How to Write a 1st Class Paper

Jeroen Loos–Publisher Economics, Elsevier
University of Mannheim
11 October 2011

Outline

- University of Mannheim
- Elsevier
- How to Write a 1st Class Paper
    1. Before you begin
    2. Select your audience & choose the right journal
    3. Prepare your manuscript
    4. The review process
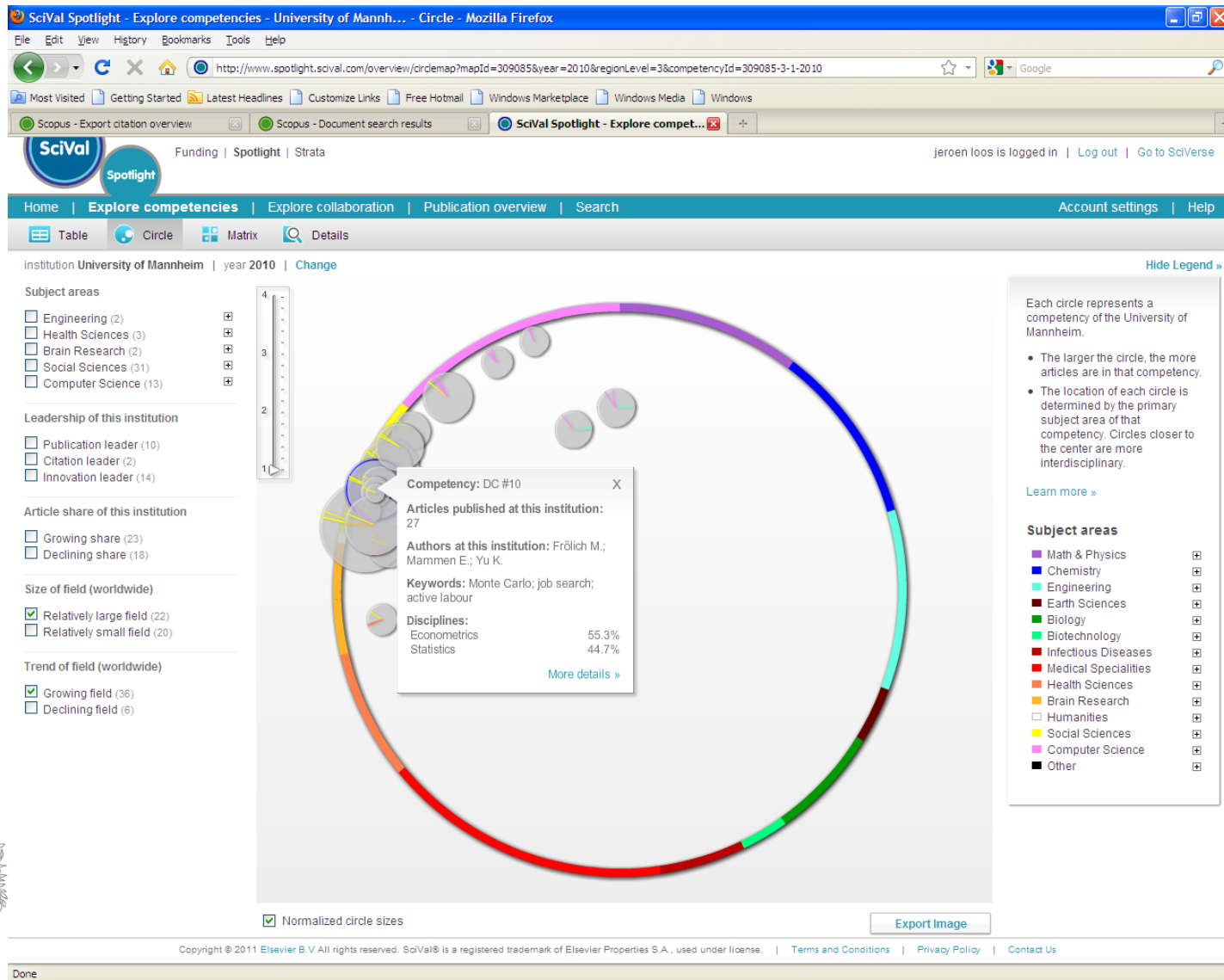- What not to do…

Outline

- University of Mannheim
- Elsevier
- How to get Published
  1. Before you begin
  2. Select your audience & choose the right journal
  3. Prepare your manuscript
  4. The review process
- What not to do…

