Author Guide

Preparing a Technical Paper for Association for Iron & Steel Technology (AIST) Conference Proceedings

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1. Introduction

It is the goal of the Association for Iron & Steel Technology (AIST) to advance the technical development, production, processing and application of iron and steel. To this end, it is important to achieve a high degree of quality and uniformity with technical papers published in AIST-sponsored Conference Proceedings.

The AIST Author Kit has been developed to assist authors with the preparation and submission of technical papers for publication in AIST-sponsored Conference Proceedings.

<p style="text-align:center; color:red;">PLEASE READ ALL INSTRUCTIONS BEFORE SUBMITTING YOUR PAPER!</p>

2. Benefits of Submitting a Technical Paper

Technical papers submitted and presented at AIST-sponsored technical conferences enjoy the following benefits:

2.1. Publication in Conference Proceedings

All papers submitted and presented at AIST-sponsored technical conferences are eligible for inclusion in AIST Conference Proceedings distributed to conference attendees. Only papers submitted on or before the conference's material deadline will be included in conference proceedings. See the specific conference Call for Papers for more information on material deadlines.

2.2. Eligibility for Publication in *Iron & Steel Technology*

All papers submitted and presented at AIST-sponsored technical conferences are subsequently considered for publication in *Iron & Steel Technology,* AIST's monthly technical journal. Selection of papers for publication is based on the following factors: recommendations from sponsoring Technology Committee members; technical content, quality and current interest; quality of figures (should not require extensive reworking); and peer-review evaluations. (See Section 4.8 for more information.)

2.3. Digital Object Identifier (DOI)

Unless otherwise specified in the Call for Papers, all papers published in AIST Conference Proceedings will receive a Digital Object Identifier (DOI), a unique alphanumeric identifier applied to a specific piece of intellectual property. DOIs are key components of reference-linking systems and help increase exposure for authors and papers.

Note: Only papers submitted on or before the conference's material deadline will be assigned DOIs. Papers submitted after the deadline are not guaranteed to receive a DOI.

2.4. Upload to AIST Resource Center

Unless otherwise specified in the Call for Papers, all papers published in AIST Conference Proceedings will be uploaded to the online AIST Resource Center following the conclusion of the conference. The AIST Resource Center offers a wide variety of downloadable technical content and steel industry publications, including more than 12,000 proceedings papers. AIST Members can download up to 100 technical articles for free each year.

Please see the specific conference Call for Papers or contact the conference planner for more information.

2.5. Awards and Recognition

Depending on the specific conference, accepted technical papers may be eligible for awards and recognition. For example, technical papers published in AISTech Conference Proceedings are eligible for the Hunt-Kelly Outstanding Paper Award, which features a US$5,000, US$2,500, and US$1,000 prize for the three highest-rated papers.

Visit the Awards and Recognition page on AIST.org to learn more.

3. AIST Policies and Procedures

3.1. Disclaimer

AIST reserves the right to withdraw any technical paper from publication in printed or digital AIST Conference Proceedings and from the online AIST Resource Center that are deemed in violation of association policies, procedures and/or association bylaws. For any policy-related inquiries, please contact AIST directly.

3.2. Author Registration and Attendance Policy

Each paper accepted for presentation at an AIST-sponsored forum and for publication in AIST Conference Proceedings must have at least one (1) author registered to attend the conference and present the paper. Failure by the authors to register by the stated deadline or present the paper at the agreed-on time (i.e., "no shows") will result in removal of the paper from publication.

3.3. Commercialism Policy

Papers delivered at AIST-sponsored forums are intended to be technical in nature, with solutions supported by verifiable data. Commercially motivated commentary or endorsement of specific brands or companies is not acceptable. Each paper will be reviewed by forum organizers to ensure compliance with this policy. If the paper is deemed to be in violation, the author(s) will be notified by the forum organizers and given the opportunity to revise the content or to withdraw the paper. To preserve and protect the interests of AIST, forum organizers will have the authority and the responsibility to stop any paper presentation they determine to be in violation of this policy and/or withdraw the paper from publication in conference proceedings. Adherence to the Commercialism Policy should include minimization of references to product branding in the paper.

