ASPE MANUSCRIPT TEMPLATE

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INSTRUCTIONS

This document provides instructions for preparing a manuscript for the proceedings of an ASPE conference. You may want to use the source file of this template directly to prepare your paper. The desired formatting is accomplished basically by using a class file "ASPE_ExtendedAbstract.cls" which is a variation of the standard "article.cls" file. It is invoked in the first line of your document source file:

```
\documentclass[letterpaper,10pt,
  twocolumn]{ASPE_ExtendedAbstract}
```

The assumed physical paper size is 8.5" $\times$ 11" (216 by 279 mm US letter size) with a 1" (25.4 mm) margin all around.

Your paper should begin one line below the author list. The text of your paper should be single spaced, 10-point Helvetica-like font using justified alignment in a two column format. Each column should be 3" (76.2 mm) wide with a 0.5" (12.7 mm) spacing between columns. Spacing between paragraphs should be one line.

For the Annual Meeting, papers should be 4–6 pages long, including tables and figures. For other meetings, a different limit may be posted on the ASPE website. *Do not use page numbers, headers, or footers within the manuscript.*

Footnotes may be included, if required.[1] These can be written as follows in the main text:[1]

```
\footnote{This is a footnote referred to
  in the regular text. Refer to Lamport's
  book \cite{Lamport1986} on how to do
  this inside, e.g., a table or a caption.}
```

Most formatting requirements described throughout this document (including paper size, two-column format, font, font size, spacings, margins, no page numbers, headers nor footers) are automatically taken care of by the class file and the "\documentclass" command.

[1]This is a footnote referred to in the regular text. Refer to Lamport's book [1] on how to do this inside, e.g., a table or a caption.

PAPER TITLE AND AUTHOR(S)

The title and author information, plus a few other LaTeX commands, appear between the opening "\documentclass" and the "\begin{document}" commands. The title of your paper should start 1" (25.4 mm) from the top of the page and be 14-point bold, Helvetica font in all capital letters. The title should be centered on the page. One line space should separate the title from the author listing(s). The command

```
\title{ASPE Manuscript Template}
```

will accomplish all of this. Just substitute your own title.

Each author name should consist of first name, middle initial, and last (family) name. It should be 12-point Helvetica bold, upper and lower case letters, centered under the title. All authors should be listed on the same line with their affiliations identified by numeric superscripts at the end of the name. (In the case of a single author, do not use a superscript.) Author affiliation(s) should consist of the following, as applicable:

- department or division name
- company or university
- city, state or province, and country.

All author affiliation information should be 12-point Helvetica bold, upper and lower case letters, centered under the name. For more than two author affiliations, they may be listed in double columns.

TEXT HEADING #1
The primary section or text heading should be 10-point Helvetica bold, all capital letters, flush left with the margin. If the heading is more than one line, the following lines should also be flush left. The spacing to the next heading should be one line. All of this is accomplished with the command (note the asterisk):

```
\section*{Text Heading \#1}
```

Text Heading #2
The first sub-heading should be 10-point Helvetica bold, upper and lower case letters, and underlined. The heading is flush left, and the spacing to the next heading is one line. All of this is accomplished with the command (note the asterisk):

```
\subsection*{Text Heading \#2}
```

Text Heading #3
The third level of heading should be 10-point Helvetica bold, upper and lower case letters, and italicized. The heading is flush left, and the spacing to the next heading is one line. All of this is accomplished with the command (note the asterisk):

```
\subsubsection*{Text Heading \#3}
```

Another subsection

Subsubsection leading off in a subsection
Whenever a lower section level header follows immediately on a higher one, i.e., no regular test in between, a command "\vspace{2\parskip}" needs to be inserted between the two (sub)section header commands.

FIGURES, TABLES, AND PHOTOS
Figures, tables and photos may be in color, but note that the printed proceedings will be in black and white, so multiple data sets in graphs should be clearly identified with this in mind.

Text within the figures should have a font size of not less than 8-point. Photographs should be scanned at 144 dots per inch (dpi) and inserted as graphic objects into the document. With LaTeX, the "graphicx" package included before the "\begin{document}" command is used to handle the graphics. Figures and tables should be numerically labeled consecutively; in LaTeX, the "\caption" command inside the figure and table definitions takes care of the desired numbering. Inserting a "\label{tableone}" command (with "tableone" being just an example for a label name) inside the caption provides you with a means to refer to the figure or table number with the "\ref" command as in "Table \ref{tableone}", which gives: "Table 1". Note that whenever you add a new reference (figure, table or bibliographic), or reorder their appearance, you have to run your LaTeX processor twice to make the output appear correctly.

An example each for a table and a figure with captions are provided below, in two-column format. If necessary, tables and figures may be inserted using a single column format.

The table identification (e.g., TABLE 1) should be 10-point Helvetica, all capitals, italicized, and end with a period. It should be placed above the table. The table caption should follow the table identification and should be 10-point Helvetica font, upper and lower case letters, italicized, and justified. The placement is accomplished by putting the "\caption" command in the table structure before the body of the table.

```
\begin{table}[htb]
\caption{\label{tableone}{This is
   the sample table caption.}}
\vspace{10pt}
\begin{tabular}[]{—c—c—c—}
\hline
Index & Value 1 & Value 2 \\ \hline
1 & 0.1 & 0.6 \\
2 & 0.5 & 1.5 \\
3 & 1.2 & 3.5 \\ \hline
\end{tabular}
\end{table}
```

The "\vspace" command places a vertical space of 10 pt between the caption and the body of the table. The letters h, t and b in the square brackets indicate that LaTeX will first try to place the table within the text where it is defined ("h" for "here"). If that runs afoul of a column break, it will try to place it at the top ("t") or bottom ("b") of a column. The ampersants "&" separate columns, and the double backslashes separate rows. The "\hline" commands and the bars and "c"-s in the "\begin{tabular}" command create the outlines of the table and the centering ("c") of the columns. For more details about how to control the appearance of the table see Lamport's book.[1] Here is the resulting table:

Figures are handled quite similarly to tables. In

TABLE 1. This is the sample table caption.

