



## TMS Proceedings Manuscript Preparation Guidelines

### Manuscript Preparation Tools for Word and LaTeX

- Springer provides manuscript preparation tools for Word and LaTeX users that help structure the manuscript. Predefined style formats are available for all the necessary structures that are supposed to be part of the manuscript.

**Note:** These tools are not intended for the preparation of the final page layout. The final layout will be created by Springer according to our layout specifications.

► [Manuscript preparation tool for Word](#)

► [LaTeX2e macro packages](#)

The usage of these tools is not mandatory. Alternatively, you may either use a blank Word document or the standard LaTeX article class and apply the default settings and styles (e.g., for heading styles, lists, etc.).

### Tip:

If you cannot use the Word tool:

- Open a blank Word document.
- Use the default styles in Word to identify the heading levels.
- Use the standard Word functions for displayed lists and type styles such as bold or italics.
- Use a single main font for the entire text, ideally Times New Roman.
- For special characters, please use Symbol and/or Arial Unicode.

### Permissions

- If excerpts from copyrighted works (including websites) such as illustrations, tables, animations, or text quotations are included in your manuscript, please obtain permission from the copyright holder (usually the original publisher) for both the print and online format.
- Please comply with the instructions stipulated in the permission(s) concerning acknowledgments or credit lines within your manuscript (e.g., reference to the copyright holder in captions) and keep the written confirmation of the permission in your possession with the copy of your manuscript.

### Language

- Either British, Australian, or American English can be used but be consistent within your paper.
- Check for consistent spelling of names, terms, and abbreviations, including in tables and figure captions.

### Article Title and Authors

- Please include each paper's authors' names (spelled out as they would be cited), affiliations and e-mail addresses, and telephone numbers after the paper title. (The telephone number will not be published but may be needed as contact information during the publishing process.) A sample opening page can be found [here](#).

## Abstract

- Begin the paper with an abstract that summarizes the content in 150 to 250 words. The abstract will appear online at [SpringerLink](#) and be available with unrestricted access to facilitate online searching.
- Don't include reference citations or undefined abbreviations in the abstract, because abstracts are often read independently of the actual paper and without access to the reference list.

## Keywords

- At least three keywords are required. Each keyword should not contain more than two compound words, and each keyword phrase should start with an uppercase letter. Chemical symbols are permitted.
- When selecting the keywords, think of them as terms that will help someone locate your article at the top of the search engine list using, for example, Google. Very broad terms (e.g., 'Case study' by itself) should be avoided.

## Headings and Heading Numbering

- Heading levels should be clearly identified and each level should be uniquely and consistently formatted and/or numbered.
- Use the decimal system of numbering if your headings are numbered.
- Never skip a heading level. The only exceptions are run-in headings which can be used at any hierarchical level. A sample page with headings can be found [here](#).
- In addition to numbered headings, two more (lower level) heading levels are possible. Their hierarchical level should be identified with the help of Springer's templates or the standard Word or LaTeX heading styles.

## Terminology, Units, and Abbreviations

- Technical terms and abbreviations should be defined the first time they appear in the text.
- Use internationally accepted signs and symbols for units (SI units) .
- Greek letters and other special characters should be added as special characters in the same font as the rest of the text.
- Numerals should follow the British/American method of decimal points to indicate decimals and commas to separate thousands. A sample page can be found [here](#).

## Formal Style

- Manuscripts will be checked by a copy editor for formal style. Springer follows certain standards with regard to the presentation of the content, and the copy editors make sure that the manuscript conforms to these styles. A sample page can be found [here](#).

## Tips:

- Italics should be used for emphasized words or phrases in running text, but do not format entire paragraphs in italics.
- In addition, use italics for mathematical/physical variables and prefixes in chemical compounds.
- Sans serif (e.g., Arial) and nonproportional font (e.g., Courier) can be used to distinguish the literal text of computer programs from running text.
- Do not set entire pages as text boxes, because this affects online readability.

## Footnotes

- Never use footnotes instead of a reference list. When notes are needed within the text, use footnotes instead of endnotes.
- Footnotes should not consist of a reference citation. Footnotes should not contain figures, tables and/or the bibliographic details of a reference.

## Equations and Program Code

- In Word, use the Math function of Word 2007 or 2010, MathType, or Microsoft Equation Editor with Word 2003 to create your equations, and insert the graphic into your text file as an object.
- In LaTeX, use the Math environment to create your equations.

## Tables

- Give each table a caption. Add a reference citation to the table source at the end of the caption, if necessary.
- Number tables consecutively and ensure that all tables are cited in the text in sequential order.
- Use the table function to create and format tables. Do not use the space bar or multiple tabs to separate columns and do not use Excel to create tables as this can cause problems when converting your tables into the typesetting program and other formats. A page with sample tables can be found [here](#).

### Tips:

- Simple, one-column lists should not be treated as tables. Use the displayed list function instead.
- Save the tables in the same file as text, references, and figure captions.
- Do not manually insert table rules in the manuscript because they cannot be retained.

## Figures and Illustrations

**Numbering:** Number the figures and ensure that all figures are cited in the text in sequential order.

**Captions:** Give each figure a concise caption, describing accurately what the figure depicts. Include the captions at the end of the text file, not in the figure file. A page with sample figures can be found [here](#).

