

Instructions for Authors

GENERAL

Stochastic Modelling & Computational Sciences (SMCS) is an international peer-reviewed online research journal that showcases original and high-quality research papers in all areas of research involving stochastic modelling. The vision of the Journal is to support and encourage the growth of advanced and innovative research in the disciplines of computing sciences, stochastic processes, and their applications in a variety of contexts. The journal provides a forum for scholars, practitioners, and researchers to exchange noteworthy discoveries, creative approaches, and workable solutions to difficult issues with computational difficulties and ambiguity. SMCS provides the most recent updates and insights into the latest academic trends, as well as useful primary sources for referencing to scientists, researchers, students, practitioners and other professionals.

The Journal cordially invites you to submit your work or by email as research papers, review papers, book reviews, theory-based empirical papers, or any other kind of publication related to computational research. All submissions can be made either through online submission or via E-mail.

All articles published by SMCS are made freely and permanently accessible online. All articles to SMCS are posted online immediately as they are ready for publication. All articles will be assigned a DOI number (Digital Object Identifier) from 2025 onward, whereby they become searchable and citable without delay. The journal aims for a first decision to be made within 4-6 weeks.

SMCS uses double-blind review, which means that both the reviewer and author identities are concealed from the reviewers, and vice versa, throughout the review process. Before being sent to reviewers, manuscripts are pre-screened by the editorial office to check that they agree with the criteria for publishing in SMCS including fulfilling the aims and scope of the journal, nature of the study, originality of the results, quantity and quality of data, general conclusions, and presentation of the work with a good quality of English language. If the paper does not fulfil these criteria, it may be rejected at this stage without review.

Please read the instructions below carefully for details on the submission of manuscripts, the journal's requirements and standards as well as information concerning the procedure after a manuscript has been accepted for publication in SMCS.

MANUSCRIPT TYPES ACCEPTED

The type of manuscript accepted in SMCS includes

- Original Research articles
- Review articles
- Book Reviews
- Theory-based empirical papers
- Any other kind of publications specific to the involvement of Stochastic Modelling and Computational Sciences.

The detailed requirements for preparing the manuscript according to its type is given below:

A. Original Research Article

An original research article is authored by the researcher or researchers who carried out the study or experiment, describing the research methods in detail and reporting the results of the research including proper discussion of the implications of their study. Articles that contain original investigations are regarded as primary or empirical sources. Authors submitting the original research articles should prepare their manuscripts according to the following structure:

Title

Provide a title which should be specific, using relevant keywords, avoiding jargon, ensuring accuracy, keeping it concise, considering the tone and engaging a good title accurately reflects the content and scope of the study, is easily understandable, and captures the reader's interest.

Abstract

Should be structured with subheadings with the Aim and objective, Background, Methods, Results, Conclusion, and Keywords.

Aim and objective: Provide a concise summary of the purpose or goal of the research.

Background: The background for the study should state the study's purpose, basic procedures, main findings and principal conclusions. It should emphasize new and important aspects of the study and observation.

Methods: Methods describe briefly the main methods including the model used, data sources, software tools, validation methods, sensitivity analysis, and performance metrics.

Results: Results should be presented in a logical sequence emphasizing or summarising only the most important observations,

Conclusion: The conclusion indicates the interpretations with the goal of the study but avoids unqualified statements and the abstract should be an objective representation of the article. It must not consider results that are not presented and substantiated in the main text and should not exaggerate the main conclusions.

Keywords: Keywords need to be added after the abstract and we recommended that the keywords are specific to the article and within the subject discipline. Keywords are used for indexing purposes and abbreviations established in the field may be eligible.

Introduction

The introduction ought to briefly situate itself within a wide context and emphasise its significance. It should outline the goal of the project and its importance, including relevant prior research as well as particular studies. As of right now, the research has produced a clear description of the study's goal, scope, and tested hypothesis. In conclusion, give a quick overview of the work's primary goal and emphasise its key findings. Make the introduction understandable to scientists who are not involved in the research paper's topic.

