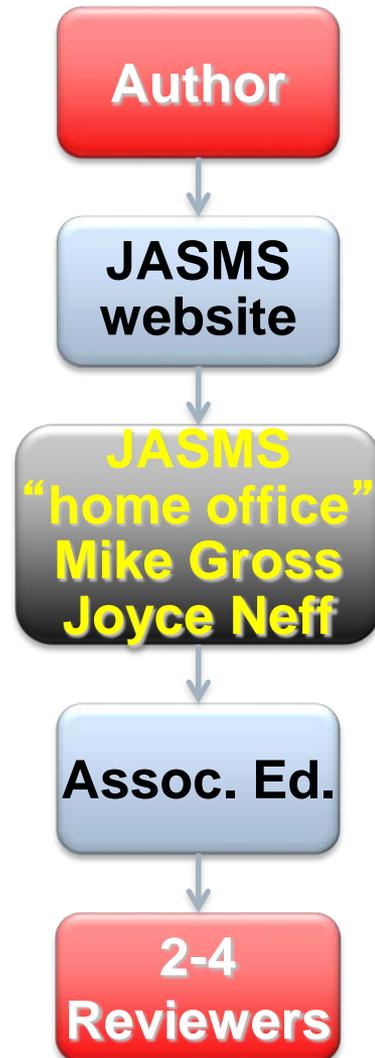


Reviewers'
Workshop:
ASMS
Conference
2015

Reviewer Workshop Agenda

- Provide overview of manuscript review process
 - Describe characteristics of a good manuscript
 - Describe “hows” of reviewing a paper
- This is intended to be a **dialogue**

The “Process” @ JASMS



Submit manuscript

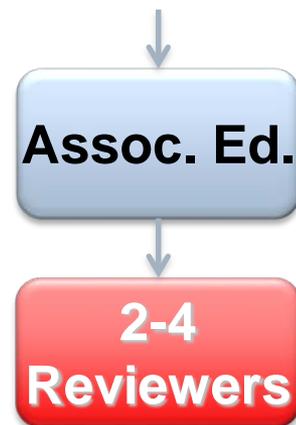
*Exam for scope
and content*

*Distribute to
appropriate
Assoc. Editor*

*Distribute to
appropriate
reviewers*

Selecting Manuscript Reviewers

- Suggested by author
- Cited in manuscript
- Active in the field
- Has relevant expertise
- Good reviewing record

