Instructions to Authors for Manuscript Preparation

35th International Symposium on Combustion

Submission Deadline: Midnight, PST, 5 December 2013

Submission Link to be provided on CI website by 1 November 2013

Length of Contributed Papers

- Length limit is **5800** words, excluding title block, abstract, and separate list of figure captions.
- Guidelines for determination of length are attached.
- Manuscripts will be rejected without review if they exceed the limit or have an inaccurate or missing word count.

Manuscripts

- Manuscripts must be in grammatically correct, concise English.
- Double-space throughout with ¾ in. (1.91 cm) margins.
- Number all pages.
- Type title page, tables, and a list of figure captions on separate pages.

Style and Organization

- Style follows the *Proceedings of the Combustion Institute* Vol. 34 (2013)
- Organize the manuscript as follows: Title Page, Abstract, Keywords, Nomenclature (if used), Introduction, Main Body, Conclusions, Acknowledgments, References, Appendices, Tables, Figures, Figure Captions and list of Supplemental material (if included)
- Use numerals to denote separate sections and subsections of the Introduction, Main Body, and Conclusions.

Title Page (must include:)

1. Title
2. Author(s) and affiliation(s)
3. Corresponding author's COMPLETE contact information:
    - Mailing address, including country
    - Fax
    - Email (**essential**)
4. Colloquium that describes the research topic (include alternate colloquia if the paper fits under more than one topic)
5. Total length of paper and method of determination
6. List word equivalent lengths for main text, nomenclature, references, each figure with caption, and each table determined according to the instructions that follow
7. Affirmation to pay color reproduction charges if applicable

Abstract

- One paragraph of 100 to 300 words.

Keywords

- List up to a maximum of five keyword entries

Nomenclature

- If symbols are used extensively, a nomenclature list arranged alphabetically, with subscript and superscript symbols listed separately, should be provided.
- Otherwise all symbols should be identified when first used in the text.

Abbreviations

- All acronyms or abbreviation of chemical compounds need to be written in full at their first mention with the abbreviation in parentheses.

Units

- Use the SI system of units.

Uncertainties

- Authors are strongly encouraged to provide experimental uncertainties as well as assessments of errors associated with numerical solutions.

LaTeX Authors will need to watch the website for additional updates in early October

Mathematics

- Numbers that identify mathematical expressions should be enclosed in parentheses and should be numbered consecutively beginning with "(1)" in the text.
- Refer to equations in the text as "Eq. (1)," etc., or "Equation (1)," etc., at the beginning of a sentence.
- Use fraction exponents instead of root signs.
- Use the solidus (/) for simple fractions.

References

- Reference formatting follows the style for Proceedings of the Combustion Institute.
- References should be indicated in the text by full-size numbers in brackets, e.g., [1] and should be numbered in the order cited.
- The numbered reference list at the end of the article should conform to the following style:

    - Journals: J.C. Rolon, F. Aguerre, S. Candel, Combust. Flame 100 (3) (1995) 422-429.

    - Books: P. Prasad, Propagation of a Curved Shock and Nonlinear Ray Theory, Longman Scientific & Technical, Harlow, U.K., 1993, p. 105.

    - Edited Book: R.A. Yetter, F.L. Dryer, D.M Golden, in: M.Y. Hussaini, A. Kumar, F.G. Voigt (Eds.), Major Research Topics in Combustion, Springer-Verlag, New York, 1992, p. 309.

    - Symposium Proceedings: All symposium papers associated with the International Symposium on Combustion should be cited in the following way: R.S. Cant, S.B. Pope, K.N.C. Bray, Proc. Combust. Inst. 23 (1990) 809-815.

    - Conference Proceedings: A conference proceedings should be styled as a book, with publisher or institution sponsoring publication and the year published as well as the year the conference was held.

    - Internal Reports: A.S. Johnson, F.W. Adams, Use of Laser Diagnostics in Supersonic Flows, Report No. SAND87-8003, Sandia National Laboratories, 1987. Authors must ensure that these references are publicly available.

    - Citing non-archival publications is strongly discouraged and Authors must insure that these references are publicly available.

    - Web Sites: V.V. Lissianski, Z. Qin, available at <http://www.me.berkeley.edu/gri_mech/>. Citation of websites should be restricted to stable websites that will remain in place. Reference to personal websites is strongly discouraged.

    - Thesis: B. Bohm, *Fully Developed Polyethylene and Wood Compartment Fires with Application to Structural Design*, PhD thesis, Technical University of Denmark, Lyngby, Denmark, 1977.

    - ***Personal communication and unpublished data*** is to be cited in parenthesis within the text

Tables

- Number tables consecutively with Arabic numerals.
- Footnotes to tables should be indicated by superscript letters, beginning with "a".
- Use the style of *Proc. Combust. Inst.* 34 or recent issues of *Combustion and Flame*.

