

MUNUSCRIPT OUTLINE FOR

TRANSACTIONS OF JAPAN SOCIETY OF REFRIGERATION AND AIR CONDITIONUNG ENGINEERS

Showa 29 (1954) March 30 th	decided in the board of director's meeting
Heisei 9 (1977) October 17 th	revised in the board of director's meeting
Heisei 12(2000) September 19 th	revised in the board of director's meeting
Heisei 16(2004) march 9 th	revised in the board of director's meeting (In effect on Heisei 16 October 1 st)
Heisei 18(2006) July 25 th	revised in the board of director's meeting
Heisei 19(2007) February 23 th	revised in the board of director's meeting in charge of scientific and editorial matters
Heisei 19(2007) November 28 th	revised in the board of director's meeting in charge of scientific and editorial matters

1. Purpose of Transactions of the Japan Society of Refrigerating and Air Conditioning Engineers and major point of this outline manuscript

Transactions of the Japan Society of Refrigerating and Air Conditioning Engineers (hereinafter abbreviate to “Transaction”) are published quarterly based on the article 3 and 4* of the standing rules of the Japan Society of Refrigerating and Air Conditioning Engineers, aiming extensive business development of science and technology of interest such as cryogenic, refrigeration, air-conditioning and articles of foods, to be effective on mutual exchange and enlightenment of information regarding outcome of research and development among not only members but also researchers and engineers in related fields.

This outline is consists of contribution regulations, writing regulations and review regulations of writing research papers, the translated papers and research reviews as indicate in 2.(1).

2. Contribution regulations

(1) Kinds of contribution manuscript

Transaction are consisted of two kind of articles as shown below, each one of which is posted along the writing regulations and further is judged to be worth appearing along the review regulations.

1) Research papers: having related contents related to the purpose shown above and to be original, not presented before and

- a) Originality; to be rich in novelty or originality in subject, content or method of research.
- b) Usefulness; to be worthwhile academically or technically (based on authors declaration)
- c) Expansibility; to be promising in future for academic system or engineering applications
- d) Reliability; to be free from apparent (serious) errors in contents
- e) Completion; to be high in percentage of completion

2) Translated papers; papers of English translation or Japanese translation contributed in this transaction by the same authors. Changes of contents or authors are not allowed. “translated papers” must be indicated clearly under the title of the paper.

3) Research review; aiming at the fields related to above purpose, prospective and timely articles, which members might have special interest about actual situation of research and recent progress, from extensive view points. As a rule, article submitted by request of members of editorial board.

* This society aims to support development of cryogenics, refrigeration and air-conditioning, engineering, refrigeration

business, production of refrigerating and air-conditioning equipment and other general business of refrigerating application.

(2) Qualification of contributor

As a rule, there should be more than one member (second-kind regular member or honorary members or special members) among authors. However, author of the research review exclude this rule.

(3) Conditions of Contribution

Languages are Japanese or English. Research paper should be author's original work, which is not presented before. In addition, orally presented papers in conferences hosted or co-hosted by JSRAE (presented in the proceedings of JARAE), or presented papers in publications of organizations (such as bulletin of universities or research laboratory), which author belongs to, are considered to author's original paper. However, in this case, authors must write clearly the fact and attach a copy or additional paper of it. In the case of submitting papers presented in the above-mentioned conferences or publications without changing the content, the original name of the conference or publication should be indicated at the designated column (the left under of the first text page), according to the style of the template.

In case of the translated papers, the intension should be indicated clearly on the cover sheet of the manuscript and further, both of kinds of manuscript and original paper should be indicated clearly by following the template.

(4) Number of pages in the Transactions

As a rule, less than equal 12 pages. However, this rule is not applicable if members of editorial board accept.

(5) Submission manuscript

In making manuscript, authors should follow "3.writing regulations". Hand-writing manuscript will not be accepted, as a rule, except if members of editorial board specially admit,

Submission should be internet mailing or postal mailing with the following items of a) ~d).

