

Special Issue

Catalytic Pyrolysis of Biomass and Waste, 2nd Edition

Message from the Guest Editors

The need to reduce the current dependence on fossil fuels has promoted the development of alternative sources for the production of fuels and chemicals. The valorization of biomass and waste is gaining increasing attention. Pyrolysis is an efficient and eco-friendly process that makes it possible to produce fuels and chemicals from biomass and waste. A wide range of catalysts have been proposed in the literature for biomass and waste valorization. Thus, the use of cracking catalysts—mainly of acid nature—represents a suitable option for the production of fuels and valuable chemicals such as BTX or light olefins. More recently, hydrogen production by combining pyrolysis and in-line catalytic steam reforming over metallic catalysts has demonstrated great potential. From a technical point of view, different strategies have also been proposed as the use of the catalyst in a single step (in situ catalytic pyrolysis) or in two-step processes (thermal pyrolysis and the in-line catalytic transformation of pyrolysis volatiles). Therefore, this Special Issue aims to gather the most novel and relevant catalytic pyrolysis studies of different types of biomass and solid waste.

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