This presentation is designed to assist authors to publish their scientific results in the Western scientific literature. Publication—in peer-reviewed journals, in English—is essential if you are going to attract Western collaborators or succeed in securing Western funding.
Topics to be covered in this lecture

The publication process
Components of a technical paper
Preparing a manuscript
Responding to reviewers’ criticisms and suggestions
Corresponding with the editor

• State topics to be covered
Publishers of Western scientific journals have four key objectives:

To get the widest dissemination of accurate, reproducible research results

To support the open exchange of scientific information

To provide a permanent archival record, accessible to all, of key scientific findings

To make enough profit to stay in business*

*To make a profit, the publisher must sell the journal to the maximum number of subscribers, who want the best papers on topics of strong current interest. Most subscribers decide which journals to buy based on their reputation for publishing sound, significant articles.

• Publishers have four key objectives
  • Get the widest dissemination of research results
    • Accurate, reproducible
  • Support open exchange of scientific information
  • Provide an archival record
    • Accessible, permanent
  • Make a profit
    • Sell the journal to as many subscribers with interest
One purpose of Western publishing is to create an archival record of important scientific discoveries.

An editor, usually a working scientist, is assisted by an advisory board appointed by the publisher to determine the journal’s scope (what topics are to be covered).

The editor is responsible for selecting appropriate, scientifically sound papers of interest to subscribers.

The editor relies on peer review to select the best papers for publication.

A journal is only as good as its worst paper.

- Establishing an archive
  - Important scientific discoveries
- Editor – a working scientist
  - Determines direction and scope of journal
  - Responsible for selecting papers
    - Appropriate for subscribers interests
    - Scientifically sound
  - Relies on peer review to select the best papers
- A journal is only as good as its worst paper
  - A journal will not stake its reputation on unsound scientific results
Most editors rely on four criteria for selecting papers for publication

Topic is appropriate for the journal
Work presented is original and significant
Account is accurate and concise
Data is presented objectively and completely
Paper is sufficiently detailed and references publicly available information so that findings can be reproduced

• Editors will rely on four criteria to select papers
  • Topic is appropriate
  • Work is original and significant
  • Account is accurate and concise
  • Data is objective and complete
  • Paper is
    • Sufficiently detailed
    • Cites publicly available information in reference
      • So findings can be reproduced
“Peer review” determines which papers are published

Most papers are accepted for publication in Western journals based on the independent recommendations of recognized experts in the field (“reviewers” or “referees”)

Reviewers are expected to offer timely, objective, honest, and constructive criticism

Reviewers are bound by professional ethics not to reveal information in a paper before it is published

• Peer review determines the selection of papers
• Independent recommendations
  • From recognized experts
• Reviewers offer criticism
  • Honest
  • Timely
  • Objective
  • Constructive
• Reviewers bound by professional ethics
  • Must not reveal information before a paper is published
  • Must not use the information for personal gain
The editor begins the peer-review process
Author submits manuscript to editor
Editor determines if paper is appropriate:
- Represents new and significant work
- Is scientifically sound
- Falls within the journal’s topical coverage
If the paper does not meet all of these criteria, it is rejected and returned without review
If the paper meets the criteria, the editor selects qualified referees and sends them each a copy of the paper for review

• Following are general steps to the publication process
  • Editor begins peer review process
  • Author submits paper to editor
  • Editor determines if paper is appropriate
    • New and significant work
    • Scientifically sound
    • Falls within journal’s interest area
  • If paper does not meet screening criteria
    • The paper is returned without review
  • If paper meets criteria
    • Editor selects reviewers
    • Sends the reviewers the paper for review
Reviewers perform the next step

Reviewers provide written comments on
- The technical soundness of the paper
- Mistakes and omissions
- Additional work to be referenced
- Suggestions for clarification, deletion of superfluous material, or other improvements

Reviewers also make a confidential recommendation to the editor
- Accept paper as written
- Recommend optional changes
- Require mandatory changes
- Reject paper

• Reviewers’ process
  • Provide written comments on:
    • Technical soundness
    • Mistakes, omissions
    • Additional current work for reference
    • Suggestions for improvement
  • Provide confidential selection recommendations to editor:
    • Accept paper as written
    • Recommend optional changes
    • Require mandatory changes
    • Reject paper without further consideration
If the reviewers suggest changes, the process continues...

