Special Issue

Catalytic Reactions and Development of (Bio)Chemical Processes for Synthesizing Value Added Compounds

Message from the Guest Editors

This Special Issue of ChemEngineering will aim the publications regarding the process development principles, both at industrial and laboratory scales. Manuscripts emphasizing highly active catalyst preparation and testing, process design, modelling. optimization and their economic efficiency assessment, with the end goal of producing value-added (bio)chemical products, will be welcome. In order to produce value-added chemical and biochemical products, an increasing number of processes, involving both homogeneous and heterogeneous catalytic materials, are proposed nowadays in different engineering fields. Manufacturing a catalyst with good activity and selectivity for a specific product plays a crucial role in increasing the economic efficiency of a process, whereas this step requires developing appropriate operating conditions for catalyst synthesis with a strong correlation between these aspects and the chemical structure of the catalyst. Given the global environmental requirements, a special emphasis should be conferred on the use of renewable raw materials as well as the minimization of waste in the proposed alternatives.

Guest Editors

Dr. Ionut Banu

Department of Chemical and Biochemical Engineering, Polytechnic University of Bucharest, Bucharest, Romania

Prof. Dr. Costin Sorin Bîldea

Department of Chemical and Biochemical Engineering, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, Str. Gh. Polizu 1-7, 011061 Bucharest, Romania

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ChemEngineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
chemengineering@mdpi.com

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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

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