As a rule, JARAE will send a receipt to the author not later than one week after receiving author's manuscript. If authors will not receive a receipt from JARAE, please be sure to inquire because the submission might not be effective. In addition, if manuscript will be submitted after the permission of contribution, authors accept responsibility of proofreading.

1) In case of the internet mailing

Authors must prepare their manuscript in the form of PDF and background material for reviewal as well, accompanying E-mail. However, it will be possible to send the background material in the postal mailing after letting the society know it.

However, after the permission of contribution, authors must send the manuscript in the postal mailing with a seal in the predetermined place of the cover sheet of the manuscript.

2) In case of postal mailing: Authors must submit three sets of manuscript (two sets are possible in copies.)

- a) Main body
- b) Cover sheet of manuscript
- c) ENGLISH COVER PAGE (not necessary in case of the translated papers)
- d) Japanese summary (less than 300 words. not necessary in case of English manuscript or the translated papers)

(6) Delivery address of the manuscript

Nihonbashi Otomi-bldg., 13-7, Nihonbashiodenmachi, Chuo-ku, Tokyo 103-0011

Japan Society of Refrigeration and Air Conditioning Engineers

Section of editorial board of Transactions

Tel: 03(5623)3223 Fax: 03(5623)3229

E-mail: ronbun-jsrae@nifty.com

URL: <http://www.jsrae.or.jp/>

(7) Review of manuscript

Review of submitted manuscript will follow “4. review regulations”

(8) Date of receipt and acceptance

Dates of receipt and acceptance are as follows.

1) Date of receipt: In case of the internet mailing, date of receipt is a day when the receipt server, which has contract with this society receiver authors' E-mail.

In case of the postal mailing, date of receipt is the day when the author's manuscript arrives at this society. However, the original receipt date will be declared null and void unless author's reply and corrected manuscript will be sent back to the society not less than two months from the date of mailing from this society.

2) Date of acceptance

Date of acceptance is defined the day when members of editorial board finally approve the manuscript in question to be worth appearing.

(9) Charge of Contribution

As for research papers, authors must ¥3,000 per a page as charge of contribution.

(As for surplus, ¥6,000 per page. Note, however, this is limited to the case that members of editorial board approve the surplus. In case of the translated papers, the surcharge is also ¥3,000 per a page.)

(10) Additional printing

In case of requirement of additional printing, the society takes order in every 50 units. Cost is prescribed charge in this society. Application should be done at the same time when authors submit the official manuscript to the society. We don't respond to a demand except authors.

(11) Return of Manuscript

Submitted manuscript will not returned, as a rule. However, photographs made by authors and drafting manuscript and so on will be returned if the authors make an offer beforehand.

(12) Copyright

Copyright of research papers, the translated papers and research review published in the transactions belongs to the society, based on the rule of "publication rule of copyright of Corp: Japan Society of Refrigeration and Air Conditioning Engineers". (established by the board of director's meeting on Heisei 18(2006) January 20 th) Consequently, authors must submit a "certificate of transfer for the copyright" to the society when contributing. In addition, when the contribution is not accepted, the certificate of transfer for the copyright will have no effect and the copyright for the contribution will be returned to the authors.

(13) Permission of reprint

In case authors will want to use figures, tables and photos and others, which copyright belong to the third

parties, authors must, in advance, obtain permission of reprint from the third parties, in writing, and as well permission of possibility that the aforementioned copyrighted works might appear in the publication matters of Corp: Japan Society of Refrigeration and Air Conditioning Engineers (including electronic media such as the home page) without permission.

However, in case that authors want to use figures, tables and photos and others, which copyright belong to the third parties in the research review written by the request of this society, head office of this society will obtain the permission of reprint. Therefore, authors must submit a list concerning information about copyright of figures, tables and photos and others, belonging to the third parties, which the author want to use, to the head office of this society when contributing the manuscript.

In addition, when extracting and putting on record of (referring to) a part of copyrighted works from the third parties without permission of reprint, activity will be restricted to the limitation of fair-minded practice and objectives along the copyright law.

3. Writing regulations

(1) Format of character

In case of Japanese language, use Mincho-tai and in case of English language.

