



Society of Petroleum Engineers

Technical Reviewer Webinar

with Curtis Cheatham

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1

2

Webinar Objectives



- Peer review basics
- Technical Reviewer qualifications and expectations
- Ethics issues
- What to look for in a paper



Editorial Policy Statement

The Society of Petroleum Engineers encourages open and objective discussion of technical and professional subjects pertinent to the interests of the Society in its publications.

Society publications shall contain no judgmental remarks or opinions as to the technical competence, personal character, or motivations of any individual, company, or group.

Any material which, in the publisher's opinion, does not meet the standards for objectivity, pertinence, and professional tone will be returned to the contributor with a request for revision before publication.



Simple Rules for Publishing

Requirements for journal publication:

- New or novel work
 - Or a review paper with new insights
- Sound approach that is well supported
- Important to the industry
- Clear to the reader



A journal should avoid commercial and plagiarism issues



Plagiarism

SPE expectations and possible actions

- SPE expects that authors will credit all sources
 - Not represent the work of another as their own
- SPE takes plagiarism very seriously
 - It is a significant violation of professional ethics
- Authors found to have plagiarized are subject to having their paper removed from the conference program and/or journal and from OnePetro



Editorial Hierarchical Structure



SPE Journals Editorial Board



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SPE Journals Editorial Board

- Journal focused on theoretical research
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Peer Review Basics



Why Do Peer Review?

- Peer review supports SPE mission:
 - Collect, disseminate, and exchange technical knowledge
 - Provide opportunities for members to enhance their technical and professional competence
- Peer review helps identify papers that are valid, original, and important
 - Prevents scientific literature from becoming a meaningless jumble
- Peer review has a positive influence on the quality of a manuscript by critically refining the paper
 - Most authors say SPE peer review improved their paper
- Peer review helps author improve critical thinking skills through thoughtful comments from subject matter experts



Keep Papers Moving

- Publishing journals on schedule requires an efficient processing and tracking system
- Timeliness is critical
 - Completion of reviews
 - 14 days target, maximum of 21 days
 - Prompt response to Associate Editors + SPE staff
 - Goal: First decision to Authors – **30 days**
 - **Currently all SPE journals are meeting or exceeding this fast pace that was not thought possible 10 years ago**



Technical Reviewer Qualifications and Responsibilities



Technical Reviewer Qualifications

- 3–5 years or more industry experience
- Prefer three published papers in a peer-reviewed journal to know what authors go through
- Significant technical accomplishments
- Respected in the E&P technical community
- Broad and/or deep understanding of current technologies in a specific discipline
- Time and commitment to support the process



Technical Reviewer Responsibilities

Editors are expected to be:

- Authoritative
- Judicious
- Professional



Technical Reviewer Responsibilities Before the Review

- When invited to review a paper, respond promptly
 - Especially if you cannot do the review so it can be reassigned
- Do not accept a review invitation if the paper is out of your expertise
- Be prepared to make a fair and thorough assessment after reading the paper



Technical Reviewer Responsibilities During the Review

- Be sensitive to language barriers for authors writing in a language that is not their own
- Make informed recommendations reflecting on knowledge or research of the subject matter being reviewed
- Provide adequate explanation to authors for what you see as a shortcoming needing revision
 - Explain your criticisms in detail
 - Do not simply say you disagree
 - Permissible to provide references to substantiate your statements



Technical Reviewer Responsibilities For the Peer Review Process

- Meet review deadlines
 - If you can't make the deadline, inform the Associate Editor immediately so the paper can be reassigned without further delay
- Read and answer emails from associate editors and editorial office within 48 hours
- Avoid any delay, biased reporting, and unethical behavior
- Always accept request to review revised papers when you reviewed the original paper
 - When AE has to assign new reviewers, then it complicates our process and slows turnaround time



Technical Reviewer Responsibilities As a Referee

- Always think about our readership and journal quality when reviewing a paper
- Act as a counselor for authors, expeditor of peer review process, and protector of SPE ethics
- Read reviews from other editors to improve your understanding of the topic or decision reached
 - After decision letter sent by EE – see next slide



How to Read other Reviewers' Comments

SPE Drilling and Completion

Home Author Review

Technical Editor View Manuscripts

Technical Editor View Manuscripts

0 [Review and Score](#)

26 Scores Submitted

[Invitations](#)

[Legacy Instructions](#)

