

How to Publish A scientific Research Article

From submission to revision

Presentation by:

Asst. Prof. Dr. Nasser M. Sabah

Engineering Professions Department
Palestine Technical College
Deir-ALBalah

Nov. 12 2012

Outline

- ① Introduction
- ② Types of Journal Paper
- ③ Scientific Quality Management
 - Peer Review
 - Roles Involved
- ④ Decision of A submitted Paper

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- 1 Introduction
- 2 Types of Journal Paper
- 3 Scientific Quality Management
 - Peer Review
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- 4 Decision of A submitted Paper

What is A scientific Article?

- When the researcher has *finished writing a research paper*.
- Considering the paper to be worth publishing.
 - Submit the paper to a journal or conference for publication.
- If the paper is submitted to a major journal.
 - **Be patient:** It's very exhausting and time consuming before the paper appears online.

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What Types of Paper You are Writing?

- There are different types of scientific papers. Four of them would appear in the *Institute of Science Index (ISI)*.
 - Full papers/Original papers;
 - Review papers/perspectives;
 - Letters/Short communications;
 - Lecture notes.
- Thomson Reuters-ISI classifies Journals into:
 - Science Citation Index (SCI) - covers more than 3,700 leading scientific and technical journals across 100 disciplines.
 - Science Citation Index Expanded (SCIE) - covers more than 8,500 significant journals across 150 disciplines.
- Self-evaluate your work: Is it sufficient for a full article? Or are your results so gripping that they need to be shown as soon as possible?
- Good papers are usually published in good journals.

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Journals From Different Disciplines

- **IEEE:**
 - IEEE Transactions on Communications.
 - IEEE Computer Architecture Letters.
 - IEEE Transactions on Human-Machine Systems.
- **Elsevier:**
 - Bioorganic & Medicinal Chemistry.
 - Pattern Recognition.
 - Journal of Accounting and Public Policy.
- **John Wiley & Sons:**
 - Random Structures & Algorithms.
 - Journal of the International Biometric Society.
 - Journal of Computer-Mediated Communication.
- **Springer:**
 - Journal of Systems Science and Systems Engineering.
 - Wireless Personal Communications.
 - Structural Chemistry.

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Select the Best Journal for Submission

- Look at **your references** - these will help you narrow your choices.
- **Review** recent publications in each candidate journal. Find out the hot topics, the accepted types of articles, etc.
- Ask yourself the following questions:
 - Is the journal **peer-reviewed**?
 - Who is this journal's **audience**?
 - What is the journal's **Impact Factor**?
- **DO NOT** gamble by submitting your manuscript to **more than one journal at a time**.

What is the Impact Factor (IF)?

Impact factor is the average annual number of citations per article published.

- **Example:** The impact factor of 2011 for a journal is calculated as follows:

$$2011 \text{ IF} = \frac{A}{B} = \frac{600 \text{ citations}}{150 + 150 \text{ articles}} = 2.$$

- A = the number of times articles published in 2009 and 2010 were cited in indexed journals during 2011;
- B = the number of "citable items" (usually articles, reviews, proceedings or notes) published in 2009 and 2010.

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- 3 **Scientific Quality Management**
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What is Peer Review?

- As research papers are reviewed by colleagues of the writers prior to publication, this process is referred to as **peer review**.
- **Review process** for scientists by scientists.
- Purpose of peer review:
 - Ensures publishable quality of research papers;
 - To filter what is published as "Science/Research";
 - To provide researchers with perspective.
- Types of Peer Review
 - **Blind review**: Common to peer review practices is the fact that authors do not know the identity of their reviewers.
 - **Double-blind review**: Also, the reviewers do not know the names of the authors.

Referees

- A journal has an **editorial board** that includes a number of referees.
- **Referees** are responsible for **reviewing and evaluating** submitted papers.
- Each referee independently advises the editor whether to **accept** or to **reject** the paper.
- Also, referees may advise the editor on the development of the journal's scope and focus.
- It is also common practice that editors designate **external referees** for certain submissions.

Associate Editor

- The most important function of the associate editor (can also be a group of persons) is to make the **final decision for a submitted paper**.
- The **review process** (dealing with the author and referees) is mostly within the duties of the associate editor.
- Indeed, the comments of the referees just serve as suggestions.

Editor-in-Chief

- Also, called **Managing Editor**.
- The job of the editor-in-chief is to relieve the associate editor from **administrative tasks**, e.g., coping with publishers.
- Take care of the **post-acceptance issues**.

