

Biomass Based Products (Biochemicals, Biofuels, Activated Carbon)

Description:

Biomass use is growing globally. Biomass is biological material derived from living, or recently living organisms. It most often refers to plants or plant-based materials which are specifically called lignocellulosic biomass. Biomass (organic matter that can be converted into energy) may include food crops, crops for energy, crop residues, wood waste and by-products, and animal manure. It is one of the most plentiful and well-utilized sources of renewable energy in the world. Broadly speaking, it is organic material produced by the photosynthesis of light. The chemical materials (organic compounds of carbons) are stored and can then be used to generate energy. The most common biomass used for energy is wood from trees. Wood has been used by humans for producing energy for heating and cooking for a very long time.

As an energy source, biomass can either be used directly via combustion to produce heat, or indirectly after converting it to various forms of biofuel. Conversion of biomass to biofuel can be achieved by different methods which are broadly classified into: thermal, chemical, and biochemical methods. Biomass gasification is the conversion of solid fuels like wood and agricultural residues into a combustible gas mixture. The gasification system basically consists of a gasifier unit, a purification system and energy converters- burner or engine.

This book offers comprehensive coverage of the design and analysis of biomass gasification, the key technology enabling the production of biofuels from all viable sources like sugar beet and sweet sorghum. It aims at creating an understanding of the nature of biomass resources for energy and fuels, the variety of processes that are available for conversion of the wastes into energy or fuels. The book discusses the overview of the Biomass Energy along with their Properties, Composition, Benefits, Characteristics and Manufacturing Process of Biomass based products. Also it contains suppliers contact details of plant & machinery with their photographs.

For more details download PDF file.

Keywords: Activated Carbon from biomass, Activated Carbon from Waste Biomass, Applications of biomass gasification, Best small and cottage scale industries, Bio-based Products from Biomass, Bio-briquette Manufacturing Process, Biochemical Conversion of Biomass, Biochemical conversion process, Biochemicals from biomass, Bioenergy (Biofuels and Biomass), Bioenergy Conversion Technologies, Bioenergy: biofuel production chains, Biofuel and other biomass based products, Biofuel briquettes from biomass, Biofuel

Created At: 04 Nov, 2017