The editor returns the manuscript and the anonymous reviewers’ reports to the author and requests revisions.

The author makes the requested changes, additions, or deletions, and returns the revised manuscript to the editor.

The editor determines whether the author has satisfactorily complied with the reviewers’ requirements—if so, the paper is accepted.

• The process will continue if:
  • The reviewers suggest changes to the original paper
    • The reviewers may request revisions
    • The author will revise and return to editor
    • The editor will review the changes
  • If revisions are adequate, the paper may be accepted.
A reviewer may ask to re-review a corrected manuscript

Sometimes, particularly if mandatory changes have been suggested, a reviewer may tell the editor he wants to check any revised manuscript before it is accepted for publication.

In that case, the editor sends the revised paper to the original reviewer for further comments or corrections.

• A reviewer may make a specific request
  • To review the revision of the paper
  • A revised paper may be sent to the reviewer
If you decide to submit a revised ms., send the editor in a separate document all the changes you have made in the original paper that address the reviewers’ criticisms

### Changes Incorporated in Revised Manuscript

1. We have added a paragraph in section 3 that describes the annealing procedure in complete detail, as requested by Reviewer #2.
2. We have revised Fig. 1, to show the complete cooling loop, as suggested by Reviewer #1.
3. We have added Fig. 8, which shows the migration of grain boundaries after annealing, as requested by Reviewer #1.
4. …

• Be sure to indicate any revisions
• Use example in slide to feature revision citations
Sometimes an author may decide that he doesn’t want to make changes

If the author decides that revisions required by the referees are too extensive, he may elect to withdraw the paper from further consideration.

If an author decides to withdraw a paper, the editor should be informed.*

The withdrawn paper may be submitted to another journal.

*A sample letter to the editor, formally withdrawing a paper, is provided in English on this CD.

• An author may decide not to make any changes
  • In this scenario the author may withdraw the paper from consideration
• Be sure to inform the editor!
• The withdrawn paper may be submitted to another journal
  • Note: It is not appropriate to submit the same paper to more than one journal at the same time; however, if a paper is rejected by one journal, it may be submitted to another
• Sample letter of paper withdraw included in the CD materials
Publishing in a peer-reviewed journal has both advantages and disadvantages

Peer-reviewed papers are more respected; other scientists place higher confidence in results tested by peer review.

Process creates better papers.

Authors get benefit of the knowledge and insight of experts.

Process is lengthy—sometimes a year or more between submission and final publication.

Many U.S. peer-reviewed journals assess "page charges"—fees charged to authors to offset the costs of publication.*

*Ask editor to waive page charges
A sample letter, in English, is provided on the CD.

•2 columns on this slide feature

•Positive and

•Negative aspects

•of publishing in peer-reviewed journals

•Positive

•Peer review is more respected

•Process creates better papers

•Authors enjoy the luxury of expert insight

•Negative

•The process is lengthy

•Many journals assess page charges

•Request waiver of page charges!

•A secret of page charges is

•Many universities do not pay page charges as a policy

•Journals will allow university researchers to publish without paying page charges but place limits on number of pages

•Template of request for waiver of page charges included in CD materials
A journal article is **not** merely a laboratory report

Does *not* simply report the work done

**Key elements of a Western scientific paper:**

✓ Establishes work in the context of other work—how it differs from or builds on prior work  
Review of the literature is essential  
References to prior and contemporary work—your own and others’—are mandatory

✓ Analyzes and interprets the meaning of the results and draws conclusions

✓ States the implications and significance of the work

• A journal article is more than a lab report
• Must include the following elements
  • Establish the work in the context of other work
  • How it builds on prior work
  • Review the current literature
    • This is mandatory
  • Analyzes and interprets the meaning of the results
    • Draw the conclusions for the readers!
  • State the implications and significance
    • Tell the reader the impact of your work

• This practice may violate some of the traditions you were taught in scientific writing but it is a general guideline for publishing in Western journals
Before you begin to write, be able to answer these questions

What is the purpose of this paper?
- Describing original, significant research results
- Reinterpreting previously reported results
*Reviewing the literature
*Providing an overview of the topic

How is it related to other papers?