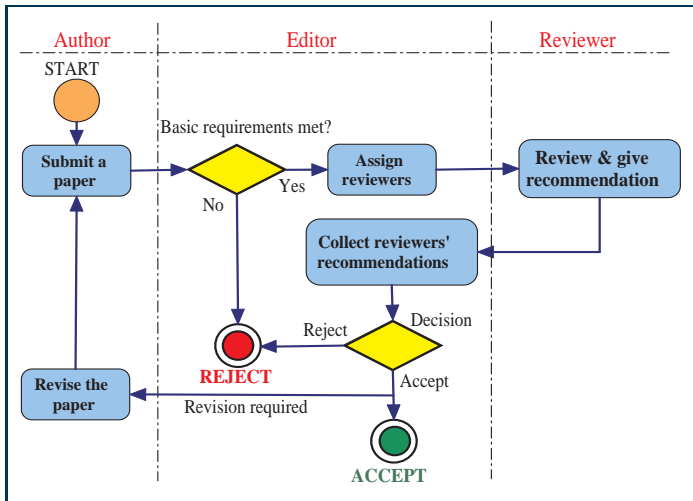
Publisher

- Publishers print accepted papers in (periodical) journal issues.
- Example of publishers:
 - Wiley-Blackwell is the publisher of John Wiley & Sons.
 - Springer Science+Business Media is the publisher of Springer.
 - IEEE is the publisher of all IEEE journals.

Initial Editorial Review

- Many journals use a system of **initial editorial review**. Editors may reject a manuscript without sending it for review.
- Reasons of doing so:
 - The peer review system is *grossly overloaded* and editors wish to use reviewers only for those papers with a good probability of acceptance.
 - It is a disservice to ask reviewers to spend time on work that has clear and *evident deficiencies*.

Peer Review Process



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First Decision: "Accepted" or "Rejected"

Accepted	Rejected
<ul style="list-style-type: none">□ Very rare, but it happens. □ Congratulations!<ul style="list-style-type: none">* Cake for the department.* Now wait for page proofs and then for your article to be online and in print.	<ul style="list-style-type: none">□ Probability 40-90%□ Do not despair.<ul style="list-style-type: none">* It happens to everybody.□ Try to understand WHY ??<ul style="list-style-type: none">* Consider reviewers' advice.* Be self-critical. □ If you submit to another journal, begin as if it were a new manuscript.<ul style="list-style-type: none">* Take advantage of the reviewers' comments.* They may review your manuscript for the other journal too!

First Decision: "Major" or "Minor" Revision

- **Minor revision:**
 - Basically, the manuscript is **worth to be published**.
 - Some elements in the manuscript must be clarified, restructured, shortened (often) or expanded (rarely).
 - Textual adaptations.
 - "Minor revision" **does NOT guarantee acceptance** after revision!
- **Major revision:**
 - The manuscript may be worth to be published.
 - **Significant deficiencies** must be corrected before acceptance.
 - Involves significant **textual modifications and/or additional experiments**.

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Manuscript Revision

- Discuss your work directly with other scientists in your community and prepare a detailed letter of response.
- Cut and paste **each** comment by reviewers.
 - State your answer directly below reviewers' comment.
 - Identify the page and line number.
 - Do not miss any point and state **specifically** what changes (if any) you have made to the manuscript.
- Provide **a scientific response** to the comment you accept; or **a convincing, solid and polite rebuttal** to the point you think that reviewer is wrong.
- Write in a way that your responses is clear to reviewers.
- **A typical problem** - Discussion is provided but it is not clear what changes have been made.

Rejection: Not the End of the World

- Everyone has papers rejected - **do not take it personally.**
- Try to understand why the paper was rejected.
- Note that you have received the benefit of the editors and reviewers' time; **take their advice seriously!**
- **Re-evaluate your work** and decide whether it is appropriate to submit the paper elsewhere.

- **If so, begin as if you are going to write a new article.**

What Leads to Acceptance?

- Attention to details.
- Check and double check your work.
- Consider the reviewers' comments.
- English must be as good as possible.
- Presentation is important.
- Take your time with revision.
- Acknowledge those who have helped you.
- New, original and previously unpublished.
- Critically evaluate your own manuscript.
- Ethical rules must be obeyed.

Nigel John Cook
Editor-in-Chief, Ore Geology Reviews

Thanks ! and Questions