

## GUIDANCE TO CONTRIBUTORS

### Scope

The Journal of the National Science Foundation of Sri Lanka publishes the results of research in all aspects of Science and Technology. It is open for publication of Research Articles, Reviews, Research Communications and Correspondence.

### IT related and other non-empirical articles

The JNSF is a journal primarily devoted to natural sciences. It also considers for publication significant and novel contributions from formal sciences. Authors of emerging sub-disciplines of Computing and related areas such as Machine Learning, Artificial Intelligence and Data Sciences are requested to carefully adhere to the following guidelines when submitting manuscripts for this journal.

- Clear formulation of outcome-oriented **Research Objective/s** for targeted knowledge (sub)domain/s or (sub)discipline/s.
- Selection and comprehensive summarization of **appropriate Research Method/s** adopted to achieve the stated Research Objective/s.
- Reporting a sound (**Empirical**) **Evaluation** of the research finding/s thereby arguing reliability, validity, and generalizability of research claim/s.

### Categories of manuscripts

**Research Articles:** Research Articles are papers that present complete descriptions of original research. Research Articles should include an Abstract, Keywords, Introduction, Methodology, Results and Discussion, Conclusion and Recommendations where relevant. References should be prepared according to the “Guidelines for the preparation of manuscripts”. Maximum length of the article should be limited to 25 pages with a word count of 10,000 including references, figures and tables. Any articles above this limit will be returned.

**Reviews:** Reviews are critical presentations on selected topics of Science or Technology. They should be well focused and organized and avoid general “textbook” style. As reviews are intended to be critical presentations on selected topics, reviewers need to have had substantial leadership in research supported by a publication track record in the areas covered by the review. A person/s wishing to submit a Review Article should obtain prior approval from the Editorial Board by submitting a concise summary of the intended article, along with a list of the author’s publications in the related area ([jnsf@nsf.gov.lk](mailto:jnsf@nsf.gov.lk)). Maximum length of the article should be limited to 40 pages with a word count of 12,000 including references, figures and tables. Any articles above this limit will be returned.

**Research Communications:** Research Communications are intended to communicate important new findings in a specific area of limited scope that are worthy of rapid dissemination among the scientific community. Authors are required to provide a statement justifying the suitability of the submission for a Research Communication. The article should include an Abstract, Keywords, Introduction, Methodology, Results & Discussion, Conclusion and References. Maximum length of the article should be limited to 10 pages with a word count of 2,500 including references, figures and tables. Any articles above this limit will be returned.

**Correspondence:** Correspondence will be accepted regarding one or more articles in the preceding four issues of the Journal, as well as Letters to the Editor. Articles covering important scientific events or any other news of interest to scientists, reviews of books of scientific nature, articles presenting views on issues related to science and scientific activity will also be considered. Publication will be made at the discretion of the Editor-in-Chief. Maximum length of the article should be limited to 05 pages with a word count of 1,500 including references, figures and tables. Any articles above this limit will be returned.

## SUBMISSION OF MANUSCRIPT

Authors submitting articles to the JNSF should first create an account in the Sri Lanka Journals Online System (<https://jnsfsl.sljol.info/>). All manuscripts in MS Word format must be electronically submitted to the journal’s online platform at <https://jnsfsl.sljol.info/submit/start/>. Submissions *via* emails are not encouraged. Please make sure that no author information is mentioned in the article submitted. The names and details of affiliations of all authors and contact information of the corresponding author must be fed into the system during the online submission process. Authors (at least the corresponding author) are required to provide their personal, validated ORCID ID (by obtaining an ORCID ID from <https://orcid.org/>) when submitting the manuscript. No change to the authors or order of authors will be accepted after the submission. All those who have made significant contributions should be listed as co-authors. The corresponding author should ensure that all contributing co-authors are included in the author list and have approved the final version of the paper and have agreed to its submission for publication.

All submissions should be in English. If the manuscript conforms to the guidelines specified, the date received will be the date that the manuscript was submitted to the online system.

Submissions are accepted for processing on the understanding that they will be reviewed and that they have not been submitted for publication elsewhere (including publication as a full paper or extended abstract as a part of Conference Proceedings). The JNSF does not accept manuscripts that have already been submitted to pre-print servers.

