Guidelines for abstracts [1]

J.-L. Bertrand-Krajewski

Université de Lyon, INSA Lyon, Laboratory DEEP, 34 avenue des Arts, 69621 Villeurbanne cedex, France. email: jean-luc.bertrand-krajewski@insa-lyon.fr

Introduction

The following guidelines are given to help you to prepare abstracts submitted to conferences, workshops, etc. They should be considered as suggestions based on experience, and not as strict and mandatory rules.

A good abstract should give information about the following 7 elements:
- the title
- the authors
- the context
- the scientific questions
- the method and/or the approach
- the results and their discussion
- the conclusions and the perspectives.

According to the call for abstracts of the conference, other information may be requested: reference to conference topics or themes, keywords, literature citations, etc. It is obvious that you have to follow the prescriptions of the conference organisers.

The title

The title should be as informative as possible, but also as concise as possible: a title is always a compromise. But it is a critical compromise because it gives the reviewer his/her first feeling and ideas about the topic and the content of your abstract. Sometimes, a maximum length in words or lines is required by conference organisers. To save some words and to keep only valuable information in your title, avoid titles starting with words like: “Contribution to the study of...”. According to the content of your abstract, fundamental words should appear in the title, like “...experiments in...”, “...modelling of...”, “...theory of...”, etc.

The authors

You should give the names, affiliations and addresses of all authors, as requested by the conference organisers. The corresponding author should appear very clearly, with his/her email address, and if requested fax and telephone numbers.

For many conferences, abstracts shall be kept anonymous for reviewers. Consequently, the title of the abstract, and names and addresses of authors shall be given on an additional or

(1) Initially published in "Sewer networks and processes within urban water systems" (Bertrand-Krajewski *et al.*, editors). London (UK): IWA Publishing, WEMS - Water and Environmental Management Series, November 2004, 149-151. ISBN 1 84339 506 1. Revised version for EJSW 2017 (modifications in blue characters).

separate front page that will not be sent to the reviewers. Once again, follow the rules given by the conference organisers.

The context of the research

The context of the research means i) the field of your research, and ii) the existing or previous state of art or state of knowledge in this field. It should also contain some brief elements to explain why this field is important for scientific, technical, operational, ecological or economical reasons. In other words, what are the stakes of your work?

Avoid two extreme cases:

i) do not start from scratch, like "it is well known since Greek and Roman civilisations that rainfall events occurring in cities may have consequences in terms of runoff and transport of substances....". You will need at least one page to reach the core of your work: remember that abstracts are very short, typically 1 or 2 pages.

ii) reciprocally, do not start with over-specialised elements that are not necessarily known by reviewers, like "Previous work in our institute has shown that the second-order derivative of the Smith-Parker-Wilkinson equation is absolutely critical for urban development...".

Topics or themes are usually given in calls for papers of conferences. If your abstract corresponds to one (or more) of these topics, you may use this information to start your abstract and to help the reviewer to identify and understand quickly your field and/or topics.

The scientific questions

In relation to the context, you should now explain what scientific question(s) you want to answer. Test of a hypothesis or of a theory, experimental or laboratory measurements to improve knowledge, to test or validate models, new techniques, new methods, new models, transposition of ideas, concepts, models, methods from another scientific field imported into your research field, etc.?

A clear definition of this(ese) question(s) is absolutely required.

The method and/or approach used

In this section, you should describe what methods, techniques, tools and approaches you use to provide answers to the above scientific questions. If necessary, some (brief) theoretical background elements may be useful for the reviewer.

Laboratory and/or field experiments? What instruments do you use? How do you proceed? How do you process data, information, results? What significant hypotheses or assumptions do you use? What model or theory do you use? What variables or parameters do you measure or analyse? What kind of mathematical, analytical, or software tools do you use? What kind of protocol do you apply?

If your research needs successive steps or phases, explain how they are organised and their logic.

The results and their discussion

This section should provide a brief description of your results. You should give some data, tables, figures, synthetic results. If you have only preliminary or partial results, this should be explained. The results should then be discussed in order to show how they contribute to answer or not your above scientific questions, how they may validate or not your hypotheses, your model, etc., how they may generate new questions or problems.

The above paragraph implies that you have already obtained some results, which is not systematically the case. However, remember that abstracts which do not provide results, but only general ideas, concepts or plans have a very low probability to be selected by the reviewers. As the number of presentations is limited in conferences, you should always keep in mind the following question that the reviewer(s) shall answer: what is the potential interest for the audience to hear your presentation if, based on the abstract, there are no results but only intentions or plans?

Conclusions and perspectives

This section is usually short in abstracts, but should provide some elements. What are the future tasks? Is your research programme finished? What are the new questions, the new problems, the possible extensions?

It is of course not the aim of these guidelines to lead to fully formatted and "standardised" abstracts. However, some orders of magnitude could be given about the respective lengths of the last 5 sections, expressed hereafter in percents of the total length:

- the context	10 %
- the scientific questions	15 %
- the method and/or approach	25-40 %
- the results and their discussion	30-45 %
- the conclusions and the perspectives	5 %

Keep in mind that your abstract should be:

- informative: the reviewer has to answer the question "based on the abstract, what is the potential interest (in terms of results, knowledge, data, models, etc.) for the audience to listen to this presentation?"

- attractive: beyond the scientific content of your abstract (which is, at least theoretically, objective), the reviewer has also to answer the question "based on the abstract, could one expect a good presentation or a good paper, i.e. a presentation or a paper that will be well structured, well organised, clear in terms of objectives, questions, results and discussion?"