

INSTRUCTIONS TO CONTRIBUTORS

Journal of Scientific & Industrial Research (JSIR)

The Journal, started in 1942 and published *monthly*, by National Institute of Science Communication and Information Resources (NISCAIR), serves as an information link between generators and users of technologies and addresses to entrepreneurs, technologists, engineers, technocrats and scientists on one hand, and planners, administrators and managers on the other.

Original research articles of interest to industry, reviews on frontiers of science and technology, articles on management and policies relating to science, technology, and industrial applications are invited for publication. **Reviews on current topics along with authors research work may be related to the workers who have already carried out their work on their respective subjects are preferred. No case studies will be entertained.** Editor decision will be final for considering MSS and publishing the research paper. The detailed coverage is given below:

Subject Coverage

Scientific Research (Applications-based)

- Biofuels
- Computer Science, IT & Mathematical Modeling
- Earth & Atmospheric sciences
- Microbiology & Biotechnology

Industrial Research (R & D)

- Chemical
- Civil
- Electrical
- Electronics & Telecommunications
- Mechanical
- Mining

Industrial Research (Utilization)

- Industrial Technologies including Nanotechnology:
Successful at Pilot Scale and Plant Trials
- Renewable Energy Technologies
- Rural Development Technologies
- Waste Utilization Technologies

S & T Management

- Technology Management

Industrial Management

- Energy Management
- Environmental Management
- Management of Industry & Policy Implementation
- R & D Management

Book Reviews: Books, monographs and technical bulletins on industrial methods and techniques, including technology management and policy, as well as other data like production and demand statistics are accepted for review.

Author-Reader Platform: A platform for instructions to contributors and announcements. Brief reports by authors on

inventions and discoveries of scientific, technological and industrial research are covered. A column where readers interact and seek clarifications/additional information on articles published in the journal, or provide opinions, views and suggestions etc.

Manuscript Preparation

General: Use SI units throughout, and where other units are used for some reason, give equivalent SI units in parenthesis.

Title: Should be short, sufficiently informative and useful for indexing and retrieval purposes. A short running title may also be provided.

Author(s) and Affiliation: Author(s) with affiliation (where work was done) with complete mailing address must be given. Present address of author(s), if different, should also be given. Provide e-mail addresses too.

Abstract: It should contain scope and methodology employed, and key results in a way that is useful for indexing and abstracting service providers and gives a bird's eye view to a reader as well. Restrict it to 200 words.

Introduction: A brief and precise literature review with objectives of the research undertaken and essential background should constitute the introduction part.

Materials and Methods: New methods should be described in sufficient details, and others can be directed to published sources. The information given should be clear and complete so that anyone interested in repeating the experiment should be able to do so. If reference to a *hard to obtain* source is given, then details of the procedure must be provided. The section should clearly indicate the experimental design followed and the statistical methods used to summarize information for interpretation.

Results and Discussion: Results should be coherently presented and appropriately linked to tables, figures and other illustrations, but restricted to bare minimum. The section should also compare findings with those of others, as deemed necessary by the authors, and its relevance be discussed to the problem tackled, in particular, and for the branch of science, in general. Any weakness of the study undertaken, or any other peculiarity must also be pointed out. New findings, new interpretations, etc should be clearly spelt out, and also confirmation of important concepts, models, theorems, etc should be indicated. Present data according to standard formats as dictated by the experimental design and the data analysis carried out.

Conclusions: Main findings of the investigations reported in the paper.

Acknowledgements: It should be brief and meaningful when invoked; trivial formalities should be avoided.

References: The literature as referred to in the text should be put under this section and number sequentially in the order of its first use or mention in the text. Indicate sources (references) in the text as superscript Arabic serial numbers. Abbreviate journal names as given in the *International Serial*

Catalogue (published by International Council of Scientific Union's Abstracting Board) without the use of any period ('.'). Examples are given below for illustration:

Research Papers and Proceedings

- *With Author(s)*— Liotta R, Rose K, Krishnan P K & Ghosal A, Creep compliance properties of steel cast in space, *J Mater Sci*, **18** (1999) 243-256. [If accepted for publication, give (in press) in place of volume, year and pages]
- *With no Authors*— Authors will simply be missing from the style given above. Other parts remain in place.
- *Proceedings*—Rao N V, Bakhetia D R C & D'Souza L, The ultimate form of power function as derived from fractional derivatives, *Proc Int Conf Appl Math Stat* (Iowa State University Press, Iowa) 2000, 224-229.

Books, Conferences and Symposia

- *Books*—Hearle J W S & Peters R H, *Fibre Structure* (Academic Press, London) 1987, 87-123. [If the reference is to a work of an author published in a book by another author, the fact should be indicated by prefixing 'in' appropriately].
- Roels O A & Mahadevan S, Vitamin A, in *The Vitamins: Chemistry, Pathology and Methods*, 2nd edn, vol VI, edited by P Gyorgy & W N Pearson (Academic Press, New York) 1967, 139-210.
- *Symposia/Conferences*—Kapoor B C, Managing in the face of not-so-developed and organised environment, in *Nat Symp Manag Dev* (Institute of Public Administration, Jaipur) 23-25 July 2000.

Theses and Dissertations

- Ghosh G, *Structure and fracture properties of coal in India*, Ph D Thesis, Indian Coal Mining Institute, Dhanabad, India, 1998.

Patents

- Trepaginer J H, New surface finishings and coatings, *US Patent 1276323* DuPont Inc, USA) 27 June 2000; *Chem Abstr*, **49** (2000) 27689.

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[This to certify that the reported work in the paper entitled "....." submitted for publication in the journal "....." is an original one and has not been submitted for publication elsewhere. I/we further certify that proper citations to the previously reported work have been given and no data/tables/figures have been quoted verbatim from other publications without giving due acknowledgement and without the permission of the author(s). The consent of all the authors of this paper has been obtained for submitting the paper to the journal ".....".

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- If referred are to be so indicated in the text itself rather than putting under references. Indicate like: ...and has a blood pressure lowering properties (Gupta G D, All India Institute of Medical Sciences, New Delhi, unpublished data) as well as a fairly good glucose regulating function (Rajpurohit B D, National Institute of Nutrition, personal communication) ...

Tables (**maximum 4-5**) and figures (**maximum 5-6**) should be on separate sheets and figures should be given as JPEG/ GIF/TIF format and also in word format. All figures, tables and equations should be in editable form so that they can be edited wherever required. Also, no bold face of symbols and letters in figures and tables. Standard abbreviations should be used in column headings. Both tables and figures are serially numbered in Arabic numerals and referred to in the text in the same way. Legends to figures should all be on a separate sheet. Figures and illustrations should be *double the final size*, which will normally be restricted to a column width (85 mm), prints should be on a glossy paper and drawings should be on white drawing paper.

Manuscript Submission

Paper can be submitted (**maximum 11-15 pages**) on line in MS Word format at: **Editor (jsir@niscair.res.in), Journal of Scientific & Industrial Research, NISCAIR, Dr K S Krishnan Marg, Pusa Campus, New Delhi 110 012**. Paper can also be submitted as three hard copies of manuscript (plus figures and tables) printed in double line spacing in 12 point matter and a copy on CD in MS word format with illustrations in suitable formats for IBM compatible computers.

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The submitted work should have a covering letter on the *official letterhead* under signatures of the corresponding author or any other authorized person.

A declaration by authors as per certificate given below: