

Template for full papers to be submitted to Solaris 2019

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Abstract: This document contains guidelines concerning layout and formatting for full papers to be sent to the Solaris2019. The full paper file must be in an editable format, preferably Microsoft Word. The submission of pdf files is not allowed. The use of this template for the full paper preparation is strongly encouraged. In this template, section 1 contains information regarding the general structure of the paper. The subsequent sections contain detailed formatting guidelines for the paper, which must be strictly followed.

The paper must include an abstract which should clearly state the purpose of the work, approach and methodology, limitations, significant results, with concise conclusions or recommendations. The maximum number of words allowed in the abstract is limited to 200. Do not include references in the abstract. Title, author information, affiliations, abstract and keywords must fit on one page.

Keywords: Full Paper Template, Submission, Solaris2017

Nomenclature (Optional)

A_e	effective area of supply.....	m^2	ν	kinematic viscosity.....	$m^2 \cdot s^{-1}$
H	height for the supply device.....	m	μ	dynamic viscosity.....	$kg \cdot m \cdot s^{-1}$
H	room height.....	m	k	kinetic energy of turbulence	$m^2 \cdot s^{-2}$
p	static pressure.....	Pa	ε	turbulence energy dissipation rate	$m^2 \cdot s^{-3}$
T	mean temperature.....	K	ω	specific dissipation of turbulent kinetic energy.....	s^{-1}
U_i	velocity component (xi-direction).....	$m \cdot s^{-1}$			
U_o	supply velocity	$m \cdot s^{-1}$			
ρ	density.....	$kg \cdot m^{-3}$	flow rate		$m^3 \cdot s^{-1}$

If needed, include a list of field specific quantities. If you choose to include a nomenclature it should be placed directly after the keywords, with an unnumbered heading. Use 11 pt size, Times New Roman text in a two-column format for the nomenclature. Specify for each listed quantity, in the following order; abbreviation, description and SI-unit, with the SI-units right aligned with a dotted underline for the space between the description and the units.

1. General structure of the paper

The file name of the final paper must be the same as the title of the paper. The length of submitted papers should be 6-8 pages, including references, figures and tables. If the paper exceeds eight pages, extra pages will be truncated. We expect all texts to be written in good English and that grammar and spelling have been checked before submission. The case of matter (main body) should at least contain the following subsections: Introduction, Methodology, Results, Discussion and/or Conclusions.

1.1. Introduction

In the introduction the topic should be shortly introduced. The introduction should also explain the background and main purpose of the work presented. It is important that the main objectives or hypotheses are clearly defined.

1.2. Methodology

Under methodology, explain and motivate used measuring techniques, statistical or mathematical methods, optimization models, data collection techniques and experimental setup etc. For well known methods, a reference instead of an explanation may be used. Explain and motivate all simplifications and assumptions.

1.3. Results

Under results, significant outcomes of the work should be presented and explained in a neutral and straightforward way.

1.4. Discussion and/or Conclusions

Under this/these section/s, the presented work should be viewed in a wider perspective. The most important results should be compared to previous work within the topic. The accuracy and possible sources of error should be presented and discussed, as well as the influence from simplifications and choice of method. The author should also present his/her interpretation of the result. Also, discuss implications of the results, e.g. how the outcome of the study could affect future work and possible applications.

2. General formatting guidelines

The paper must be prepared in A4 format (297x210 mm) with 25 mm margins and Times New Roman used for the entire document. The formatting presented in this Template must be used. Papers which fail to conform to these guidelines will not be accepted for review.

2.1. Header and footer

The entire paper must include a header with the exact formatting and context shown within this template. In the example the topic is Photovoltaic (PV). This should of course be changed to the topic under which the paper has been submitted. Otherwise no changes within the header are allowed. Leave the footer blank.

2.2. Formatting of first page

The paper must start with the following sections: Title, Author/s name/s, Affiliation/s, Abstract and Keywords. All this information must fit on the first page and have a format corresponding to the one explained in the following subsections. Note that if there is room left after the abstract, this space can be used for the main body of the paper. Formatting rules for the main body is found under section 2.3.

2.2.1. Title

The title of the contribution must be centered and written in bold script, font size 14 pt. Leave a 12 pt space before the author's/authors' name(s).

2.2.2. Authors name

The name(s) must be centered, written in 12 pt, normal script and given in the following order: given name, (initials) and surname. After the name(s),leave a 12 pt space before the affiliation list. Link author names to affiliations with corresponding superscript Arabic numerals.

2.2.3. *Affiliations list*

Affiliations must be centered, written in 10 pt italic script, and include at least the name of the institution, city and country. Indicate the corresponding author by an asterisk (*). At least e-mail for the corresponding author must be given. Leave a 24 pt vertical space between the affiliations and the abstract.

2.2.4. *Abstract*

Use 10 pt, single spaced, fully justified normal script for the abstract. Paragraphs within the abstract text should not be separated with a blank line. The abstract should have a top border, with a 4 pt distance to the text and a weight of ½ point.

2.2.5. *Keywords*

Leave one blank line (10 pt font size) between the abstract and the keywords. At least three keywords must be given, with a maximum of five keywords. Keywords should be in 10 pt script, italicized, and separated by commas. Capitalize the first letter of each keyword or keyword phrase. Below the keywords there should be a bottom border with a 4 pt distance to the text and a weight of ½ point.

2.3. *Formatting of main body*

2.3.1. *Main headings*

The main body should be separated into sections, each one with an appropriate heading. Use 12 pt bold script for the main headings, and number the headings according to 1.; 2.; 3. etc. The main headings should have a left indent of 6 mm after the numbering. Leave a 6 pt space after main headings.