University of Mannheim – Research Competencies

University of Mannheim – An Overview – All subjects

University of Mannheim – Economics & Finance

Publications Economics & Finance, 2001-2010

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Building Insights. Breaking Boundaries.™
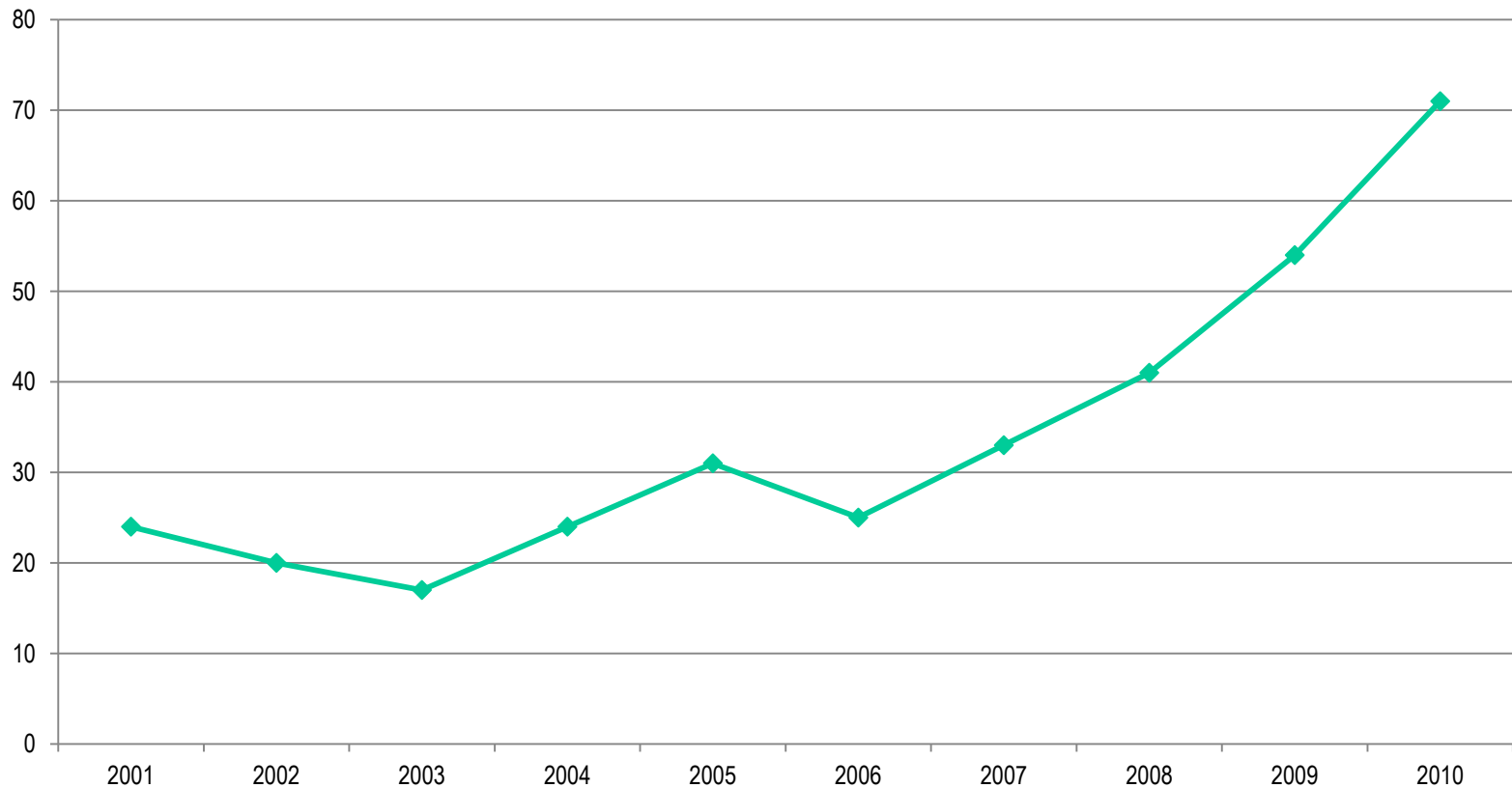
Top Publication Output Economics & Finance, 2006 - 2010

	Number of Articles	Number of Citations
Journal of Marketing	11	271
International Journal of Production Economics	9	36
Journal of the Academy of Marketing Science	6	7
Economic Journal	6	28
Journal of Banking and Finance	6	27
Judgment and Decision Making	5	37
Labour Economics	5	12
Journal of Econometrics	5	33
Public Choice	5	12
Jahrbucher fur Nationalokonomie und Statistik	4	1
Applied Economics	4	31
European Economic Review	4	12
Econometrica	4	20
Journal of the Royal Statistical Society. Series A: Statistics in Society	3	6
Theory and Decision	3	0
International Journal of Industrial Organization	3	22
Journal of Population Economics	3	4
Econometric Theory	3	5
Journal of Economic Behavior and Organization	3	2
Journal of Financial Econometrics	3	33
American Economic Review	3	38

Source: SciVerse Scopus, 10 October 2011

Elsevier Journal publishing volume

- 1,000 new editors per year
- 20 new journals per year

- Organise editorial boards
- Launch new specialist journals

- *600,000+ article submissions per year*

- 200,000 reviewers
- 1 million reviewer reports per year

Solicit and manage submissions

Manage peer review

Archive and promote

- *11 million articles now available*

- *40%-90% of articles rejected*

Publish and disseminate

Edit and prepare

Production

- *11 million researchers*
- *5,000+ institutions*
- *180+ countries*
- *400 million+ downloads per year*
- 3 million print pages per year

