AIP Conference Proceedings: Guidelines for CEC/ICMC Authors

Dear Author

Thank you for writing and contributing a paper to the proceedings of CEC/ICMC. These guidelines are intended to help everyone involved in the proceedings achieve a rapid and efficient publication, so we are grateful to you, and any co-authors, for taking the time to read them and for following the instructions below. Reading lots of documentation can be time-consuming so we have tried to be brief and cover the most important points you need to consider before writing your paper for AIP Conference Proceedings. If you have any questions, do please contact us via e-mail at confproc@aip.org. We will do our best to write back to you within 1 working day but the proceedings mailbox is extremely busy and it may, sometimes, take a little longer to reply.

Thank you, and best wishes
The AIP Conference Proceedings team

Introduction: What is in these guidelines?

Please take a moment to familiarize yourself with the documents we have provided to you via the CEC/ICMC website.

- **author_guidelinesCECICMC.pdf**: The file you are reading, which summarizes the main issues you should consider when writing your paper and preparing your article PDF file.
- **permissions:** The information provided contains essential guidelines on using copyrighted materials within your article, together with a letter you can use to apply for copyright permission.
 - o **permission_guidelines.pdf**: Essential notes and guidance on use and reproduction of copyrighted material.
 - o **permission_letter.pdf:** A suggested template letter you can use to seek permission to reproduce copyright material.
- sample_references.pdf: A collection of examples showing how to prepare and format your references.
- article templates: We have provided the manuscript templates in Word (or LaTeX).

Submission of papers and Copyright Transfer Agreements

CEC/ICMC is using an online article submission and peer review system called PXP. As part of the article submission process, PXP provides online forms for transfer of copyright so there is no need to sign and submit a separate Copyright Transfer Agreement.

What do I have to read?

In addition to the advice and guidance contained in this document, if you wish to use copyrighted material in your article we ask you to read the document **permission_guidelines.pdf**.

In essence, what do I need to do?

The proceedings publication process is summarized below in the section *What is the publication process* for proceedings. The main requirement is that AIP Conference Proceedings requires a ready-to-publish PDF file of your article (with fonts embedded), prepared using our Word or LaTeX templates and following

the general guidelines discussed in this document. Be sure to check the CEC/ICMC 2013 website for any limits on page count requested by the proceedings editors: AIP does not impose any limits on page counts, but the editors may do so.

Is there anything else I need to prepare or submit?

The following items will only be required if they apply to your article, most authors can ignore these. If relevant to your paper, you should submit these details at the time you upload your article:

• Marmission letters:

If you have used copyrighted material in your paper you must obtain permission to use it from the owner of the copyright and/or authors. You need to upload full details (e.g., copies of permission received in e-mails) when you submit your article.

Essential points for all authors

Before you start writing, please consider the following essential points.

- PACS numbers and keywords: Our current templates refer to including them on your paper but these no longer required; however, you can still include them if you wish to do so. New templates are in preparation and will be released later in 2013.
- No 1-page papers please. AIP Conference Proceedings does not wish to publish extremely short
 proceedings papers, such as 1-page, abstract-only contributions and we reserve the right to
 exclude any such articles from the proceedings. AIP's online publication fees are completely
 independent of the number of pages in each article and we welcome substantial contributions,
 provided your page count complies with guidelines/limits set by your proceedings editor.
- Online use of color is free. We still get asked if it costs extra to use color within online proceedings papers and, of course, the answer is no it does not.
- Avoid huge PDF files (10 MB maximum, ideally). For the benefit of readers and researchers
 accessing your article from slow or expensive internet connections we recommend that you try to
 keep your article PDF file below 10 MB. This is just a recommendation, it is not a requirement.
- **Prepare and format references with care**. Please prepare and format your references in accordance with the examples provided in the document **sample_references.pdf**.
- Do not add page numbers or headers/footers. Our article templates deliberately do not include
 these so please do not add them. Adding them causes significant delays and creates unnecessary
 work for your editor. Page numbers and headers are added by AIP during the publication process.
- **Do not alter the margins of our templates**. They are carefully designed for AIP's production process, altering them can cause significant delays and create unnecessary work for your editor.
- **Embed all fonts into your article PDF**. The importance of font embedding is explained below, together with how to check this.
- Use clear, legible graphics and diagrams. We still receive articles containing graphics that are almost illegible, which significantly reduces readership of the article. Do try to avoid "blocky" JPEG images, especially if they contain text: readers of your paper will be grateful. If they cannot read it they are unlikely to cite it.
- Do not use copyrighted material without permission. The file permission_guidelines.pdf
 supplied with these guidelines contains advice on using copyrighted materials within your article.
 Regretfully, papers submitted to AIP without appropriate copyright permissions may be excluded
 from the proceedings without any opportunity to resubmit. Seeking copyright permission at that
 late stage can cause significant delay in publication which would be unfair to other authors in the
 proceedings.

What is the publication process for proceedings?

