GUIDE FOR AUTHORS

About the journal

The Journal of the Ethiopian Society of Chemical Engineers (ESChE) is a fully open-access publication established in 1995 by the Ethiopian Society of Chemical Engineers. Since its inception, it has published annual research outputs in the fields of chemical engineering science, food processing technology, process engineering, biochemical engineering, food engineering, cleaner production, and related areas.

Aims and scope

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The journal publishes original research articles, technical notes, case studies and discussions in (but not limited to) the following areas:

1. **Chemical & Process Engineering**
    - Catalysis and Reactor Technology
    - Process intensification and design
    - Separation and purification technologies
    - Thermal process engineering
2. **Sustainable Energy & Environment**
    - Renewable energy (bioenergy, solar, geothermal, etc.)
    - Waste-to-energy and circular economy solutions
    - Environmental pollution control and remediation
    - LCA and environmental impact assessment
    - Climate change and sustainable development
3. **Biochemical & Food Engineering**
    - Bioprocess engineering and biotechnology
    - Fermentation and enzyme technology
    - Food process engineering and safety
    - Food packaging applications
4. **Material science & Nanotechnology**
    - Advanced materials, polymers, and composites
    - Nanomaterials and nanostructured systems
    - Membrane technology and functional coatings
5. **Water & Waste Management**
    - Industrial and municipal wastewater treatment
    - Solid waste management and valorization
    - Resource recovery and recycling technologies
6. **Industrial Applications & Technology Transfer**
    - Process optimization, control and scale-up
    - Energy auditing and process integration
    - Chemical industries in Ethiopia
    - University-industry collaboration and innovation

7. **Computational & Systems Engineering**
    - Process modelling, CFD and Aspen simulation, and optimization
    - Data-driven chemical engineering and AI applications
    - Process safety, risk assessment, and control systems

Manuscript Preparation Guidelines

- Save files in an editable format, using the extension .doc/.docx for Word files. A PDF is not an acceptable source file.
- Lay out text in a single-column format.
- Use double space between lines.

Title

The title should be Concise and informative. Titles are often used in information-retrieval systems. Should be carefully selected. Not too long and not too short. Shouldn't contain jargon words or acronyms.

You should ask yourself the following questions before framing your title:

- Does the current title capture what you have done in your draft chapters?
- Does it define exactly the central research question which you have answered?
- Does it avoid drawing attention to any gaps or deficiencies in your research?
- Does your title's vocabulary include the main theoretical concepts or innovations, or themes that run through your research, which are used in the chapter texts and do an important job of work there?
- Does the title make clear the empirical referents of your research, and the necessary limitations you have set for its scope and approach?

Author names

Provide the given name(s) and family name(s) of each author. The order of authors should match the order in the submission system. Carefully check that all names are accurately spelt.

Affiliations

Add affiliation addresses, referring to where the work was carried out, below the author names. Indicate affiliations using a lower-case superscript letter immediately after the author's name and in front of the corresponding address. Ensure that you provide the full postal address of each affiliation, including the country name and, if available, the email address of each author.

Corresponding author

Indicate who will handle correspondence for your article at all stages of the refereeing and publication process, and also post-publication. This responsibility includes answering any

future queries about your results, data, methodology and materials. The email address and contact details of your corresponding author must be kept up to date during the submission and publication process.

Abstract

The abstract should not contain more than 150-300 words. It should be informative, concisely stating the subject and giving a clear indication of the nature and range of the results contained in the paper. Basically, it should contain the whole and the core of the work.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of"). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Numbering sections

Divide your paper into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its separate line.

Introduction

The introduction should clearly define the nature of the problem being considered. Reference should be made to previously published pertinent papers, accenting the major original contributions. Answer the question: “What is the gap that needs to be filled?” and/or “What is the problem that needs to be solved?” What are the scientific and/or technical changes that need to be addressed? State the problem early in a paragraph. Limit the variables you address in stating your problem or question. Consider framing the problem as a question.

Material and methods

Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

Theory/calculation

A Theory section should extend, not repeat, the background to the thesis already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

Results

Results should be clear and concise. It should be compared with existing literature. Moreover, it should be justified with established scientific theories.

Discussion

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions

The main conclusions of the study should be presented in a short Conclusions section.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly, for tables and figures: Table A.1; Fig. A.1, etc.

Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the thesis. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the manuscript.

Math formulae

Please use math equations as editable text with equation editor such as MathType and Office Equation Editor, and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the thesis. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the thesis.

Tables

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the thesis, or on separate page(s) at the end. Number tables consecutively following their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the thesis. Please avoid using vertical rules.

Figure and its captions

Use high high-quality figure or image. Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. Ensure that each illustration has a caption. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum, but explain all symbols and abbreviations used.

References

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list, they should follow the standard reference style of the references (Chicago, APA, Vancouver, etc.) and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references

As a minimum, the full URL (universal resource locator) should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Reference management software

Use the most popular reference management software products. These include all products that support Citation Style Language styles (http://citationstyles.org), such as:

- Mendeley (http://www.mendeley.com/features/reference-manager)

- EndNote (http://endnote.com/downloads/styles).

Using the word processor plug-ins from these products, authors only need to select the appropriate reference template when preparing their thesis, after which citations and bibliographies will be automatically formatted in the references style.