**2022 Japan-U.S. seminar on Two-Phase flow Dynamics:**

**Instructions to Authors for Typing THEIR MANUSCRIPTS**

Author Onea, Author Twob, Author Threea, and Author Fourc, \*

a: Affiliation A, address A

b: Affiliation B, address B

c: Department of Nuclear Engineering and Radiological Sciences, University of Michigan

2355 Bonisteel Blvd, Ann Arbor, MI 48109, USA; [abc@umich.edu](mailto:abc@umich.edu)

\*: Correspondence author

**ABSTRACT**

Detailed instructions for typing your article are given in the following. Please remember the following points in particular: a) type the body of the paper in double column, inside the prescribed margins (see Fig. 1 in the back); do not print any border around the text; b) use **9 pt Times New Roman** font or equivalent to type up to 200 word abstract in this box, single column; c) use **10 pt Times New Roman** font or equivalent and single spaced lines for the main text; d) list references in numerical order of appearance; e) supply good quality figures, tables and photographs pasting them directly on the paper; f) list all the used variables (together with their units) in a nomenclature section at the end of the paper if a large number of variables are used; g) the use of SI units is mandatory; h) advised paper length is around **6 pages**; i) upload the PDF file of your **final** manuscript onto *https://usjapanseminar.engin.umich.edu/summary-submission/*, not later than March 31, 2022. Please contact X. Sun xdsun@umich.edu for questions/suggestions.

The final appearance of your paper should be similar to the present template. Thank you for your patience and cooperation.

# 1. SUBMISSION AND PUBLICATION

Papers should be prepared according to the present instructions. The pdf file of the manuscripts should be uploaded onto *https://usjapanseminar.engin.umich.edu/summary-submission/*, preferably not later than March 15, 2022.

The most reliable transmission form is Portable Document Format (Adobe PDF). Please use the first author’s family name as the file name.

A USB memory containing the pdf files of all manuscripts received before **March 31, 2022** is planned to be distributed after the meeting to all participants.

# 2. PAPER TYPING, LENGTH AND ORGANIZATION

## 2.1. Typing

Type or print your manuscript in **Letter-size** or also in 8.5”x11” paper (**No A4 paper size please**). The text must be arranged in in two columns, spaced of 8 mm (0.32 inch), with margins of 12 mm (0.5 inch) on each side (top, bottom, left and right) in a box of 254x190 mm. Do not leave extra margins. Do not print any box margin outside the text.

Type the text single-spaced, justified. Times New Roman (or an equivalent typeface) is preferred. A typeface of 10 point should be used for the text.

Indent first line of each paragraph 4 mm (0.16 inch), and do not leave extra space between paragraphs.

If possible, equalize the column heights on the last page.

## 2.2. Length

The advised length of the paper, including figures and tables, is around ***6 camera ready pages***. Please limit your writing concisely, not by reducing the figures to a size at which their labels would be difficult to read.

## 2.3. Paper title and authors

The first page of each paper is to contain the title of the paper, the author's (authors') name(s) and affiliation(s) within the title box.

a) Begin typing the title at the top of the title box on the first page. Type the title centered, 12 pt Times New Roman (or an equivalent typeface) boldface, in all capital letters with a single line spacing. All lines (run-over lines of a long title) should be centered.

Skip one line between the title and the authors.

b) Type the name(s) of the author(s) centered under the title, 10 pt Times New Roman (or an equivalent typeface), in upper and lower case letters.

Skip one line between the authors and their affiliation(s).

Type affiliation(s) 10 pt, in upper and lower case letters, single line spacing. You may want to include email address for the author(s).

## 2.4. Abstract

Begin your abstract (200 words maximum) at the top of abstract box on the first page. The ABSTRACT heading must be typed 10 pt Times New Roman (or equivalent) boldface in all capitals. It should be flush left with the left dotted margin.

Type the abstract single column, filling the abstract box. A smaller (9 pt) font is preferable. Skip one line between the ABSTRACT heading and the text.

## 2.5. Succeeding pages

The first line of the text on all pages after the first (title page) is to start below top margin.

## 2.6. Organization

Use only two values of internal subheadings:

(a) Type *first-value heads* in all capital letters, boldface, flush with the left hand margin of the column. Put them on a separate line separated from the text, leaving 12 pt spacing both above and below (For the first *first-value head* in the text, such as “**SUBMISSION AND PUBLICATION**” on page 1, leave 12 pt spacing only below it).

