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Emergent Materials and Strategies for Catalytic Glycerol Transformation with Low Energy Input

Guest Editors:

Dr. Vicente Montes
Department of Chemical Engineering and Physical Chemistry, University of Extremadura, 06006 Badajoz, Spain

Dr. Jesús Hidalgo-Carrillo
Organic Chemistry Department, University of Cordoba, Campus de Excelencia Internacional Agroalimentario (ceiA3), Campus de Rabanales, Marie Curie Building, E-14014 Cordoba, Spain

Deadline for manuscript submissions:
closed (30 September 2021)

Message from the Guest Editors

Glycerol is the main by-product of biodiesel, and therefore it will be generated in tremendous amounts, with the real possibility of market saturation. Glycerol transformation in other products has been extensively investigated since the 1990s. Some of these technologies require a large energy input, which might prevent/hinder their industrial implementation. As an alternative, photoconversion uses direct light as energy input to produce and accelerate chemicals reactions. However, the current typical yields achieved through photochemical process are lower than those achieved with conventional thermochemical processes, necessitating research in this field. This Special Issue focuses on significant advances in heterogeneous catalysts for glycerol photoconversion or new photocatalytic routes for glycerol transformation.

The aim of this Special Issue is to cover the research trends in catalysts for the photoconversion of glycerol. Full papers, short communications, and reviews in this field are welcome. Mini-reviews with an overview on the state of the art with the future perspectives and trends will also be considered.