What information does the reader need to understand the paper?

What conclusions should the reader reach?

**The editor usually selects a specific author to write such a paper; don’t submit a review or overview paper without first asking the editor if he is interested in receiving such a paper and discussing its scope

•Answer these questions before writing:
  •What is the purpose of this paper
    •Original results?
    •Reinterpreting previous results?
    •Reviewing the literature
      •Editor directly selects the author
    •Providing an overview of a topic
      •Editor directly selects the author
  •How is the work related to other papers?
  •What information is most pertinent?
  •What conclusions should the reader reach?
A paper submitted to a Western journal must contain the following components or sections:

- Title
- Abstract
- Background and Introduction (relation to other work, information reader needs to understand the paper)
- Methods (what you did)
- Results (what you found out)
- Discussion (how you analyzed your data)
- Conclusions (what you think it means)
- Acknowledgments
- References

• Use this checklist of items to include in your paper
  • Title
  • Abstract
  • Background and Introduction
  • Methods
  • Results
  • Discussion
  • Conclusions
  • Acknowledgments
  • References
The title must be descriptive and interesting
You have about 30 s to grab the reader’s attention and make him want to read your paper

Worst title I have ever seen:
Towards the Observation of Signal over Background in Future Experiments

Put key words first
Restrict title to a maximum of 12 words
Avoid using unfamiliar acronyms or abbreviations in the title

• Title must be descriptive and interesting
  • In less than 30 seconds
    • Cite example from slide
• Put keywords in the first half of your title
• Title should be no more than 12 words
• Do not use acronyms and abbreviations
<table>
<thead>
<tr>
<th>Original Title</th>
<th>Better Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application of the time-dependent local density approximation to conjugated molecules</td>
<td>Time-dependent local density approximation for conjugated molecules</td>
</tr>
<tr>
<td>A novel approach to estimate the stability of one-dimensional quantum inverse scattering</td>
<td>New stability estimate for 1D quantum inverse scattering</td>
</tr>
</tbody>
</table>

*These examples feature poor and improved use of keywords in titles*
### Make titles short (≤ 12 words)

<table>
<thead>
<tr>
<th>Original Title</th>
<th>Better Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser-Induced Plasma Phenomena near a Solid Surface at the Incident Intensity in the Range from 10 MW/cm² to 10 GW/cm²</td>
<td>Laser Plasma–Solid Surface Interaction at 10 MW/cm² to 10 GW/cm²</td>
</tr>
<tr>
<td>Investigation of the Plasma Rate Equations by the Langevin Equation in Density Space for Non Local Thermodynamic Equilibrium Plasmas</td>
<td>Rate Equations for Non-Local Thermodynamic Equilibrium Plasmas</td>
</tr>
</tbody>
</table>

• These examples feature poor and improved use of title length
Every article submitted to a technical journal or meeting proceedings must have an abstract

Every abstract must contain the following:
A concise statement of the problem studied
A brief explanation of the methods used
A succinct description of the principal results obtained, their validity, and their significance

See the related presentation “Abstracts” on the CD for suggestions on how to write a perfect abstract

• Your abstract is an important component of your paper
• Every abstract must contain
  • A concise statement of the problem studied
  • A brief explanation of the methods
  • A succinct description of results, their validity, and significance
• CD materials contain guidance on drafting a paper’s abstract
Use this checklist to evaluate your abstract:

