



# CHEMICAL ENGINEERING JOURNAL

An International Journal of Research and Development

## AUTHOR INFORMATION PACK

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### DESCRIPTION

The *Chemical Engineering Journal* focuses upon three aspects of **chemical engineering**: chemical reaction engineering, environmental chemical engineering, and materials synthesis and processing.

The *Chemical Engineering Journal* is an international research journal and invites contributions of original and novel fundamental research. The journal aims to provide an international forum for the presentation of original fundamental research, interpretative reviews and discussion of new developments in **chemical engineering**. Papers which describe novel theory and its application to practice are welcome, as are those which illustrate the transfer of techniques from other disciplines. Reports of carefully executed experimental work, which is soundly interpreted are also welcome. The overall focus is on original and rigorous research results which have generic significance.

Within the *Chemical Engineering Journal*, the **Environmental Chemical Engineering** section presents papers dealing with topics in environmental chemical and process engineering. Treatment and environmental separation processes, pollution control and resources recovery, environmental bioprocesses, bioenergy, environmental nanotechnology, clean process technology and waste minimization include the topics which are covered. Papers in which knowledge from other disciplines is integrated with chemical engineering are especially welcome.

Within the *Chemical Engineering Journal*, the **Chemical Reaction Engineering** section presents papers on a wide range of topics including reaction kinetics, applied catalysis, simulation and optimization of different types of reactors, unsteady-state reactors, multiphase reactors, and process intensification including fundamental investigations of the processes of heat, mass and momentum transfer that take place along with chemical reactions. Innovative research works addressing critical areas of **reactor engineering** (e.g. catalysis, novel reactor designs and materials, reactor safety and environmental issues), and emerging reactor technologies (e.g. membrane reactors, chromatographic reactors, unconventional fluidized beds, electrochemical reactors, micro-reactors, photoreactors, fuel-cells, enzymatic reactors, etc.) are particularly welcome. Submissions based entirely on e.g. synthesis and characterisation of novel catalytic material, numerical simulations with commercial CFD codes without novel experimental validation; theoretical mathematics, combustion in the context of energy conversion, or straightforward bioreactor applications (bacteria or animal cells) are highly discouraged, as they will find better fit in other existent journals.

Within the *Chemical Engineering Journal*, the **Novel Materials for Energy and Advanced Applications** section presents papers dealing with different aspects of the preparation and characterization of advanced materials designed for specific applications. This section represents

the evolution of the highly successful Materials Synthesis and Processing section whose scope has been redefined to emphasize the design and application of materials in a number of fields, with energy (harvesting, storage, utilization) occupying a prominent but not exclusive role; manuscripts demonstrating applications of novel materials across multiple fields are welcomed. Manuscripts describing novel methods of synthesis as well as the processes used to obtain materials with different morphologies and/or modify the surface and structural properties of those materials will be considered provided the manuscript is written from a chemical engineering point of view. Manuscripts dealing with micro- and nano-structured materials and/or describing the preparation of composite and hybrid materials with advanced properties are particularly welcome. Given the applied character of the CEJ, we will consider manuscripts where specific applications are demonstrated for the materials synthesized.

Comments and Proposals: We are interested in receiving comments/feedback on this and our other journals and welcome publication proposals for books, electronic products, new journals and co-operation for existing journals.

## AUDIENCE

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Chemical and Process Engineers, Applied Chemists and Product Engineers, Biochemical Engineers and Biotechnologists.

## IMPACT FACTOR

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2016: 6.216 © Thomson Reuters Journal Citation Reports 2017

## ABSTRACTING AND INDEXING

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BIOSEP Bulletin  
BIOSIS  
Cambridge Scientific Abstracts  
Chemical Abstracts  
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## GUIDE FOR AUTHORS

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*Environmental Chemical Engineering:*

**Stephen Allen:** Adsorption (liquid and gas); Ion exchange; Water treatment (physico/chemical methods); Air/gas treatment, NO<sub>x</sub> control, CO<sub>2</sub> capture; Constructed wetlands and reed beds for water treatment; Agricultural wastes (liquid and solid); Solid waste treatment and bioconversion; Sustainable development or processes

**Dionysios (Dion) Dionysiou:** Advanced oxidation processes/technologies (AOPs/AOTs); Photocatalysis; Environmental catalysis ; Environmental nanotechnology; Membranes processes; Electrooxidation, electrochemical methods ; Particle separation; Separation processes

**Tejraj Aminabhavi (Bhavi):** Emerging pollutant separation and waste minimization via membrane processes; Membrane bioreactors for environmental pollution abatement; Toxic metal separation and recovery; Acid/flue gas separation; Fuel cell membranes of environmental concern

*Chemical Reaction Engineering:*

**King Yeung:** heterogeneous catalysis (including enzyme), hybrid and miniature reactors, green and fine chemistry

**Guy B. Marin:** kinetics; heterogeneous catalysis; petrochemistry, polymer, reactor design and modeling, reactor scale-up, crude oil refining, natural gas valorization

*Materials Synthesis and Processing:*

**Jesus Santamaria:** materials synthesis processes; shaping processes; micro- and nanostructured materials; hybrid materials; surface modifications

### *Types of papers*

**The editors make every effort to ensure that manuscripts are fairly and independently reviewed. Submissions which describe novel theory and its application to practice are welcome, as are those which illustrate the transfer of techniques from other disciplines. Reports of carefully executed experimental work which is soundly interpreted are also welcome. Manuscripts of routine studies, however, presenting experimental data but without any significant new interpretation or novelty, or that are very specific and applied in their scope, will be rejected by the editors as "lacking in novel content".**

*Original papers* - these should be complete and authoritative accounts of work, which has a special significance and must be presented clearly and concisely.

*Review articles* - these will normally be commissioned by one of the Co-Editors. Prospective authors of a review article should consult with either Editor to check the suitability of their topic and material before submitting their review.

*Short communications* - will be accepted for the early communication of important and original advances. Such accounts may be of a preliminary nature but should always be complete and should not exceed the equivalent of 3000 words, including figures and tables.

*Letters to Editors* - raise scientific or technical questions about a published article. They are typically no longer than 1000 words. These letters will be considered for publication only if they contribute an added value or special consideration to a specific article that has already published in the *Chemical Engineering Journal*. Letters-to-the-Editor should be submitted directly to the appropriate Editor by

e-mail. Publication and/or peer review of submitted letters will occur solely at the Editors discretion. It should be noted that authors of the original research article will be given the opportunity to publicly respond to any Letter-to-the-Editor should it be accepted for publication.

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- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

*Graphical Abstracts / Highlights files* (where applicable)

*Supplemental files* (where applicable)

Further considerations

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- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

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Divide your article 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 own separate line.

#### *Introduction*

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

#### *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.

#### *Results*

Results should be clear and concise.

#### *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 may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.



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Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. 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 article.

## Acknowledgements

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

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[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

Reference to a dataset:

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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