- 7,000 editors
- 70,000 editorial board members
- 6.5 million author/publisher communications /year

- *280,000 new articles produced per year*
- 190 years of back issues scanned, processed and data-tagged

ELSEVIER

Examples of Elsevier Economics & Finance titles

- **60+ journals**
- **Prestigious Field Journals**
- **25% of articles, as recorded in Thomson-Reuters Economics subject Category**
- **All journals available from Volume 1, Issue 1**

Elsevier online

http://www.elsevier.com/wps/find/S04.cws_home/journals

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- What not to do…

1. Before you begin:

Building Insights. Breaking Boundaries.™

Your personal reasons for publishing:

Get funding?
Get promoted?
PhD degree?
???

- However, editors, reviewers, and the research community don't consider these reasons when assessing your work.

Always keep in mind that your paper is your passport to your community so:

What is it that distinguishes an excellent article from a poor one?

Determine if you are ready to publish

You should consider publishing if you have information that advances understanding in a certain scientific field

This could be in the form of:

- Presenting new, original results or methods
- Rationalizing, refining, or reinterpreting published results
- Reviewing or summarizing a particular subject or field

If you are ready to publish, a <u>strong</u> manuscript is what is needed next

What is a strong manuscript?

- Has a <u>novel</u>, <u>clear</u>, <u>useful</u>, and <u>exciting</u> message

- Presented and constructed in a <u>logical</u> manner

- Reviewers and editors can grasp the scientific significance <u>easily</u>

Editors and reviewers are all busy scientists – make things easy to save their time

Type of your manuscript?

- Full articles/Original articles;

- Letters/Rapid Communications/Short communications;

- Review papers/perspectives

- Self-evaluate your work: Is it sufficient for a full article? Or are your results so thrilling that they need to be shown as soon as possible?

- Ask your supervisor and colleagues for advice on manuscript type. Sometimes outsiders see things more clearly than you.

2. Select your audience & choose the right journal

Building Insights. Breaking Boundaries.™

Identify the right audience for your paper

- Identify the sector of readership/community for which a paper is meant

- Identify the interest of your audience

- Is your paper of local or international interest?

Choose the right journal

Do not just "descend the stairs"

Top (general) journals

⬇

Field-specific top journals

⬇

Other field-specific journals

⬇

National journals

Choose the right journal

- Ask help from your supervisor or colleagues
  - The supervisor (who is sometimes the corresponding author) has at least co-responsibility for your work. You are encouraged to chase your supervisor if necessary

- Articles in your references will likely lead you to the right journal

- DO NOT gamble by submitting your manuscript to more than one journal at a time.
  - International ethics standards prohibit multiple/simultaneous submissions, and editors DO find out! (Trust us, they DO!)

Additional sources & metrics

SJR SCImago Journal & Country Rank   http://scimagojr.com/

eigenFACTOR.org RANKING AND MAPPING SCIENTIFIC KNOWLEDGE   http://www.eigenfactor.org

Economics and Finance   http://www.elsevier.com/wps/find/S04.cws_home/journals

http://www.scopus.com/source/eval.url
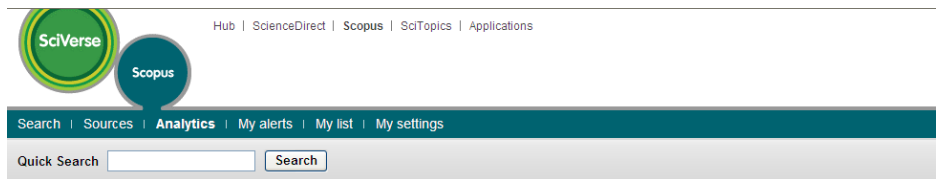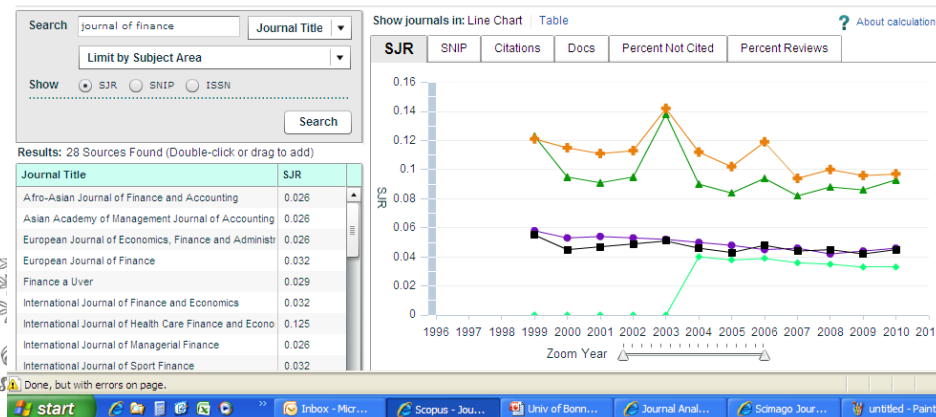
Impact Factor

- The number of current citations to articles published in a specific journal in a two year period

  ➤ In 2009 there were <u>200</u> citations to papers published in 2008 and <u>275</u> to papers published in 2007.

divided by

- The total number of articles published in the same journal in the corresponding two year period.

  ➤ The journal published <u>180</u> articles in 2007, and <u>205</u> in 2008

Impact factor 2009 for this journal is:

$$(200+275)/(180+205) = 1.233$$

Alternative calculation of the IF…

Your (real) Impact Factor

$$\text{Impact Factor (corrected)} = \frac{\substack{\text{\# times your} \\ \text{work is cited}} - \substack{\text{\# citations that} \\ \text{actually trash} \\ \text{your work}} - \substack{\text{\# times} \\ \text{you cited} \\ \text{yourself} \\ \text{(nice try)}} - \substack{\text{\# times you were} \\ \text{cited just to pad} \\ \text{the introduction} \\ \text{section}} - \substack{\text{\# citations the editor} \\ \text{pressured the} \\ \text{author to include to} \\ \text{increase the journal's impact factor}}}{\substack{\text{\# original} \\ \text{articles you've} \\ \text{written}} + \substack{\text{\# articles you were} \\ \text{included in out of} \\ \text{pity or politics}} + \substack{\text{\# not-so-original} \\ \text{articles you've} \\ \text{written copied and pasted}}}$$

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Elsevier offering:

- Investigate all candidate journals to find out
  - Aims and scope
  - Accepted types of articles
  - Readership
  - Current hot topics
    - go through the abstracts of recent publications)

3. Prepare your manuscript:

Read the 'Guide for Authors'! Again and again!

- Stick to the Guide for Authors in your manuscript, even in the first draft (text layout, nomenclature, figures & tables, references etc.). In the end it will save you time, and also the editor's.

- Editors (and reviewers) do not like wasting time on poorly prepared manuscripts. It is a sign of disrespect.

General Structure of a Research Article

- Title
- Abstract
- Keywords

> **Make them easy for indexing and searching! (informative, attractive, effective)**

- Main text (IMRAD)
  - <u>I</u>ntroduction
  - <u>M</u>ethods
  - <u>R</u>esults
  - <u>A</u>nd
  - <u>D</u>iscussions

> **Journal space is not unlimited.**
>
> **Make your article as concise as possible.**

- Conclusion
- Acknowledgement
- References
- Supplementary Data

Scientific Language – Overview

Write with clarity, objectivity, accuracy, and brevity.

- Key to successful scientific writing is to be alert for common errors:
  - ➢ Sentence construction
  - ➢ Incorrect tenses
  - ➢ Inaccurate grammar
  - ➢ Not using English

Check the Guide for Authors of the target journal for language specifications

Why Is Language Important?

Save your editor and reviewers the trouble of guessing what you mean

Complaint from an editor:

"[This] paper fell well below my threshold. I refuse to spend time <u>trying to understand</u> what the author is trying to say. Besides, I really want to send a message that they can't <u>submit garbage</u> to us and expect us to fix it. My rule of thumb is that if there are more than 6 grammatical errors in the abstract, then <u>I don't waste my time</u> carefully reading the rest."

Scientific Language – Sentences

- Write direct and <u>short</u> sentences

- <u>One idea</u> or piece of information <u>per sentence</u> is sufficient

- Avoid multiple statements in one sentence

Authorship

- Policies regarding authorship can vary

- One example: the International Committee of Medical Journal Editors ("Vancouver Group") declared that an author must:

  1. substantially contribute to conception and design, or acquisition of data, or analysis and interpretation of data;

  2. draft the article or revise it critically for important intellectual content; and

  3. give their approval of the final full version to be published.

  4. ALL 3 conditions must be fulfilled to be an author!

All others would qualify as "Acknowledged Individuals"

Authorship - Order & Abuses

- General principles for who is listed first
  - First Author
    - Conducts and/or supervises the data generation and analysis and the proper presentation and interpretation of the results
    - Puts paper together and submits the paper to journal
  - Corresponding author
    - The first author or a senior author from the institution
      - ✓ Particularly when the first author is a PhD student or postdoc, and may move to another institution soon.

- Abuses to be avoided
  - Ghost Authors: leaving out authors who should be included
  - Gift Authors: including authors who did not contribute significantly

Title

- A good title should contain the fewest possible words that adequately describe the contents of a paper.

- **Effective titles**
  - Identify the main issue of the paper
  - Begin with the subject of the paper
  - Are accurate, unambiguous, specific, and complete
  - Are as short as possible
    - Articles with short, catchy titles are often better cited
  - Do not contain rarely-used abbreviations
  - Attract readers

Keywords

- In an "electronic world", keywords determine whether your article is found or not!