2.3.2. *Subheadings*

Two levels of subheadings can be used. Use 12 pt bold italic script for the first subheading level, and number them according to 2.1.; 2.2.; 2.3. etc. with a left indent of 10 mm after the numbering. Leave a 3 pt space after first level subheadings.

For the second level subheadings, use 12 pt italic scripts and number the subheadings as 2.1.1.; 2.1.2.; etc., with a left indent of 12 mm after the numbering. Leave a 3 pt space after second level subheadings.

2.3.3. *Main body text*

The body text must be written using 12 pt Times New Roman. Leave a 12 pt blank line before the next heading or subheading after each body text paragraphs. Paragraphs within the main body text should be separated with one blank line of 12 pt size.

2.4. *Figures and tables*

All figures and tables should be placed near the text where they are first mentioned. They must also, at least once, be referred to in the text. Refer to figures as e.g. Fig.1 and to tables as e.g. Table 1. All figure and tables must fit within the 25 mm margins. Units used in figures or tables should be placed within parentheses. Leave one blank line of size 12 pt before and after all figures and tables.

2.4.1. Figures

When adding figures, feel free to use colors but keep in mind that the figures must be readable also when printed in black and white. Therefore, do not use dark background colors and make use of for example dotted or dashed lines rather than different colors when plotting graphs.

All figures should have an extensive caption and it should not be necessary to read in the text to understand the figure. Use 11 pt italic scripts for figure captions. Place the caption below the picture. The figures must be numbered consecutively, as shown in the example below.

All axes as well as all curves must be correctly labeled. For text used in figures, Times New Roman is recommended but not required. Hand-written text is not allowed. Make sure that the size of the text is sufficiently large to be easily readable.

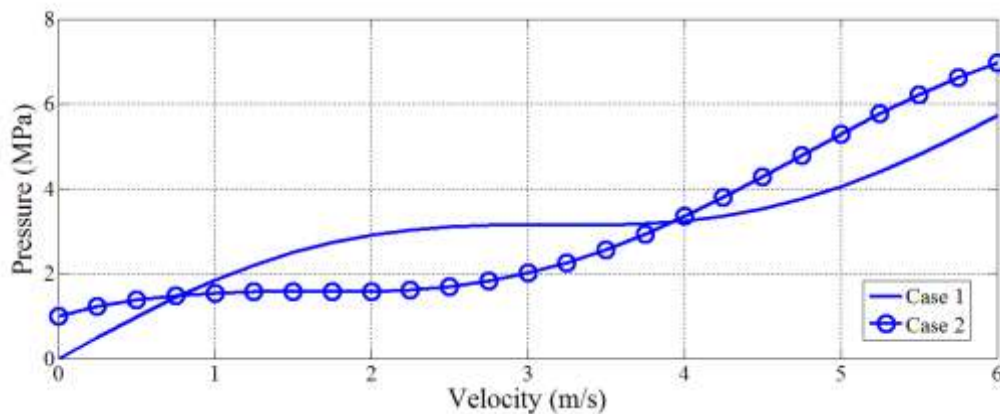


Fig.1. Example of a figure with the correct format.

2.5. Tables

Make sure that tables do not contain superfluous information or duplicate data from other tables, figures or from the main text. In tables, horizontal single lines border should be used as presented in Table 1. Use 12 pt font sizes within tables. Do not use vertical lines.

Each column and row should have an appropriate title and, if possible, the text should be centered within the column. All tables must have a proper caption, placed above the table, using 11 pt italic scripts. The tables must be numbered consecutively, as shown in the example below.

Table 1. Example of table.

Test case	Inlet velocity (m/s)	Outlet pressure (MPa)
Case I	15.04	11.35
Case II	72.32	23.37
Case III	10.45	4.13

2.6. Equations

Times New Roman must be used also within equations. Make sure that the equations have a scientific appearance and are easily readable. In the text equations should be referred to as Eq. (1).

Equations must be placed on separate lines with a 12 pt blank line before and after each equation. Number equations using Arabic numerals within parentheses. If any new variables or notations are introduced in the equation, their meaning should be explained underneath the equations, as shown in the example that follows.

$$\frac{\partial u_i}{\partial t} + \frac{\partial u_i u_j}{\partial x_j} = -\frac{1}{\rho} \frac{\partial p}{\partial x_i} + g \frac{\partial u_i}{\partial x_j \partial x_j} \quad (1)$$

$$\frac{\partial u_i}{\partial x_i} = 0 \quad (2)$$

Where ρ is the density and p is the pressure.

If you use Microsoft Word, you should use the Microsoft Equation Editor when writing equations. Do not use the inbuilt equation editor in Microsoft Word 2007. In Word 2007, the Microsoft Equation Editor 3.0 can be found under: Insert → Object → Microsoft Equation Editor 3.0.

3. Units

Follow internationally accepted rules and conventions for units. As far as possible, use the international system of units (SI). If other quantities are utilized they should be explained or their equivalent in SI units should be given.

References

Do not number the Reference section. Format the references according to the examples below. Number the references in the order they appear in the text. Use Arabic numerals within brackets for the numbering, with a hanging left indent of 75 mm. Use a 6 pt space after each reference.

A. Author, Title of book, Name of publisher, Edition, 2006, pp. 307 – 314.

F. Ake, How to write references in this paper, Journal of Reference Writing 83, 2010, pp. 307- 346

E. Quation, Correct Formatting of Equations, Proceedings of 12th international Conference on Equation formatting, 1976, pp. 4314-4337.