

**Outline of Contribution Manuscript for
Transactions of Japan Society of Refrigeration and Air Conditioning Engineers**

| | |
|-----------------------------|--|
| 1954(Showa 59) March 30 | decided in the board of director's meeting |
| 1977(Heisei 9) October 17th | revised in the board of director's meeting |
| 2000(Heisei 12) July 19th | revised in the board of director's meeting |
| 2004(Heisei 16) March 9th | revised in the board of director's meeting (in effect on 2004(Heisei 16) October 1st) |
| 2006 (Heisei 18) July 25 th | revised in the board of director's meeting |

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 abbreviated 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 and research reviews as indicate in 2.(1).

2. Contribution regulations

(1) Kinds of contribution manuscript

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

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

- a) Originality: to be rich in novelty or originality in subject, regarding 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 in papers

2) Research review: aiming at the fields related to the 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, this article is submitted by the request of the 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 excludes this rule.

(3) Conditions of Contribution

Language is 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 JSRAE), 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 inform to the society clearly and send a copy or additional paper of it with clear notification.

(4) Number of pages in the Transactions

As a rule, total pages are 12 pages or less. However, this rule is not applicable if the **editorial board admits**.

(5) Submission manuscript

In making manuscript, authors should follow "3.writing regulations". Hand-writing manuscript will not be accepted, as a rule, unless the **editorial board specially admits**,

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

As a rule, JSRAE 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 JSRAE, please be sure to inquire for submission because the submission might not be effective.

In addition, authors accept responsibility of proofreading of a manuscript, which is submitted after the permission of contribution,

1) In case of the internet mailing

Authors must prepare their manuscript in the form of PDF and send it by E-mail. Background material for reviewing is as well, however, it will be possible to send it in the postal mailing after informing society to do so.

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
- d) Japanese summary (less than 300 letters, however, not necessary in English manuscript)

(6) Delivery address of the manuscript

Sanei-building, 8-banchi, Sanei-cho, Shinjyuku-ku, Tokyo 〒160-0008

Corporate aggregate: Japan Society of Refrigeration and Air Conditioning Engineers

Section of **editorial board of Transactions**

Tel: 03(3359)5231 Fax: 03(3359)5233

E-mail: ronbun-jsrae@nifty.com

URL: <http://village.infoweb.ne.jp/~reito/index.html>

(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 the day when the reception server, which has contract with this society, has received 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 reception 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 the manuscript in question is finally approved to be worth appearing by the **editorial board**.

(9) **Charge of Contribution**

As for research papers, authors have to pay ¥3, 000 per a page as charge of publication.

(As for surplus, authors have to pay ¥6,000 per a page.) Note, however, this is limited to the case that the editorial board approves the surplus.) In addition to this, utilization of art papers, colored papers, color photos and so on, needs permission of the editorial board. Additional actual cost is added.

(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 be returned, as a rule. However, photos made by authors and drafting manuscript and so on will be returned if the authors make a request beforehand.

(12) **Copyright**

Copyright of research 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

Japanese manuscript should be in mincho-tai, and English manuscript should be in Times New Roman.

(2) Paper title

For a Japanese manuscript, give it an English title.

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

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

(例) 蒸発冷却器の性能
----- 第2報：プレート式蒸発冷却器 -----
Performance of Evaporative Cooler
--- 2nd Report: Plate Type Evaporative Cooler -----

(3) Authors name

In Japanese manuscript, both of Japanese and English authors name should be written.

Romanized transliteration is as follows. Character size is 12 pt for both Japanese and English and keep 1 blank line space for 10 pt from the paper title. In English family name should be written in all capital letters.

(Example of Japanese manuscript)

| | | |
|-------------|---------------|-----------------|
| 山田太郎 | 川上次郎 | 山川三郎 |
| Taro YAMADA | Jiro KAWAKAMI | Saburo YAMAKAWA |

(Example of English manuscript) Jiro YAMAGUCHI

(4) Affiliation

1) In Japanese manuscript, authors name and address should be written in both Japanese and English.

For Notation order of address is chome-bann, chi-gou, town name and city-gun-village (except Tokyo 23 wards, name only), prefecture and city governments (for to-fu-ken, name only), postal code. Character size is 10pt for Japanese and English and keep 1 blank line space for 10pt character-size from the authors' name.

東京大学工学部機会工学科 (113-0033 東京都文京区本郷 7-3-1)

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

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

東京大学大学院新領域創成科学研究科環境学専攻 (113-0033 東京都文京区本郷 7-3-1)

Institute of Environmental Studies, Graduate School of Frontier Science The University of Tokyo

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

2) In English manuscript,

Character size is 10pt and 1 blank line space for 10pt character-size should be kept 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 writing, keeping blank of two half size space.

Do not include figures nor refer to references. Character-size is 10 pt and 1 blank line space for 10pt character- size should be kept 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.

In that regard, select about 2 words from the glossary of standard key words attached separately, and arrange them in the first place. 1 blank line space for 10pt character- size should be kept from the summary.