Materials and Methods

The Methods section should exclusively contain data that was accessible during the planning of the study or the drafting of the protocol; any information obtained throughout the study should be presented in the Results section. Thorough descriptions should be given for novel methods and protocols, whereas established methods can be succinctly outlined and properly referenced. It is essential to specify the name and version of all software utilized, along with the availability of the computer code used. A declaration confirming that the research was endorsed by independent entities at local, regional, and national levels.

Results

Provide a succinct and accurate depiction of the experimental findings and data pertaining to every outcome delineated in the materials and methods section, excluding methodologies, discussions, and conclusions. All graphs, illustrations, and tables should be referenced within the text sequentially by number, accompanied by a concise explanation. It is advisable to incorporate supplementary materials and highlight key discoveries.

Discussion

The author should discuss the results and how they can be interpreted from the perspective of previous studies and the working hypotheses. The finding and their implications should be discussed in the broadest context possible limitations of the work are highlighted and further research directions may be mentioned. Explore the implications of findings for further research and policy and combine them with results.

Conclusion

This section is crucial and required as it summarizes the key points and findings of your paper. It determines the overall conclusions of the study and the future research directions.

Patents: It is not mandatory but may be updated if there is patent work reported in this manuscript.

B. Review Article

Review articles are typically authored by individuals who have conducted significant research in the field or are acknowledged by authorities. These articles are expected to focus on a specific topic, issue, or question while maintaining a balanced and current perspective. Instead of merely restating existing literature, review articles are meant to offer an interpretation and integration of findings to establish a comprehensive framework for understanding the subject matter. Additionally, a brief overview of the author's contributions to the field should be included alongside the manuscript. Furthermore, authors of review articles are required to detail the methods employed for data location, selection, extraction, and synthesis. These methodologies should be succinctly summarized in the form of an abstract.

Structure

The sections comprised in the review articles bear resemblance to the Original research article albeit with some modifications. Generally, the manuscript ought to be segmented into the Abstract, Keywords, Introduction, Discussion, Conclusion, and References.

The discourse segment of the review necessitates organization into subsections delineated by enlightening subheadings. We encourage the submission of review articles encompassing journal topics; however, the content pertaining to the aforementioned subjects must be deliberated with the Editors prior to submission, elucidating the distinctive aspects of this manuscript from recent review articles within the field.

C. Case Report / Case Series

Case reports include detailed studies of real-world applications of stochastic models and computational techniques across various fields. These may cover epidemiological studies, financial market analysis, engineering systems reliability, environmental modelling, operations research, bioinformatics, queueing theory, healthcare systems, manufacturing processes, and social sciences. Each report should offer in-depth insights into the application, methodology, results, and implications of the stochastic models used in the specific context.

D. Book Reviews

A book review involves critically evaluating a book or textbook and assessing its content, quality, and relevance to the field. It includes summarizing the book's contents, evaluating its strengths and weaknesses, comparing it to similar works, considering its intended audience, assessing its innovation, and providing recommendations for potential readers. Ultimately, the review aims to offer a balanced assessment of the book's scholarly contributions and significance in computational research.

E. Theory-based empirical papers/Any other kind of publications

We also welcome theory-based empirical papers and other types of publications that contribute to the field. Theory-based empirical papers should combine rigorous theoretical development with empirical validation, providing a bridge between abstract models and real-world data. These papers might include empirical analyses that test or refine stochastic models, studies that compare theoretical predictions with observed outcomes, and work that develops new methodologies for empirical testing of stochastic theories.

