Some thoughts on Writing for Journals, Conferences, Books, Theses etc

By

Prof. Arun S. Mujumdar
Mechanical Engineering Dept.
National University of Singapore
Objectives

- Disseminate knowledge (not just information) that you have generated
- Degree of originality and depth required depends on medium selected for dissemination and expected readership or audience—match them well!
- Bring recognition to you, your institution, employer etc depending on quality of research and of your presentation—written and oral—do your best
What to write/present

- Depending on medium chosen, follow instructions and guidelines of the journal/conference etc closely
- Write clearly, concisely and correctly! (3 C’s of presentation requirements!)
- Present only what is new, innovative and true- do not exaggerate claims and do not claim others’ work as own
- Make it interesting!
What to write?

- Write only if it is worthwhile publicizing - should be a substantial contribution to knowledge
- Note knowledge is dynamic - be aware of state-of-the-art and acknowledge prior work ethically; research literature regularly
- Write as if it were a detective story - build up interest in introduction and follow a logical sequence
- Test - would you read the paper if someone else did the work and wrote it?
What to write?

- Be ethical at all times - even in writing as in conducting research being reported
- Ethics - origin in Greek word *ethos* - meaning personal character
- **Some commandments**: 1. *Thou shalt not plagiarize or claim credit for others’ work* 2. *Thou shalt not misreport or invent results* 3. *Thou shalt not present wrong data*, 4. *Thou shalt not conceal sources or destroy data*

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Choose medium wisely

- Do not choose journal by its cover or ISI impact factor exclusively - may go to wrong readership (even if it slips through the review process)
- Only final, archival work which will withstand test of time for some time is appropriate for journals - work in progress is typically good for conferences
- Be aware of target readership/audience and their needs, and write at right level - keep reader’s interest in mind - not just your own!
Some notes about the content

- Quality and quantity depend on level of work and readership
- Disseminate only correct, reproducible, reliable results in usable form-test data statistically and quantifiable form
- Check data for precision, uncertainty, reproducibility etc and present it in right format e.g. tables vs graphs etc. No need to present ALL data you have obtained/generated!
- Be logical and ensure smooth flow of thought-don’t “jump” all over the map!
Analytical/Computational results

- Give sufficient details to reproduce work if reader wishes to.
- Validate model and results. State all implicit and explicit assumptions clearly and justify them.
- Point out weaknesses along with merits: no model is perfect, by definition!
- Numerical results must be tested carefully to ensure correctness. Compare and contrast with earlier work.
- State explicitly your own contribution.
Presentation of results

- Dimensional vs non-dimensional form- choose wisely and justify
- Give equations you actually solved- not in a different format- always give BCs and ICs as a well-posed problem
- Give all details that have bearing on accuracy of numerical solutions
- Try to generalize results where possible- do not leave it to readers (who will not do it anyway)
- Consider alternate ways of presenting data-use the best one

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On writing itself...

- Make sure spelling, grammar, syntax and style are all correct.
- Sloppiness in writing can be (mis-interpreted as sloppiness in research itself! Referees and readers will not consider such work favorably.
- Length of text must be consistent with content to be conveyed—most journals impose restrictions on page count.
- Draw right and useful conclusions based only on what is presented!
Summary/ Abstract

- Abstract or Summary should state exactly and concisely the key objectives, methodology and in some instances key conclusion of work.
- Abstract must attract attention of potential reader
- Include Notation(with units), References in standard formats
- Acknowledge help of persons, agencies etc
What about co-authorship?

- Be careful in choosing order and number
- Main researcher is the first author (or Senior author, by convention)-primarily responsible for validity of content
- Others -typically in order of contributions actually made to reported work- often hard to decide
- Too many authors may spoil the “broth”
- Ethically, only those who have actually contributed to the research effort (not with funds or giving space etc) and writing itself should be listed.
- Differentiate between co-authorship and acknowledgements.
Review process

- All archival journals are peer-reviewed - some poor quality papers and even wrong information may slip through these “filters” - be critical in reading printed words.
- Be ethical, thorough and critical in assessing and reviewing prior work (not just listing it)
- Be aware of latest developments in your area and also have good foundation in related areas, fundamentals of your discipline
- Avoid repeating prior work. Try to be innovative and creative - the main purpose of research.
- Do not be risk-averse. Do not look for easy solutions or ways to circumvent problems!
Pitfalls to avoid – a must!

- Plagiarism- intentional or not, is committed when one uses others’ writing as own –without giving due credit
- Even your own published writing is subject to copyright laws!
- Do not plagiarise words as well as ideas!
- Inadvertent plagiarism can occur when writer tries to summarize or paraphrase without quoting source!
- Quote when you need to appeal to authority and paraphrase when conclusions are more important and you can possibly say it more succinctly!
- *Read Booth, Colomb and Williams (Univ.Chicago Press, 2003) for more in-depth discussion of topic.*
Closure

- This is a very cursory summary of some thoughts on the publication process for new graduate students/novice writers.
- Possible to elaborate on specific topics listed – to be done in a later meeting.
- Happy writing!
- Many useful books available for novices as well as seasoned writers. Read them!

ANY QUESTIONS?