(7) Format of main body

Format of the main body is two-column frame work and start printing after 2 blank line spaces for 10pt character- size from the keywords. Column space is 12 mm and margins are 30 mm from the top, 27 mm from the bottom, 24 mm from the right and left. Line numbers in a page is 44. Letter numbers in a line is 21 of full size.

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

Heading symbols of chapter, section, paragraph, small items are expressed, as a rule, in the following manner. Keeping a blank of one character of full size, after the symbol of chapter, section, paragraph and small items, write titles of chapter, section, paragraph and small headlines. Chapter name is written in the central position of a line, 11pt and 1 blank lines up and down, each, should be kept. Section and paragraph are written in 10pt from the start of line. Small headlines are written in 10 pt, keeping two character blank of full size after the titles such as (a) , (b)

章 Chapter 1. 2. 3. 項 Paragraph 1.1.1 1.1.2 1.1.3

節 Section 1.1 1.2 1.3 小見出し Small headline; (a) (b) (c)

(8) Sentences

1) In Japanese manuscript, use colloquial style Japanese (である and so on), and as a rule, use kanji designed for everyday use with modern kana-tsukai.

2) As for spelling of English words, combined spelling between American English and British English is prohibited.

3) Character size is 10pt in Japanese and English. .

4) At starting of new body or changing to a new line, keep 1 blank of full size character. In English, keep 5 character blanks of half size.

5) As punctuations, use comma (,) and period (.) and use comma(,) for arranging words in a line.

Use centered period (・) for foreign words and kanagaki- names.

(Example) (words in a line) compressor, condenser and evaporator

(kana-gaki for foreign word more than two words) クランクケース・ヒータ

- 6) In Japanese manuscript, use small letters for imported words except proper nouns of personal names and place names. In case of writing foreign words in kata-kana, if necessary, original word should indicate in ().

(Example)

クライオゲン(cryogen)

Personal name is Smith, or J. Smith if mistakable

In case of representative of plural authors, indicate Smith 〱 (Japanese) and Smith et al.(English).

- 7) In case of referring to year, use year of A.D., not mentioning this year or last year.

(9) Term • Unit • Symbol

- 1) For using academic terms, as a rule, follow “Terminology of academic terms” compiled by Education Ministry or “Terminology for refrigeration and air- conditioning and food science” compiled by this society. Others such as animate beings , follow terminology of main academic society of interest.
- 2) For units, 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)
- 4) For symbols, as a rule, pay serious attention to JISZ8202 (quantity symbols, unit symbols and chemical symbols), JISZ8201 (mathematical symbols), JISB8601 (graphic symbols for refrigeration). And for character style of quality symbol units, use italic letters and for subscript use solid letters.
- 5) In principle, it is prohibited to use name of commodities.
- 6) 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 should be 0.123, 1.234 should be 1.234, 1,234.5234 should be 1234.5, $1.23 \cdot 10^{-3}234$ should be 1.23×10^{-3}
- 2) Equation in a sentence is arranged as follows.
(Example) $\frac{a}{b}$ a/ b, $\frac{a+b}{c+d}$ (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 Eq. (1), Eqs. (1) and (2), Eqs.(1)-(3).
- 4) How to use parentheses in a sentence, follow the order of [()].
- 5) Logarithm and index
Natural logarithm: ln X, common logarithm :logX , exponential function : e^X , exp(X/a)

(11) Name of animate beings

- 1) In Japanese manuscript, standard Japanese name is expressed in kata-kana, being followed by scientific

name in italic. However, for nouns such as sardines-senmou and dried bonito which don't mean animated beings use expression in common use.

- 2) In English manuscript, names of animated beings are followed by scientific name in italic.

For micro-organisms, directly scientific name should be used.

- 3) In principle, name of namer is omitted, but if necessary, write name of the namers.

(Example) マイワシ *Sardinops melanostictus* (TEMMINCK et SCHLEGEL)

(12) Name of chemical material

- 1) In Japanese manuscript, name of chemical material should be indicate in kanji or kata-kana as customary.

If it is necessary to use original language, write as the following example.

(Example) 塩酸、グリコーゲン 10mmol phosphate buffer, chlorodifluoromethane

- 2) As for abbreviation of chemical compound, follow international common use. If necessary, note in the main body or footnote.

(Example) TVB-N 揮発性塩基窒素 volatile base nitrogen
ATP アデニシン三リン酸 adenosine triphosphate

- 3) 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, all of these are written in English.

- 2) Numbers should be written 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 words. In addition, titles of tables and figures should be written after numbering tables (or 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 graphs, 10pt of Times New Roman is recommended to use.

- 4) Photos should have enough sharpness.

(14) Literature

- 1) Character size is 10pt for Japanese and English.

