



Biomass Conversion to Biofuels

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Message from the Guest Editor

Bioconversion of biomass to useful materials is strongly recommended under global warming, but is still inefficient and costly, especially for cellulosic biomass. The worldwide demand for biofuels is growing rapidly, and technological development for producing biofuels efficiently and at low cost from various types of biomass is an urgent issue. Thus, the development of new technologies and the creation of basic knowledge for “Biomass Conversion to Fuels” are indispensable and will contribute to the transition to a sustainable development society.

This topic includes basic to applied researches relating to “Biomass Conversion to Fuels”; for example, treatment of biomass materials, enzymatic hydrolysis of polysaccharides, efficient fermentation by newly isolated microbes, enhancement of microbial stress tolerance including heat resistance, mechanism of stress tolerance, metabolic engineering, synthetic biology, consolidated fermentation, high temperature fermentation, and combination with downstream processes.

