

JSME Journal Template

Font

Main title

-18 point

-Bold

Sub title

-16 point

-Bold

Author name

-11 point

Affiliation

-8 point

The first letter of title is capital letter. (The other is small letters)

✗ **Common mistake example:** Things to be Careful of Before Submitting Manuscript

Subtitle is enclosed in brackets.

**Things to be careful of before submitting manuscript
(About the use of the JSME specification template file)**

The symbol "*" is to correspond to author and his affiliation.

✗ **Common mistake example:** Taro KIKAI¹, Sakura Kiku GIJUTSU² ~

The word "and" is needed between the last and the second from last.

✗ **Common mistake example:** ~ Kiku GIJUTSU*, Matsu KOGAKU **

Taro KIKAI*,

Sakura Kiku GIJUTSU* and Matsu KOGAKU**

First name: The first letter is capital

Middle name: The first letter is capital

Last name: Every word is capital

✗ **Common mistake example:**

-Taro Kikai

-TARO Kikai

-TARO KIKAI

-S. K. GIJUTSU

*Japan Society of Mechanical Engineers

4-1 Shin-ogawamachi, Shinjuku-ku, Tokyo 162-0814, Japan

E-mail: journal@jsme.or.jp

**Department of Mechanical Engineering, Kikai University

4-1 Shin-ogawamachi, Shinjuku-ku, Tokyo 162-0814, Japan

E-mail: elasticity@tokyo.or.jp

+81-3-5360-3500

Affiliation description rule:

Organization name, address, postal code, country

Corresponding author's E-mail is necessary.

Author need not edit these dates.

✗ **Common mistake:** Showing coauthor's E-mail✗ **Common mistake:** Showing telephone number

Received: X January 2017; Revised: X February 2017; Accepted: X March 2017

Font

Abstract

-10 point

Keyword

-10 point

Abstract

Study should be summarized in about 200 ~300 words.

The length of the abstract should be 200-300 words. In the beginning of the abstract, the subject of the paper should be stated clearly, together with its scope and objectives. Then, the methods, equipment, results and conclusions in the paper should be stated concisely in a sufficiently logical manner. The discussion on the results may also be stated to emphasize their importance appropriately.

The first letter of word is capital letter and the other is small.

✗ **Common mistake example:** Strength of Materials, Fluid Dynamics, ~✗ **Common mistake:** Making indent and starting a newline.**Example**

The length of the abstract should ~
paper should be stated ~ objectives.
Then, the methods, equipment, ~

Keywords : Material dynamics, Fluid dynamics, Thermodynamics,
Scanning Electron Microscope (SEM), Crystalline, Foil

Full words are shown basically. Author can add abbreviation.

✗ **Common mistake example:** ~Thermodynamics, SEM, Reynolds number

Each keyword is divided by comma.

✗ **Common mistake example:** Material dynamics; Fluid ~

Font

Heading

-11 point

-Bold

Main body

-10 point

1. IntroductionManuscript has a line space between the chapter heading and main body sentence.

In preparing the manuscript with Microsoft (MS) Word, please read and observe this sample manuscript carefully. For LaTeX users, template files are provided separately.

The recommended structure of a manuscript is as follows: Introduction (purpose of the research, significance of the research supported by a literature survey, outline of contents, and so on), Nomenclature (symbols and subscripts, and so on), Main body of the text (theoretical analysis, method and results of experiment, interpretation of results and discussion, and so on), Conclusion (conclusions obtained through the research), Acknowledgment, Appendixes, References.

Apart from the above example, a different structure of manuscript may be accepted if it is the most suitable and effective style for the contents of the manuscript.

Heading must be left-justified.

✗ **Common mistake:** Some sentences stick out the template sentence width.**2. Title, authors' name and affiliations**

The title should be concise but sufficiently descriptive to identify the contents of the paper. A lively and informative one may be preferred. A subtitle may be used as needed, although expressions such as "the first report" and "the second report" are not acceptable. Nonstandard abbreviations and acronyms should be avoided in the title. Only the first word of title should be capitalized.

