



Microwave-Assisted Catalysis

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Message from the Guest Editors

Compared to conventional heating, microwave radiation: (I) has a better energy balance, (II) provides a possibility of heating the material itself, not the tank in which it is located, (III) reaches the desired temperature faster, (IV) increases reaction rate and improves its efficiency, (V) ensures even temperature distribution in biomass, (VI) provides a better control of reaction temperature, as the heating process can be stopped immediately. Effective microwave heating is the main reason for using this technique in the thermochemical conversion of biomass to biofuels. Due to its properties, microwave radiation is increasingly used in catalytic processes and organic compound conversions.

The *Catalysts* Special Issue entitled "Microwave-Assisted Catalysis" includes original research papers and reviews that cover the latest developments in the use of microwave radiation in lignocellulosic biomass decomposition, the conversion of organic compounds, and catalysis using acid/basic and metallic catalysts. The Special Issue also features articles on the industrial use of microwave generators and the construction of microwave catalysis reactors.