- Subject of the paper is stated immediately
- Scope and objectives of the work are identified
- Significant findings are summarized
- Results are emphasized
- Methods and operational ranges are specified
- All abbreviations are defined
- All equations are rendered linearly
- No references are cited
- No mention is made of figures, tables or equations used in the main text
- No figures or tables of any kind are used
The “background and introduction” section establishes the context
States the purpose of the work
Gives a concise background of the problem being studied
Relates the work described to prior work, both the authors’ and others’
Describes the experimental or theoretical basis for the work
Explains the significance, scope, and limitations of the work
Provides background information the reader will need to understand the work

• Your background and introduction section
  • Places your work in context of prior work
    • States the purpose of the work
    • Gives a concise background of the problem
    • Relates the work described to prior work,
      • both the authors’ and others’
    • Describes the experimental or theoretical basis for the work
    • Explains the significance, scope, and limitations of the work
    • Provides background information the reader will need to understand the work
The “methods” section describes **in detail** how the work was done

- Describes the apparatus, computer codes, or other devices used in the work
- Identifies materials used and gives their specifications
- Describes procedures completely
- Gives adequate parametric details to reproduce the work
- Emphasizes any hazards, e.g., toxicity, radiation hazards, biohazards, explosive tendencies
- Includes sufficient mathematical detail to reproduce derivations and check numerical results
- Includes all background data, equations, and formulae necessary to the arguments

• The methods section describes how the work was done
  • Describe apparatus, codes, or devices
  • Identify materials
    • Give specifications
  • Describe procedures completely
  • Emphasize hazards
  • Include sufficient mathematical detail
  • Especially if your project is theoretical
  • Include all background data
The “results” section presents relevant and significant findings

Presents only relevant data
Emphasizes results achieved, not chronology
Identifies obvious dead-ends

Describes statistical treatment of data, if any

Uses figures to illustrate data

Uses tables to organize and summarize data and to reveal relationships

Gives sufficient detail to justify the conclusions

• Results section presents findings
  • To feature the work’s relevance and significance
• Present only relevant data
• Describe statistical treatment of data
• Use figures to supplement and illustrate data
• Use tables to organize and summarize data
  • May also help to convey relationships among data
• Do not present data without sufficient detail to justify your conclusions
The “discussion” section points out key features of the work

Describes the analysis of results

Compares the results to prior work, both to the authors’ and to others’

Assesses the extent to which the results were as expected and if not, what caused the discrepancies

Explains the meaning of the results and how the authors arrived at that interpretation

States honestly the limitations of the work

• Discussion section identifies key features of work
  • Describes analysis of results
  • Compares results to prior work
  • Answers whether results were expected or not
  • Explains meaning of results
  • States limitations of work
The “conclusions” section evaluates the results from the standpoint of the original objectives of the work

What has been contributed?

What are the logical implications of the results?

Do they suggest directions for future study?

Do they support development of technological applications?

Do they identify a dead end that should be abandoned?

• Conclusions section evaluates results
  • From original standpoint of work
• Answers:
  • What has been contributed?
  • What are the implications of the results?
A “summary” section may be included in very long papers

Is used only for very long papers—>30–40 pages

Recaps most important points from the introduction, results, discussion, and conclusions sections

• Summary section
  • Should be reserved for longer papers
  • To remind readers of the important points
The “acknowledgments” section thanks individuals and groups who contributed to the work

Acknowledge contributions by colleagues who are not listed as authors on the paper

Acknowledge the institution or agency that provided financial support for the work; provide specific grant numbers

Do not include purely personal acknowledgments

N.B. There is no e between the g and the m in the US English spelling of acknowledgment

• Acknowledgments recognize
  • Individuals or groups that contributed to the work
    • Colleagues not listed on paper
    • Funding agency
  • No personal acknowledgments
The “references” section is not a bibliography; it should contain only those references specifically cited in the text.

Cite the reference at the end of the phrase\(^1\) or sentence in which it is first mentioned. [Elliott, 1998]

List all references at the end of the manuscript in numerical order, if cited by number, or in alphabetical order, if cited by name and date.

- References contains
  - Citations of only references specifically in the text
Check references for . . .