3.4. Plagiarism Policy

AIST seeks to maintain the highest standards in all activities to serve the steel industry. AIST expects its members, authors and presenters to adhere to these standards within any AIST function or forum. This includes the development, submittal, and presentation of written or electronic material for publication. Plagiarism within submitted work will not be tolerated.

3.5. Antitrust Compliance

Antitrust law prohibits agreements or understandings between two or more individuals or businesses to regulate prices or quantities of goods and services, to allocate customers or territories, to hinder or limit a competitor or potential competitor's operations, or otherwise unreasonably restrain business activity. Discriminatory pricing or servicing is also prohibited.

Every individual who participates in AIST meetings and activities should follow these guidelines:

- DON'T discuss with other members your own or competitors' prices, pricing procedures, or anything that might affect prices such as costs, discounts, terms of sale, or profit margins, or anticipated wage rates.
- DON'T make announcements or statements about your own prices or those of competitors.
- DON'T talk about what individual companies plan to do in particular markets or with particular customers.
- DON'T disclose to others any competitively sensitive information.
- DON'T propose or agree to any action intended to disadvantage or injure another company.
- DON'T stay at a meeting or activity where any such anti-competitive talk occurs.

- DO have an AIST staff person present at any meetings and insist on the agenda being followed and minutes kept.
- DO confer with AIST staff before making any statement with competitive ramifications.

It is incumbent upon all AIST members to adhere to these guidelines to avoid putting all parties and their respective companies at risk for antitrust law violation.

3.6. Anti-Harassment Policy

AIST is dedicated to providing harassment-free events for everyone, regardless of age, race, religion, disability, gender, gender identity or sexual orientation. We do not tolerate harassment in any form of anyone attending an AIST event. Harassing behaviors include: offensive verbal comments related to age, race, religion, disability, gender, gender identity or sexual orientation; the use or display of sexual images, activities or commentary in public spaces; deliberate intimidation; stalking or following; harassing photography or recording; sustained disruption of events; or inappropriate physical contact. Participants asked to stop any harassing behavior are expected to comply immediately. Participants violating this policy may be sanctioned or expelled from the event or the membership and their paper withdrawn from publication at the discretion of the AIST leadership.

Authors will be asked to confirm that they have read and accept the AIST Anti-Harassment Policy when submitting their abstract for an AIST-sponsored conference.

3.7. AIST Privacy Statement

AIST is committed to respecting the privacy of all members and non-members. As part of our bylaws, AIST will never share or sell user information. Please review AIST's Privacy Statement to learn what information AIST collects, how it is used and what you can do to control the use of your data.

Authors will be asked to confirm that they have read and accept the AIST Privacy Statement when submitting their abstract for an AIST-sponsored conference. Without this acceptance, AIST will not be able to communicate with you regarding our technology training events, conferences and exhibitions, membership benefits, and other products and services that you may find valuable.

4. Submission Process

4.1. Abstract Submittal

Unless otherwise stated in the conference Call for Papers, the first step is to submit an abstract for the conference organizers to review. See the Call for Papers for preferred method of submittal. The abstract should provide a concise account of the objectives, results and implications of the work.

Please limit your abstract to a single paragraph of 100 words or fewer and include the following information:

- Paper Title
- Author Name
- Title
- Company Affiliation
- Complete Mailing Address
- Phone
- Email
- Co-Author Name(s)
- Co-Author Title(s)
- Co-Author Company Affiliation(s)

4.2. Abstract Selection

If your abstract is selected, AIST will send you a formal letter of invitation via email. This letter will contain necessary information, including registration requirements and guidelines for preparing and submitting the final manuscript. If accepted to the conference, your abstract may be published in print and digital media related to the conference, such as attendee schedules and marketing materials.