- Avoid to make them

  - too general

  - too narrow (so that nobody will ever search for it)

- Effective approach:

  - Look at the keywords of articles relevant to your manuscript

  - Play with these keywords, and see whether they return relevant papers, neither too many nor too few

Abstract

Tell readers what you did and the important findings

- One paragraph (between 50-300 words)
- Advertisement for your article
- A clear abstract will strongly influence if your work is considered further

Graphite intercalation compounds (GICs) of composition $C_xN(SO_2CF_3)_2 \cdot \delta F$ are prepared under ambient conditions in 48% hydrofluoric acid, using K_2MnF_6 as an oxidizing reagent. The stage 2 GIC product structures are determined using powder XRD and modeled by fitting one dimensional electron density profiles.

A new digestion method followed by selective fluoride electrode elemental analyses allows the determination of free fluoride within products, and the compositional x and δ parameters are determined for reaction times from 0.25 to 500 h.

What has been done

What are the main findings

Introduction

The place to convince readers that you know why your work is relevant, also for them

Answer a series of questions:

> ➤ What is the problem?

> ➤ Are there any existing solutions?

> ➤ Which one is the best?

> ➤ What is its main limitation?

> ➤ What do you hope to achieve?

General

Specific
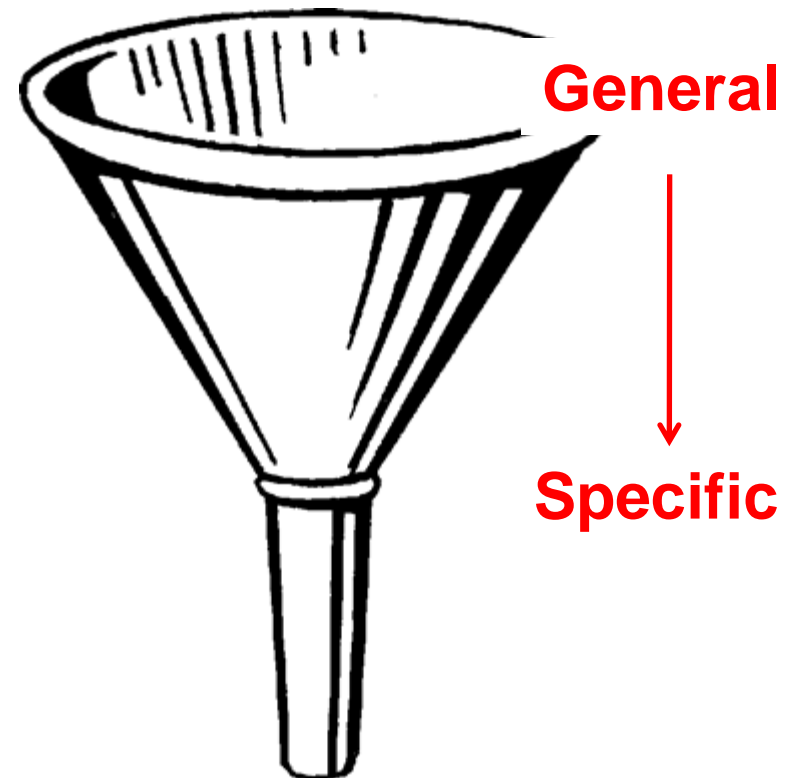
Pay attention to the following

- Before you present your new data, put them into perspective first

- Be brief, it is not a history lesson

- Do not mix introduction, results, discussion and conclusions. Keep them separate

- Do not **_overuse_** expressions such as "novel", "first time", "first ever", "paradigm shift", etc.

- Cite only relevant references
  - Otherwise the editor and the reviewer may think you don't have a clue what you are writing about

Methods / Experimental

- Include all important details so that the reader can repeat the work.
  - Details that were previously published can be omitted but a general summary of those experiments should be included
- Avoid adding comments and discussion.
- Write in the past tense
- Consider use of Supplementary Materials
  - Documents, spreadsheets, audio, video, ...

Reviewers will criticize incomplete or incorrect descriptions, and may even recommend rejection

Results – what have you found?

- **The following should be included**
  - the **main findings**
    - Thus not all findings
    - Findings from experiments described in the Methods section
  - Highlight findings that **differ** from findings in previous publications, and **unexpected** findings
  - Results of the **statistical analysis**
  - Figures and tables are the most efficient way to present results but …

Results – Figures and tables

- Un-crowded plots
  - 3 or 4 data sets per figure; well-selected scales; appropriate axis label size; symbols clear to read; data sets easily distinguishable.
- Each photograph must have a scale marker of professional quality in a corner.
- Text in photos / figures in English
  - Not in French, German, Chinese, ...
- Use color *ONLY* when necessary.
- Color must be visible and distinguishable when printed in black & white.
- Do not include long boring tables!

Discussion – what do the results mean?

