

Special Issue on
Valorization of Biomass in Arid/Semiarid Regions

CALL FOR PAPERS

Arid and semiarid regions are defined by their water scarcity. Biomass availability in these regions is limited due to the water scarcity. Consequently, limited amount of forestry is found in addition to limited amount of agricultural activities compared with not arid regions. Biomass residues available in arid/semiarid regions may be derived from Palm trees related activities (as the in the MENA region), fisheries and marine capture-farming-processing in coastal arid/semiarid areas, and the organic fraction of municipal solid waste. The regions still process these biomasses and this is often associated with high cost. The biorefinery of such biomass residues can produce valuable products, for example, activated carbon, organic acids, and biogas that can contribute to the economy of the arid regions. However, special attention needs to be considered when using such biomasses in arid and semiarid regions.

The special issue focuses on biomass residues available in arid/semiarid regions like palm trees residues, organic fraction of municipal solid waste, and seawater biomass based residues. The special issue will describe and discuss the availability of these biomasses, their conversion to value chemicals, fuel, fertilizer using chemical, and biochemical process in addition to thermal processes. Concept using salty-water, for example, seawater, in the biomass processing instead of fresh water will be described in order to decrease the use of fresh water.

Potential topics include but are not limited to the following:

- Availability and characterization of biomasses in arid and semiarid regions
- Valorization of biomasses from arid and semiarid regions
- Economic and technological evaluation of biorefineries in arid and semiarid regions
- Production of biofuels in arid and semiarid regions
- Water, food, and energy nexus challenges in arid and semiarid regions
- Biotechnological approaches to enhance plant biomass and productivity in arid/semiarid Regions

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/biotechnology/vbasr/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Jens E. Schmidt, Masdar Institute, Abu Dhabi, UAE
jschmidt@masdar.ac.ae

Guest Editors

Juan-Rodrigo Bastidas-Oyanedel, Masdar Institute, Abu Dhabi, UAE
jbastidas@masdar.ac.ae

Mette Hedegaard Thomsen, Aalborg University of Denmark, Esbjerg, Denmark
mht@et.aau.dk

Iwona Cybulska, Université Catholique de Louvain, Louvain-la-Neuve, Belgium
iwona.cybulska@uclouvain.be

Irini Angelidaki, Technical University of Denmark, Copenhagen, Denmark
iria@env.dtu.dk

Pablo D. De María, RWTH Aachen University, Aachen, Germany
dominguez@itmc.rwth-aachen.de

Submission Deadline

Friday, 28 July 2017

Publication Date

December 2017