The names of authors should be placed immediately below the title. The given names and family names should be spelled out with each character of family names capitalized. In the address (all authors' addresses should be listed except when multiple authors have the same address), give the prefecture, ward, city and postal code. Give "the country name"

Author need not edit paper number and DOI.

Author need not edit header.

at the end of the address, and provide the e-mail address of the contact person.

(Example)

Department of Mechanical Engineering, Shinjuku University,

35 Shinanomachi, Shinjuku-ku, Tokyo 160-0016, Japan

E-mail: journal@jsme.or.jp

Do not provide e-mail addresses of authors other than the contact person.

3. Chapter heading

Manuscript has a line space between the chapter heading and main body sentence.

The main body of the text should be suitably divided into sections (and if necessarily subsections), each with a heading.

No space between the clause heading and its main body sentence is no problem.

3.1 Clause heading

The main body of the text should be suitably divided into sections (and if necessarily subsections), each with a heading.

No space between the section heading and its main body sentence is no problem.

3.1.1 Section heading

The main body of the text should be suitably divided into sections (and if necessarily subsections), each with a heading.

First letter of heading is capital letter

✗Common mistake example:

-4. CHAPTER HEADING

-4. Chapter Heading

4. Chapter heading

No space between each heading is no problem.

4.1 Clause heading

4.1.1 Section heading

The main body of the text should be suitably divided into sections (and if necessarily subsections), each with a heading.

5. Abstract

Title and abstract are the keys to your work. The length of the abstract should be 200-300 words. The abstract should appear immediately following the title, authors' names and affiliations. In the abstract, the authors should clearly state the contents of the manuscript so that readers can understand the contents of the paper without reading the main body.

Our journals place importance on the sufficiently informative abstract. Authors should carefully prepare the abstract, referring to the following instruction: In the beginning of the abstract, the subject of the paper should be stated clearly, together with its scope and objectives. Then, the methods, equipment, results and conclusions in the paper should be stated concisely in a sufficiently logical manner. The discussion on the results may also be stated to emphasize their importance appropriately. A summary leading to conclusions is not required. Figures, tables and references in the text should not be cited. If the citation of an equation is unavoidable, the full equation should be given rather than citing only the equation number. Do not insert line feeds in the abstract, i.e., the abstract should be written as only one paragraph.

6. Keywords

Five to ten keywords should be given below the abstract. The keywords should be chosen so that they would best describe the contents of the paper. They are also useful in the classification and search of papers. The use of hyphens, prepositions and articles should be avoided. Capitalize the initial letter of each word.

7. Figures, tables, photographs and online supplements

✗Common mistake: The heading and its sentence are separated by astride pages

7. Figures, tables, photographs and online supplements

Figures, photographs and tables can be used to describe clearly and accurately the contents of the paper. In general, figures are useful for presenting general tendencies, and tables are suitable for presenting specific numeric values and data. The use of figures, tables and others should be limited to important and representative ones that make the authors' statement persuasive. Since our journals are on-line journals, figures, photographs and tables can be presented in color.

Figures and tables should be presented with sufficiently informative captions. Too short captions are not accepted except when they are enough. Every caption should be complete and intelligible by itself without references to the text. See an example shown below. When figures from other papers are reprinted, the permission of the original authors is required.

Manuscript has space between the sentence and the table at least a line.

Table 1 Examples of writing numbers.

Recommended	Not recommended
0.357	.357
3.141 6	3.141,6
3.141 6×2.5	3.141 6 • 2.5
3.141 6×10 ³	3.141 6E+3
1000 or 1 000	1,000

Abbreviation is prohibited.

✗Common mistake example: Tab. 2 Examples of ~

Table 2 Examples of writing a square root and a fraction.

Recommended	Not recommended
$\sqrt{x-y}$	$\sqrt{x}-y$
$(a+b)/(c+d)$	$a+b/c+d$

Table does not stick out the sentence width.

