## **Creating Better Conference Papers**

**Thomas Orr Consulting, LLP** 

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Some academic conferences publish a conference proceedings, which contains the papers that presenters will present at the conference via PowerPoint slide presentations or other media. The intent is to make this information available to everyone who attended the conference, as well as to everyone who can find the proceedings on the Internet after the conference committee archives it in an academic database or online library collection.

For graduate students, postdocs, researchers, and working professionals who wish to build an excellent professional reputation based on valuable expertise and accomplishments, here is some advice that I have typically given to my students, when I was a professor and research center director, as well as given to my clients, in my role as a consultant.

### Section 1: Purposes of Proceedings Papers in the Eyes of Novices

- 1. To give the authors a quick publication for their CV, without the required paper length, quality, competitiveness, and time requirements that journal articles typically require.
- 2. To satisfy the requirements for conference attendance.

Novices who are new to the academic world often do not know that conferences vary considerably in prestige and quality. They do not know that high quality conferences add value to one's personal brand and that low quality conferences reduce that value. Consequently, novices often select conferences because of the convenience (e.g., they will be held at their university), the ease of getting their paper accepted (e.g., a 95-100% acceptance rate), and the lax requirements for quality of English and content (e.g., any paper in any style is accepted, even if it contains significant language errors and amateur content). All researchers begin their research career as novices, but they do not have to remain novices if they have the ambition and training to achieve much higher levels of professional expertise.

### Section 2: Purposes of Proceedings Papers in the Eyes of Mature Professionals

- To disseminate new research findings or inventions quickly and internationally via the most reputable conference possible in order to claim ownership of the novel ideas, findings, and inventions before others do something similar.
- 2. To present an intelligent, reader-friendly description of the work that will complement the conference presentation for those who heard it, as well as provide enough information for many others around the world who were unable to attend.
- 3. To build one's reputation internationally about one's particular interest and expertise in a particular field
- 4. To demonstrate one's vast familiarity with other research in the same field and complementary fields, via the other papers that the proceedings paper will cite.
- 5. To demonstrates one's superior logic, language skills, and writing ability.
- 6. To build one's professional network strategically with key people at the conference and elsewhere, who will be attracted to the topic and impressed by the work.
- 7. To promote further research and publication on related topics that will cite this conference paper in other publications, thus making it more valuable and memorable.
- 8. To bring greater value to the conference and its sponsoring organization(s).

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### Section 3: Characteristics of a Superior Proceedings Paper

- 1. The paper has a main point and supporting information that is written to accomplish a specific communicative goal.
- 2. It has substantial content that is very useful and thus worth reading and citing.
- 3. The title communicates the main point of the paper clearly, concisely, and grammatically.
- 4. The list of authors truthfully communicates who did the research and authored the paper.
- 5. The content is concise for easy reading, but it contains enough detail to explain the essentials.
- 6. The paper is connected to its context in a particular research area via essential citations to the most relevant papers.
- 7. The ideas, sentences, and graphics are unique and completely free of plagiarism.
- 8. The abstract surveys all of the essential parts of the paper so that readers can understand the content without having to read the entire document.
- 9. The introduction contains essential background info rather than vague ideas that simply fill up space without saying anything substantial.
- 10. The body of the paper contains all of the necessary material to accomplish the purpose for which the paper has been written.
- 11. The closing sections (e.g., discussion, conclusion, future research, etc.) contain essential material of value rather than trite closings that imitate poor endings in other papers.
- 12. The reference list is accurate and uses the appropriate style, consistently, for each item that is listed.
- 13. The acknowledgements (or acknowledgments) section expresses proper credit and appreciation to those who contributed to the work but did not author the paper.

**Important Note**: A paper's authorship policy will vary from country to country since some cultures require the addition of an advisor, lab head, or someone else to be listed as an author, even though the person may not have contributed much (or anything) to the project and the writing of the paper. By international standards, however, it is usually considered unprofessional to list all the members of a laboratory, department, or research division when some of the people have no knowledge of the project or did not participate in its work. The best way to measure if someone should be listed as an author is if the person can present the paper at a conference alone, with full knowledge of the work so that they can answer questions that may come during the Q&A. If they can't, then they should be listed in the acknowledgements (or acknowledgments) rather than listed as an author. Paper authorship issues are typically the most problematic in cultures where the number of publications (i.e., quantifiable data) is considered more important than quality of research and professional integrity.

## Section 4: Professional Writing Improvement Strategy

One of the best ways to improve one's writing of academic papers is to study good examples strategically, rather than casually without any methodology. Here is a useful method:

1. Identify the most prestigious journals and proceedings in your field that have high standards for acceptance and grammatical correctness.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Roughly 50% of the English one needs for success in a specific research field appears in the top journals of that field, so it is wise to read this English often and learn as much of it as one can.



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- 2. Read some of the articles weekly—especially ones related to your work that have been written by native or near-native speakers at top universities.
- 3. Create an Excellent Writing Archive where you can keep exemplary English samples.
- 4. Copy and paste segments of text that impress you as excellent examples of writing into your *Archive*. These examples can be impressive titles, sentences or phrases, or any other parts that are worthy of imitation (but not plagiarism). See example below.

### **Excellent Writing Archive**

### **Possible Title Patterns for Research Papers**

- Defining functional DNA elements in the human genome
- Compositional engineering of perovskite materials for high-performance solar cells
- Parallel coordinate descent methods for big data optimization
- FFRob: An efficient heuristic for task and motion planning
- The oracle problem in software testing: A survey
- An empirical study of collaborative acoustic source localization
- An overview of nanoparticles commonly used in fluorescent bioimaging
- The effects of experimental demyelination on conduction in the central nervous system

### **Useful Sentences and Phrases for Research Papers**

- This paper introduces a novel approach to....
- In this short paper, we present brief descriptions of our previous inventions for those who may be interested in our innovative technologies.
- Other research that has attempted to solve this problem has still not been able to....
- Currently, our research team is working to improve...,which we did not address in an earlier phase of our project.
- 5. Seek wise advice and feedback on your papers from excellent professors, mentors, editors, and professional development coaches, who know a great deal about good writing and who care a great deal about your professional success. Naturally, it is wise to select professionals who have written excellent papers for conferences and journals themselves.

#### Conclusion

The ideas presented above have continually yielded superb results over the past 30 years of my career for those who have understood and followed this advice. I hope you will experience equally excellent success as well.