



Chemical and Biochemical Processes for Utilization of Renewable Energy Sources

Guest Editor:

Prof. Dr. Venko N. Beschkov

Institute of Chemical
Engineering, Bulgarian Academy
of Sciences, Acad. G. Bonchev
Str., Bl. 103, 1113 Sofia, Bulgaria

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Message from the Guest Editor

This Special Issue considers various approaches and technologies for a circular economy either by renewable energy production or recycling waste (household or industrial) for the needs of energy demand. Such technologies are biofuel production (biogas, bioethanol, biodiesel, and higher alcohols), hydrogen energy, fuel cell applications with various reductors serving as fuel, and waste recycling to obtain energy sources—pyrolysis to produce synthesis gas, as well as carbon dioxide recycling to obtain fuels (carbon monoxide, methanol, and methane) and chemicals.

The chemical methods involved in these energy productions are catalysis and electrochemistry, being compatible and complementary as technology and a final goal. Energy storage in batteries, or as hydrogen in adsorbents, is also a topic in this Issue.

Biofuels are produced by biotechnologies, mainly being used as feedstock for other chemical applications, besides being directly used as fuels. Articles for advanced biotechnologies in this field are welcome.

Integrated technologies for energy production and waste recycling for energy and secondary feedstocks are welcome too.





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Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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