Table caption must be directly above its table.

Table 3 Physical properties of air at atmospheric pressure.

$T[^\circ\text{C}]$	$\rho[\text{kg}/\text{m}^3]$	$c_p [\text{J}/(\text{kg}\cdot\text{K})]$	$\eta[\text{Pa}\cdot\text{s}]$	$\nu [\text{m}^2/\text{s}]$	$k[\text{W}/(\text{m}\cdot\text{K})]$	$\alpha [\text{m}^2/\text{s}]$	Pr
		$\times 10^3$	$\times 10^{-5}$	$\times 10^{-5}$	$\times 10^{-2}$	$\times 10^{-5}$	
0	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
10	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
20	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
27	1.1763	1.007	1.862	1.583	2.614	2.207	0.717
30	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
40	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
50	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
60	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
70	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
80	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
90	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx
100	x.xxxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx	x.xxx

✗Common mistake: the table is shown astride 2 pages.

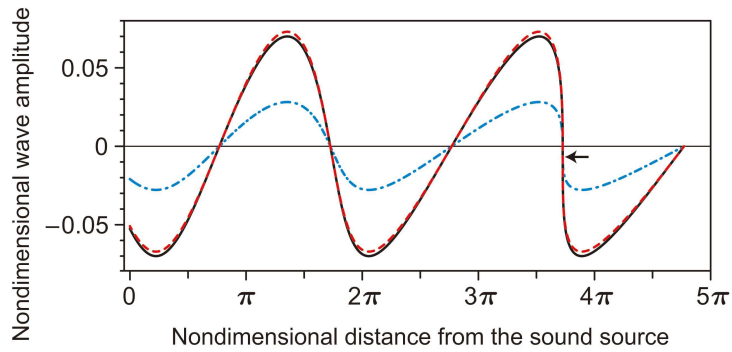
Example

Page 1

AAA	BBB	CCC	DDD	EEE
AA1	BB1	CC1	DD1	EE1
AA2	BB2	CC2	DD2	EE2

Page 2

AA3	BB3	CC3	DD3	EE3
AA4	BB4	CC4	DD4	EE4



Caption is Abbreviated.

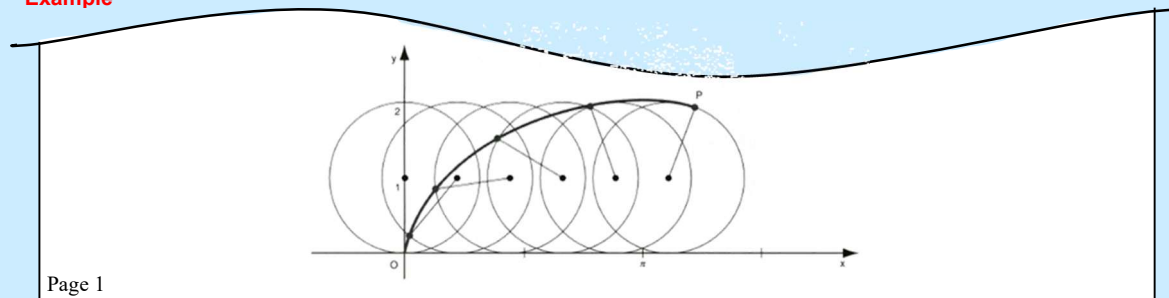
✗ Common mistake example:
Figure 1 The ~

Fig. 1 The nonlinear propagation of plane acoustic wave radiated by the sound source. Using the exact solution of the system of Euler equations, the nondimensional profiles of fluid velocity, acoustic pressure and temperature variation at the time of shock formation are plotted with the solid (black), dashed (red) and dash-dotted (blue) curves, respectively. As the wave propagates, the nonlinear effect accumulates to distort the profile, and ultimately leads to the formation of shock wave. The shock formation point is denoted by a small arrow in the figure.

Figure caption must be directly below its figure.

✗ Common mistake: the figure (also table) and its caption are shown astride 2 pages.

