INSTRUCTIONS FOR AUTHORS FOR THE PREPARATION OF 4-PAGE PAPER

M. Pumpička¹, F. Gumišlajf², T. Hronec³

Abstract: This document serves as a template for papers submitted to the Engineering Mechanics 2025 conference. The abstract should provide a concise summary of the work, including the research problem, methodology, and key findings or contributions. It must not exceed 200 words and should be self-contained, giving readers a clear overview of the paper's content. Authors are encouraged to maintain a professional and clear writing style, ensuring the abstract is accessible to a broad audience within the field of engineering mechanics. References, citations, or any external sources should not be included in the abstract, as it will serve as a standalone heading for their paper on the conference proceedings webpage. Additionally, include up to 5 relevant keywords separated by commas at the end of your abstract (e.g., Engineering Conference, Mechanics, Numerical Analysis, Optimization, Structural Dynamics), and do not use a full stop after the keywords. To ensure a smooth review process, please strictly follow the instructions provided in this template.

Keywords: Enter up to 5 keywords and separate them by commas, Engineering conference, Mechanics, Do not use a full stop after the keywords

1. Introduction

Each presenting author is invited to submit a 4-page paper in DOCX, LaTeX, or PDF format by the deadline of 10th February 2025. The paper will undergo a review process and, if accepted, will be published in the conference proceedings.

The filename should include the presenting author's surname and first name, matching the registration details on the conference website. For example, SURNAME-FIRSTNAME.ZIP is a suitable format. To ensure optimal file size, please use vector graphics where possible, or resample any bitmap images (such as photos) to a maximum resolution of 300 dpi, keeping the total file size under 2-3 MB. If you choose to submit your paper in PDF format, kindly provide the original source file (DOCX or LaTeX) as well. This will help to expedite the copyediting process. Papers should be uploaded through the "Paper" section on the conference website, which helps track submissions. If you encounter any issues with uploading, please send the file via email to em2025@engmech.cz.

2. Presentations

Each paper presentation will be allocated 20 minutes, including time for discussion and transitions between speakers. Every lecture room will be equipped with a standard setup of a computer and data projector. If you require any additional or non-standard equipment, please kindly contact the Conference Secretariat.

The allotted space for a poster will be approximately 0.95×1.15 m (width \times height). The number of available poster slots is limited.

Prof. Ing. Minimilián Pumpička, CSc.: Institute xdsfxx, University ysdsdyy, Street 559/7; 140 00, Prague; CZ, pumpicka@buac.pacr.cz

² RNDr. Fishtroan Gumišlajf, DrSc.: Institute ysdsxyx, University adsfgfgbc; Street 778/9; 614 89, Brno; CZ, gumis@uyr.oiuy.cz

Assoc. Prof. Theodor Hronec, PhD.: Institute xysdfgxy, University csddffsdgfgfgfgfba; Street 111/29; 715 47, Ostrava; CZ, thronec@aaa.bbb.cz

3. Typesetting of the text

The paper must be written in English using the Times New Roman font and formatted as follows (feel free to use this file as a template):

- Page layout: Use A4 paper with the following margins: top and bottom 2 cm, inside 3 cm, and outside 1.5 cm.
- Title: Write the title in capital letters, bold, and centred, with a font size of 14 pt. Leave 60 pt of space above the title (+2 cm top margin). The organizers will add the conference heading at the top margin of the first page.
- Authors' names: List author names without academic titles, e.g., M. Smith, C. A. Brown. Include full names, titles, and addresses as a footnote on the first page. Use bold font, 12 pt, and leave 10 pt of space between the title and the authors' line.
- Abstract: Provide a short abstract summarizing the problem formulation and conclusions. The abstract must be a single paragraph of up to 200 words. Use 10 pt italic font, and maintain 6 pt vertical space before the text.
- Keywords: Include up to five keywords, separated by commas. Use 10 pt bold font, with 10 pt vertical space above the keywords. Do not use a full stop (period) at the end of the keywords.
- Section headings: Use 11 pt bold font for section headings. Leave 15 pt vertical space before each heading. Standard commands \section and \subsection are applicable.
- Text: Use 11 pt normal font for the main text. Do not indent paragraphs. Leave a 6 pt gap between paragraphs.
- References: Follow the APA style (Author's name, year of publication), arranged alphabetically by the first author's surname. Refer to sample references below for further guidance.
 - For users of BIBT_EX, use \bibliographystyle{apaem2018} style with modified font size and spacing \def\bibfont{\small}\setlength{\bibsep}{3pt}, as defined in the preamble of this sample file. Cite using commands \citep{key} or \citet{key}, cf. also section 3.3. below.
- Page numbering: Do not number the pages. (\pagestyle{empty})
- Equations, figures, and images: When including equations, figures and photographs, take into account that dimensions of the proceedings will be 173×250 mm (reduction to approx. 82%).