Proceedings publication differs from regular journals in several aspects:

- (1) Most pure proceedings publications, including AIP's, use author-prepared PDF files for publication and production of printed copies.
- (2) Proceedings papers are submitted directly to the proceedings editors who manage the review process and collect together the accepted articles.
- (3) After peer review is completed, the proceedings articles are transferred to AIP (by the editors) in a single batch, rather than one-by-one as each paper is ready.
- (4) The proceedings papers are published together as a single collection (volume) of AIP Conference Proceedings.

Proceedings editors undertake a review of papers in accordance with community and conference traditions/expectations and will advise you of any changes you may need to make, prior to it being accepted. Once the editors have collected sufficient accepted papers, or as many papers as authors are willing to write, they submit them to AIP in a single batch. AIP cannot publish any proceedings until the entire set of files submitted to us meets the requirements of our publication and production systems. Consequently, it is extremely important for all authors to follow our guidelines so that the proceedings are not delayed by problematic papers.

Some general notes on graphics

The guiding principle is to think of your readers. Will they be able to read the text with very small graphics, especially scaled-down bitmap images? Try to consider readers who may have restricted vision. Generally, use the highest quality graphics possible, placed within your article at a sensible size so that the text is clear and legible. Here are some recommendations for raster images (halftones, line art/bitmaps):

- If you are scanning line art: use a minimum 600 dpi resolution.
- If you are scanning photographs or images (creating halftones): 300 dpi.
- Use 600 dpi for combinations line art halftones.
- Save line art as black/white bitmap, not grayscale.
- Save halftones and combinations as grayscale, not black/white bitmap.

Font embedding: What is it and why is it so important?

Today, readers of scientific articles use an ever-increasing range of devices to access, view, and print PDFs: From smart phones and tablets through to desktop computers running any one of a number of operating systems. In addition to this range of devices are the numerous "PDF viewer" applications now available, and the wide spectrum of software tools used by authors to prepare the text and graphics of their articles. To ensure that readers of your article can display and print it correctly it is important for your article's PDF file to be truly *portable*: The PDF file needs to be fully "self contained". In particular, for PDFs containing complex scientific content it is highly advisable not to rely on the fonts available on the device used to display or print the PDF: The fonts (font data) need to be *embedded* into the PDF.

Font embedding is no longer a nice-to-have, it really is a *need-to-have*. Although AIP does perform a number of quality checks on author-supplied PDFs, re-processing author PDFs to embed missing fonts is far from ideal. It is *much* safer to have all fonts embedded by you when you generate the PDF version of your article prior to sending it to your proceedings editor.

How do I check font embedding?

If you have access to Adobe's Acrobat Pro product you can easily check font embedding using its built-in preflight tools; however, free tools are also available. If your institution's policies permit you to download and install software you can use the *free* Xpdf tools to check for fonts embedded in PDF files. Part of the

Xpdf tools package is a free command-line utility called **pdffonts** which is available for Windows and Linux. (we are not aware of a Mac OS version):

http://www.foolabs.com/xpdf/download.html

pdffonts generates a list of fonts used in a PDF including whether each font is embedded, or not.

Font subsetting: What is that?

It is the process used by PDF-creation software to embed the font data for just those characters needed to display the text of your article (including text within graphics). For example, if you had a single page of text containing "Hello World", it is only necessary to include the font data for the characters H, e, I, o, W, r and d (plus space "character")— the PDF needs to *embed* a just *subset* of the characters contained in the font. Modern font files (e.g., OpenType) contain data to display many thousands of characters and the font files can be very large (many megabytes). Font subsetting helps keep your PDF files small and, in reality, many font licences insist that the entire font is not allowed to be embedded. In practice, you rarely need to worry about font subsetting because your PDF-generation software does it for you automatically. Note that the pdffonts utility will also tell you which fonts in your PDF are subset.

I notice some fonts are not embedded, what can I do?

If your complete article PDF is reported as not having all fonts embedded the first step is to remove all graphics from your document and create a PDF of just the article text. If that PDF is reported as having all fonts embedded, you need to check your graphics: especially if you pasted them (in Microsoft Word) or imported them via PDF or EPS (Encapsulated PostScript) format (LaTeX or pdfLaTeX).

With the huge variety of software tools available to authors it is difficult to provide comprehensive advice but here are some diagnostic tips.

- Copying and pasting graphics (Microsoft Word, or other word processors). Depending on how
 you generate the article PDF, it is possible that some fonts for the text within your pasted graphics
 did not get embedded into the final PDF. A simple test is to paste a graphic into a new blank Word
 document, make a PDF and check to see if the fonts are embedded.
- **PDF or EPS export**: It is quite possible that some of those PDF or EPS graphics files do not contain the font data needed to render/display the text inside them. By default, many graphics tools or applications export PDF or EPS files that fail to embed font data so you should explore any file export settings (or configurations) to determine if your graphics application can be made to export font data.

If you have further questions please contact us at

confproc@aip.org

Best wishes
The AIP Conference Proceedings team