ABSTRACT

This template is formatted to AHS guidelines. A portion of the guidelines themselves has been used as “filler” in this template. Replace this text, as well as the following, with the body of your paper. An abstract of approximately 150 words is required. It should consist of a single paragraph only. It should be a summary, not an introduction, and be complete in itself. It should not contain any numerical references to figures or references contained in the paper. The abstract should indicate the subject covered in the paper and should state the objectives of the investigation. Newly observed facts and conclusions must be stated in summary form. Readers should not have to read the paper to understand the abstract. The abstract should be centered across the width of the first page. Please download the “AHS Forum 73 Guide for Authors” at http://submissions.mirasmart.com/AHS2017/Login.aspx for a more comprehensive and easier-to-read outline.

NOTATION

This section is optional if only a few symbols or simple equations are used. In this case, the symbols should be defined in the text when introduced. If more than a few symbols or equations are used, a Notation section should be included. It should list and define the symbols used (including units). Place the symbols in alphabetical order, English first, Greek next, and then subscripts. The metric and dual system (metric and English) should be used if possible. If used, this section is the first section in the two-column format.

INTRODUCTION

The paper should be formatted for printing on 8.5-inch by 11-inch paper. Margins should be at least 0.75 inches and not more than 1.0 inch (top, bottom, and sides). A standard proportional font (such as Helvetica or Times) should be used throughout the paper. The font size in the title block is at the discretion of the author, but should never be less than 10 point. All of the rest of the paper should be 10 point. The title block and abstract should be centered across the width of the first page. Except for the Title Block, fully justified text throughout the paper is preferred. Left justified is acceptable.

Note that there is a non-visible footnote at the end of the title of this section (“Introduction”) in order to force the copyright statement below. (\meeting in \LaTeX)

The introduction should introduce the subject, provide some background, including a brief assessment of prior work by others (citing relevant references), and an explanation of how the paper contributes to the field. It is not a summary. The introduction tells what has been done, what needs to be done, and how the present results relate to past work and present needs.

MAIN BODY — MAJOR HEADING

Organize the Main Body under logical headings and subheadings. Do not number the headings. Main headings are centered on the page, subheadings begin at the left margin above the text, and sub-subheadings are set at the left margin on the first line of the paragraph. Use third person. Avoid jargon, slang and commercialism. Use acronyms and footnotes sparingly. Use simple English prose in paragraph form wherever possible. Pages should be numbered and centered at the bottom of the page.

The body of a paper should be single-spaced and in two columns of equal width (with a 0.20 inch “gutter” between columns). The first page must include a Copyright Statement. The statement should be a footnote at the bottom of and within the left column. Elements of the paper plus the sections and subsections within the body of the paper should NOT be numbered or lettered.

Sub-Heading

The titles for the elements of the paper plus the sections and subsections may be in bold or underlined, but should not be both. The use of color should be limited to Figures and Tables. When using color, remember that the printed version of the Proceedings will be in black and white ONLY. You must satisfy yourself that anything in color will be readable and
intelligible when printed in black and white. Pages must be numbered.

**Equations**

Unless only a few are used, all equations should be numbered in the order introduced and referred to in the text by number. Equations and/or symbols may be presented in any suitable form; however, clarity for the printer is essential. Special symbols should be identified.

**FIGURES AND TABLES**

Figures and tables should be inserted in the Main Body. Each figure or table should be placed as soon after its reference in the text as is practical. If including them within the Main Body proves too difficult, grouping all Figures together and then all of the Tables together after the last section of the Main Body is acceptable. Note that Figures and Tables should all be within the Main Body or all after the Main Body for consistency.

**Figures**

Illustrations and graphics used in figures must be clear and sharp. Converting to PDF files can sometimes affect the resolution of images: If you do the conversion to PDF, carefully review the conversion of all images. Lettering should be large enough to be legible, at least 1/16 high. If needed for clarity, selected figures can be double column width. Illustrations/figures showing plotted data should have axes labeled with appropriate names and units. Symbol keys should be included to identify plotted lines and data when needed. Additional information or parameter values related to a figure should generally be placed in the figure caption rather than on the figure itself. Each figure must be numbered, have a caption, and be cross-referenced in the text, such as: as shown in Figure 1.

**Tables**

The number of tables should be kept to a minimum. Each table must have a number and a caption and should be cited in numerical order in the text. Tables should be simple and arranged in the following format. Type a double line at the top and bottom of each table and a single line under the column headings. Table footnotes should be placed under the bottom double line and should be indicated by the letters a, b, c, d, etc. See Table 1 for an example of an alternative format using color. The data is given for illustrative purposes only.

**CONCLUSIONS**

The most important results of the paper should be summarized as a concise list of numbered items. Conclusions should be supported by development in the main text and no new material should be introduced in this section. If the paper did not result in specific conclusions, then the section may be entitled Concluding Remarks or Concluding Recommendations, with brief summary comments as appropriate.

**APPENDIX**

Appendices should be used for highly specialized data, derivations, etc. They should be lettered (A, B, C, ...) if more than one is used. Each appendix must be cited in the main text.

**ACKNOWLEDGMENTS**

If used, this should be placed at the end of the paper, before the references. If used, one or more acknowledgments to contributors, a sponsor or technical monitor should be placed at the end of the paper, before the references section. Also include any research or project support/funding sources here.
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All reference material should be grouped in the final section of the paper, numbered, and placed in the order cited in the text. Reference only that material which is readily available to the reader. Do not include classified material, internal company memoranda, or reports unavailable to the reader. Additional information on citing references in the text is provided in the Authors Guide.

The references should be cited in the text as: “This approach is discussed in Ref. 2.” or “Johnson (Ref. 3) showed that...” or “Reference 3 discusses the approach...” Do not use the superscript citation style, such as “Johnson1 showed that...”.

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