- **Check for the following:**
  - How do your results relate to the original question or objectives outlined in the Introduction section?
  - Do you provide interpretation for each of your results presented?
  - Are your results consistent with what other investigators have reported? Or are there any differences? Why?
  - Are there any limitations?
  - Does the discussion logically lead to your conclusion?
- **Do not**
  - Make statements that go beyond what the results can support
  - Suddenly introduce new terms or ideas

Conclusions

- Present global and specific conclusions

- Indicate uses and extensions if appropriate

- Suggest future experiments and indicate whether they are underway

- Do not summarize the paper

    - The abstract is for that purpose

- Avoid judgments about impact

Avoid non-quantitative words, if possible

e.g. low/high, extremely, enormous, rapidly, dramatic, massive, considerably, exceedingly, major/minor, …

Quantitative descriptions are always preferred

References: get them right!

- Please **adhere to the Guide for Authors** of the journal
- It is your responsibility, not of the Editor's, to format references correctly!
- Check
  - Referencing style of the journal
  - The spelling of author names, the year of publication
  - Punctuation use
  - Use of "et al.": "et al." = "and others",

- Avoid citing the following if possible:

  - Personal communications, unpublished observations, manuscripts not yet accepted for publication

    - Editors may ask for such documents for evaluation of the manuscripts

  - Articles published only in the local language, which are difficult for international readers to find.

Supplementary Material

- Data of secondary importance for the main scientific thrust of the article

- Or data that do not fit into the main body of the article
  - e.g. audio, video, ...

- Not part of the printed article
  - Will be available online with the published paper

- Must relate to, and support, the article

Suggested length of a full article

- Not the same for all journals, even in the same field

- "…25- 30 pages is the ideal length for a submitted manuscript, including *ESSENTIAL* data only."

  - Title page
  - Abstract   1 paragraph
  - Introduction   1.5-2 manuscript pages (double-spaced, 12pt)
  - Methods   2-4 manuscript pages
  - Results and Discussion 10-12 manuscript pages
  - Conclusions   1-2 manuscript pages
  - Figures   6-8
  - Tables   1-3
  - References   20-50

- Letters or short communications have a stricter size limitation, e.g. 3,000 words and no more than 5 figures/tables.

Abbreviations

- Abbreviations must be defined **on the first use** in **both** abstract and main text.

- Some journals even forbid the use of abbreviations in the abstract.

- Abbreviations that are **firmly established** in the field do not need to be defined, e.g. DNA o.

- Never define an abbreviation of a term that is only used once.

- Avoid acronyms, if possible
  - Abbreviations that consist of the initial letters of a series of words
  - Can be typical "lab jargon", incomprehensible to outsiders

Make every attempt to make the first submission a success

- **No one gets it right the first time!**
  - ➢ **Write, and re-write ….**

- Suggestions
  - ➢ After writing a first version, take several days of rest. Come back with a critical, fresh view
  - ➢ Ask colleagues and supervisor to review your manuscript. Ask them to be highly critical, and ***be open to their suggestions***.

4. The review process

Cover Lett...

- Submit...

- Mention... ...nal

- Note sp... ...of interes...

Professor H. D. Schmidt
School of Science and Engineering
Northeast State University
College Park, MI 10000
USA

January 1, 2008

Dear Professor Schmidt,

Enclosed with this letter you will find en electronic submission of a manu... entitled "Mechano-sorptive creep under compressive loading – a microme... model" by John Smith and myself. This is an original paper which ...neither previously nor simultaneously in whole or in part been submitted ...ywhere else. Both authors have read and approved the final version submitted.

Mechano-sorptive is sometimes denoted as accelerated creep. It has been experimentally observed that the creep of paper accelerates if it is subjected to a cyclic moisture content. This is of large practical importance for the paper industry. The present manuscript describes a micromechanical model on the fibre network level that is able to capture the experimentally observed behaviour. In particular, th... difference between mechano-sorptive creep in tension and compression is analyse... John Smith is a PhD-student who within a year will present his doctoral thesis. T... present paper will be a part of that thesis.

Three potential independent reviewers who have excellent expertise in the ... this paper are:

Dr. Fernandez, Tennessee Tech, email1@university.com
Dr. Chen, University of Maine, email2@university.com
Dr. Singh, Colorado School of Mines, email3@university.com