Details for writing different types of articles

Article Types:	Detail Descriptions
Original Research Article	<p>Word limit: 3000-4500 (Excluding references) Structured Abstracts: Aim & Objective, Background/Introduction, Material & Methods, Results, Conclusion, and Keywords (150 -250 Words) Keywords: (3-6) Maximum Number of Figures: 8 (Quality: Pixel 300 DPI) Maximum No of Table: 8 Article explanation: Introduction, Materials and Methods, Results, Discussion, Conclusion and References References: Minimum - 15 and Maximum - 70</p>
Review Article	<p>Words limit: 5000-6000 (Excluding references) Headings: Abstract, Keywords, Introduction, Discussion, Conclusion, and References Maximum Number of Figures: 8 (Quality: Pixel 300 DPI) Maximum No of Table: 8 References: Minimum - 15 and Maximum - 100</p>
Case Report/Case Series	<p>Words limit: 1000- 2500 Excluding references Main Headings: Abstract, Introduction, Case Presentation/Series, Discussion, Conclusion, and References Figures: 5-15 (Quality: Pixel 300 DPI) Table: 3-8 References: 8-25</p>
Book Reviews/ Theory-based empirical papers/Any other kind of publications	<p>Word Limit : 1500 excluding references Structure: Introduction, Body, Conclusion Figure: 5- 6 (300dpi) Table : 2 to 3 References: 8 to 15</p>

WRITING THE MANUSCRIPT

This section provides readers with detailed instructions for writing the manuscript. In addition, it is advisable to authors that they refer to the latest articles and manuscript template

<https://romanpub.com/resources/SMCS-template.pdf> for the format of each section. There is no page limit for manuscripts.

The manuscript must be typed in 12-point Times New Roman font (Double space line) in MS Word (2003 or above). The manuscript must have line numbers. Other details are given below:

Sections to be included in the manuscript (May vary as per the type of research article)

- **Title:** Should be clear, descriptive and not too long
- **Author/s' name and Affiliation:** Authors are required to disclose both their current institutional affiliation and the institution where the majority of their research was conducted. It is necessary to ensure the accuracy of author names and institutional affiliations. After the publication of a manuscript, modifications or revisions to the author's contact information or institutional affiliation might not be permissible.
- **Abstract-** Structured as discussed in the above sections of 'MANUSCRIPT TYPES ACCEPTED'
- **Keywords (indexing terms):** Normally 3-6 items.
- **Introduction:** Should include recent references preferably of the last 10 years.

- **Method:** Should include materials studied, area descriptions, methods, techniques
- **Results**
 - Tables
 - *Title and caption:* Every table must have a unique title placed at the top. Titles should be clear and concise.
 - *Tools:* Microsoft Word is strongly recommended for inserting a table. It's necessary to avoid tables created with the tab key.
 - *Numbering and citations:* Tables in the main body of the text should be numbered consequently and cited in the order of appearance in the text.
 - Figures
 - *Title and caption:* Each figure should have a caption. The caption should be concise and typed separately.
 - *Numbering & Citation:* All figures are to be sequentially numbered with Arabic numerals. Figures should always be cited in the text in consecutive numerical order.
 - Equation
 - *Format:* The equation number should be placed in parentheses to the right of the equation.
 - *Numbering & Citation :* Equations should be numbered consecutively with Arabic numerals to avoid ambiguities
- **Discussion:** Discuss the result with the support of recent references.
- **Conclusion:** This particular division is not obligatory, however, it has the potential to be incorporated into the document in cases where the discourse appears to be notably extensive or intricate.
- **Funding details:** If the study has been funded, please include all the specifications of the source of funding for the study and any potential conflict of interest if appropriate. Suppliers of materials should be named and their location (town, state/county, country) included.
- **Acknowledgement:** Under Acknowledgements, please specify contributors to the article other than the authors accredited.
- **Declarations:** All manuscripts must contain the following sections under this heading:
 - *Authors' contribution:* The specific contributions made by each author to the manuscript should be delineated in this section. It is recommended to utilize initials when denoting the contribution of each author in this section. For instance, "FC conducted analysis and interpretation of the patient data pertaining to the haematological condition and the transplantation. RH carried out the histological analysis of the renal tissue and played a significant role in drafting the manuscript. All authors reviewed and endorsed the ultimate version of the manuscript.
 - *Conflict of interest:* All financial and non-financial conflicts of interest should be disclosed within this particular section. It is advised to utilize the initials of the authors when denoting their respective conflicting interests in this segment. In cases where there are no conflicting interests present, it is recommended to explicitly mention "The authors assert that no competing interests exist" in this section.
 - *Data availability statement:* All manuscripts are required to incorporate a statement regarding the 'Availability of data and materials'. Statements pertaining to data availability need to encompass details about the location where the data used to support the findings presented in the manuscript can be accessed, including, when relevant, links to publicly archived datasets that were examined or produced during the research. The term 'data' refers to the basic dataset essential for understanding, reproducing, and expanding upon the outcomes delineated in the manuscript. It is acknowledged that there are situations where sharing research data openly may not be feasible, such as when it could jeopardize individual privacy. In such cases, the manuscript should still specify data availability and any terms for obtaining access.
 - *Ethical Statement and approval, if any:* Manuscripts reporting studies involving human participants, human data or human tissue must include a statement on ethics approval and consent (even where the need for approval was waived) and the name of the ethics committee that approved the study