### **Suggesting potential reviewers by authors**

The authors may suggest up to three names of referees when submitting their manuscript, in the Cover Letter space provided at the bottom of the page in the first stage of online submission. Referees should not be from the institution where the work was carried out and should not have been co-authors in previous publications. The address, institutional affiliation and e-mail of the suggested referees should be supplied. Please note that the JNSF is not bound to select all or any of the suggested referees for sending the manuscript for reviewing

### **Authorship**

All authors designated as authors should be eligible for authorship. Those who have made a substantial contribution to the concept or design of the work; or acquisition, analysis or interpretation of data are recognized as Authors.

The corresponding author should be prompt and ensure adherence to timelines when responding to requests, queries and recommendation of reviewers conveyed by or on behalf of the Editor-in Chief and Editorial Board.

### **Supplementary materials**

Any experimental data necessary to evaluate the claims made in the paper but not included in the paper should be provided as supplementary materials. Supplementary materials will be sent to the reviewers and published online with the manuscript if accepted. The supplementary materials should conform to Journal guidelines and should be uploaded as separate files. Authors should number Supplementary Tables and Figures as, for example, 'Supplementary Table S1'. Refer to each piece of supplementary material at the appropriate point(s) in the main article. Supplementary Materials may include description of the materials and methods, controls, or tabulated data presented in Tables or Figures, and programming codes.

### **Peer review**

The manuscripts submitted to the JNSF will initially be screened by the Editorial Board and, if suitable, will be referred to at least two subject experts in the relevant field. The peer-review process of the JNSF is double-blind.

When revision of a manuscript has been requested, the revised manuscript should be submitted on or before the stated deadline. If the revised manuscript is not received on time, the manuscript will not be processed further. The authors' response to the comments of referees should be tabulated with the comment, response and the line number/s for reference. The decision of the Editorial Board shall be final.

Accepted papers are subject to editing. The date of acceptance will be the date when the Editorial Board has decided it to be acceptable for publication.

### **Article publication fee**

A total of US\$ 250 will be levied for each accepted manuscript for publication, except when the corresponding author is affiliated to a Sri Lankan Institute, in two stages as explained below.

- A processing fee of US\$ 20 will be levied for each manuscript at peer-review stage and the remaining US\$ 230 will be charged for accepted manuscripts at the time of publication.

Payments can be made online via NSF Payment Portal (<http://pg.nsf.gov.lk/>)

### **Authors' declaration**

When an article is accepted for publication, the authors are required to submit the Authors' Declaration signed by all the authors.

### **Copyright**

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### **Post-publication corrections**

The Editorial Board reserves the right to take action on publishing an erratum or corrigendum. If serious errors are identified in a published article, the Journal may consider a retraction or publishing a correction.

## **STRUCTURE OF MANUSCRIPT**

### **Manuscript**

The manuscript should be free of errors and prepared in single column, using double-spaced text of Times New Roman 12 font throughout with line numbers, leaving at least 2 cm margins on both sides, and liberal spacing at the top and bottom of each page. Pages should be numbered consecutively.-

#### **a. Style**

The paper should be written clearly and concisely. The style of writing should conform to scholarly writing. Slang, jargon, unauthorized abbreviations, abbreviated phrasings should not be used. In general, the impersonal form should be used. Poor usage of language will result in rejection of the manuscript during initial screening.

#### **b. Layout**

Manuscripts other than review articles should be generally organized as follows: Title, Abstract, Keywords, Introduction, Methodology, Results and Discussion, Conclusions and Recommendations (where relevant), Acknowledgements and References. Pages should be arranged in the following order:

**Title page** should include the title of manuscript, and no author information should be mentioned in the title page. If a major part of the research has been published as an abstract in conference proceedings, it should be cited as a footnote on the title page. Authors must also indicate the **general and specific research area** of the manuscript in the title page. In order to highlight the significance of the manuscript, authors are required to provide the following highlights in brief. (1) Why was this study conducted? (2) What are the new findings? (3) Possible applications of the findings. Please limit your answers to 25-30 words for each.

**Title:** Should accurately and concisely reflect the contents of the article.

**Running title:** Should be a shortened title (limited to a maximum of 50 characters) that could be printed at the top of every other page of the Journal article.

**Abstract:** Should be between 200 - 250 words for full length articles and written as a single paragraph. It should not contain any references and should be able to stand on its own. It should outline objectives and methodology together with important results and conclusions. A Review Article should carry a summary of not more than 300 words.

**Keywords:** Include a maximum of six keywords, which may include the names of organisms (common or scientific), methods or other important words or phrases relevant to the study.

**Introduction:** This should state the reasons for performing the work with a brief review of related research studies in the context of the work described in the paper. Objectives of the study should be clearly stated.