Conformance to the journal’s specific manuscript preparation instructions

Accuracy of all information

Reference to the *English* version, if a reference has been published in both English and Russian

No references to *unpublished material, private communications, obscure proceedings*, or other sources not readily accessible to readers

• Check your references for
  • Journal’s preparation specifications
  • Accuracy of information
  • Reference to English version, if available
  • No reference to unpublished or unavailable material
Provide sufficient identifying information for all references

Include certain information as a minimum:

Journal articles—Author, journal title, volume number, inclusive page numbers, year.

Proceedings or articles in books—Author, title, name of publication, editors’ names, inclusive page numbers, publisher, city of publication, date

Books—Author, title, publisher, city, date

Patents—Patent holder’s name, title of patent, country of issue, patent number, date of issue

Theses—Author, title, degree, department, university, location, date

Other—Sufficient information to identify source and its location

•Provide sufficient identifying information for references including:
  •Journal articles
  •Proceedings
  •Books
  •Patents
  •Theses
  •Other sources
Some papers may require additional special sections

Material that supplements the text should be placed in a special section or sections following the references, so as not to disrupt or obscure the logic of the presentation

Appropriate material for special sections:
- List of abbreviations or glossary of special terms
- List of symbols or mathematical terms
- Computer codes
- Lengthy or supplemental background material

• Additional material may be required for your paper
  • May include
    • List of abbreviations
    • List of mathematical terms
    • Computer codes
    • Other supplemental information
After the paper is written, the manuscript should be revised, edited, and proofread by the authors

Revising looks at the logical structure of the manuscript; is there a clear path that leads the reader inevitably from the introduction to the conclusions?

Editing looks at the language; is it clear, unambiguous, and concise?

Proofreading looks for mistakes in grammar, spelling, and numbering that distract the reader and detract from the quality of the manuscript

• Remember, after the drafting of the paper, be sure to:
  • Revise
    • Is the reader led to your conclusions?
  • Edit
    • Is the language clear?
  • Proofread
    • Will the reader be distracted by simple mistakes?
**Strive for logical organization**

The purpose of a Western technical paper is *not* just to present results—
Must *explain* the meaning of the results
Must *persuade* the reader that the conclusions drawn are the correct interpretation of the results

The paper must be organized so that the reader can easily follow the logic of the arguments

*See separate presentation on “Persuasion” on this CD

• Make your paper logical
  • You must do more than simply present your results
    • Explain the meaning of the results
    • Persuade the reader that your conclusions are correct

• See the CD materials on persuasion
In revising, concentrate on the ideas first

Do the ideas logically flow from the background and introduction to the conclusions?

Does the presentation of the ideas lead the reader to draw the same conclusions that the authors have?

Are there gaps in the logic?

Is there missing information that the reader needs?

• Revise the logical flow of your ideas
Use the sections of the paper as building blocks to create a logical structure

Each section should focus on one key element of the work described

Example—a paper presenting a new experimental method:
§1 describes existing methods
§2 describes new method
§3 explains how new method differs from, extends, or is superior to existing techniques
§4 gives advantages of new method
§5 honestly states limitations of new method
§6 describes how new method will be implemented

• Use the sections to feature major portions of your paper
• Each section should focus on one key element
Use section headings as cues to guide the reader through the paper

Complex Systems: Science for the 21st Century*
“Nature’s Mastery”

Nature responds to its environment
Nature creates complexity via self-assembly
Nature fabricates hierarchically
Nature discovers new structures
Nature uses templates
Nature uses thermodynamics

*This publication is included in the CD

•Section headers should act as cues to guide the reader
Use transitional statements to reveal connections and move reader from one idea or section to the next

We previously mapped and sequenced human chromosome 19 (HSA19) - related homology segments in mouse (*Genomics* 74:129-141, 2001; *Science* 293:104-111, 2001). While comparisons between the two mammalian species are proving extraordinarily helpful, biological understanding is substantially enhanced by comparing sequences from additional reference species at informative evolutionary distances. To this end we have mapped and are sequencing HSA19-related regions from a third, evolutionarily more distant vertebrate, the chicken.


