduation, think about timing and first impressions. You want to have enough of your work published in journals by the time you start looking for a job, so you can demonstrate that it has passed the peer review process as well as the rigor of your dissertation committee. On the other hand, conference presentations are where you join your intended community and again you may be surprised how lasting are first impressions about you. So write your conference

papers as good as they should be for a good archival journal, and send your journal submissions early so they can be the testimony you will need once you start the job search. As everything else in life, balancing your priorities and doing some planning will serve you well.

Panos Y. Papalambros Editor

**090201-2** / Vol. 133, SEPTEMBER 2011

Transactions of the ASME