**Materials and Methods:** This section should give the details of how you conducted your study. New methods may be described in detail with an indication of their limitations. Established methods can be mentioned with appropriate references. Sufficient details should be included to allow direct repetition of the work by others. Where human subjects are involved, they should be referred to by numbers or fictitious names. A paper reporting the results of investigations on human subjects or on animals must include a statement to the effect that the relevant national or other administrative and ethical guidelines have been adhered to, and a copy of the ethical clearance certificate should be submitted. Methods of statistical analyses used should be mentioned where relevant.

**Results and Discussion:** Results: the results should be concisely and logically presented. Repetition of the same results in figures, tables or text should be avoided.

Discussion: data essential for the conclusions emerging from the study should be discussed. Long, rambling discussions should be avoided. The discussion should deal with the interpretation of results. It should logically relate new findings to earlier ones. Unqualified statements and conclusions not completely supported by data should be avoided.

Molecular sequence data, such as gene or rDNA sequences, genome sequences, metagenomic sequences etc. must be deposited in a public molecular sequence repository, such as GenBank, that is part of the International Nucleotide Sequence Database Collaboration (INSDC). The accession numbers obtained must be cited in the text, Table or on Figures of phylogenetic trees of the manuscript.

**Conclusion:** The conclusion should be brief, highlight the outcomes of the study and should be aligned with the objectives of the study. It should not contain references.

**Conflict of interest statement:** All authors should include a statement on conflict of interest disclosing any financial or other substantive conflicts of interest that may be construed to influence the results or interpretation of their research. All sources of financial support for the project should be disclosed.

**Acknowledgement:** Should be brief and made for specific scientific, financial and technical assistance only. If a significant part of the research was performed in an institution other than in those indicated by the authors' affiliations given in the title page, this fact should be acknowledged. All those who have made substantial contribution to the research but do not qualify to be authors should be acknowledged.

#### **References :**

All research work of other authors, when used or referred to or cited, should be correctly acknowledged in the text and in the References.

Citing references in the text:

- References to the literature must be indicated in the text and tables as per the Author-Year System, by the author's last name and year, in parenthesis (i.e. Able, 1997) or (Able & Thompson, 1998).
- Citation to work by more than two authors should be abbreviated with the use of *et al.* (i.e. Able *et al.*, 1997).
- Multiple publications by the same first author in the same year should be coded by letters, (i.e. Thompson, 1991a; b).
- Multiple citations should be made in chronological order and separated by a semi-colon, (i.e. Zimmerman *et al.*, 1986; Able *et al.*, 1997).
- Reference to unpublished work, work in preparation or work under review should be cited in italics as (*unpublished data*) or, with the author's initials and surname given; such works should not be included in the Reference section.
- Personal communications may be mentioned in the text with the date of communication as (*Personal communication, 2 June 2000*).

List of references:

- The list of References should be arranged in alphabetical order based on the last name of the first author.
- Names of all the authors should be given except when there are more than 10 authors. When there are more than 10 authors, only the name of the first author can be given followed by *et al.*
- All the initials of the author must be given after the last name and the year of publication should follow in parentheses.
- This should be followed by the full title of the referred publication.
- When journal articles are listed, the journal name should be given in full and in italics and followed by the volume number in bold type, issue number in parentheses and then the inclusive pages.
- Where there are several publications by the same author(s) and published in the same year they should be differentiated by adding a lower-case letter after the year. When books are listed, the order should be: author(s), year, book title, volume number, edition, pagination/ inclusive pages, publisher and place of publication. The book title should be in italics. When sections of a book are listed, the order should be: author(s) of chapter, year, title of the section, title of the book, edition, inclusive pages, publisher and place of publication.
- Digital object identifiers (DOIs) should be included for all references where available.
- References should only be cited as 'in press' if the paper has been accepted for publication.

Examples of correct forms of references are given below.

#### **Journal Articles**

Boutin C. & Harper J.L. (1991). A comparative study of the population dynamics of five species of *Veronica* in natural habitats. *Journal of Ecology* 79(01): 199 – 221.

DOI: <https://doi.org/10.2307/2260793>

## Books

Burnham K.P. & Anderson D.R. (2002). *Model Selection and Multimodal Inference*, 2<sup>nd</sup> edition, pp. 488. Springer Science and Business Media, Inc., New York, USA.