- Identify all elements found in the figure in the figure caption and use squares, circles, etc. as coordinate points in graphs instead of color lines.
- If a figure is reproduced from a previous publication, include the source as the last item in the caption.

**File preparation:** A figure is an object that is drawn or photographed. It does not consist solely of characters and thus cannot be keyed.

- All figures should be provided as separate files. Place a callout in the text where the figure should be inserted. It is optional to also place the entire figure in the text in the desired location.
- Graphics and diagrams should be saved as EPS files with the fonts embedded. Microsoft Office files (Word, Excel, or PowerPoint) can be submitted in the original format (doc, docx, xls, xlsx, ppt, pptx). Figures submitted as PDF files are not acceptable.
- Photos or drawings with fine shading should be saved as TIFF with a minimum resolution of 300 dpi.
- A combination of halftone and line art (e.g., photos containing line drawings or extensive lettering, color diagrams, etc.) should be saved as TIFF with a minimum resolution of 600 dpi.

### Tips:

- Color figures will appear in color online but will be printed in black and white. In that case, do not refer to color in the captions and make sure that the main information will still be visible if converted to black and white.
- Ensure consistency by using similar sizing and lettering for similar figures. Ideally, you should size figures to fit in the page or column width.
- To add lettering, it is best to use Helvetica or Arial (sans serif fonts) and avoid effects such as shading, outline letters, etc. Keep lettering consistently sized throughout your final-sized artwork. Variance of type size within an illustration should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.

## References

**In-text citations:** All text references should be consecutively numbered, using square brackets with the period after the reference; for example [1, 2].

**Reference list:** All papers must include a reference list that has all works that are cited in the paper and that have been published (including on the Internet) or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes as a substitute for a reference list.

## Reference samples:

### BOOK

#### One Author

1. Robert D. Pehlke, *Unit Processes of Extractive Metallurgy* (New York, NY: American Elsevier Publishing Company, 1973), 175-199.

#### Two or three authors

2. Ulrich Rembold, Karl Armbruster, and Wolfgang Ulzmann, *Interface Technology for Computer-Controlled Manufacturing Processes* (New York, NY: Marcell Dekker, Inc., 1985), 103.

#### More than three authors

3. R.L. Gibbey et al., *Fast Breeder Reactor Fuel Performance* (LaGrange Park, IL: American Nuclear Society, 1979), 188.

#### Editor, compiler, translator

4. Lawrence E. Murr, ed., *Industrial Materials Science and Engineering* (New York, NY: Marcel Dekker, Inc. 1985), 98.

5. Robert C. Bates. "A Model for Striation Spacing in Fatigue Crack Growth," *Fracture: Interactions of Microstructure, Mechanisms and Mechanics*, ed. J.M. Wells and J.D. Landes (Warrendale, PA: The Metallurgical Society of AIME, 1984), 255-284.

#### Multivolume work or series

6. H. Baker et al., eds., *Metals Handbook*, vol. 2 (Metals Park, OH: American Society for Metals, 1979), 60.

### JOURNAL

#### Volume and year

7. E.H. Lee, R.L. Mallet, and W.H. Yang, "Stress and Deformation Analysis of the Metal Extrusion Process," *Computer Methods in Applied Mechanics and Engineering*, 10 (1977), 339-353.

#### Volume, issue and year

8. M.J. Cooke et al., "LPCVD of aluminum and Al-Si Alloys for Semiconductor Metallization," *Solid State Tech*, 25 (12) (1982), 62-65.

9. B.L. Agarwal, "Postbuckling Behavior of Composite Shear Webs," *A.I.A.A. Journal*, 19 (F) (1981), 933-939.

#### Year as volume number

10. A.H. Cottrell and P.R. Swann, "Technical Lessons for Flixborough, A Metallurgical Examination of the Eight-Inch Line," *The Chemical Engineer*, 1979, no. 4:266-274.

### UNPUBLISHED PAPERS

#### Reports

11. D.N. Robinson, "A Unified Creep-Plasticity Model for Structural Metals at High Temperature" (Report ORNL/TM-5969, Oak Ridge National Laboratory, 1978).

### **Dissertation or thesis**

12. B.G. Snyder, “Superplasticity in Ferrous Laminated Composites” (Ph.D. thesis, Stanford University, 1982), 45-51.

### **Paper presented at meeting**

13. P.B. Queneau, “Behavior of Magnesium Sulfate During Acid Pressure Leaching Nickeliferous Laterite Ore” (Paper presented at the 113<sup>th</sup> AIME Annual Meeting, Los Angeles, California, 28 February 1984), 5.

## **Manuscript Submission Checklist**

- Final title checked
- All author names included and checked for accuracy
- E-mail address of corresponding author included
- Abstract included
- Keywords included
- Text heading levels and special text elements consistently styled
- No heading levels skipped
- Reference list included
- Citations in text agree with reference list
- All figures mentioned in text provided as separate files
- Figures consecutively numbered within paper
- Figures consecutively cited in text
- Figure captions included at the end of the text file
- Tables prepared with the table function
- Tables consecutively numbered within paper
- Tables consecutively cited in text
- Permissions obtained for all material from other works
- Copyright form uploaded with manuscript