and the committee's reference number if appropriate. Studies involving animals must include a statement on ethics approval. If your manuscript does not report on or involve the use of any animal or human data or tissue, please state "Not applicable" in this section.

- *Informed consent statement, if applicable:* If the study involved human participants, then written informed consent must be obtained and a statement must be included under this heading.
- *Declaration of AI:* Large Language Models (LLMs) like ChatGPT don't meet authorship criteria, so their usage must be documented in the Methods section.
- **References:** All sources cited in the text must appear in the reference list and all items in the reference list must be cited in the text. Reference must be arranged in alphabetic order. The journal follows the American Psychological Association Referencing Style 7th Edition (2020) <https://apastyle.apa.org/products/publication-manual-7th-edition> A brief guideline for referencing of the most common types of documents is provided here:

Journal article with a Single author

Last Name, First Name. (Year of publication). Article Title. *Journal Name*, Volume No (Issue No), Page No, DOI

Example

Akpan, E. (2003). Early marriage in Eastern Nigeria and the Health consequences of vesicovaginal fistulae (VVF) among young mothers. *Gender and Development*, 11(2), 70-76

Journal article with multiple author

Last Name, First Name. & Last Name, First Name. (Year of publication). Article Title. *Journal Name*, Volume No (Issue No), Page No. DOI

Example

Alamri, H. R., Alanazi, A. R., & Alrashedi, S. M. (2021). Anxiety in Writing Skills: the Voices of EFL University Learners. *International Journal of English Language Teaching*, 9(6), 33-51.

Book

Author name, (Year)"Title of chapter in the book, "Title of the Published Book, (xth ed. if possible), Abbrev. of Publisher, pp. xxx–xxx.

Examples

Tom B, Jack E, R. Voss, (2013) "The Current Situation of Education," in Current Situation and Development of Contemporary Education, 1st ed, HRPUB, pp. 1-200.

Fuare, R., Grabowski, R., & Grosskopf, S. (1985). The measurement of efficiency of production. Boston: Kluwer Academic Publishers

Chapter in an edited book

Example

Mettam, G.R., Adams, L.B., (1999). How to prepare an electronic version of your article, in: Jones, B.S., Smith, R.Z. (Eds.), Introduction to the Electronic Age. E-Publishing Inc., New York, pp. 281-304.