I would very much appreciate if you would consider the manuscript for publication in the *International Journal of Science*.
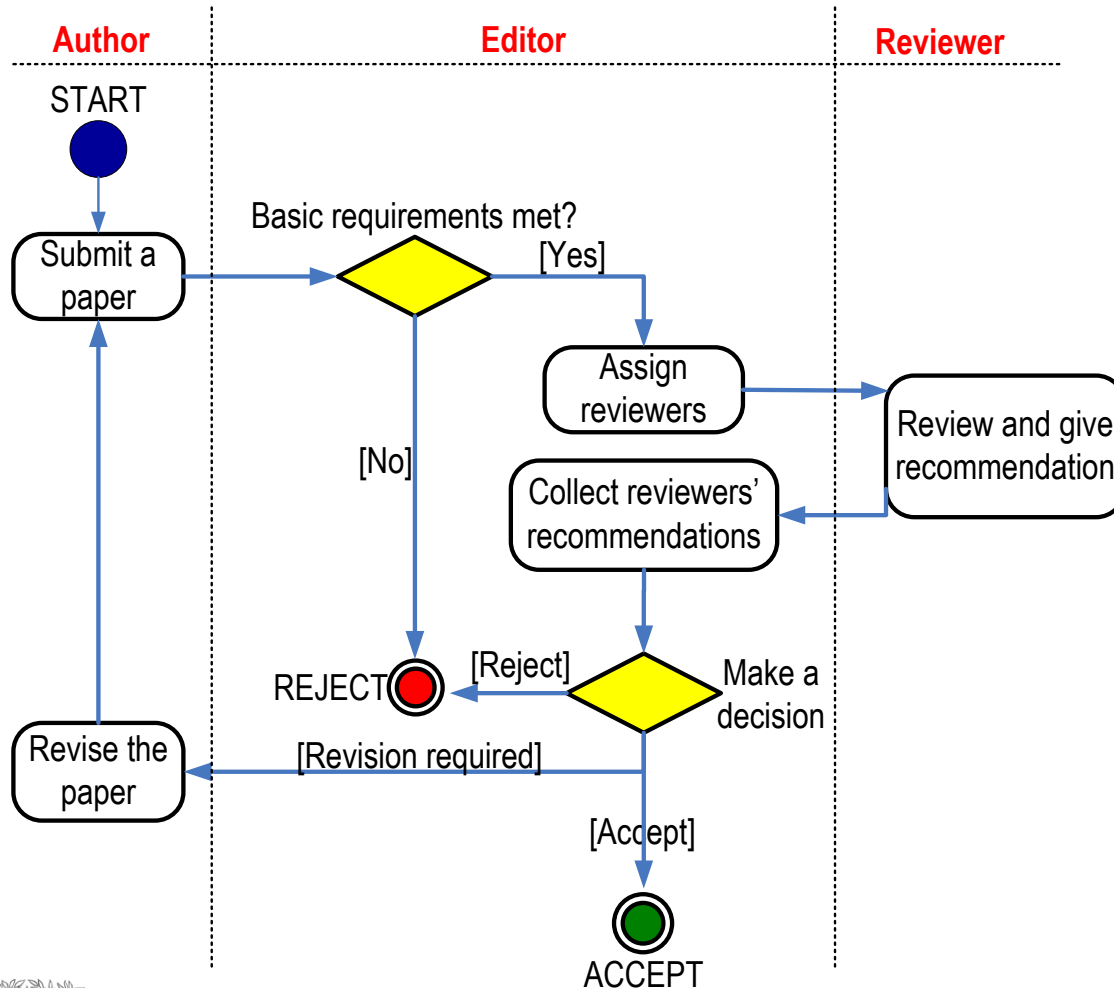
...ely yours,

A. Professor

Final approval from all authors

Explanation of importance of research
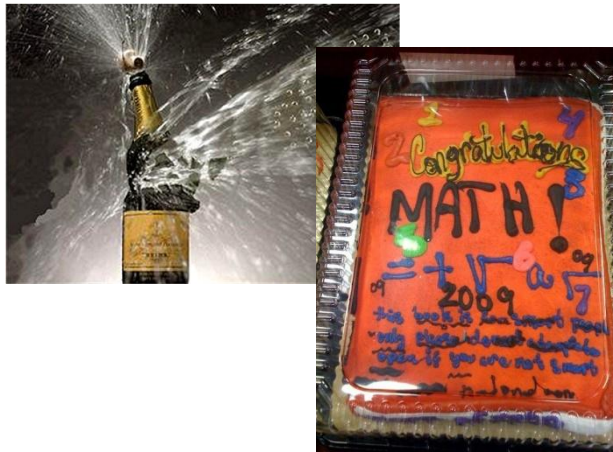
Suggested reviewers

The Peer Review Process - Overview

# First Decision: "Accepted" or "Rejected"

Accepted

- Very rare, but it happens

- Congratulations!
  - Cake for the department
  - Now wait for page proofs and then for your article online and in print

Rejected

- Probability 40-90% ...
- Do not despair
  - It happens to everybody
- Try to understand WHY
  - Consider reviewers' advice
  - Be self-critical
- If you submit to another journal, begin as if it were a new manuscript
  - Take advantage of the reviewers' comments
  - The same reviewer may again review your manuscript!
  - Read the Guide for Authors of the new journal, again and again.
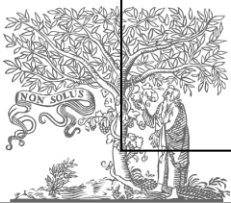
First Decision: "Major" or "Minor" Revision

- Minor revision

  - Basically, the manuscript is worth being 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 being published
  - Significant deficiencies must be corrected before acceptance
  - Involves (significant) textual modifications and/or additional experiments

Manuscript Revision

- Cherish the chance of discussing your work directly with other scientists in your community.

