

## ASC-10 Author Instructions and Information

*IEEE Transactions on Applied Superconductivity* publishes its papers with a strictly enforced double column format to give the journal a uniform appearance. Authors are strongly encouraged to download and use the appropriate template to help ensure the correct paper format. The checklist below summarizes the guidelines for a correctly formatted publication in *IEEE Transactions on Applied Superconductivity*.

- Maximum number of pages without extra page charges is 4 for a contributed oral or poster presentation, 6 for an invited presentation, and 12 for a plenary presentation.
- Set width of text to be 181 mm (7.13 in) between left and right margins.
- Set Height of text to be 243 mm (9.58 in) between top and bottom margins.
- Columns should be fully justified.
- Set column width to be 88 mm (3.45 in).
- Set column number to be 2 for the text body (see the ASC-10 template).
- Spacing between columns should be 5 mm (0.2 in).
- Paper spacing needs to be adjusted between the text and floating objects (section heads, tables, figures, etc.) to obtain equal length for adjacent columns.
- Paper spacing should be adjusted on the last page to obtain equal column lengths.
- Use correct font (Times New Roman or Times)
- Use the correct title font size (24 pt).
- Use the appropriate capitalization of the words in the paper title (see ASC-10 template).
- Use correct author font size (11pt).
- If an author is a member of IEEE, the words *Member IEEE* in italics must be put after the author name (see the ASC-10 template).
- Locate the author affiliations in the footnote on lower left side page 1.
- Use correct abstract font size and font face (9 pt bold).
- Use the correct text font size (10 pt).
- Use paragraph indentation of 3.5 mm (0.14 in).
- Use correct section and subsection headings (see the ASC-10 template for the main heading style and the subheading style).
- If footnotes are used, use correct footnote font size (8 pt, see the ASC-10 template).
- Date received should be the date the paper is uploaded to the submission site and should be inserted in the footnote on lower left side page 1 (see the ASC-10 template).
- Funding acknowledgement (if any) should appear in the footnote on lower left side page 1 (see the ASC template).
- Use the correct formatting for figure captions (see the ASC-10 template). Figures are numbered with Arabic numerals (1, 2, 3, etc.; see the ASC-10 template).
- Use the correct table caption formatting. Tables are numbered using roman numerals (see the ASC-10 template).
- Use the correct formatting for lines, borders, fonts, footnotes, and other parts of any table body (see the ASC-10 template).
- Figure lines should be no less than 0.18 mm (0.5 pt) wide.
- Figure fonts should be at least 9 pt.
- Use the appropriate abbreviations and acronyms. Acronyms should be defined if they are not part of common language.
- Use SI units (put other units in parenthesis). Example: 1.61 km (1.0 mi).
- Symbols should be given in italic font and should be defined upon first use. Example: The magnetic flux density *B*.
- Use correct format for displayed and in-line equations (see the ASC-10 template for the equation location and style).
- Number displayed equations in the paper (see ASC-10 template).
- Use the correct format for appendixes and acknowledgements.
- Use the correct format for references. See the template for examples of correct formatting.

### Comments on Figures and Tables

The number of figures and tables should be limited to about three per page. Figures or tables may be either a full page wide (up to 181 mm) or one column wide (up to 88 mm wide). The minimum

figure size should be no smaller than about 60 mm wide by 50 mm high. Do not put two figures side-by-side in a single column. Make sure that copy and paste operations capture all layers and parts of complex figures. Labels on curves in plots are often more effective than legends for identifying data. Make sure that symbol shapes can be distinguished. The use of photographs in the paper should be minimized. Photos that are used in the paper should be labeled within the photo, or the figure caption should carefully describe what is important within the photo. The reviewers may suggest that inappropriate figures, photos and tables be removed from the paper. The text within the paper should explain what is important about the figures and tables used in the paper.

Figures may be put into the paper in color, but the authors should remember that the paper will be printed in black and white in *IEEE Transactions*. Do not use colored type within a table. Graphs should not use colored lines. One should never refer to the color of a graph line in the figure caption or paper. The lines in a graph should be dashed in various ways or the line should use a symbol to differentiate one line in a graph from another. The minimum final line size in a figure in the printed-paper should be 0.5 point wide. The minimum figure font size should be 9 point. Do not use unusual font types in figures. It is best to use Times as a figure font. Use a bold font in figures; it will be more visible.

IEEE journal figures should be 500 dots per inch (dpi), or 220 dpi for photos. Care should be taken to never expand a low-resolution figure to 500 dpi due to the pixilation and resampling that will occur, which will likely render the figure unreadable. When possible, vector graphics (metafiles, postscript, etc) should be used to maintain scaling when producing figures for insertion into text. Tables produced in Word are suitable even though they are less than 100 dpi. Figures should be produced in the size intended for the paper at 500 dpi resolution if possible; otherwise the figure should be inserted into the paper in the resolution it was created in. Do not reduce the size of a large figure (for example one created of A0 in a CAD program) and insert it in the paper as a figure unless all features remain 1 mm or larger in size. Figures should be of illustration quality with typeset fonts; authors should note that CAD drawings are almost never of illustration quality.

Care should be taken to manage figure resolution, especially for photographs acquired at high resolutions. Reduce the figure resolution before reducing its size. Especially, modern photographs are acquired at 8, 16, 24, or even 32 bits per pixel, which translates to very large image file sizes for even small pictures. Paper files that are too large in size may not be possible to upload. Large figures are the primary reason that paper file sizes are too large.