Example



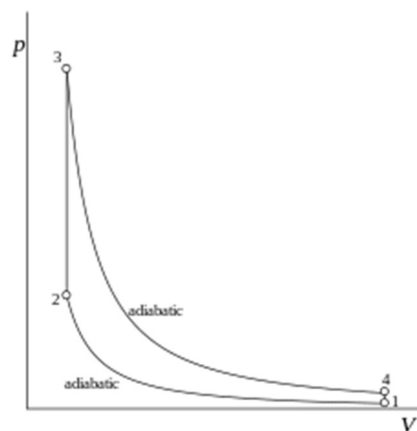
Page 1

Page 2

Fig. X Mistake example



(a) Diagram 1



(b) Diagram 2

Fig. 2 Sample figure consists of more than two diagrams.

8. Citation of equations, references, tables, figures and others in the text

At the beginning of a sentence, "Equation" and "Figure" should not be abbreviated. Within a sentence, an equation is cited with the number and "Eq." for example, "Eq. (1)," and at the beginning of a sentence, it should be written out as "Equation (1)." Within a sentence, a figure should be cited with "Fig.," for example, "Fig. 1," and at the beginning of a sentence, it should be written out as "Figure 1."

Manuscript has space between the sentence and equation at least a line.

Equation number is right-justified.

$$d \left\{ \sum_{i=1}^N \frac{1}{2} m_i \left[\left(\frac{dx_i}{dt} \right)^2 + \left(\frac{dy_i}{dt} \right)^2 + \left(\frac{dz_i}{dt} \right)^2 \right] \right\} = \sum_{i=1}^N (X_i dx_i + Y_i dy_i + Z_i dz_i) \quad (1)$$

6.8mm indent

Equation and its number are same line.

$$\bar{C}(t) = \frac{1}{N} \sum_{i=1}^N C_i(t) \quad (2)$$

$$\frac{p_v - p_{sat}}{p_{sat}} = - \left(2.13204 + 2\sqrt{\pi} \frac{1-\zeta}{\zeta} \right) \frac{(u_v - u_{int}) \cdot n}{\sqrt{2RT_{int}}} \quad (3)$$

$$\frac{T_v - T_{int}}{T_{int}} = -0.44675 \frac{(u_v - u_{int}) \cdot n}{\sqrt{2RT_{int}}} \quad (4)$$

Italic type must be used for physical and mathematical symbols. Upright Roman type may be used for differentiation operator d as shown in Eq. (1).

Caption number is not needed for "Acknowledgements~" and "References" headings.

9. Acknowledgments and conflicts of interest

This research is supported by JSME. -----

10. References

Citations in the text are indicated by author's last name and year with the list of references arranged in alphabetic order: for example, (Ahrendt and Taplin, 1951) or the book by Ahrendt and Taplin (1951). For a reference from three or more authors, the citation in the text is indicated by the first author's name followed by "et al." and the year: for example, (Takeuchi et al., 2006). More than one reference from the same author(s) in the same year are identified by the letters "a", "b", "c", placed after the year: for example, (Karin and Hanamura, 2010a, 2010b). Unpublished works (including papers not yet submitted or not yet published) should be avoided. The complete name of the journal referred to should be given. Cite references published as recently as possible. It is recommended for contributors to cite articles published in journals of the JSME, if possible. If a reference is not written in English, authors are required to translate the title into English and indicate the original language as "(in Japanese)," for example. See an example below.

Reference form sample.

- ~ is observed (Author1 and Author2, 20XX).
- ~ is observed (Author1 et al., 20XX).
- ~ is observed (Author1 and Author2, 20XX; Author3 et al., 20XX).
- ~ is observed by Author1 and Author2 (20XX).
- ~ is observed (Author 1, 20XXa, 20XXb).
- Author1 et al.(20XX) observed ~

✗ Common mistake example:

- ~ is observed [1].
- ~ is observed (Author1 et al, 20XX).
- ~ is observed (Author1 et al. 20XX).
- ~ is observed (Author1 and Author2, 20XX) (Author3 et al., 20XX).
- ~ is observed (Author1 and Author2, 20XX, Author3 et al., 20XX).