Conference Proceedings

Author. Year Published. Title. Proc. Conference Name, Edition, Conference Location, Year of Conference, Volume, Pages, Place Published, Publisher

Example

Mohan Jain S. 2013. Mutation-assisted breeding for improving ornamental plants. Proc. XXII International Eucarpia Symposium, Section Ornamentals, Breeding for Beauty, Thuringia, 2013, 714:85-98. Thuringia: Tuorix Press

Website

Author/Organization. Year. Title. URL

Example

Biostimulant Coalition. 2013. What are the biostimulants? www.biostimulantcoalition.org

- **In-text Citations:** An in-text citation serves as a concise acknowledgement that is incorporated every time a quotation or information is extracted from a reference in scholarly writing. Its primary function is to guide the reader to the source, enabling them to trace the origins of the information utilized. The journal follows APA 7th edition for in-text citation. <https://apastyle.apa.org/style-grammar-guidelines/citations> It uses the (author's name, and year) style citation. The detail with examples is given below:

a) Article citation with a single author

Example:

Reference: Yadav, M. S. (2021). Role of Social Media in English Language Learning to the Adult Learners. *Technology, Pedagogy and Education*, 29(1), 65–75.

In-text Citation: (Yadav, 2021)

b) Article citation with 2 authors

Example:

Reference: Pikhart, M. and Botezat, O. (2021), The Impact of the Use of Social Media on Second Language Acquisition, *Procedia Computer Science*, Vol. 192, pp. 1621-1628.

In-text Citation: (Pikhart and Botezat, 2021)

c) Article citation with authors 3 or more

Example:

Reference: Van, D. B. A., Thurlings, M., & Willems, M. (2020). Towards an understanding of Social Media use in the class-room: A literature Review. *Technology, Pedagogy and Education*, 29(1), 35–55.

In-text Citation: (Van et al 2020)

Reference: Alsmadi, M. K., Al-Marashdeh, I., Alzaqebah, M., Jaradat, G., Alghamdi, F. A., Mohammad, R.M. & Tayfour, M. (2021). Digitalization of learning in Saudi Arabia during the COVID-19 outbreak: A survey. *Informatics in Medicine Unlocked*, 25, 100632.

In-text citation: (Alsmadi et al, 2021)

d) Multiple articles citation

Example:

References: Yadav, M. S. (2021). Role of Social Media in English Language Learning to the Adult Learners. *Technology, Pedagogy and Education*, 29(1), 65–75.

Hussain, I. H. I., Saeed, R. M. B., & Syed, A. F. (2020). A study on the effectiveness of the online learning system during COVID-19 in Sargodha. *International Journal of Language and Literary Studies*, 2(4), 122-137.

In-text citation: Yadav, 2021; Hussain et al, 2020)

□ Appendix

An appendix may be included (and is often helpful) in management or computational modelling.

ONLINE SUBMISSION OF MANUSCRIPT

Manuscripts should be submitted online at <https://romanpub.com/smcs-online-submission.php> or by email.

MANUSCRIPT TRACKING

The author can track the progress of the submitted manuscript by email.

MANUSCRIPT REVISION

The corresponding author will receive an email once reviewers submit the comments to SMCS. The editor will check the comments and forward the manuscript to the author with or without further comments. The authors have to submit the revised manuscript within 4 weeks. If more time is needed, then he/she must get approval from the editor. The Editor-in-Chief will make the final decision for each manuscript.

AUTHORSHIP AND ACKNOWLEDGEMENT

Authorship

For the technical knowledge conveyed in a manuscript, all writers are accountable. For this reason, before completing the consent and declaration form, all authors must read and approve the final manuscript. All listed authors must have actively participated in the ideation, design, data analysis, and interpretation, as well as in the writing of the manuscript. They must also have critically examined the manuscript's content and approved the final version before it was submitted for publication. Authorship cannot be justified by participation in a project's procurement of financing or data collecting alone.

The corresponding author must ensure that all authors of the manuscript are properly recognized and acknowledged for their contributions to the article at the moment of submission. This is an essential step that warrants the integrity and transparency of the publication process. Any failure to provide the necessary acknowledgements may lead to the rejection of the article, or worse, damage the professional reputation of the authors. Therefore, it is highly recommended to carefully review and double-check all the acknowledgements before submitting the article. Authorless contributors should be acknowledged in the Acknowledgements section.

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