- 2) Write down the literature which authors quoted or referred to, at the ending of the main body as follows

- 3) Numbers of literature are sequential serial numbers in the article and are placed on the right shoulder of relevant place in the article, shown 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, 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)

田中太郎：冷凍, 71(830), 42(1996)

田中太郎, 伊藤次郎..... : (全著者名を示す)

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

1) Name of author: "Name of book" (for English "title of book"), Volume (not necessary for one volume), Revised edition (name of compiler), Quoted pages, Publication office, Publication place (publication year)

(example)

田中太郎：「冷凍機」, pp.40-42, 日本出版, 東京 (1996)

田中太郎：「空気調和」, 3巻, 第2版 (伊藤次郎編), pp.50-53, 空調書籍, 大阪 (1996)

T.Tanaka: "Refrigerating Machine", pp.40-42, Japan Publication Co., Tokyo(1996).(in Japanese)

J.Ito : "Air Conditioning", Vol.3, 2 nd 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.J.Morris and A.Clarke), pp.3-19, Academic Press, London(1991).

c) For translation version

Name of original author (translator): "Name of book" (for English "title of book"), Quoted pages, Publication office, Publication place (publication year).

(Example) J. H. Wilkinson (守屋寛, 吉田光孝, 藤本光男 訳) : 「低温微生物」, pp.60-65, 丸善, 東京(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. Engels and L.J.M. Kuipers: Proc. 19 th Int. Cong. Refrig. (The Hague, The Netherlands, 1995), Vol. b, pp.860-867, 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, month)

(Example) 冷凍太郎, 空調花子 : 平成 15 年度冷空講論, pp.1-4, 東京(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 (brochure)

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

g) For web site

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

(5) Abbreviation of journals

Abbreviations are allowable for names of journals

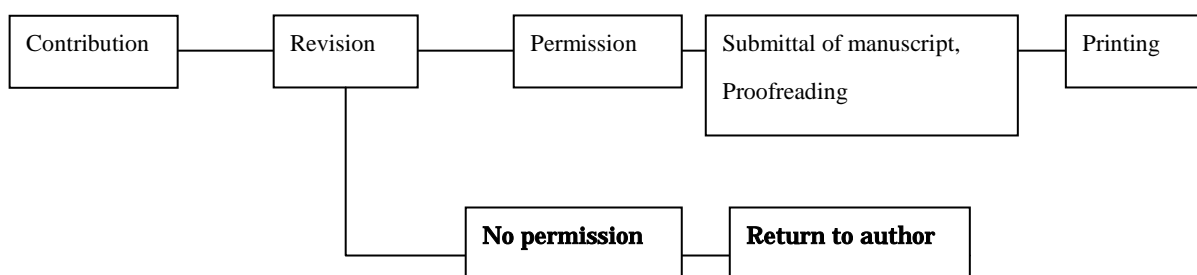
a) For domestic journals

| | | | |
|-------------------|-------|-------|--|
| 日本冷凍空調学会論文集 | ----- | 冷空論 | Trans. JSRAE |
| 日本冷凍協会論文集 | ----- | 冷論 | Trans. JAR |
| 日本冷凍空調学会年次大会講演論文集 | ----- | 冷空講論 | Proceedings of (year in A. D.) JSRAE Annual Conference |
| 日本冷凍協会学術講演会論文集 | ----- | 冷講論 | Proceedings of (year of A. D.) JAR Annual Conference |
| 冷 凍 | ----- | 冷 凍 | Refrigeration or Refrig. |
| 空気調和・冷凍連合講演会論文集 | ----- | 冷連講論 | |
| 日本機曾学会論文集 | ----- | 機論 | Trans. Jpn. Soc. Mech. Eng. |
| 日本機曾学会誌 | ----- | 機誌 | J. JSME |
| 空気調和・衛生工学会論文集 | ----- | 空衛論 | Trans. SHASE |
| 空気調和・衛生工学会誌 | ----- | 空衛学会誌 | J. SHASE |
| 食品衛生学雑誌 | ----- | 食衛誌 | J. Food Hyg. Soc. Japan |
| 日本食品科学工学会誌 | ----- | 食科工 | Nippon Shokuhin Kagaku Kaishi |
| 日本水産学会誌 | ----- | 日水誌 | Nippon Suisan Gakkaishi |
| 中央水産研究所報告 | ----- | 中央水研報 | Bull. Natl. Res. Inst. Fish. Sci. |
| 日本農芸化学会誌 | ----- | 農化 | Nippon Nogeikagaku kaishi |

b) Foreign journals follow abbreviation method of ISO833.

4. Revision regulations

(1) Flow of revision of contributed manuscript



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

(2) **Obligation of compilation**

As for compilation of the transactions, compilation will be done, following the policy 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 the **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 the 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 and others.

(7) Method of review and period

Reviewers will proofread and look over the manuscript, following this article and internal review regulations, which is set as 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

As for the accepted manuscript, the editorial board will make authors known the acceptance and an action to print it in the Transactions will be taken will 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 not in this contribution manuscript, members of editorial board will set up depending on necessity.