Index	Value 1	Value 2
1	0.1	0.6
2	0.5	1.5
3	1.2	3.5

place of the body of the table, a graphics file is referenced by the "\includegraphics" command, and the caption is placed below the image (Figure 1) rather than above.

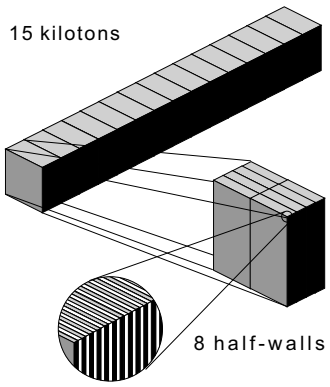

FIGURE 1. The figure identification (e.g., FIGURE 1) should be 10-point Helvetica, all capitals, italicized and end with a period. It should be placed below the figure. The figure caption should follow the figure identification and should be 10-point Helvetica font, upper and lower case letters, italicized, and justified.

ACKNOWLEDGMENTS
Please make sure to acknowledge the contributions of people who are not listed as authors, and of the support by institutions and funding agencies.

THE LAST SECTION: REFERENCES
References should be set in the same typeface as the text. They should appear at the end of your paper and be arranged in order of appearance in the text. Within the text, they should be numerically identified using closed brackets. For example, to identify the first reference, use the format [1], i.e., numbers in square brackets. With LaTeX, you write that as

```
\cite{refname}
```

The parameter "refname" reappears in the list of references at the end of your paper. LaTeX takes care of the sequential numbering. The format follows the "Vancouver" numbered style, described at

http://www.icmje.org

The section on references can also be found at

http://www.nlm.nih.gov/bsd/
uniform_requirements.html

An easy, manual way to create the actual list of references is to use the "\bibitem" command as follows:

```
\begin{thebibliography}{23}
\bibitem{Lamport1986}Lamport, L.
   LaTeX - A Document Preparation System,
   Reading, MA, USA: Addison-Wesley
   Publishing Company; 1986.
\bibitem{Lindeke1991}Lindeke R.,
   Schoenig F Jr, Khan A, Haddad J.
   Machining of $\alpha,\beta$-Titanium
   with Ultra-High Pressure Through the Insert
   Lubrication/Cooling. Transactions of the
   North American Manufacturing Research
   Institution of SME. 1991; 19: 154-161.
\bibitem{Trigger1951}Trigger K,Chao B.
   An Analytical Evaluation of Metal Cutting
   Temperatures. ASME Transactions, Journal
   of Engineering for Industry. 1951; 73:
   57-68.
\bibitem{Ulsoy1989}Ulsoy A, DeVries W.
   Microcomputer Applications in
   Manufacturing. John Wiley and
   Sons, Inc. New York: 1989.
\end{thebibliography}
```

The parameter "{23}" indicates the widest space that needs to be reserved in the list of references for the reference numbers as 2 fairly wide digits ("1" is narrower than all the others). The resulting list of references appears at the end of this template paper.

The drawback of this manual method is that in order to have the reference numbers appear in the running text in sequential order, you have to know in which sequence they are used in the paper and sort the "\bibitem" commands into that specific order. For working with a BIBTeX database, see the correspondign version of this document and Lamport's book.[1]

PORTABLE DOCUMENT FORMAT (PDF)
Please submit your abstract as an Adobe Acrobat (PDF) file to be included in the electronic and bound conference proceedings. This means that you must make an Acrobat version after you have created the manuscript using your favorite word processing software, and you must embed all fonts used in the PDF file.

Protected Documents: It is very important that you not send documents that are password protected or otherwise secured. The publisher must be able to open the PDF files to add page and volume numbers. "Read or Print Only" documents cannot be included in the Proceedings.

PAPER SUBMISSION
Please follow the directions on the website at *aspe.net* for links to the online submission portal, and details of conference submission deadlines.

QUESTIONS
Please direct any questions to the ASPE Executive Director.

Telephone: (919) 839-8444

Email: executive@aspe.net

Note that the Executive Director may forward specific questions to qualified volunteers within the ASPE.

REFERENCES

[1] Lamport L. LaTeX - A Document Preparation System. Reading, Massachusetts, USA: Addison-Wesley Publishing Company; 1986.

[2] Lindeke R, Schoenig F Jr, Khan A, Haddad J. Machining of α, β-Titanium with Ultra-High Pressure Through the Insert Lubrication/Cooling. Transactions of the North American Manufacturing Research Institution of SME. 1991; 19: 154-161.

[3] Trigger K, Chao B. An Analytical Evaluation of Metal Cutting Temperatures. ASME Transactions, Journal of Engineering for Industry. 1951; 73: 57-68.

[4] Ulsoy A, DeVries W. Microcomputer Applications in Manufacturing. John Wiley and Sons, Inc. New York: 1989.