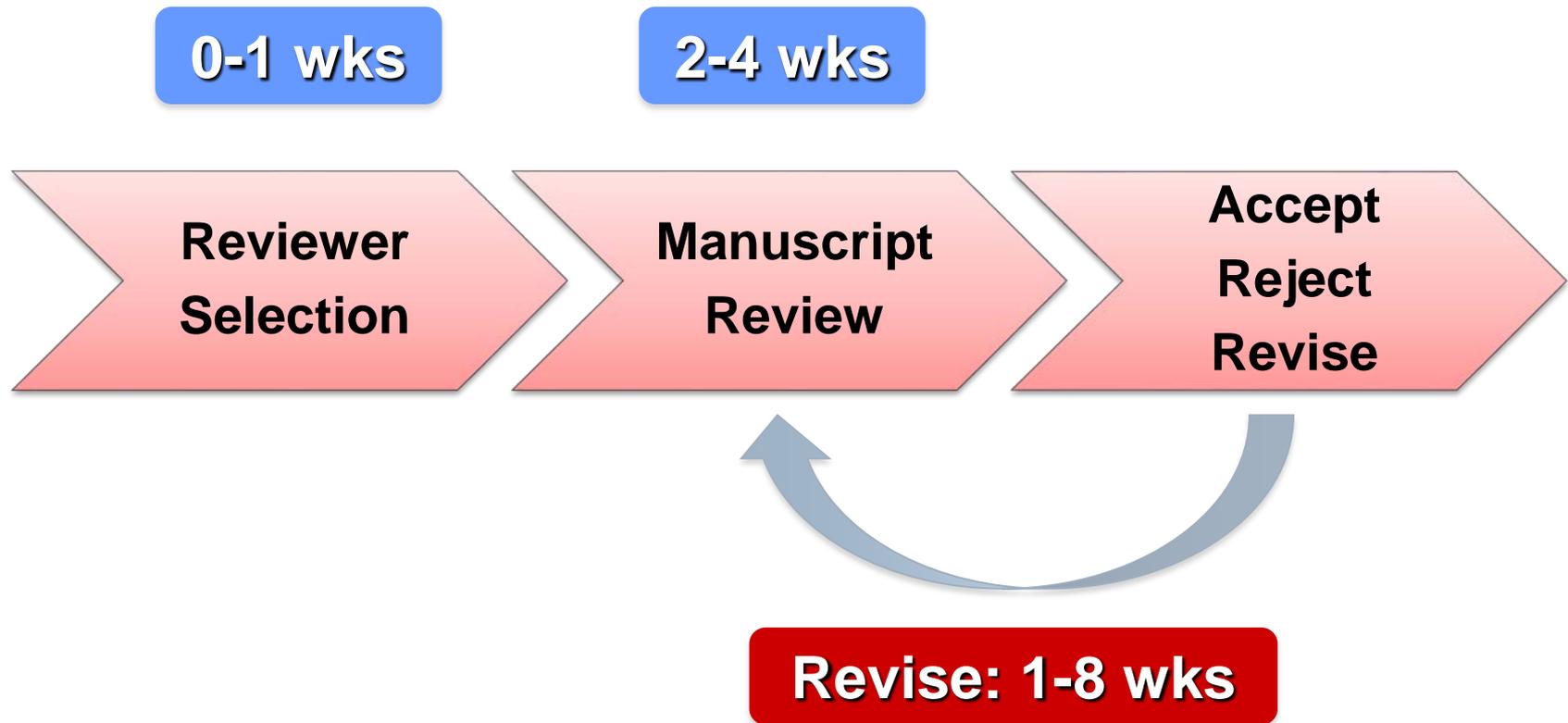


*Distribute to
appropriate
reviewers*

Want to Review for JASMS?

- Contact us: Editor, Assoc. Eds., Managing Ed.
 - JLoo@chem.ucla.edu
 - Neff@wustl.edu
- Summarize your background, expertise

Timeline of a Manuscript



Preparing (and Reviewing) a Paper

Abstract and Overview

- In general, consult ACS Style Guide for grammar, style.
- Provide purpose and short perspective of paper. Do not include extensive literature review
- Give key results (recall abstract is readily seen in electronic searching) but minimize experimental details.
- Offer short description of interpretation and conclusion
- Keep it short: < 250 words
- **Role of Reviewer:**
 - Prior to commenting on Abstract, if needed, add a short (few sentence) summary of article, indicating a general comprehension of article, its importance, your enthusiasm.
 - Avoid *ad hominem* remarks and excessive or pointlessly clever and sarcastic remarks. Remember that reviewer comments can be hurtful. If you must “vent”, add such remarks to “comments to editor.”

Introduction

- Keep it concise and to-the-point
- Provide proper perspective consistent with nature of journal
- Cite original and important work plus recent reviews for mature areas
- Minimize cites for related developments that are now well accepted (> 30 cites probably too many)
- Avoid discussions of the glories of ESI, MALDI, ion mobility
- State purpose of paper; describe research strategy, but do not give results, discussion, or summary of the paper (abstract should do this)
 - Do not extrapolate outcome of research. For example, introduction of a paper describing a strategy for a specific problem should not contain discussion of potential extensions.
- Role of Reviewer:
 - Comment on effectiveness, clarity, organization
 - Suggest changes in organization
 - Document grammar, style problems
 - Point authors to appropriate cites. Say more than “authors have done a poor job of citing relevant research.” Instead, at minimum, point out that the “early work of Gross et al. has been (again) omitted.”