(2) Paper title

In case of Japanese, English title should be attached.

After keeping 32mm blank from the top margin, then type the paper title. Character size is 20pt, boldface for Japanese and 16pt, boldface for English. In case of English, use capital letter of each word except prepositions and conjunctions.

In expressing continuation, begin on new line and subtitle as follows.

(Example) Performance of Evaporative Cooler

--- 2nd Report : Plate Type Evaporative Cooler -----

In case of the translated papers , the original paper should be identified as follows

Performance of Evaporative cooler[※]

※Translated paper [Original: Trans. JSRAE, Vol.○,No.○.pp. ○-○,(20○○)]

(3) Author name

For Japanese manuscript, authors name are indicated both in Japanese and in English. Romanized transliteration is as follows. Character size is 12pt for both Japanese and English, and type 1 blank line space for 10 pt from the paper title. Additionally, family name should be written all capital letters..

(Example of Japanese manuscript)

Taro YAMADA Jiro KAWAKAMI Saburo YAMAKAWA

(Example of English Manuscript) Jiro YAMAGUCHI

According to the style of the template, facsimile number and e-mail address of the author responsible for further correspondence should be indicated at the designated column (the left under of the first text page).

(4) Affiliation

- 1) For Japanese manuscript: Affiliation and address of authors are indicated both in Japanese and in English. For English notation order of address is chome-bann, chi-gou, town name. city-gun-village (except Tokyo 23 wards, name only), prefecture and city governments (for to-fu-ken, name only), postal code, name of

country (for Japan, omit). Character size is 10pt for both Japanese and English, and type 1 blank line space for 10pt character-size from the authors' name.

Department of Mechanical Engineering, Faculty of Engineering, University of Tokyo.

(7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033)

- 2) For English manuscript: Character size is 10pt and type 1 blank line space for 10pt character-size from the authors' name.

Department of Food Science and Technology, Tokyo University of Marine Science and Technology (4-5-7 Konan, Minato-ku, Tokyo 104-8477)

(5) Summary

Sum up into 150~200 words in a brief English and start typing keeping blank of two half size.

Do not include figures and do not refer to references. Character-size is 10 pt and type 1 blank line space for 10pt character-size from the affiliation.

(6) Key words:

Select 5 ~8 English words which express main theme and are easy to guess the content of the research paper.

(7) Format of main body

Format is two-column frame work and type starting after 2 blank line spaces for 10pt character-size. Column space is 12mm and margins are 30mm from the top, 27mm from the bottom, 20mm from the right and left. Line numbers in a page is 44. Letter numbers in a line is 21, full size.

As a rule, description order is introduction, symbols and abbreviations, theory, analysis, experiment, method, results, prospect, conclusion and references.

Heading symbol of chapter, section, paragraph, small items are expressed, as a rule, in the following manner. Keep a blank of one character, full size after the symbol of chapter, section, paragraph, small items and type titles of chapter, section, paragraph, small headlines. Chapter name is typed in centered, 11pt and keep two blank lines up and down. Section and paragraph are typed in 10pt from the start of line. Small headlines are typed in 10 pt, keeping two character blank of full size after the titles such as (a), (b)

Chapter: 1. 2. 3. Paragraph; 1.1.1 1.1.2 1.1.3

Section: 1.1 1.2 1.3 Small headline; (a)(b)(c)

(8) Sentences

- 1) In Japanese manuscript, colloquial style in plain words of kanji designed for everyday use in the modern kana-tsukai (such as dearu or the like) is appropriate.
- 2) In English words, combined application between American and English is prohibited.
- 3) Character size is 10pt for both Japanese and English.
- 4) In Japanese manuscript, keep 1 character blank of full size when starting new body or changing line. In English Manuscript, keep 5 character blanks of half size character/
- 5) As punctuation, use comma (,), period (.) and use comma for arranging words in a line.
Use centered period for foreign words or words of kana-tsukai.
(Example) (words in a line) compressor, condenser and evaporator
(kana-kaki of foreign words more than two words) crankcase • heater
- 6) Use small letters for imported words except proper nouns of personal names and place names in the midst of Japanese manuscript. If necessary, put down original word in ()
- 7) In case of referring to year, use year of A.D. instead of this year, last year.

