



Editorial Note on Biomass Technology

Arthur Ragauskas*

Department of Engineering, Georgia Institute of Technology, Georgia

Biomass refraction has gained widespread attention because of its edges as a standalone method to enhance biomass properties to be at par or the same as those for coal in electricity generation or as a pretreatment step before transformation and chemical action processes. It's conjointly found application in alternative processes like production wherever it's getting to replace coal or work aboard coal by co-firing the coal with biomass at sure proportions. There are loads of papers on biomass torrefaction review, however this paper tried to appear at a unique angle to indicate alternative aspects of torrefaction and the way it links to alternative technologies similarly because the chemistry behind it. Overall, the method has seen a giant shift within the technology it utilizes, and also the hope is that it'll build the method a lot of viable and applicable in future.

The focus starts from the raw biomass, however it's analyzed and also the completely different analysis that area unit performed to work out relevant info concerning biomass properties. There area unit completely different reactors that area unit used however so far there's not a most well-liked one as they need their execs and cons. However, the main target principally is that the method not that reactor to use as they need all not shown any important variations. The most product of the method, torrefied biomass determines the potency and the way it will be applied to alternative technologies. To date, biomass torrefaction is for co-firing with coal for energy generation and as a pretreatment step for transformation and chemical action. because of varied sorts of biomass in several countries, the technology has not nevertheless reached its full potential, however the hope is it'll with incorporate use of renewable sources of energy. As a result of this, the biomass desires a pretreatment method therefore on improve its properties before it will be used at the side of or as a replacement for coal. Torrefaction,

a thermochemical method, is considered an easy and effective methodology to remodel the biomass properties to become virtually at par with those of coal. Investigation of co-firing of coal and torrefied biomass for energy production was 1st started at the Energy Centre of Holland (ECN) and resulted during a very thorough ECN report on the subject in 2005. This report has since been cited by several authors so far. Derived from plants or animals area unit classified as biomass. In plants, biomass is created through conversion of carbonic acid gas within the atmosphere into carbohydrates within the presence of the sun's energy. Biological species can then grow by overwhelming these biological science or alternative biological species adding to the biomass chain. These sources area unit detailed a lot of in Basu (2018b). Virgin biomass includes vegetables and crops, leaves, plants, and wood while waste biomass includes municipal solid and liquid waste, sewage, animal, and human wastes and agricultural wastes. Municipal solid waste provides an outsized share of waste biomass, the maximum amount of it comes from renewables like leaves, papers, grass, clippings, organics and food residue (like fruits, rice etc.). sewerage sludge is taken into account a vital biomass supply as a result of it contains fat, waste matter and grease and another waste is made in sawmills throughout the assembly of lumber from wood. Biomass has extractible and non-extractible parts. The extractible parts embrace fats, waxes, alkaloids, proteins, phenolics, easy sugars, pectins, gums, resins, terpenes, starches, glycosides, sapomins and essential oils. Due to that, it doesn't have an effect on the organic phenomenon once it's collected and used for production of biochar, bio-oil or biogas. Plant biomass features a major half called lignocellulose, consisting of 3 main compound components: hemicellulose, cellulose, and polymer and it's typically termed lignocellulose-based biomass. In general, lignocellulose-based biomass is wide used for renewable energy applications.

***Corresponding author:** Arthur Ragauskas, Department of Engineering, Georgia Institute of Technology, Georgia, Tel: 439685721469; E-mail: arthurragaaukas@gmail.com

Received December 01, 2021; **Accepted** December 06, 2021; **Published** December 10, 2021

Citation: Ragauskas A (2021) Editorial Note on Biomass Technology. *Innov Ener Res*, 10: 259.

Copyright: © 2021 Ragauskas A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.