Scores Submitted

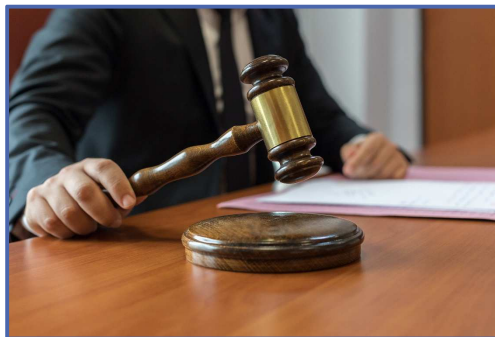
Items per page: 10 1 - 10 of 26

ACTION COMPLETED

- ✓ Select...
- View Submitted Review
- View Abstract
- View Proof (New Window)
- View Decision Letter
- View Response to Decision Letter
- Contact Journal



Ethics



Basic Principles

- Confidentiality – Respect the privacy of the review process
- Integrity – Declare any potential conflicts of interest
 - Recuse yourself from a review if you feel there may be any concern
- Do not allow your reviews to be influenced by the origins, nationality, religious, political beliefs or other non-scientific aspects of the authors
- Do not use information gained during the peer-review process for your own advantage or to disadvantage or discredit others

SPE's "golden" rule: Referee papers as you would wish others to referee yours



Confidentiality

- SPE is a **single-blind** peer-review process:
 - Never reveal your identity. Always phrase your comments in 3rd person
 - Do not directly contact the author(s) or anyone directly involved in the research without permission from the journal leadership
- Do not share the manuscript with others during the review process without obtaining permission from the journal leadership first
- Do not reveal any details of the manuscript or review during or after the review process



Additional Guidelines During Review

- Be objective and constructive in your review, and provide feedback to help the authors improve the manuscript
- Do not make disrespectful comments
- Do not comment on things that do not pertain to the paper's content
- Make a deliberate attempt to provide positive feedback even when declining a paper



Additional Guidelines During Review

- Do not attempt to rewrite the author's paper
 - Focus on describing changes needed to improve the paper from a high level
- Notify the journal if you become aware of similarities between the manuscript and another published paper



Paper Elements to Look For



Title

The title should:

- Be focused – not too short or too long
- Accurately describe the paper's content
- Use terms familiar to the reader
- Good titles are essential for literature searches
– we want our papers to be found!



Summary (Abstract)

The summary should:

- State the principal objective and scope of the paper
- Describe the method used
- Summarize results – *this is often missed by authors*
- Be consistent with the rest of the paper, particularly the Conclusions section



Introduction

The introduction should:

- Clearly present the nature and scope of the problem investigated
- Provide a critical review of key literature
- Explain the original contributions for the current paper and how they advance the industry
- State the method of investigation and the reasons for using it



Methods

The methods description should:

- Convince readers of the validity of the approach
- Describe methods sufficiently to be reproducible by other experts
- Theoretical Papers
 - What is going to be proved?
 - What are the assumptions?
 - Explain the theoretical developments
 - Provide logical and convincing arguments to demonstrate validity of the proposed method
- Experimental / Case Study Papers
 - Purpose of the experiments / case study
 - Describe the apparatus / equipment and procedures



Results

The results description should:

- Present data, observations, and other results
 - Clearly legible figures and table
 - Ensure body of paper explains and matches information in figures and table
 - Provide compelling support for paper's conclusions and key learnings
- Avoid large numbers of tables and figures



Discussion

The discussion should:

- Describe the value of new findings
- Show theoretical implications and practical applications
- State any inconsistencies, exceptions, or any lack of correlation of the new work
- Show how results and interpretations agree (or contrast) with previously published results
- Could discuss future work or next steps



Conclusions

The conclusions should:

- Summarize how the information provided supports claims made in the introduction
- Be supported by evidence in the body of the paper
- State what the implications are of the new information
- Be consistent with the abstract



Think about who your reader is:

- Readers are key to the paper's success
 - Papers should be clearly written
 - Key points should be convincingly supported by evidence presented in the paper
 - Sometimes controversy advances technology
- Readers expect the following:
 - Good ideas that can be applied to the reader's work / business
 - Unbiased approach
 - Sound technology
 - Readable and relatable style
 - Clear story



Webinar Summary

- Technical editing is a big responsibility that makes scientific literature more reliable and authoritative
- Technical editing should be done by those knowledgeable and experienced in the relevant discipline
- Technical Reviewers must be willing to devote time and commitment to support the process
 - Approximately 4–6 hours per review

Ask yourself: Is the paper new, important, well supported, and understandable?



Q/A