8) In case of the English manuscript, please be sure to be checked by a native speaker beforehand.

(Correction by this society is not performed.)

(9) Term • Unit • Symbol

- 1) For using academic terms, as a rule, follow “Vocabular of academic terms” compiled by Education Ministry or “Vocabular of refrigeration and air- conditioning and food science” compiled by this society. Others such as animate beings, follow vocablar of main academic society of interest.
- 2) For unit, use International System of Units (SI) described in JIS8203 ” International System of Units and how to use”. Unit conversion from non-SI units to SI units, follow JIS8203 ” International System of Units and how to use”. Character style of units is roman letters (solid). And insert half character space between number and unit.
- 3) For symbols, pay serious attention to JISZ8202 (quantity symbols, unit symbols and chemical symbols), JISZ8201 (mathematics symbols), JISB8601 (graphic symbols for refrigeration). And for character style of quality symbol units, use italic letters and for subscript use solid letters.
- 4) In principle, it is prohibited to use propriety name.
- 5) As for refrigerant numbers, insert half space (or space of one quarter) between R and symbol such as R 134a.

(10) Number and numerical expressions

- 1) How to write numbers is as follows. Arithmetic point should be printed below the center.
(Example) .123>>0.123, 1'234>>1.234, 1,234.5>>1234.5, 1.23 10⁻³>>1.23 × 10⁻³
- 2) Equation in a sentence is arranged as follows.
(Example) $\frac{a}{b} \rightarrow a/b$, $\frac{a+b}{c+d} \rightarrow (a+b)/(c+d)$
- 3) Mathematical equations should be numbered serially such as (1), (2), (3) and referring to equations in a sentence, write as equation(1), equation(2), equation(3).
Write as Eq. (1), Eqs. (1) and (2), Eqs.(1)-(3), in English manuscript.
- 4) How to use parentheses in a sentence, follow the order of [()].
- 5) Logarithm and index
Natural logarithm: $\ln X$, common logarithm : e^X , $\exp(X/a)$

(11) Name of animate beings

- 1) In Japanese manuscript, standard Japanese name is written by katakana followed, by italic scientific name. However, for nouns which are not name of animate beings such as “Iwashi-senmou” , “katsuo-bushi” and others, notations are in common use.
- 2) In English manuscript, scientific name should be in italic and followed by name of animate beings. For micro-organisms, directly scientific name should be use.
- 3) In principle, name of namer is omitted, but if necessary, write name of the namers.
(Example) *Sardinops melanostictus* (TEMMINCK et SCHLEGEL)

(12) Name of chemical material

- 1) In Japanese manuscript, in case of referring to name of chemical material, use katakana, following custom and if it is necessary to use original language, write as the following example.
(Example) hydrochloric acid, glycogen, 10mmol phosphate buffer, chlorodifluoromethane
- 2) As for abbreviatiion of chemical compound, follow international common use. If necessary, note in the

main body or footnote.

(Example) TVB-N volatile base nitrogen
 ATP adenosine triphosphate

- 2) As for name of enzyme, follow rules of International Union of Biochemistry.

(13) Figures • tables • photos

- 1) As for titles of tables, figures and explanations, use English.
- 2) Numbers should be as Fig.1, Figs. 1-3, Table 1 (photos are included in figures).
For titles of tables and figures, use 10pt, Times New Roman and use capital letter for only the initial letter of word. In addition, titles of tables and figures should be written after number of table (figures), keeping one character blank of full size. The main body is written keeping one blank line of 10pt from the title of tables and figures.

(Example) Fig.1 □ Experimental apparatus, Table 1 □ Experimental conditions

- 3) Figures, Tables and photos should be enough clear to be printed and letters in the figures and tables are printed in larger than 9pt, Times New Roman. For titles of abscissa and longitudinal axes of charts, use 10pt, Times New Roman.
- 4) Photos should be used with enough sharpness.