- Prepare a detailed Response Letter
    - Copy-paste each reviewer comment, and type your response below it
    - State specifically which changes you made to the manuscript
        - Include page/line numbers
        - No general statements like "Comment accepted, and Discussion changed accordingly."
    - Provide a *scientific* response to comments to accept, ...
    - ..... or a convincing, solid and polite rebuttal when you feel the reviewer was wrong.
    - Write in such a manner, that your response can be forwarded to the reviewer without prior editing

- Do not do yourself a disfavour, but cherish your work
    - You spent **weeks** and **months** in the lab or the library to do the research
    - It took you **weeks** to write the manuscript

> *Why then run the risk of avoidable rejection by not taking manuscript revision seriously?*

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. Read the Guide for Authors of the new journal, again and again.**

Outline

- University of Mannheim

- Elsevier

- How to get Published
    - Before you begin
    - Select your audience
    - The review process

- What not to do…

Publish *AND* Perish! – if you break ethical rules

- International scientific ethics have evolved over centuries and are commonly held throughout the world.

- Scientific ethics are not considered to have national variants or characteristics – there is a *single ethical standard* for science.

- Ethics problems with scientific articles are on the rise *globally*.

M. Errami & H. Garner
A tale of two citations
Nature 451 (2008): 397-399

Plagiarism Detection Tools

- Elsevier is participating in 2 plagiarism detection schemes:
  - Turnitin (aimed at universities)
  - Ithenticate (aimed at publishers and corporations)

Manuscripts are checked against a database of 20 million peer reviewed articles which have been donated by 50+ publishers, including Elsevier.

All post-1994 Elsevier journal content is now included, and the pre-1995 is being steadily added week-by-week

- Editors and reviewers
- Your colleagues
- "Other" whistleblowers
  - "The walls have ears", it seems ...

Publication ethics – How it can end .....

"I deeply regret the inconvenience and agony caused to you by my mistake and request and beg for your pardon for the same. As such I am facing lot many difficulties in my personal life and request you not to initiate any further action against me.

I would like to request you that all the correspondence regarding my publications may please be sent to me directly so that I can reply them immediately. To avoid any further controversies, I have decided not to publish any of my work in future."

A "pharma" author
December 2, 2008

BBC NEWS EUROPE

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24 February 2011 Last updated at 11:38 GMT

German minister loses doctorate after plagiarism row

Germany's defence minister has been stripped of his university doctorate after he was found to have copied large parts of his work from others.

Karl-Theodor zu Guttenberg, an aristocrat who lives in a Bavarian castle, admitted breaching standards but denied deliberately cheating.

Analysis revealed that more than half of his thesis had long sections lifted word-for-word from the work of others.

Mr Guttenberg failed to name sources for parts of his PhD thesis

So far the German Chancellor, Angela Merkel, has stood by the minister.

The University of Bayreuth decided that Mr Guttenberg had "violated scientific duties to a considerable extent".

It deplored the fact that he had lifted sections of text without attribution.

Last week Mr Guttenberg said he would temporarily give up his PhD title while the university investigated the charges of plagiarism. He admitted that he had made "serious mistakes".

His thesis - Constitution and Constitutional Treaty: Constitutional Developments in the US and EU - was completed in 2006 and published in 2009.

Chancellor Merkel insisted on Monday that she was standing by her defence minister, who was seen as something of a rising star in her conservative coalition.

Related Stories

Germany's Baron without a title

Plagiarism row minister drops PhD

German minister denies plagiarism

RETRACTED: Matching pursuit-based approach f

Available online 24 August 2005.

This article has been retracted at the request of the Editor-in-Chief and P
http://www.elsevier.com/locate/withdrawalpolicy.

Reason: This article is virtually identical to the previously published article
algorithm for SNR improvement in ultrasonic NDT", *Independent Nonde*
International, volume 38 (2005) 453 – 458 authored by

The article of which the authors committed plagiarism: it won't be removed from ScienceDirect. Everybody who downloads it will see the reason of retraction…

Data fabrication and falsification

Fabrication: Making up data or results, and recording or reporting them

"… the fabrication of research data … *hits at the heart of our responsibility to society*, the reputation of our institution, the trust between the public and the biomedical research community, and our personal credibility and that of our mentors, colleagues…"

"It can *waste the time of others*, trying to replicate false data or designing experiments based on false premises, and can lead to therapeutic errors. It can never be tolerated."

Professor Richard Hawkes
Department of Cell Biology and Anatomy
University of Calgary

"The most dangerous of all falsehoods is a slightly distorted truth."

G.C.Lichtenberg (1742-1799)

What leads to acceptance ?

- **A**ttention to details
- **C**heck and double check your work
- **C**onsider the reviewers' comments
- **E**nglish must be as good as possible
- **P**resentation is important
- **T**ake your time with revision
- **A**cknowledge those who have helped you
- **N**ew, original and previously unpublished
- **C**ritically evaluate your own manuscript
- **E**thical rules must be obeyed

– Nigel John Cook

Editor-in-Chief, *Ore Geology Reviews*

Thank you!

Questions?

Jeroen Loos

j.loos@elsevier.com