### **Reasons Why ASC Papers may be Rejected**

There are seven general reasons why ASC papers may be given a low score by the reviewers and subsequently rejected by the editors: 1) The paper topic is not suitable for publication in *IEEE Transactions on Applied Superconductivity*. 2) The paper has little or no technical merit. 3) There is no original work in the paper. 4) The paper is not properly referenced. 5) The paper has been or will be concurrently published in another journal or proceedings. 6) The paper is written in incomprehensible English. These reasons are explained in more detail below. 7) The editor may reject a paper if the author fails to make appropriate changes to the paper in a timely manner or explain why changes have not been made.

**Reason 1: Topic not suitable for publication in *IEEE Transactions on Applied Superconductivity*** – The key words here are “Applied” and “Superconductivity”. Papers about the theory of superconductivity are usually not suitable unless the paper relates the theory to some application of superconductivity. Papers about cryogenics, power systems, and similar topics must relate the topic directly to the superconductivity in the device. A cryostat without a superconducting

device is not applied superconductivity. A power system without a description of the superconducting device being powered is not about applied superconductivity. The author must be careful to see that the paper he or she is writing is related to the application of the superconducting material or device.

**Reason 2-4: Lack of technical merit** is another common reason that papers are rejected by the editor. Conclusions that are poorly supported by the data, faulty science, errors in logic, or unfounded speculations constitute a lack of technical merit. A paper that does not draw conclusions from testable hypotheses or otherwise does not follow scientific methods may be rejected for lack of technical merit. A paper may also lack technical merit because there is **no original work in the paper** or the paper is poorly written. Papers written about work in an ongoing program must provide new information and that information must be interesting to the superconducting community. Previous work on the same topic by the authors or others should be suitably referenced. Authors should make a literature search before writing their paper. The paper should not be the same as similar work published 30 or 40 years earlier. If the work is related to work reported in earlier publications, the earlier publications should be suitably referenced. *IEEE Transactions* is an archival journal; proper references are important. **Not having proper references** is grounds for paper rejection. See the paper template for proper reference formatting.

**Reason 5:** Work published in the *IEEE Transactions on Applied Superconductivity* must not only be original work, but most of the **work must not have been published in another journal or proceedings or be in the process of publication**. Electronic tests for plagiarism and duplication of work being used by IEEE journals.

**Reason 6: Poor English** – If the English in the paper is so poor that a reviewer cannot understand what the author is trying to convey, or if the review decides that a typical reader will not understand the paper, the paper may be rejected for **poor English** and for a **lack of technical merit**. Either American English or British English are acceptable. If the author is not fluent in written English, he or she should seek the help of a colleague who is fluent in written English. Reviewers and editors may suggest minor changes in the English, but they cannot rewrite a paper. Authors are strongly encouraged to use spell check and grammar check in typesetting programs such as Word before the paper is turned into ASC for review. When the paper is returned after review, the author must make required changes or explain why the changes are not need. **Reason 7: Failure to make changes in a timely manner can result in the paper being rejected.**

### ASC-2010 Paper Submission Procedure

The 2010 Applied Superconductivity Conference will use electronic submission of the papers. Authors who have pre-registered are urged to submit their manuscripts electronically before they leave their home laboratory. The paper may be submitted in its original format (Word or LaTeX) with all figures and tables inserted in their correct position within the paper or as a pdf file. ScholarOne will produce a pdf version of the submitted paper (whether it was submitted as a word/LaTeX file or pdf file). The author must inspect and approve the converted pdf copy of the paper to see that it is correct before submitting the paper for review. The authors will be asked to submit their final papers in their original format after the papers have been reviewed and approved for publication by the technical editors.

Each paper submission must include a unique conference registration code which will be assigned after a registration is submitted/processed. Only Full Conference and Student participants will receive one complimentary registration code with registration submission. **Authors who submit more than one paper will have to pay a publication charge of US \$440 for every paper after the first one.**

Any author of the paper may have his or her registration code attached to the web submission of the paper. The paper must have the correct number of pages (4 pages for a contributed oral or poster paper, 6 pages for an invited paper, and up to 12 pages for a plenary paper). **Papers with more than the allotted number of pages will have to pay a page charge of US \$110 per page for pages over the allotted number. Additional page charges must be paid for by Tuesday, August 3, 2010.**

Submission of the paper before the conference means that the author does not have to wait for a computer in the Internet Café or the publication upload room to submit his or her paper. Authors who register at the conference must submit their papers electronically after they have registered. Authors who must pay extra page charges or charges for extra papers must submit their papers electronically after the charges have been paid at the conference. If a submitted paper is found to have too many pages and the extra page charges have not been paid, ASC will not allow the paper to be published in the conference edition of *IEEE Transactions of Applied Superconductivity*.

The papers must be submitted to the submission website no later than **5 PM (17:00) on Tuesday, August 3 2010, Washington, D.C. time**. Papers will not be accepted after that time or date. Submission can be done through any computer that is connected to the Internet. The paper may also be submitted from a flash memory stick or a CD at the conference publications room. There will be staff in the publication upload room to help authors with the mechanics of paper submission and other publication related problems.