

Template of a two-page abstract for FMC2022 (Prof. J.W. Elsner Competition)

A. Kowalski (Competitor)¹ and M. Nowak (Supervisor)¹ (The competitor, either MSc or PhD student up to 35 years of age, should present individual or joint papers with supervisors, containing original experimental, numerical or analytical results.)

¹ Rzeszow University of Technology, The Faculty of Mechanical Engineering and Aeronautics, al. Powstańców Warszawy 8, 35-959 Rzeszów, Poland

E-mail: a-kordos@prz.edu.pl

Abstract. Start your abstract here. The abstract should state briefly the purpose of the research, the principal results and major conclusions. References in this part of text should be avoided. Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself. Text of the abstract should not exceed 500 characters.

1. Keywords: Keyword1, Keyword2 (**IMPORTANT: the first 2 keywords have to be taken from the Conference Topics List i.e.: Aerodynamics, Biological Flows, Combustion, Computational Fluid Dynamics, Experimental Fluid Mechanics, Flow Control and Optimisation, Flow Machinery, Geophysical and Environmental Flows, General Fluid Dynamics, Interdisciplinary Areas in Heat and Fluid Flow, Measurement Techniques, Micro- and Nano- flows, Multi-phase Flows, Turbulence**), Keyword3, Keyword4, Keyword5...

2. Prof. J.W. Elsner Competition

The competition is organized under the auspices of PTMTS (Polish Society of Theoretical and Applied Mechanics) and Polish Pilot Centre of ERCOFTAC and held during each of the Fluid Mechanics Conference. The competition is aimed at promotion of research achievements of young outstanding scientists working in the field of fluid mechanics.

First paragraph after a heading is not indented (Bodytext style). The Introduction should state the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results. This two-page abstract has the same style as an article prepared for publication in IoP conference series. Please keep in mind this information because the two-page abstract could be used as a initial material for preparation a final article. Before the preparation of the two-page abstract please read carefully other editorial information available at the FMC 2022 website. The list of publications in **References** is organized according to the order of appearance of the citations in the text of two-page abstract. The abstract should be submitted electronically via the conference

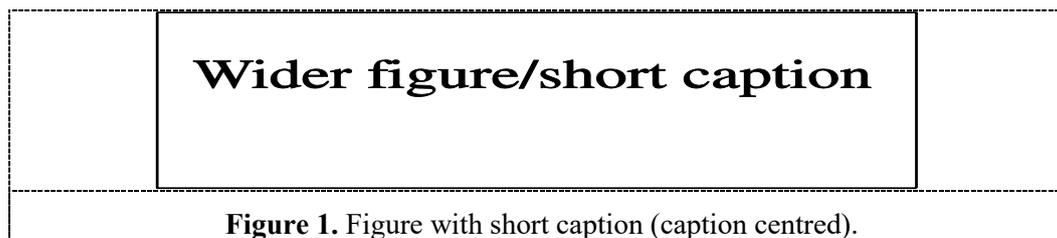
registration system in pdf or docx file. Accepted abstracts will be distributed during Conference in electronic form.

Other paragraphs are indented (BodytextIndented style).

3. Another section of your paper

The first paragraph after a heading is not indented (Bodytext style).

Other paragraphs are indented (BodytextIndented style). Below an example of a figure.



3.1. A subsection

Some text.

3.1.1. A subsubsection. The paragraph text follows on from the subsubsection heading but should not be in italic. Although it is not forbidden please avoid nesting *subsubsections*. Here you can find an example of the table.

Table 1. Formatting sections, subsections and subsubsections.

	Font	Spacing
Section	11 point Times bold	1 line space before a section No additional space after a section heading
Subsection	11 point <i>Times Italic</i>	1 line space before a subsection No space after a subsubsection heading
Subsubsection	11 point <i>Times Italic</i>	Subsubsections should end with a full stop (period) and run into the text of the paragraph

4. Equations and mathematics

Make sure that your Equation Editor or MathType fonts, including sizes, are set up to match the text of your document.

Vectors. Bold italic characters is our preferred style but the author may use any standard notation; for example, any of these styles for vectors is acceptable:

‘the vector cross product of \mathbf{a} and \mathbf{b} is given by $\mathbf{a} \times \mathbf{b} \dots$ ’, or

‘the vector cross product of \mathbf{a} and \mathbf{b} is given by $\mathbf{a} \times \mathbf{b} \dots$ ’, or

‘the vector cross product of \vec{a} and \vec{b} is given by $\vec{a} \times \vec{b} \dots$ ’.

Small displayed equations: Some examples:

$$\phi_k(\vec{r}) = (2\pi)^{2/3} \exp(i\vec{k} \cdot \vec{r}) \quad (1)$$

$$A^{(3/2)} = A^{(+)} - A^{(-)} \quad (I = \frac{3}{2}) \quad (2)$$

Miscellaneous points

- Exponential expressions, especially those containing subscripts or superscripts, are clearer if the notation $\exp(\dots)$ is used, except for simple examples. For instance, $\exp[i(kx - \omega t)]$ and $\exp(z^2)$ are preferred to $e^{i(kx - \omega t)}$ and e^{z^2} , but e^2 is acceptable. Similarly the square root sign $\sqrt{\quad}$ should only be used with relatively simple expressions, e.g. $\sqrt{2}$ and $\sqrt{a^2 + b^2}$, but in other cases the power $1/2$ should be used.
- It is important to distinguish between $\ln = \log_e$ and $\lg = \log_{10}$.
- Braces, brackets and parentheses should be used in the following order: $\{[()]\}$. The same ordering of brackets should be used within each size. However, this ordering can be ignored if the brackets have a special meaning (e.g. if they denote an average or a function).
- Decimal fractions should always be preceded by a zero: for example 0.123 *not* .123 (note, do not use commas, use the decimal point).

References

- [1] Strite S and Morkoc H 1992 *J. Vac. Sci. Technol. B* **10** 1237
- [2] Szytula A and Leciejewicz J 1989 *Handbook on the Physics and Chemistry of Rare Earths* vol 12, ed K A Gschneidner Jr and L Erwin (Amsterdam: Elsevier) p 133
- [3] Caplar R and Kulisic P 1973 *Proc. Int. Conf. on Nuclear Physics (Munich)* vol 1 (Amsterdam: North-Holland/American Elsevier) p 517