If your abstract is not initially selected, AIST will retain the abstract in case of cancellations in the program.

4.3. Author Acceptance

To verify your acceptance to the conference and commitment to present, AIST requires a response to our letter of invitation.

4.4. Final Paper Submittal

If your paper abstract is selected for an AIST conference, the conference planner will contact you with detailed instructions for submitting your final manuscript.

Manuscripts should be submitted electronically with full text and images. Papers must be in the proper format and be suitable for publication when submitted (see Section 6 for formatting instructions). Non-adherence to instructions will cause the paper to be returned to the author(s) for editing. Papers must be resubmitted in a timely manner to ensure publication.

4.4.1. Submission Deadline

Material submission deadlines will be strictly enforced to accommodate production schedules. Manuscripts submitted after the stated deadline on the conference Call for Papers will not be guaranteed publication in AIST Conference Proceedings.

4.4.2. Permissions/Releases

Authors should secure any necessary permissions/releases, including legal permissions, **before** submitting their abstract/technical paper to AIST.

Once the final manuscript paper has been submitted, authors must assume that it will be published. AIST will not be liable for any issues that may arise concerning the content of a paper.

4.5. Revisions

Before submitting the final manuscripts, authors should review the paper content to be certain it reflects their intent, obtain all necessary permissions (see Section 4.4.2), and confirm that all co-authors are properly listed and in the correct order. Authors must assume that the manuscript submitted to conference organizers on or before the submission deadline will be the final published version. Multiple submissions of revised copies of a manuscript may cause the wrong version to be published.

Manuscript revisions (including addition, removal or rearrangement of the list of co-authors) submitted after the material deadline will be at the discretion of AIST and are not guaranteed in AIST publications. The corresponding author must contact the conference planner directly with a written explanation of the nature of the changes prior to upload. Revisions to papers published in *Iron & Steel Technology* will be handled by the Publications Manager.

4.6. Additional Submission Materials

Once your paper has been accepted for presentation, the following materials must be submitted electronically to the conference planner:

4.6.1. Presenter Form

A signed and completed Presenter Form must be submitted. The Presenter Form provides critical information to AIST, informs you of AIST policies and allows your paper to be published in conference proceedings. The presenter biographical information submitted in the Presenter Form will be used by the forum organizers as your introduction. Please ensure its accuracy.

4.6.2. Copyright Consent Agreement

A signed and completed electronic Copyright Consent Form and permission to publish form must be submitted by the corresponding author on behalf of all authors of the paper. A written transfer of copyright is necessary under U.S. Copyright Law for AIST to grant permission to reprint from published volumes.

Please note: The transfer of copyright from the author(s) to AIST, as well as permission to publish, is implied in the act of submission of the manuscript.

4.7. Publication

Published conference proceedings papers will be made available to registered full conference attendees. See the specific conference Call for Papers for more information on the format of publication (print or digital). Attendees will receive instructions from the conference planner on how to access the conference proceedings.

4.8. *Iron & Steel Technology* Selection

Papers presented at AIST-sponsored forums are eligible for publication in future issues of *Iron & Steel Technology,* AIST's monthly technical journal. **Publication in AIST Conference Proceedings does not guarantee future publication in *Iron & Steel Technology.*** See Section 2.2 for more information on selection criteria.

If a published technical paper is selected for *Iron & Steel Technology,* the corresponding author will be contacted directly by AIST's Publications Manager. Publication timelines will vary based on the specific month and issue for which the paper has been selected.

5. Guidelines for Writing the Paper

Author(s) must carefully proofread material before submitting papers for publication. Papers will be checked for content and formatting guidelines. Basic spelling and grammar will be checked in the title only.

5.1. File Format

Submissions must be in Microsoft Word format (.docx). Electronic copy must be clearly labeled with title of paper, author(s), conference title and session name (if appliable). PowerPoint presentations are not acceptable for publication.