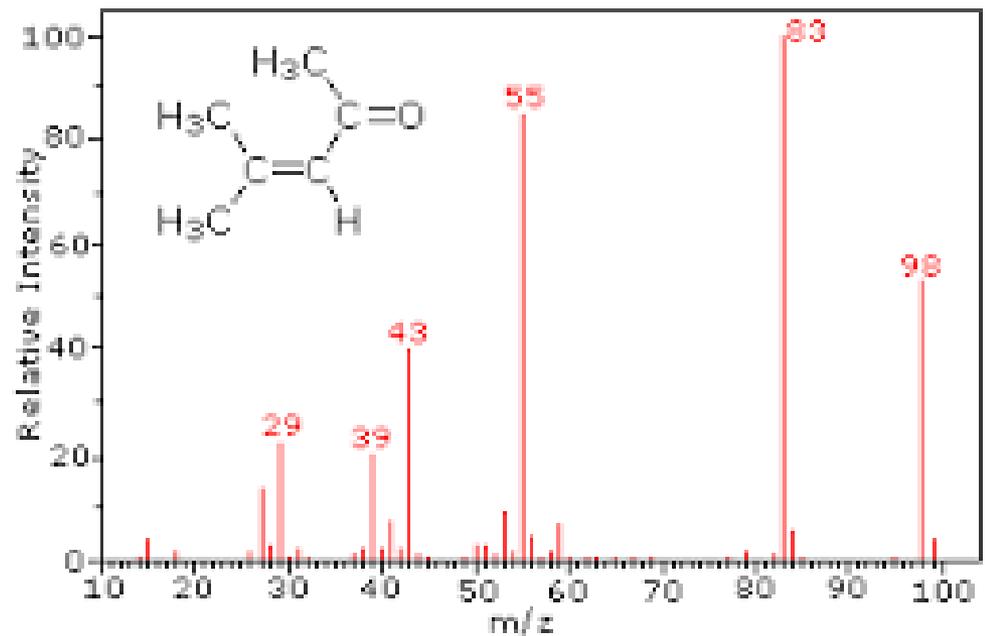
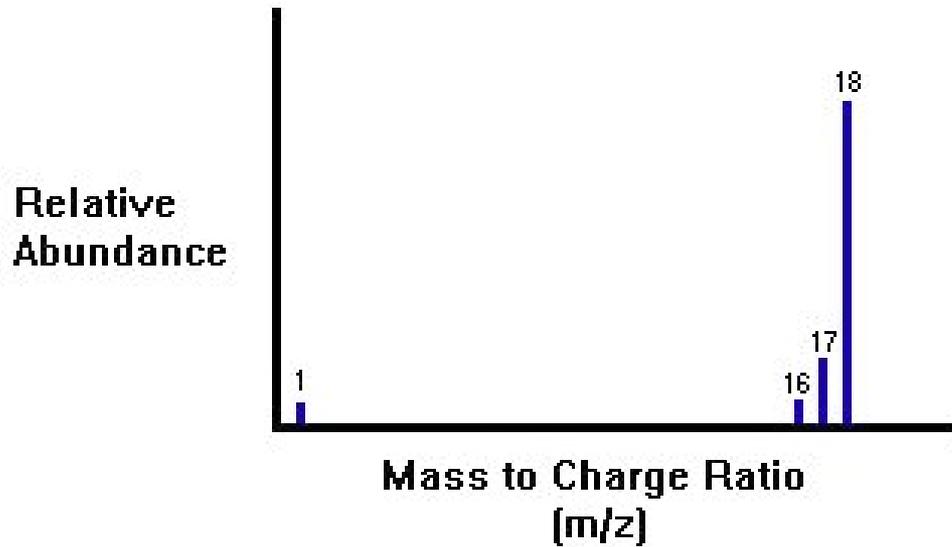
Experimental

- Include all important details so that the reader can repeat the work. (Details in previously published papers can be omitted but broad summaries of those expts should be included.)
- Give vendors (and addresses) for commercial instruments and parts (e.g., chromatography columns), permitting exact reproduction.
- Give origins and synthetic details (including other spectroscopic evidence) for compounds used in the work. All chemicals must be identified. . . Do not use proprietary, unidentifiable compounds.
- Present proper control experiments.

