**Title OF FULL paper**

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1 Affiliation 1

2 Affiliation 2

\* E-mail:

**Abstract**: Include here a short abstract of maximum 100 words. This abstract will also be included in a printed version of the conference program.

**Keywords**: Contact mechanics; rail-wheel systems; elastic contact; half-space assumption; FE method; characteristic size; significant dimensions.

1. **Introduction**

This template contains guidelines to assist you when preparing your full paper to be included in the *Proceedings of the 13th International Conference on Contact Mechanics and Wear of Rail/Wheel Systems (CM2025)*. The official language is English.

The title should reflect the essential of the work. Please avoid including abbreviations. Authors' names and affiliations are to be written immediately after the title. For all the affiliations, a lower case superscript number should be placed after the authors' names and in front of the addresses. Also, ensure to provide a valid e-mail address of the corresponding author marked by a superscript star.

Then, a short abstract of maximum 100 words is to be included.

Add keywords immediately after the abstract. Five to seven keywords should be included.

The topics of the conference are:

* Contact mechanics of rail-wheel systems.
* Friction and adhesion at rail-wheel interface.
* Influence of vehicle/track interaction on rail-wheel contact behavior and damage.
* Damage of rails and wheels.
* Metallurgy and material behavior of rails and wheels at macro and micro scales.
* Development, application and in-service performance of rail and wheel materials.
* Management of rail-wheel interface, grinding, milling, re-profiling, friction modification, etc.
* Vibration and noise related to rail-wheel contact.
* Mutual influence between environmental aspects and rail-wheel contact.
* Physical and virtual measurement of rail-wheel contact.
* Condition monitoring and diagnostics in relation to rail-wheel contact.
* Digital twin of rail-wheel contact.
* Rail-wheel contact related problems from service: case studies and possible solutions.
1. **Writing full paper**

The full paper consists of 6 to 10 pages (references do not count).

The following general guidelines should be adhered to:

* A4 page size.
* Single line spacing.
* Font of text: Times New Roman, regular, size: 10, justified alignment.
* Font in figures and tables, including captions: Times New Roman, italic, size: 8 with centered alignment.
* No letterhead or company logos to be incorporated.
* 6 to 10 pages, with page number in the right corner of the footer.
* (Sub-)sections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. Each heading should appear on its own separate line with Time New Roman, bold face, regular for Sections and italic for subsections.
* All figures and tables should be numbered and each one must be located as close as practical after the first reference to it.
* The quality of the figures should be above 300 dpi. All micrographs must be clear.
* References do not count for the maximum page number.
	1. ***References***

The full paper must include an introduction with a literature survey of the most relevant and highly related research. The contribution of the paper must be highlighted explicitly in view of the state-of-the-art.

References are to be made by sequential index number [1], [2, 3], [1~3] with a listing in the References section at the end of the full paper. The formats below should be followed carefully:

* Reference to journal articles should include authors, title of article, journal, year, volume (number) pages.
* Reference to conference articles should include authors, title of the article, editors, title of the proceedings, publisher, city, country, year, pages.
* Reference to books should include authors, title of book, publisher, edition (if relevant), year.
* A private communication or company and agency reports may be cited when necessary. Papers presented at meetings but not published are in this category. The citation must include authors, affiliation (company or agency or project), title of the report, year.

The paper should then contain problem statement, results, and conclusions including further research. Acknowledgements may be included after conclusions.

* 1. ***Examples of figures, tables, equations and deadlines***

Consider the following examples for figures, tables and equations. Explain in the text each figure, table and equation. Include caption titles to make it easier to understand figures and tables. In Figure 1 a schematic diagram of a model is presented as example.

 

*(a) (b)*

*Figure 1 Schematic diagrams of the FE model: (a) Front view. (b) Side view.*

It is essential to submit your full paper in time. Delays might mean that the paper cannot be included in the proceedings of the conference. Every paper must have at least one registration and one registration may give only one presentation. The important dates are presented in Table 1:

*Table 1 Important dates.*

|  |  |
| --- | --- |
| **Event** | **Date** |
| Early bird registration open | June 1, 2025 |
| Full paper submission deadline | June 1, 2025 |
| Early bird registration close | July 15, 2025 |
| CM2025 Conference | September 22-26, 2025 |
| Technical tour | September 26, 2025 |
| Submission system open for invited papers, special issue of the journal Wear of CM2025 | October 15, 2025 |
| Submission deadline for invited papers, special issue of the journal Wear of CM2025 | January, 2026 |

As an example for including equations, consider the Hertzian contact pressure distribution *p*:

 (1)

where *p0* is the maximum Hertzian pressure, *a* and *b* are the semi-axes of the elliptic contact area in the *x* (rolling) and *y* (transverse) directions.

1. **Full paper submission**

The submission system will guide you through the process of entering your full paper details and uploading your file.

An electronic copy of the full paper must be submitted in PDF format. In case the PDF is not complying with the template of the conference, you will be asked to comply with the requirements. Delays in complying with the template might lead in not being included in the proceedings.

1. **Presentation**

The conference will be held in Sophia University, Yotsuya Campus.

Oral presentation: Instructions will be sent to authors by August 20, 2025, including final details about room location, day and time of the presentation.

Poster presentation: The size of the poster is A0, the layout can be decided by the authors, but it should contain all the important information about the paper: authors, paper title, major findings and conclusions.

All posters are assigned a one-minute presentation slot during the shotgun session.　Best posters will be selected and awarded per category. To avoid the difficulties in taking a poster to the Conference, the CM2025 organizer can print your poster. Further announcements will be provided on the website.

1. **Special issue Wear**

All the full papers presented at the conference will be assessed for invitation to submit an extended version for consideration to publish in the special issue of the journal Wear of CM2025

 (<https://www.journals.elsevier.com/wear>).

The submission system will be open for invited papers on October 15, 2025. Possibilities for publishing in some other journals are being evaluated.

1. **Conclusions**

This document is the template for the full paper preparation. If you have any further queries please contact the CM2025 Secretariat:

cm2025(at)jscmr.jp

Please replace (at) with @ to email us.

We are looking forward to seeing you in Tokyo.

**Acknowledgments**

Please include here all the acknowledgements, to project, contributions from non-authors, etc.

**References**

1. K.L. Johnson: *Contact Mechanics*, Cambridge University Press, 1985.
2. J.J. Kalker: *Survey of Wheel-Rail Rolling Contact Theory*, Vehicle System Dynamics, 1979, 8(4) 317 – 358.
3. P. Clayton P, M.B.P. Allery and P.J Bolton PJ: *Surface damage phenomena in rails*, in J. Kalousek R.V. Dukkipati and G.M.L. Gladwell (Ed), Proceedings of the conference on Contact Mechanics and Wear of Rail/wheel Systems, Vancouver, British Columbia, July 6-9, 1982, 419-443, University of Waterloo Press, 1983.