5.2. Paper Length

The average length of an AIST Conference Proceedings paper is 10 pages. Please keep your paper in the range of 8–12 pages.

5.3. Paper Language

All text, including tables and figure captions, must be in English. AIST recommends that non-English-speaking authors have their work edited and proofread by someone fluent in English to ensure clear communication of the information in their paper.

5.4. Paper Organization

The following general outline should be used as a guide for organizing a paper:

- Title
- Author Name(s) and Affiliation(s)
- Abstract
- Keywords
- Introduction
- Discussion Text, Tables and Figures (inserted within text)
- Conclusions

- Acknowledgments
- References
- Appendices (optional)

Please see sample paper accompanying this guide.

5.4.1. Title

The title should highlight the main theme of the paper and be as short and concise as possible. Do not use commercial language, trademarks or product branding within the paper title.

5.4.2. Author(s) Name(s) and Affiliation(s)

List the author's full name (first/given name, middle initial, last name/surname) and those of any co-authors. Do not list any courtesy titles (for example, Dr., Dr-Ing., PhD, etc.). Author names will be indexed by last name/surname (e.g., Smith, John; de Silva, Antonio Marcelo; Zhang, Lie). Also include name, address, phone number and email address of the company with which the author and co-authors are affiliated.

If an author has a persistent digital identifier, such as an Open Researcher and Contributor ID (ORCID iD), please include it with their name and affiliation.

5.4.3. Abstract

Include a copy of the paper abstract within the final manuscript (see Section 4.1).

5.4.4. Keywords

Keywords will be used for online search engines. A list of six to eight keywords that categorize the paper should be provided and placed centered on the page, immediately following the abstract.

5.4.5. Introduction

The introduction should give a brief overview of the paper's subject matter, any procedures, issues, research rationale, and conclusions presented in the paper.

5.4.6. Discussion Text, Tables and Figures

Editorial comments, commercialism or endorsements of any products are not acceptable. Use of company logos is not permitted. Please remove any watermarks from figures.

5.4.7. Conclusions

This section should briefly review the most significant information and summary of the paper. A well-written conclusion should be no more than one paragraph.

5.4.8. Acknowledgments (optional)

This section should be brief and written in the first person, using "I" or "we."

5.4.9. References

Please refer to Section 6.5.15 for more comprehensive directions on how to create references. Formats and examples are cited in this section.

5.4.10. Appendices (optional)

An appendix is a listing of material (graphs, books, illustrations) related to the text, but not suitable to be included in it. Material in an appendix should be related to one topic, and each topic should form a separate appendix. For large-scale images, please keep in mind the page size limits outlined in the Formatting Instructions section (See Section 6). Images will be resized to accommodate standard paper size.

6. Formatting Instructions

6.1. Paper Template

A Microsoft Word template with pre-built font and paragraph styles is available for download from the conference material upload website or from the conference planner. Authors are encouraged to use this template when formatting their papers to ensure that their material adheres to style guidelines.

6.2. Page Dimensions and Margins

Manuscripts are to be submitted with a page size of 8.5 x 11 in. (21.6 x 27.9 cm). **Do not use A4 sizing.**

Please adhere to the following margins:

- Top: On the first page, the title of the paper should begin 1.75 in. (4.45 cm) from the top of the page. A 0.5 in. (1.27 cm) margin should be used on the top of the following pages.
- Left: 0.75 in. (1.905 cm)
- Right: 0.75 in. (1.905 cm)
- Bottom: 1 in. (2.54 cm)

Do not include a cover page with your submission. Pages should be set to one-column format.

6.3. Headers, Footers and Page Numbers

Do not incorporate headers, footers or page numbers into the paper. Pages should flow sequentially without page numbers marked.

6.4. Font

All text should be in 10-point Times New Roman font apart from the Paper Title (see Section 6.5.1). Avoid using font colors other than standard black.

6.5. Formatting by Paper Section

6.5.1. Title

The Paper Title should be written using 12-point Times New Roman Bold and capital and lowercase letters (not all caps). The title should be center-aligned, using more than one line to complete the title if necessary.

