



an Open Access Journal by MDPI

## Chemical Kinetics and Computational Fluid Dynamics Applied to Chemical Reactors Analysis and Design

Guest Editors:

**Prof. Dr. Luis M. Gandía**

Sciences Department, Institute for Advanced Materials and Mathematics, Public University of Navarre, Campus de Arrosadia, Edificio de los Acebos, 31006 Pamplona, Spain

**Dr. Fernando Bimbela**

Grupo de Reactores Químicos y Procesos para la Valorización de Recursos Renovables, Institute for Advanced Materials and Mathematics (INAMAT2), Universidad Pública de Navarra, Pamplona, Spain

Deadline for manuscript submissions:

**closed (16 June 2018)**

### Message from the Guest Editors

Dear Colleagues,

Continued progress in computing hardware and software are markedly affecting the approaches adopted to chemical processes equipment analysis and design. Particularly, Computational Fluid Dynamics (CFD) is becoming an increasingly used tool in many fields within Chemical Engineering. Chemical reactors are one of the exemplifying cases of the sorts of equipment benefitted by the abovementioned progress, the design of which may be notably improved by the use of CFD. CFD modeling allows a complete description of the phenomena governing reactor performance, thus, giving rise to an unprecedented powerful tool to guide design and scale-up. This Special Issue aims at compiling relevant contributions showing the capabilities of CFD applied to the analysis and design of any type of chemical reactor. Manuscripts in which the modeling results are validated by experimental evidence are particularly welcome.

Prof. Dr. Luis M. Gandía

Dr. Fernando Bimbela

*Guest Editors*



[mdpi.com/si/9177](https://mdpi.com/si/9177)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Mario J. Muñoz  
Batista**

Department of Chemical  
Engineering, Faculty of Sciences,  
University of Granada, Avda.  
Fuentenueva, s/n, 18071  
Granada, Spain

## Message from the Editor-in-Chief

*ChemEngineering* is to consolidate its position as a high-quality, open access journal that not only disseminates excellent research but also sets the agenda for future directions in chemical engineering. We will continue to highlight core areas such as catalysis, process intensification, and the circular economy, while also opening the door to emerging topics such as multi-energy systems that integrate light, heat, and electricity, etc., as well as digital tools, modelling, and artificial intelligence applied to chemical engineering.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [ESCI \(Web of Science\)](#), [Inspec](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Engineering, Chemical) / CiteScore - Q1 (General Engineering)

## Contact Us

---

ChemEngineering Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/ChemEngineering](http://mdpi.com/journal/ChemEngineering)  
[chemengineering@mdpi.com](mailto:chemengineering@mdpi.com)