Experimental

- Include here or in an accompanying “Theory” section, relevant, theoretical (mathematical, modeling).
- Avoid comments and discussion. Include results such as spectroscopic and other evidence (mp, bp, etc), purification, etc
- Write in the past tense, passive voice (e.g., “Production spectra were obtained by scanning the 3rd quadrupole at a scan rate of . . .”)
- **Role of Reviewer:**
 - Insure that sufficient detail is included that another can reproduce work
 - Insure that compounds, vendors, etc identified
 - Check that spectroscopic data are presented (or in supplementary section)
 - Check for comments on safe handling of chemicals, apparatus

Mass Spectrum of Water



Results and Discussion

- Identify approximately six figures. Use these as a “centerpiece” around which you write your paper, describing the experiments and their outcomes
- Use figures to illustrate typical results, S/N, peak shapes. Minimize number of figures, ignoring cliché: “a figure is worth a thousand words. . .” (*JASMS* guideline is six figures).
- Avoid publishing straight-line plots, bar graphs: instead give eqn and regression. If you’re proud of the figure, put it in Supp. Info.
- Move identifying material and legends to the caption. Keep axes labels large and sparse. Minimize white space.
- Put “compilations of spectra” in Supp. Info.
- Consider a single section or one on Results, another on Discussion.
- Include design of research. Continue with description of experimental results. Include on going conclusions, if appropriate.
- Use schemes to represent mechanisms, processes, strategies, algorithms; insert structures in text with appropriate numbering.
- Discuss results including accuracy, precision, and propagation of error (pet peeve: std dev has one sig. fig: 13.3 ± 0.3 not 13.323 ± 0.334). Use tables for more efficient presentation of spectra.

Results and Discussion-cont'd

- Include descriptions of “simple outcome” in text—not in tables or figures. “Minimize white space!”
- Avoid excessively enthusiastic interpretations (eschew “novel” “first time” “first ever,” “paradigm-changing,” etc; others should draw such conclusions.)
- Insure interpretations and conclusions are justified.
- Place less important data, tables, figures, etc in supplementary material.
- **Role of Reviewer:**
 - Suggest improvements in organization, presentation, and style.
 - Comment on logic, interpretation, and justification of conclusions
 - Detail concisely and carefully required changes (recall that author must respond or rebut your requirements!). Avoid “thinking out loud.”
 - Consolidate as one item suggested changes in style, grammar, and other small issues.
 - Comment on number of figures, tables, schemes, their need and their quality. Legend material should not be in figure.

Results and Discussion-cont'd

- Consolidate as one item (minor changes) suggested changes in style, grammar, and other small issues.
- Comment on number of figures, tables, schemes, their need and their quality. Legend material should not be in figure.
- Require or suggest other experiments, and make clear need for such. Defer to editor if you are unsure whether new experiments are essential or would be more appropriate for future studies.
- When suggesting further work, be cognizant of nature of submission—is it a communication, application note, full article?

Conclusions

- Present specific & global conclusions
- Indicate uses and extensions, if appropriate
- Suggest future experiments and indicate those that are underway
- Do not summarize paper (abstract is for that purpose)
- Avoid judgments about impact.

Role of reviewer:

- Comment on validity and generality of conclusions. Request “toning down” claims that are not justified.
- Request summary material and redundancies from other sections be removed.
- Be sensitive to feelings of authors

References, Tables, Figures

- Minimize Numbers of References, Tables, Figures. Use journal style. Include article titles for JASMS.
- Role of Reviewer:
 - Check, if possible, accuracy of cites.
 - Comment on no. of cites: are important ones missing? Is number excessive? This is a big problem.
 - Point out redundancies, incomplete cites (missing volume nos, page numbers, author spellings)
 - Indicate any footnotes in ref list (often footnotes can be included in text material).
 - Comment on need for figures, their quality, legibility (recall figs are often published in one column), size of lettering
 - Request removal from figure excessive legend material, headers from instrument software, excessive axis labels.
 - Request removal of discussion in figure legends and table titles.
 - Comment on consistency of presentation (consistent font, size).
 - Comment on need for color in figures.
 - Comment on Table footnotes and request additional ones.