Technical Manuscript Writing for Doctoral Candidates

David J. Keffer
Department of Chemical and Biomolecular Engineering
Yonsei University
dkeffer@utk.edu

Module 14. The Review Process

In this module we discuss the submission and review process for a manuscript. The work does not end with the submission of the manuscript. In these notes, we discuss the process and the work involved at each step in the process. In this lecture module, we divide the process into four steps.

- submission
- review
- revision and resubmission
- acceptance

1. Submission

Typically, manuscripts are submitted to a journal via a website. The complete submission requires several documents, including

- the manuscript, including text, table, figures and references
- the supporting information
- a cover letter to the editor
- a transfer of copyright form
- supporting material for review only

The copyright isn't transferred until the paper is accepted for publication, but many journals request that it be filled out before the review process begins. This ensures that the editors and reviewers don't expend effort on a paper, to which the author eventually refuses to hand over the rights.

The supporting material for review only typically takes the form of a reference under review or in press. For example, if you are referencing a work of your own that is not yet publicly available, it can be included as supporting material for review only and made available to the reviewers.

Other information must also be provided via the website, including all of the contact information for every author and a list of three-four recommended reviewers, including their contact information.

Upon submission, you typically receive an email acknowledging receipt of the manuscript.

Example:

For the purposes of following the submission and review process, we will use the following example:

Wang, Q., Keffer, D.J., Nicholson, D.M., Thomas, J.B., "Coarse-grained Molecular Dynamics Simulation of Polyethylene Terephthalate (PET)", *Macromolecules*, **in press**, DOI: 10.1021/ma102084a, 2010.

The document included in the submission of this manuscript are provided on the course website and include

- the manuscript, including text, table, figures and references
- the supporting information
- a cover letter to the editor

2. Review

In general, the manuscript is sent an editor. The editor then makes a decision whether the paper has any chance to appear in the journal. If the editor decides that the paper is not sufficiently appropriate to merit external review, then s/he will return the manuscript without review. The higher impact the journal is, the more likely an editor is to return a manuscript without external review. There is little point in arguing with an editor that has chosen not to have the manuscript reviewed. Typically there may be a few sentences providing the reason that the paper did not merit external review. The appropriate course of action is to (1) read the reason, (2) adjust the manuscript accordingly, if applicable and (3) reformat the paper for submission to a different journal.

If the editor send the manuscript out for review, you wait about a month before you receive the reviewer's comments. Usually, the editor tries to send all the reviews at the same time. Sometimes, a late review arrives and the editor sends it afterward.

Example:

For our example [Wang *et al.*, *Macromolecules*, 2010], the three reviews of this manuscript are provided on the course website. Typically the reviewers are asked to make a general recommendation in addition to providing specific comments. The general recommendations usually are

- publish as is (no changes needed)
- minor revision (does not need to be reviewed again)
- major revision (needs to be reviewed again)
- reject

In this case, the first reviewers suggests "major revision". The second two reviewers suggest "minor revision".

Please note that these reviews contain valuable information for improving the manuscript. Each suggestion should be carefully considered.

3. Revision and Resubmission

Assuming that the reviews call for modifications, which is the typical case, one must submit a revised manuscript. The materials submitted for the revised manuscript include

- the revised manuscript, including text, table, figures and references
- the revised supporting information
- a cover letter to the editor
- an itemized response to the reviewers' comments

This last document, an itemized response to the reviewers' comments, must be examined in greater detail.

Example:

For our example [Wang et al., Macromolecules, 2010], two documents related to resubmission are included on the course website:

- the revised manuscript
- a cover letter to the editor, including an itemized response to the reviewers' comments

It is instructive to study the itemized response to the reviewer's comments.

The reviewer makes his/her comments because they want to see changes in the published manuscript. The purpose of the itemized response to the reviewer is not to argue with the reviewer. This will not help in the slightest. Presenting long arguments in the response to the reviewer without corresponding changes in the revised manuscript is not useful. One should clearly indicate whether or not changes were made in response to each of the reviewer's comments.

One should consider all of the reviewers' comments. Where the reviewer simply misunderstood the paper (or in your opinion read it carelessly), one should take this as an opportunity to clarify that particular aspect of the paper so that even a careless reader comes away with the correct message.

If the reviewer recommends that one include additional citations to relevant work, then one should include those references. This can often be done with a single sentence and will assuage the reviewer. Only in egregious cases, should a request for the inclusion of a citation be ignored.

If the reviewer recommends that new work be performed, then one must consider this. If the new work is additional analysis of existing data, then one should make every effort to do this extra work. It can be included in the supplementary information if you judge it not to be central to the work.

If the reviewer asks that a large amount of work be done, or that analysis be done that would require repeating old work, then the authors may decline to adopt this suggestion. However, there must be a justification for declining each suggestion. Frequently, rather than just flat out

stating that you will not agree to the request, you may find some less arduous alternative that may placate the reviewer.

Remember: Always be civil in a review and in the response to the reviewer. We are all human beings. We don't like to hear bad news. Keep in mind that a negative review can be viewed as "free constructive criticism".

If you receive a thoroughly nasty review, remember also that some people are just born assholes. Take a deep breath and move on. Do not sink to the level of an uncivil reviewer. Editors appreciate civility and will over-rule an obviously biased or hostile reviewer.

4. Acceptance

Even when the manuscript is accepted for publication, the work is not done. Typically within a week or two of acceptance, the manuscript will be reformatted by the journal staff. A "galley proof" will be sent to the authors. This galley proof shows how the paper will appear in the journal.

It is the duty of the graduate student to make sure that no errors were added to the paper by the journal staff in the reformatting process. Sometimes the journal staff have questions and these queries must be answered. Sometimes, errors are made. Typical places for errors are in the equations and the references. These have to be checked thoroughly.

Note, journals do not allow changes in the manuscript at the galley stage beyond error correction. The manuscript should be published as it was approved by review. Changes to the manuscript after review are not allowed because they circumvent the review process. They also create extra work for the journal staff.

Example:

For our example [Wang et al., Macromolecules, 2010], one documents related to acceptance is included on the course website:

• the galley proof

In this example, we did not find any errors in the galley proof. We approved it as is.