3.1. Figures and tables (subsection)

Figure captions (Fig. 1: Schematic diagram ...) should be placed below the figure, table captions (Tab. 1: Coefficients ...) above the table, centred, italic font 11pt. All tables and figures must be referenced in the text, as, for example, Fig. 1 and Tab. 1. In tables, use a 10pt font size and only horizontal lines. We recommend using vector graphics whenever possible. For instance, use the SVG format for MS Word and PDF for LaTeX. For photos and other bitmap images, ensure the maximum horizontal size does not exceed 1920 pixels for images using the full text width, as the total text width is 16.5 cm (i.e., 300 dpi \times 6.44 in). Scale the pixel width proportionally based on its actual size in the text.

	without absorber		with absorber		ratio with/without absorber	
Frequency $[Hz/s^{-1}]$	X	Y	X	Y	X	Y
0.90/5.65	0	0.0948	0	0.2031	-	2.14
1.27/7.98	19.064	3.279	0.271	0	0.0142	-
1.70/10.68	0	7.382	0	0.466	-	0.0632

Tab. 1: VIR — very important results

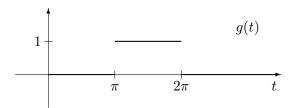


Fig. 1: Example figure

3.2. Equations

Equations should be centred numbered consecutively starting from one, without reference to the chapter number. Use slanted font for mathematical symbols (e.g., ... where m denotes mass...) and bold regular font for vectors and matrices (e.g., ... x is the vector of unknown variables and M is the system matrix...). Correct equation numbering in MS Word can be tricky. However, in LaTeX, standard equation numbering is straightforward. Use the equation environment for individual equations or the align environment for multiple equations, ensuring they are properly aligned and formatted. For example:

$$T = \frac{1}{2}m\left(v_p^2 + v_q^2 + v_n^2 + \frac{2}{5}r^2\left(\omega_p^2 + \omega_q^2 + \omega_n^2\right)\right),\tag{1}$$

$$V = mg\varrho(1 - \cos\alpha), \qquad (\varrho = R - r), \tag{2}$$

where in (1) and (2), m, g represent the mass and gravitational acceleration, respectively.

3.3. References and Citations

For bibliographic references, use the APA style, https://www.scribbr.com/apa-citation-generator/, arranged in alphabetical order of the first author, without numbering (see below example section References). References are should use only the latin characters and should be written in English. For publications in other languages specify the language as a note, e.g., (in Czech/Slovak/Poland/Russian, ...)

For citations in the text, please aim for a smooth integration of the authors' names whenever possible. For example: "The first papers dealing with the theory and practical aspects of ball absorbers were published during the past decades, see (Pirner, 1994) and (Pirner and Fischer, 2000), and are based on engineering approaches. Later Náprstek and Pirner (2002) presented a basic nonlinear model in 2D together with its numerical evaluation, and a report on its practical application, including some results of long-term in situ measurements. See also (Fischer, 2019)." Use the command \citet for in-text citations and \citep for citations in parentheses.

To increase the likelihood of indexing the proceedings in Clarivate (Web of Science, CPCI index), it is unfortunately necessary to adhere to certain formal requirements for references, which may not always seem logical.

- The number of citations should correspond to the small extent of the text.
- Clarivate discourages authors from citing only their own work or that of their team, even though, from a content perspective, such references may be necessary and relevant to the topic and scope of the paper.
- Avoid references to works where the connection to the topic is not immediately obvious. While Clarivate claims the expertise of its editors, they are no better than officials in other review panels.

Unfortunately, official recommendations are vague, often change, and their placement on the Clarivate website can also change.

4. Conclusions

The conclusion section of the paper should provide a clear summary of the key findings, results, or insights presented in the text. It should emphasize the significance of the work and its potential impact or future applications. Authors are encouraged to keep the conclusion concise and focused on the main takeaways

from the paper. This is not the place for detailed discussions or additional references. The conclusion should tie together the main points of the paper and highlight any potential implications, without the need for further citations.

Acknowledgments

The authors would like to express their sincere gratitude to all organizations and grant agencies who have sponsored the successful completion of this work, despite the limited funding available. Special thanks go to ChatGPT for its invaluable assistance in writing the "Conclusion" section of this paper, ensuring a clear and effective summary of our work.

References

Fischer, C. (2019) Rapid research with computer algebra systems. In Zolotarev, I. and Radolf, V., eds, *Engineering Mechanics* 2019, Prague. Institute of Thermomechanics of the CAS, Prague, 25, pp. 109–112.

Náprstek, J. and Pirner, M. (2002) Non-linear behaviour and dynamic stability of a vibration spherical absorber. In Smyth, A. W., edt., *Proc. 15th ASCE Engineering Mechanics Division Conference*, New York. Columbia Univ. CD ROM, paper 150.

Pirner, M. (1994) Dissipation of kinetic energy of large-span bridges. Acta Technica CSAV, 39, pp. 645-655.

Pirner, M. and Fischer, O. (2000) The development of a ball vibration absorber for the use on towers. *Journal of the International Association for Shell and Spatial Structures*, 41, 2, pp. 91–99.