## Book Chapters

Hinrichsen R.A. & Holmes E.E. (2009). Using multivariate state-space models to study spatial structure and dynamics. In: *Spatial Ecology* (eds. R.S. Cantrell, C. Cosner & S. Ruan), pp. 145 – 166. CRC/ Chapman Hall, Florida, USA.  
DOI: <https://doi.org/10.1201/9781420059861.ch8>

## Edited Books

Kimati H., Amorim L., Rezende J.A.M., Bergamin Filho A. & Camargo L.E.A. (eds.) (2005). *Manual de Fitopatologia*, volume 2. Doenças das Plantas Cultivadas, 4<sup>th</sup> edition. Ceres, São Paulo, Brazil.

## Conference Papers

Weaver D. (2002). Implementation of a learning management system using an integrated approach to professional development. In: Winds of change in the sea of learning. *Proceedings of the 19th Annual Conference of the Australasian Society for Computers in Learning and Tertiary Education (ASCILITE)* (eds. A. Williamson, C. Gunn, A. Young & T. Clear), volume 2, Auckland, New Zealand, 8-11 December. Unitec Institute of Technology, Auckland, New Zealand, pp. 711-720.

## Agency Publications

U.S. Census Bureau (2009). *World Population: 1950 – 2050*. U.S. Census Bureau, Washington DC, USA.

Department of Health (2008). *Health Inequalities: Progress and Next Step* (pdf). Department of Health, London, UK. Available at [http://PublicationsPolicyAndGuidance/DH\\_08\\_5307](http://PublicationsPolicyAndGuidance/DH_08_5307), Accessed 9 June 2008.

## Other

Robinson L.J. (2003) Spatial scale and depletion models of farmland birds in a fragmented landscape. *PhD thesis*, University of Reading, Reading, UK.

Efford M.G. (2008). Density 4.3: software for spatially explicit capture-recapture. Available at <http://www.otago.ac.nz/density>, Accessed 15 March 2009.

**Abbreviations and Symbols:** Unless common, these should be defined when first used, and not included in the abstract. The SI System of units should be used wherever possible. If measurements were made in units other than SI, the data should be reported in the same units followed by SI units in brackets, e.g. 5290 ft (1610 m).

**Formulae and Equations:** Equations should be typewritten and quadruple spaced. They should be started on the left margin and the number placed in parentheses to the right of the equation.

**Nomenclature:** Scientific names of plants and animals should be printed in italics. In the first citation, genus, species and authority must be given. e.g. *Borassus flabellifer* Linn. In latter citations, the generic name may be abbreviated, for example, *B. flabellifer* L.

**Tables and figures:** Tables and Figures should be clear and intelligible and kept to a minimum, and should not repeat data available elsewhere in the paper. Any reproduction of illustrations, tabulations, pictures etc. in the manuscript should be acknowledged.

**Tables:** Tables should be numbered consecutively with Arabic numerals and placed at the appropriate position in the manuscript. If a Table must be continued, a second sheet should be used and all the headings repeated. The number of columns or rows in each Table should be minimized. Each Table should have a title, which makes its general meaning clear, without reference to the text. All Table columns should have explanatory headings. Units of measurement, if any, should be indicated in parentheses in the heading of each column. Vertical lines should not be used and horizontal lines should be used only in the heading and at the bottom of the table. Footnotes to Tables should be placed directly below the Table and should be indicated by superscript lower case italic letters (<sup>a</sup>, <sup>b</sup>, <sup>c</sup>, etc.).

**Figures:** All illustrations are considered as figures, and each graph, drawing or photograph should be numbered consecutively with Arabic numerals and placed at the appropriate position in the manuscript. Any lettering to appear on the illustrations should be of a suitable size for reproduction and uniform lettering should be used in all the Figures of the manuscript. Scanned figures or photographs should be of high quality (**300 dpi**), to fit the proportions of the printed page (12 × 17 cm). Each figure should carry a legend so that the general meaning of the figure can be understood without reference to the text. Where magnifications are used, they should be stated.

## Units of measurement

Length: km, m, mm, µm, nm

Area: ha, km<sup>2</sup>, m<sup>2</sup>

Capacity: kL, L, mL, µL

Volume: km<sup>3</sup>, m<sup>3</sup>, cm<sup>3</sup>

Mass: t, kg, g, mg, µg

Time: year(s), month(s), wk(s),  
d(s), h, min, s

Concentration: M, mM, N, %, g/L, mg/L, ppm

Temperature: °C, K

Gravity: x g

Molecular weight: mol wt

Others: Radio-isotopes: 32P

Radiation dose: Bq

Oxidation-reduction potential: rH

Hydrogen ion concentration: pH