1. For *second-value heads*, capitalize only the first letter of each major word, boldface. Also, put them on a separate line with 6 pt spacing both above and below.
2. You may number first- and second-value heads, using single numbers and double numbers, respectively, e.g., 1, 1.1, 1.2, 2, and so on.
3. *Third-value heads* should be avoided if possible. If they are essential, type them as part of the first following paragraph. Leave no space above or below the head, indent it 4 mm, capitalize only the first letter of the head, underline it, follow it by a full stop and then immediately by the text. Do not number third-value heads. Example:

The heater tube. This device is used as the electrical resistance for providing heat input. D.C. voltage is …

# 3. EQUATIONS, UNITS AND NOMENCLATURE

(l) Equations must be typed. Allow one line of space above and below. Number displayed equations consecutively from Eq. (1) to the end of the paper. As shown in Eq. (1), enclose equations numbers in round parentheses and place them flush-right in the column.

 (1)

When referring to an equation in the text write "Eq. (1)", except at beginning of a sentence, where "Equation (1)" should be used.

(2) If an extensive number of variables are used in a paper, it is strongly suggested to have a separate nomenclature section that lists in detail and unambiguously all the symbols/variables used in the text and their definitions. Do not use the same symbol for two or more different meanings or definitions if possible; similarly, do not use more than one symbol for one variable/parameter. Each dimensional symbol must have SI units mentioned at the end. All dimensionless groups and coefficients must be indicated as dimensionless after their definitions. All Latin symbols (dimensional and dimensionless) should be listed in an alphabetic order. All Greek symbols follow the Latin symbols. Subscripts and superscripts follow Greek symbols, and should be identified by a minor heading. Symbols should be italicized throughout the text.

(3) Decimals should always be shown by full stops rather than by commas or centred dots.

(4) All data (including the ones in tables and figures) must be reported in SI units.

(5) When used with numerals, units should be abbreviated (full stops are not used with abbreviations); units should *not* be italicized to ease the distinction from symbols. If units are used in general terms with no specific numerals, they should be spelled out; e.g., “the SI unit for mass is kilogram” (not “the SI unit for mass is kg”).

(6) Several units written together should be separated by a thin space, not a centered dot, e.g.: 10 Pa s, 5 W/(m2 K).

# 4. TABLES AND FIGURES

(l) Brief and descriptively title each table and caption each figure. Place table title above the table; place figure caption below the figure. Text and symbols must be clearly readable, avoid small symbols.

(2) Refer to each table and figure in the text. If possible, place tables and figures in the order mentioned in the text, at top or bottom of the page, as close as possible to text reference.

(3) Allow one line of space between the table title and the table (or between the figure and its caption). Allow one line of space between the table or figure and the adjacent text above and below.

(4) In general, tables and figures should not repeat data available elsewhere in the paper.

1. Number figure and tables separately and consecutively with single Arabic numerals (e.g., Figure (or Fig.) 1, Figure 2, Table 1, Table 2.

## 4.1. Tables

(l) If too wide to fit on the page, a table may be placed crossing two columns.

(2) Table footnotes should be identified by superscript lower case letters and placed at the bottom of the table.

## 4.2. Figures

(1) High-quality reproduction of illustrations depends on the condition of the original artwork. It should be prepared as carefully as the text. All figures should be clear, sharp, and of high quality.

(2) Label with a standard mechanical set or with the same typewriter used for the text. Indicate coordinate values by tick marks along the coordinate axes. Rule the coordinate axes and ticks in fine line weight; draw the graph in heavy line weight. Tick marks on four sides of each graph are requested.

1. To denote the ordinates, a verbal description may be used:

HEAT TRANSFER COEFFICIENT / (W/(K m2))

Alternatively, the symbol may be used:

*h* [W/(K m2)]

# Nomenclature (NOT Numbered)

A nomenclature should be included here if an extensive number of variables are used in the paper.

*h* heat transfer coefficient, W/(m2 K)

*k* thermal conductivity, W/(m K)

*m* mass, kg

# ACKNOWLEDGEMENTS (NOT Numbered)

Any acknowledgements should be included here.

# REFERENCES (Not numbered)

References to cited literature should be identified in the text in square brackets and grouped at the end of the paper in numerical order of appearance. References should be styled and punctuated according to the following examples: journal article [1], book [2], thesis [3], report [4], proceedings [5], and edited book [6].

1. M.E. Braaten and W. Shyy, Study of Pressure Correction Methods with Multigrid for Viscous Flow Calculations in Nonorthogonal Curvilinear Coordinates, *Numer. Heat Transfer,* **11**, pp. 417-442, 1987.

2. Y. Jaluria and K.E. Torrance, *Computational Heat Transfer*, Hemisphere, Washington, D.C., 1986.

3. C. Graham, The Limiting Heat Transfer Mechanism of Dropwise Condensation, Ph.D. thesis, Massachusetts Institute of Technology, Cambridge, MA, 1969.

4. E. Book and H. Bratman, Using Compilers to Build Compilers, Systems Development Corp. Rept. SP-176, Santa Monica, CA, Aug. 1960.

5. S.L. Soo, Boundary Layer Motion of a Gas-Solid Suspension, *Proc. Symp. Interaction between Fluids and Particles*, **1**, pp. 50-63, 1962.

6. W.B. Thompson, Kinetic Theory of Plasma, in M.N. Rosenbluth (ed.), *Advanced Plasma Theory*, Ch. 1, Academic Press, New York, 1964.

Always give inclusive page numbers for references to journal articles and a page or chapter number for books. Each reference must be cited in the text.

# FINAL CHECKS

In the following, some advices are given for the final check on your manuscript in order to avoid the most common sources of errors.

1. Check the numbering sequence of headings, if any: this is a very frequent source of misprints.
2. Check the remaining numbering sequences: references, equations, tables and figures.
3. Cross-check the references in the text to references, figures, tables and equations.
4. Fill up and return to the lead scientist the “CHECKLIST FOR AUTHORS OF PAPERS SUBMITTED TO THE MEETING” om the last page of these instructions. Please be aware that if you respond negatively to any one of questions, then, regrettably, the organizers may ask you to revise your paper before accepted for inclusion in the Proceedings. Please note that this checklist is NOT included in the 6-page limit.

# PERMISSIONS

You are responsible for making sure that you have the right to publish everything in your paper. If you use material from a copyrighted source, you may need to get permission from the copyright holder. You need to seek permission to use a figure or table if it has not been changed in any substantive way from the original or if it does not plot or compile data readily available to anyone. You need to seek permission to quote material if you use it in a way competitive with the original material, that is, if your use of the material will harm the rights of the original publisher and/or author. This criterion holds true regardless of the length of the quote. If the quoted material will not be used competitively, you need only to cite the original source. Please consult your own legal advisor if you have any questions about what may need permission.

# ASSISTANCE

For any question/comment concerning typing and organization of the paper, please contact:

Dr. Xiaodong Sun

Phone +1-(734) 615-9749

Email xdsun@umich.edu

Japan-U.S. Seminar on Two-Phase Flow Dynamics

##### Virtual Meeting May 8-11, 2022

#### **CHECKLIST FOR AUTHORS OF PAPERS SUBMITTED TO THE MEETING**

Paper No.: (**leave it blank**)

Author(s):

Manuscript Title:

Dear Author,

Please complete the following questionnaire for your paper. It could be helpful to comply with authors’ instructions.

We thank you for your cooperation,

The Editorial Board

Please check YES or NO to each of the question posed, if applicable. YES NO

1. Did you respect the maximum length of six (6) pages allocated for your paper?  

2. Is the paper title centered along two columns using one or more lines? Are the authors and their affiliations centered along two columns?  

3. Is the abstract (and not summary) typed within the space provided after the title and author information box?  

4. Is a separate Nomenclature section included before References?  

Are they arranged alphabetically, first Latin letters followed (separately) by Greek symbols?  

Are SI units included for dimensional quantities and "dimensionless" for nondimensional quantities?  

5. Is the format of References in accordance with the Meeting format?  

Are all the References complete (e.g.; names of all authors, complete paper title, volume number, starting and ending page numbers, year, etc. specified)?  

Are all reference numbered is consecutive order as they appear in the text, and are they cited by numbers rather than by years in the text?  

6. Is the artwork (figures) in the manuscript of satisfactory quality?  

Do all line drawings with technical data/results have boundaries with scale indicators (tick marks) on all four sides?  

Are all data points, symbols and lettering on each figure large enough?  

7. Are all figures and tables pasted in the text where appropriate? Papers with the figures and tables pasted at the end of the text are not acceptable.  

8. Did you make the length of both columns equal on the last page?  

10. For experimental papers, are sufficient details provided on experimental apparatus, instrumentation, operating conditions and data reduction procedures?  

11. For experimental papers, are the experimental uncertainties and qualification of test data explicitly and sufficiently described in the paper?  

Did you also mention the details or an appropriate reference on how you arrived at the experimental uncertainties?  

For numerical papers, does the new numerical solution methods include all the necessary criteria for estimating the computational errors and establishing the validity of the solution?  

Author who filled out the form Today's Date