- (Author1 et al., 20XX) observed ~

References

Reference list must be ordered alphabetically.

- Ahrendt, W. R. and Taplin, J. F., Automatic feedback control (1951), p. 12, McGraw-Hill.
- International Federation of Library Associations and Institutions, Digital libraries: Resources and project, IFLANET (online), available from <<http://www.ifla.org/II/htm>>, (accessed on 30 November, 1999).
- Kameyama, H., Production method of thermal conductive catalyst, Japanese patent disclosure H00-100100 (1990).
- Karin, P. and Hanamura, K., Microscopic visualization of PM trapping and regeneration in a diesel particulate catalyst-membrane filter (DPMF), Transactions of Society of Automotive Engineers of Japan, Vol. 41, No. 1 (2010a), pp. 103–108.
- Karin, P. and Hanamura, K., Microscopic visualization of particulate matter trapping and oxidation behaviors in a diesel particulate catalyst-membrane filter, Transactions of Society of Automotive Engineers of Japan, Vol. 41, No. 4 (2010b), pp. 853–858.
- Keer, L. M., Lin, W. and Achenbach, J. D., Resonance effects for a crack near a free surface, Transactions of the ASME, Journal of Applied Mechanics, Vol. 51, No. 1 (1984), pp. 65–70.
- Nagashima, A., New year's greeting, Journal of the Japan Society of Mechanical Engineers, Vol.108, No.1034 (2005), pp. 1–2 (in Japanese).
- Tagawa, A. and Yamashita, T., Development of real time sensor for under sodium viewer, Proceedings of the 19th International Conference on Nuclear Engineering (ICONE-19) (2011), Paper No. ICONE19–43187.
- Takeuchi, S., Yamazaki, T. and Kajishima, T., Study of solid-fluid interaction in body-fixed non-inertial frame of reference, Journal of Fluid Science and Technology, Vol. 1, No. 1 (2006), pp. 1–11.
- Takeuchi, Y., Ultraprecision micromilling technology, Transactions of the Japan Society of Mechanical Engineers, Series C, Vol. 71, No. 701 (2005), pp. 1–4 (in Japanese).
- The Japan Society of Mechanical Engineers ed., JSME data handbook: Heat Transfer (1979), p. 123, The Japan Society of Mechanical Engineers (in Japanese).
- Tsutahara, M. Tamura, A. and Kataoka, T., A study of SIS of surfactant by the finite difference lattice Boltzmann method, Proceedings of the 16th Computational Mechanics Conference (2003), pp. 121–122 (in Japanese).
- Watanabe, T., Sakai, Y., Nagata, K., Terashima, O., Ito, Y. and Hayase, T., DNS of turbulent Schmidt number and eddy diffusivity for reactive concentrations, Transactions of the JSME (in Japanese), Vol. 80, No. 809 (2014), DOI:10.1299/transjsme.2014fe0008.

6.8mm indent

Reference rule in "Reference" chapter

- Books: Author name, Title (year), page, Publisher (Language except for English)
- Journal paper: Author name, Title, Journal name, Journal volume, Journal Number (year), page or DOI (Language except for English)
- Journal paper (JSME): Author name, Title, Journal name (Language except for English), Journal volume, Journal Number (year), DOI
- Online site: Internet site name, Article title (online), available from <URL> , (Accessed date)
- Patent: Inventor name, title, country, state of patent, patent number (year)

NOTICE!

We send coauthor verification email to all coauthors when you submit your manuscript.

The subject is "Please verify your contribution to (manuscript title)".

Coauthors can verify their contribution by clicking URL next to "Yes, I am affiliated:" in the email.

As long as editor cannot confirm the verification, the submitted manuscript cannot proceed to peer preview.

Thus, we would like corresponding author to ask his/her coauthors to verify their contribution.