(14) Literature

- 1) Character size is 10pt for both Japanese and English.
- 2) Write down the literature which authors quoted in the paper, the translated papers and research review should be referred to, at the ending of the main body as follows
- 3) Numbers of literature should be sequential serial number in the article and on the right shoulder of relevant place in the article, refer to like ○○^{1,2)}, ○○²⁻⁵⁾
- 4) Description of literature follows the following rule. In case of referring to the same literature, same magazine of above can be abbreviated as (ibid.) Additionally, when referring to a reference in English, which is originally in Japanese, write with (in Japanese)

- a) For journals:

Name of author: Name of journal, Volume (number), Page (publication year)

(Volume is written in bold face)

(Example) Tanaka Taro: refrigeration, **71** (830), (1996)

Tanaka Taro, Ito Kinji,..... : (all authors are indicated)

T. Tanaka: Refrigeration, **71** (830), 42 (1996). (in Japanese)

G. Lorenzen and T.Gac: Int. J. Rerig., **6** (5), 289 (1984)

- b) For printed books

「Name of book」 (in English translation, “Name of book ”), Volume (not necessary for one volume), Revised edition (name of compiler), Quoted pages, Publication office, Publication place (publication year)

(Example) Tanaka Taro : 「refrigerating Machine」 , pp.40-42,Japan Publishing Co., Tokyo (1996).
(in Japanese)

Tanaka Taro: 「Air Conditioning」 , Vol.3, second edition (edited by Ito Jiro) , pp.50-53, Air Conditioning Press., Osaka., Osaka (1983). (in Japanese)

T. Tanaka:” refrigerating Machine”, pp.40-42, Japan Publishing Co., Tokyo (1996). (in

Japanese)

J. Ito: "Air Conditioning", Vol.3, 2nd ed., (ed. by T. Tanaka), pp.45-46, Air Conditioning Press., Tokyo (1983). (in Japanese)

F. Franks: "Effects of Low-temperatures on Biological Membranes", (ed. by G. Morris and A. Clarks), pp.3-19, Academic Press, London (1996).

c) For translation version:

Name of original author (translator): 「Name of book」 (in English translation, "Name of book "), Quoted pages, Publication office, Publication place (publication year)

(Example) J. H. Wilkinson (Translated by Moriya Hiroshi, Yoshida Mitsutaka, Fujimoto Mitsuo): 「Micro-organisms in cold temperature」 ,pp.60-65, Maruzen, Tokyo (1953)

A. E. Kriss (Translated from Russian by J. M. Shewan and Z. Kabata) : "Low Temperature Preservation Foods", PP.43-51, Oliver and Boyd, Edinburgh, UK (1996).

d) For proceedings of international conference

Name of author: Name of proceedings (place where the meeting is held, year), Volume, Page, Publishing organization (publication year).

(Example) G. Lorentzen: "New Applications of Natural Working Fluids in Refrigeration and Air Conditioning", (ed. by IIR Commission B1,B2,E1 and E2, Hannover, Germany, May 1944), pp.23-36, IIR, Paris (1994)

M. J. P. Jansen, F. L.M. Engel and L. J. M. Kuipers: Proc 19 th Int. Cong. Refrig. (The Hague, The Netherlands, 1995), Vol. IVb, pp.860-767, IIR, Paris(1995)

e) For proceedings of domestic conference

Name of author (all authors are indicated): Name of proceedings, Pages, Place where the meeting is held, (year and month)

(Example) Reito Taro , Kucho Hanako : Heisei 16 year Proceedings of 2003 (Heisei16 year) JSRAE Annual conference, pp. 1-4, Tokyo (2003.10)

T. Reito and H. Kucho: Proceedings of 2003 JSRAE Annual conference, pp. 1-4, Tokyo (2003.10) (in Japanese)

f) For engineering data (brouchure)

Name of engineering data: Company name of publication, (Publication year, month)

g) For web site

h) URL of web site: (year and month of quotation)

