Special Issue

Industrial Chemistry Reactions: Kinetics, Mass Transfer and Industrial Reactor Design

Message from the Guest Editors

It is well known that many chemical reactions are of great interest for industrial processes and must be conducted on a large-scale in order to get needed information in thermodynamics, kinetics, and transport phenomena related to mass, energy, and momentum. For a reliable industrial-scale reactor design, all this information must be employed in appropriate equations and mathematical models that allow for accurate and reliable simulations for the purposes of scaling up. The aim of this proposed Special Issue is to collect worldwide contributions from experts in the field of industrial reactor design based on kinetic and mass-transfer studies. The following areas/sections will be covered by the call for original papers:

- Kinetic studies for complex reaction schemes (multiphase systems)
- Kinetics and mass transfer in multifunctional reactors
- Reactions in mass-transfer dominated regime (fluid-solid and intraparticle diffusive limitations)
- Kinetics and mass-transfer modeling with alternative approaches (ex. stochastic modeling)
- Pilot plant and industrial size reactors simulation and scale-up based on kinetic studies (lab-to-plant approach)

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2021)

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Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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