Illustrations

- **Figures MUST be submitted at the intended size for reproduction**
    1. Single column (67mm width) or double column (up to 144 mm width).

2. Lettering and data symbols must be large enough to be clearly legible at their final size.

- Lettering on the artwork should have a finished, printed size of 7 pt for normal text and not smaller than 6 pt for subscript and superscript characters.
- Each figure must have a caption and a list of all captions should be typed on a separate page.
- Figures should be numbered consecutively, beginning with "1," in the text.
    1. Refer to figures in the text as "Fig. 1," etc.,
       or "Figure 1," etc., at the beginning of a sentence.
    2. Figure parts should be labeled with lowercase letters, e.g., Fig. 3a.
- EPS and TIFF formats are preferred. Define the bounding box in EPS figures to minimize white space around the figure.
- For assistance on how to prepare artwork visit
  http://www.elsevier.com/wps/find/authors.authors/authorartworkinstructions

Supplemental Material

Elsevier is able to accept electronic supplemental multi-media material to support and enhance presentation of your scientific research in the electronic formats (published CD and on-line).

- **DO NOT submit the figures of your regular manuscript as supplemental material. Supplemental material is in addition to the manuscript content, e.g. extensive data collections, tables, reaction mechanisms, etc.**
- Supplemental material will be subject to peer review and must be submitted at the time of manuscript submission.
- Name Supplemental figures and tables as Fig. S1, Table S1 etc.
- Include a reference to your paper (Author, Title, Proc. Combust. Inst. 35, 2015) in each file
- Indicate the availability of supplemental material on the title page of your manuscript.
- Place all supplemental material in a folder "SMM"
- A list of supplemental files and their contents (captions) must be included as a separate page at the conclusion of the manuscript.
- For further details on preferred and supported file types, please visit
  http://www.elsevier.com/wps/find/authors.authors/authorartworkinstructions

Color Page Charges and Use of Color

- Authors must agree to pay charges for reproduction of color figures at the time of submission of the manuscript. The charge is expected to be approximately $970 per page. Exact cost will be determined at the time of production.
- Color line drawings and images that are to be printed in grey scale MUST use line types, symbol shapes, colors, and image palettes that preserve technical content in grey scale.

Guidelines for Determination of Paper Length

35th International Symposium on Combustion

Submitted manuscripts MUST include an estimate of length and the method(s) of determination on the title page. The length limit is **5800** words (excluding title block, abstract, and the separate list of figure captions). Manuscripts that exceed the length limit will be rejected without review.

Authors may choose the method or combination of methods most convenient for them:

Method 1. Count words, equations lines, table lines, references, and the word equivalent of each figure and caption.

Method 2. Format the sections of the paper (or the complete paper) into columns according to the attached format specifications for the *Proceedings of the Combustion Institute*. Convert to an equivalent word count.

Method 1: (Recommended for most Word users)

- Main Text: Use word processor utility or manual count.
  1. Include Introduction, Body, Conclusions, and Acknowledgments.
  2. Exclude the Title and Abstract. Use separate count for equations.
- Equations: Word count = (#equation lines + #blank lines) x (7.6 words/line) x (#columns)
  Allow for 1 blank line above and below each complete equation.
- Nomenclature: Word count = (#nomenclature lines + 4 lines) x (7.6 words/line)
- References: Word count = (#references + 2) x (2.3 lines/reference) x (7.6 words/line)
- Tables: Word count = (#text lines + 2 lines) x (7.6 words/line) x (#columns)
  A full page table counts as 900 words.
- Figures and Captions:
  1. Reduce the figure to the intended final size
     (67-mm width for single column, up to 144-mm width for double column).
  2. Measure the figure height in mm.
  3. Count the words in the caption
  4. Calculate word count as:
     Word count = (figure height in mm + 10 mm) x (2.2 words/mm) x (#columns) + (#words in caption)
     A full page figure counts as 900 words.

Reporting: On the title page report word counts for each item above

Method 2: (Recommended for most LaTeX users)

- Format sections of the paper (e.g., references, figures and captions) into columns according to the attached specifications
- OR create a complete two-column formatted version of the paper.
- Count each full page as 900 words.
- For partial pages, measure the column length in mm, and multiply by 2.2 words/mm (or 4.4 words/mm for double-column).

Instructions for conversion to two-column format will be available with LaTeX Instructions soon.

Do not submit a two-column version. The submitted manuscript must be single column and double space.