(5) Abbreviation of journals

a) For domestic journals

Transactions of Japan Society of Refrigeration and Air Conditioning Engineers ----- Trabs. JSRAE

Transactions of Japan Association of Refrigeration ----- Trabs. JAR

Proceedings of Annual conference of Japan Society of Refrigeration and Air Conditioning Engineers

-----Proceedings of (year in A. D.) JARAE Annual conference

Proceedings of Annual conference of Japan Association of Refrigeration

-----Proceedings of (year of A. D.) JAR

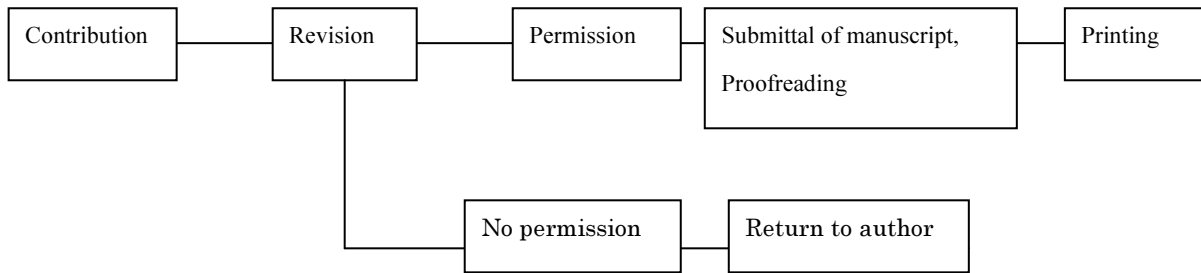
Refrigeration ----- Refrigeration or Refrig.

Proceedings of joint conference of Air-conditioning and refrigeration -----
 Transactions of the Japan Society of Mechanical Engineers -----Trans. Jpn. Soc. Mech. Eng.
 Journal of the Japan Society of Mechanical Engineers ----- J. JSME
 Transactions of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan
 ----- Trans. SHASE
 Journal of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan
 ----- J. SHASE
 Journal of the Food Hygienics Society of Japan -----J. Food Hyg. Soc. Japan
 Journal of the Japan Society of Food Science and Technology -----Nippon Shokuhin Kagaku Kogaku Kaishi
 Journal of the Japan Society of Fishery Science ----- Nippon Suisan Gakkaishi
 Bulletin of National Research Institute of Fishery Science, Fishery Research Agency
 ----- Bull. Natl. Res. Inst. Fish. Sci.
 Journal of the Japan Society for food Science and Technology ----- Nippon Nogeikagaku Kashi

b) Foreign journals follow abbreviation method of ISO833.

4. Revision regulations

(1) Flow of revision of contributed manuscript



As for enquiry of returned revision, authors must correct manuscript, if necessary, and submit corrected manuscript with an answer.

(2) Obligation of compilation

As for compilation of the transactions, compilation will be done, following the policy of members of editorial board.

(3) Responsibility of content of manuscript

Authors are responsible for the final content of the manuscript.

(4) Proofreading of the manuscript

Reviewers, who are selected by members of editorial board, proofread and look over the manuscript, following the policy of the editorial board. And reviewers will judge acceptance and necessity of correction and classify printing for the manuscript

(5) Selection of reviewer

Members of editorial board will select some appropriate reviewers from the members of reviewer, depending on each manuscript.

(6) Official announcement of reviewers

Name of reviewers will never be appeared to authors.

(7) Method of review and period

Reviewers will proofread and look over the manuscript, following this article and internal review regulations, which is another rule, and fill necessary items in “report of transaction revision” to

submit to the editorial board. Period of revision is less than 3 weeks from the acceptance of a manuscript.

(8) Decision of acceptance

Members of editorial board will judge acceptance of edited manuscripts depending of opinion of reviewers.

(9) Accepted manuscript

Acceptance will be known to authors and printed in the Transactions as soon as possible.

(10) Not accepted manuscript

Members of editorial board will send to authors with a document of reviewers' opinions and so on.

(11) Other formalities

For items which are in the revision regulations, members of editorial board will set up depending of necessity.