• Use transitional statements as a tool
  • To move the reader through each idea to the next
• Create a seamless transition of ideas
Use summary statements to recap important points for the reader

As expected, chicken sequence exhibits much higher levels of conservation relative to mouse and human than, for instance, that of the evolutionarily more remote puffer fish, *Fugu rubripes*, recently sequenced at the JGI (*Science* 297:1301-1310, 2002).


• Remind the reader of important points through summary statements
One paragraph = one idea

Paragraphs form a logical structure for the narrative

Paragraphs should guide the reader through the discussion one idea at a time

Each paragraph should present a new key idea or a different aspect of a continuing thought

Link paragraphs by providing logical connectives or reader “cues”

• Limit your ideas to one per paragraph
Use a simple five-step process to build logical paragraphs

State the key idea or topic in the first sentence

Explain the idea or give an example of it

Provide supporting details

Summarize the idea

Provide a logical transition to the key idea in the next paragraph

• Use a 5-step process to build logical paragraphs
  • State the key idea in the 1st paragraph
  • Explain the idea or give an example of it
  • Provide supporting details
  • Summarize the idea
  • Provide a transition to the key idea in the next paragraph
Use logical transitions to link paragraphs and sections

One paragraph or section ends with:

“...because of interference by backscattering, current methods are very inexact.”

Begin the next paragraph with:

“Greater precision may be achieved by...”

The logical connection between the two paragraphs is made clear by repeating the idea of precise measurement

•Examples of transitional statements
After you finish revising your paper and are satisfied that all necessary information has been included, and all superfluous information has been removed, it is time to edit your paper.

Revising concentrates on ideas and the logical exposition of the paper.

Editing concentrates on language—are the ideas expressed clearly and concisely?

• Editing focuses on clear language
Achieving clear, concise language is the key goal of editing

- Use short sentences
- Keep verbs close to nouns
- Limit the number of modifying clauses
- Eliminate unnecessary words
- Replace wordy expressions with simple words
- Use active verbs
- Express ideas in positive statements, not negative

*Use simple tools to improve your editing:
- Use short sentences
- Keep verbs close to nouns
- Limit number of modifying clauses
- Eliminate unnecessary words
- Use simple language
- Use active verbs
- Express ideas in a positive way – avoid negative statements

*Illustration only, does not represent actual data.
Write in short sentences (<20 words)

The following sentence (63 words), although grammatically correct, is very hard to understand, even for a native-English speaker:

“A program of chemical analysis and receptor modeling is proposed in which samples obtained at the EB ENTEK sites will be used to estimate the sources and/or source regions of trace elemental deposition into the area and the effects of specific urban areas on the airborne particulate matter compositions and thus, their potential contribution to the contamination of the area's water supplies.”

• Short sentences should be less than 20 words
For clarity, break up long sentences into several shorter ones

The proposed project includes chemical analysis and receptor modeling. Samples obtained at ENTEK sites will be used to determine the sources of trace elemental deposition into the area. The effects of specific urban areas on the composition of airborne particulate matter will be calculated. Thus, the extent to which they contribute to the contamination of the area’s water supplies can be estimated.

• Break up long sentences into shorter thoughts
Eliminate unnecessary words

the results *tend to suggest*
they are *both identical*
estimated to be about 0.75 mg
such as copper, iron, and *etc.*
divided into two equal halves
throughout the *entire experimental run*
bright yellow *in color*
fewer *in number*
elliptical *in shape*
γ equals $T_{max}$, and *vice versa*

*N.B. Words in *italics* can be eliminated, with no loss of meaning, to improve conciseness*

• Examples of unnecessary words to eliminate
Replace wordy expressions with simple, direct words

due to the fact that  because
on the order of approximately  about
in the near future  soon
a very limited number of cases  few
it appears to be indicated that  apparently
in spite of the fact that  although
subsequent to  after
at the present time  now
in consequence of this fact  thus
as compared to  versus
in combination with  with

• Examples of using simple language
Change negative expressions to positive statements

A positive statement is easier to understand—and more concise—than a negative

*Although some data supported the hypothesis, it could not be concluded that output scaled linearly with current.*

*Data on linear scaling of output with current was inconclusive.*

*Arcing under high-current operation could not be avoided without the use of the insulated feedthrough.*

*The insulated feedthrough prevented arcing, even during high-current operation.*

• Examples of positive statements and avoiding negative statements
After editing is completed, it’s time to proofread the manuscript

Revising concentrates on ideas and the logical exposition of the paper

Editing concentrates on language—is it clear and concise?