Examples (M1 - Method 1, M2 - Method 2)

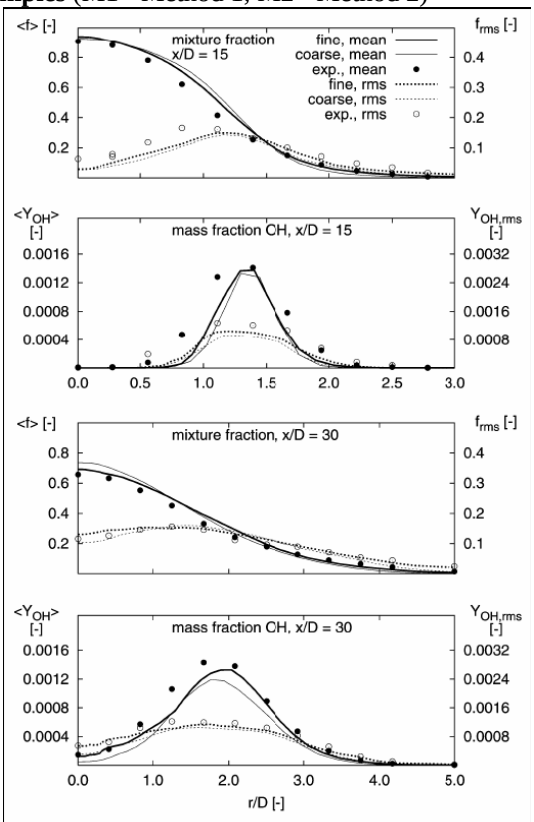

Fig. 5. Radial profiles of the mean and standard deviation of mixture fraction and OH mass fraction at x/D = 15,30 (Reynolds averages).

(from *Proc. Combust. Inst*. 30 (2005) 561)
M1: (105 mm + 10 mm) x (2.2 words/mm) + 21 words
= **274 words**
M2: (122 mm x 2.2 words/mm) = **268 words**

Table 1
Fuel composition

	EB1	EB2	EB1 char
Ultimate (*dry*) (%)			
C	77.33	74.67	74.55
H	5.08	4.77	0.19
O	6.29	10.08	0.02
N	1.45	1.44	1.24
S	0.96	2.16	0.70
Proximate (%)			
Dry loss	0.75	1.69	0.40
Ash	8.82	8.56	22.9
Vol. matter	34.91	34.25	7.50
Fixed C	55.52	55.50	69.20

(from *Proc. Combust. Inst*. 30 (2005) 2188)
M1: (14 text lines + 2 blank) x 7.6 words/line
= **122 words**
M2: (56 mm x 2.2 words/mm) = **123 words**

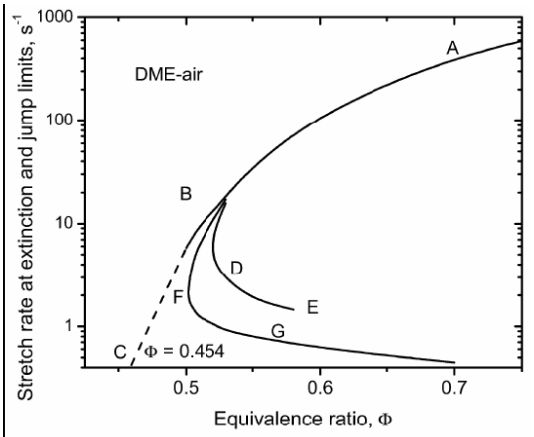

Fig. 9. The diagram of flammable regions: extinction limits vs. equivalence ratio.

(from *Proc. Combust. Inst*. 30 (2005) 300)
M1: (56 mm + 10 mm) x (2.2 words/mm) + 11 words
= **156 words**
M2: (70 mm x 2.2 words/mm) = **154 words**

$$\rho\frac{\partial Y_i}{\partial\tau}+\varepsilon^2\rho v_\alpha\frac{\partial Y_i}{\partial\xi_\alpha}+\varepsilon\rho\left[\frac{\partial Z_1}{\partial t}\frac{\partial Y_i}{\partial\zeta_1}+\frac{\partial Z_2}{\partial t}\frac{\partial Y_i}{\partial\zeta_2}+v_\alpha\frac{\partial Z_1}{\partial x_\alpha}\frac{\partial Y_i}{\partial\zeta_1}+v_\alpha\frac{\partial Z_2}{\partial x_\alpha}\frac{\partial Y_i}{\partial\zeta_2}\right]$$
$$=\frac{\partial}{\partial\zeta_1}\left[\rho D_i\left(\left(\frac{\partial Z_1}{\partial x_\alpha}\right)^2\frac{\partial Y_1}{\partial\zeta_1}+\left(\frac{\partial Z_1}{\partial x_\alpha}\frac{\partial Z_2}{\partial x_\alpha}\right)\frac{\partial Y_i}{\partial\zeta_2}+\varepsilon\frac{\partial Z_1}{\partial x_\alpha}\frac{\partial Y_i}{\partial\xi_\alpha}\right)\right]+\frac{\partial}{\partial\zeta_2}\left[\rho D_i\left(\left(\frac{\partial Z_1}{\partial x_\alpha}\frac{\partial Z_2}{\partial x_\alpha}\right)\frac{\partial Y_i}{\partial\zeta_1}+\left(\frac{\partial Z_2}{\partial x_\alpha}\right)^2\frac{\partial Y_i}{\partial\zeta_2}+\varepsilon\frac{\partial Z_2}{\partial x_\alpha}\frac{\partial Y_i}{\partial\xi_\alpha}\right)\right]$$
$$+\varepsilon^2\frac{\partial}{\partial\xi_\alpha}\left[\rho D_i\left(\frac{1}{\varepsilon}\frac{\partial Z_1}{\partial x_\alpha}\frac{\partial Y_i}{\partial\zeta_1}+\frac{1}{\varepsilon}\frac{\partial Z_2}{\partial x_\alpha}\frac{\partial Y_i}{\partial\zeta_2}+\frac{\partial Y_i}{\partial\xi_\alpha}\right)\right]+\dot{m}_i. \qquad (4)$$