6.5.2. Author(s) Full Name(s)

Beginning two lines below the paper title, list the author(s) full name(s). Author names should be center-aligned and use capital and lowercase letters.

6.5.3. Author(s) Affiliation(s)

Beginning two lines below the author name(s), list the author's affiliation, address, phone number and email address. Section should be center-aligned. If there are co-authors, repeat these instructions for each additional author.

6.5.4. Abstract

Beginning two lines below the Author(s) Affiliation(s) section and using center alignment, include the paper abstract (see Section 5.4.3).

6.5.5. Keywords

Beginning two lines below the Abstract and using center alignment, list six to eight relevant keywords. Each keyword/phrase should be separated by a comma. Follow the list of keywords with the Introduction (see Section 5.4.5).

6.5.6. Headings

Section headings should be center-aligned and written in 10-point Times New Roman Bold using all capital letters. Please leave one line between a paragraph and a new heading.

Subheadings should be in 10-point Times New Roman with left alignment. Subheadings should be title case (using capital and lowercase letters). Insert one line before a new subheading.

Subheadings of subheadings, if used, should be bold and indented five spaces. Capitalize only the first word of the sub-subheading.

6.5.7. Body Text

The body text of the paper should be in 10-point Times New Roman font. Paragraphs should be single-spaced with justified paragraph alignment. Do not indent paragraphs. It is not necessary to double-space between paragraphs, although it is preferred that you double-space between sections of the paper.

6.5.8. Tables

Tables must be embedded within the text of the paper; do not provide separately. Tables should be identified within the text and placed as close to the text reference as possible. Tables should be center-aligned with no text wrapping applied.

Please size tables to fit within the paper width/margins (see Section 6.2). An extremely wide table may be turned on one of its longer sides.

Number tables according to their order of appearance in the text (e.g., Table 1, Table 2). Include a descriptive caption directly above the table (see Sample Paper for visual examples).

Any symbols used in a table must be defined in a formal nomenclature immediately following the table in which they are mentioned.

6.5.9. Figures

Figures, including images, line drawings, photographs, diagrams, graphs, etc., must be embedded within the text of the paper; do not supply separately. Figures should be referenced within the text and placed as close to the text reference as possible. Figures should be placed in line with text with no text wrapping and center-aligned. Please size figures to fit within the standard paper width/margins (see Section 6.2).

All figures should be numbered according to their order of appearance in the text (e.g., Figure 1, Figure 2). Include a descriptive caption underneath each figure.

6.5.10. Line Drawings and Graphs

Line art must be computer-generated. Lettering must be in English and legible. Be sure to define/label all parts of the graph including units of measurement.

6.5.11. Photographs

Photographs should be high-resolution images (300 dpi). Scanned copies of figures reproduce poorly and are not acceptable. Please ensure that all necessary photo permissions have been secured. If an image has been sourced from another publication, include the name of the source within the figure caption.

6.5.12. Equations

Equations should be set off from the text by one line above and below the equation. Equations are numbered with Arabic numerals, with the numerals placed in parentheses directly across from the last line of the equation, at the right-hand margin. List and define equation symbols in a nomenclature immediately following the equation. AIST recommends writing equations using Microsoft Word's Equation function, MathType, or LaTeX. Equations should be converted to Professional format.

6.5.13. Abbreviations

If there is any doubt concerning the abbreviation of a term or word, spell it out. For long terms or names that will be used more than once, spell them out on the first reference, place the abbreviation in parentheses immediately after the term or name, and use the abbreviation on all further references. Standard abbreviations for weights, distances, heights and other measurements can be found in most English dictionaries.

6.5.14. Use of Metric Units

Either SI metric or imperial units of measure may be used in the paper; however, use one or the other consistently, rather than a combination. A conversion factor table at the end of the paper should list the factors necessary to convert from one system of units to another, if needed.