Proofreading concentrates on correcting errors in spelling, grammar, and numbering that distract the reader and detract from the overall quality of the paper

• Proofread
  • To correct errors in:
    • Spelling
    • Grammar
    • Numbering
• Simple mistakes can distract the reader and create a negative impression
Proofreading is more than just eliminating typographical errors

Are section headings numbered consecutively and consistently?
Are all references to sections correct?
Are all acronyms and abbreviations defined the first time they appear?
Are all mathematical symbols defined?
Are all equations numbered consecutively and cited correctly?

• Proofread in detail:
  • Number section headers correctly
  • Reference sections correctly
  • Define acronyms and abbreviations correctly
  • Define mathematical symbols correctly
  • Number and cite equations consecutively
Are all references given in the reference list cited in the text? Are they in the proper order?

Are all tables and figures cited in consecutive order in the text?

Does every figure have a stand-alone caption, and every table a stand-alone title?

Are the figures reproducible?

Are both axes on all graphs labeled?

Are the units of measure (in SI units) given for all graphs and tables?

• Continue to proofread by asking yourself the following questions
Finally, look at your paper with an editor’s “eyes” . . .

Evaluate the “content”—the science
Are the results new and important?
Are they presented objectively?
Are they accurate and complete?

Evaluate the “style”—the use of language
Are your ideas presented logically?
Is the language precise, concise, and unambiguous?
Is the text free of mechanical errors?

• Look at your paper with your editor’s eyes
  • Evaluate the content – the science
    • Are the results new and important?
    • Are the results presented objectively?
    • Are the results accurate and complete?
  • Evaluate the style – the use of language
    • Are the ideas presented logically?
    • Is the language clear?
    • Is the text free from error?
Evaluate the scientific content of your paper from an editor’s or reviewer’s point of view

Does the paper contain significant new results?

Are there obvious errors or omissions?

Are the conclusions logical and defensible?

Is adequate reference given to prior work?

Is there any superfluous material that should be omitted?

•Evaluate the scientific from the reviewer’s point of view
  •Does the paper contain significant, new results?
  •Are there any errors or omissions?
  •Are the conclusions logical and defensible?
  •Is adequate reference given to prior work?
  •Is there material that should be omitted?
To be accepted for publication, a research paper must present significant new results—the editor will ask reviewers to answer the following questions:

Has this or very similar material been previously published elsewhere?

Does the paper contain new research results or original theories?

Will the results reported be of interest to the journal’s readers?

• The editor will ask several questions before accepting a paper:
  • Has this material been published elsewhere?
  • Does the paper contain new results or original theories?
  • Will the results be of interest to the journal’s readers?
Is the paper well-organized?

Are assumptions and inferences clearly stated and supported?

Are points asserted or proven?

Are reader cues provided to illuminate the logic of the arguments?

Does the logic flow naturally, or are there bumps and gaps?

• You must ask yourself:
  • Is the paper well organized?
    • By answering whether:
      • Assumptions and inferences clearly stated and supported
      • Key points are proven, rather than asserted
      • Readers are given cues to identify the logic of your argument
      • The logic flows naturally
Is the paper well-written?

Are the underlying relationships of ideas and data made clear?

Are descriptions precise and meaningful?

Is the meaning of every sentence clear?

• You must ask yourself
  • Is the paper well-written:
    • By answering whether
      • The underlying ideas of the data are made clear
      • Descriptions are precise and meaningful
      • Each sentence is clear
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