(from *Proc. Combust. Inst*. 30 (2005) 2756)
M1: (13 eqn lines + 2 blank) x 7.6 words/line
= **114 words**
M2: (64 mm x 2.2 words/mm) = **141 words**

Examples (M1 – Method 1, M2 – Method 2)

Table 1
Milling times (min) required for spontaneous initiation of stoichiometric mixtures of Al-MoO_3 and Al-Fe_2O_3 for specific ball sizes and charge ratios

Ball size (mm)	$C_R = 2.5$	$C_R = 5$	$C_R = 10$
Al-MoO_3			
2.36	39.2 ± 1.1	33.2 ± 1.8	7.75 ± 0.21
3.16	24.2 ± 2.4	13.9 ± 0.1	7.05 ± 0.07
4.76	22.8 ± 0.8	11.4 ± 0.6	5.85 ± 0.07
9.52	35.4 ± 6.4	9.65 ± 0.9	4.60 ± 0.14
Al-Fe_2O_3			
2.36	$169 \perp 94$	$14.8 \perp 1.1$	$8.93 \perp 0.64$
3.16	59.0 ± 7.1	18.1 ± 0.5	9.47 ± 0.39
4.76	41.6 ± 4.1	20.5 ± 3.6	10.0 ± 1.03
9.52	33.6 ± 4.3	11.7 ± 4.3	9.42 ± 0.74

(from *Proc. Combust. Inst*. 30 (2005) 561)
M1: (105 mm + 10 mm) x (2.2 words/mm) + 21 words = **274 words**
M2: (122 mm x 2.2 words/mm) = **268 words**

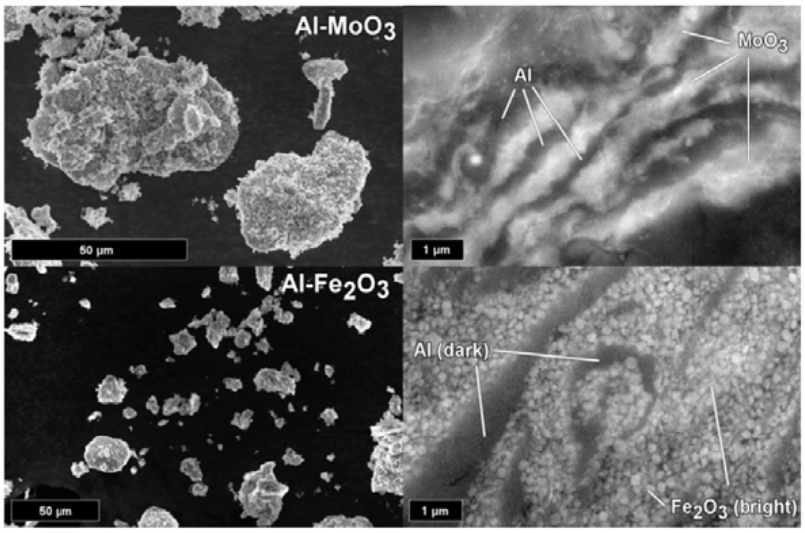

Fig. 3. SEM images of the prepared reactive nano-composite powders and respective particle cross-sections.

(from *Proc. Combust. Inst*. 30 (2005) 2188)
M1: (14 text lines + 2 blank) x 7.6 words/line x 2 columns + 21 words in caption = **264 words**
M2: (61 mm x 2.2 words/mm) x 2 columns = **268 words**

Two-column figures may be sized at less than the full two-column width (5.67 in, 144 mm), provided they are clearly legible.
A full-page figure or table counts as 900 words.

Note: large mathematical expressions occupying multiple lines are more accurately represented by Method 2, column formatting. Method 2 is especially recommended for LaTeX papers that include many equations.