6.5.15. References

Reference numbers within the text are placed immediately after the final word or punctuation mark of the sentence in which the reference is first mentioned. The reference number is placed slightly above the line of type (superscript). Use Arabic numerals for all references.

Each paper must include a complete list of references at the end of the paper, numbered consecutively in their order of appearance within the text.

Reference entries should be single spaced in justified paragraph alignment, with a hanging indent of 0.25 in. (0.635 cm).

6.5.16. Reference Format Examples

Book

Name(s) of author(s), chapter title (in quotations), book title (in italics), city and state or country of publication: name of publisher, date of publication, inclusive pages.

Example:

1. M.X. Misal, "Crankcase Oil as an Edible," *Physical Principles of Oil Production*, New York, N.Y., USA: McGraw-Hill Co., 1949, pp. 27–30.

Journal Article

Name(s) of author(s), article title (in quotations), publication title (in italics), volume, number, date of publication, inclusive pages, and DOI number/URL (if applicable).

Example:

2. A. Wright, "Reducing Crane Wheel Failures at the Midwest Plant of U. S. Steel," *Iron & Steel Technology,* Vol. 3, No. 6, June 2006, pp. 39–46.

3. R. Plessinger, S. Seetharaman and E. De Moor, "Oxide Stability Analysis and Characterization in a Galvannealed Dual-Phase Steel Exhibiting Coating Defects," *AIST Transactions,* Vol. 18, No. 1, April 2021, pp. 210–219, https://doi.org/10.33313/tr/0421.

Paper Published in a Conference Proceedings

The reference format for journal articles would also apply for a paper published in a formal proceedings volume.

Example:

4. A. Chan and H. Alshawarghi, "AOD Process Control: From Slide Rule to Factory Automation," *AISTech 2019 — Proceedings of the Iron & Steel Technology Conference,* Vol. II, 2019, pp. 1053–1060, https://doi.org/10.33313/377/108.

For an unpublished conference paper and/or presentation, see the next entry.

Unpublished Paper/Conference Presentation

Name(s) of author(s), title of paper (in quotations), name of conference at which paper was presented (in italics), city and state or country in which conference was held and date of conference.

Example:

5.   W.H. Bailey, "Refining and Casting of Large Forging Ingots," *Metals Society Conference*, Sheffield, England, July 1975.

Dissertation

Name of author, title of dissertation (in quotations), type of dissertation, degree-granting institution, year, pages.

Example:

6.   C. Homsher-Ritosa, "Influence of Processing Parameters and Alloying Additions on the Mechanically Determined No-Recrystallization Temperature in Niobium Microalloyed Steels," Ph.D. thesis, Colorado School of Mines, 2016, p. 55.

Website

Website publisher, website title (in quotations), Date accessed, URL.

Example:

7.   Association for Iron & Steel Technology, "AIST Steel Wheel," accessed 30 March 2021, http://apps.aist.org/SteelWheel/index.html.

Technical Report

Name of author, title of report (in quotations), abbreviated name of company, city of company, state, report number, year.

Example:

8.   Association for Iron & Steel Technology, "Specification for Electric Overhead Traveling Cranes for Steel Mill Service," AIST, Warrendale, PA, AIST Technical Report No. 6, 2018.

Patent

Patent holder, title of patent (in quotations), country where patent is registered, patent number, date issued.

Example:

9.   F. van Laar and J. van Laar, "Hot blast stove dome and hot blast stove," U.S. Patent US9194013B2, 24 November 2015.

Standard

Title of standard (in italics), standard number, corporate author (if applicable), location (if applicable), date or year of publication.

Example:

10.   *Standard Specification for Carbon Structural Steel,* ASTM A36, ASTM International, Washington, D.C., USA, 2019.

6.5.17. Appendix

If an appendix is included in the paper, follow the instructions appropriate to the material. Each topic should be listed as a separate appendix, and each appendix labeled with a Roman numeral (Appendix I, Appendix II, etc.).