

Subject: PG Elective course for Environmental Science/biological science/chemistry/Agriculture

Course: Biomass characterization

Development Team

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Module Title :15. Biomass characterization (Tools)

Id: BC/OMSM/15

Objectives: To study the principle, components and working method of some instruments used for analysing the properties of biomass.

Key words: Biomass properties, oven; Muffle furnace; spectrophotometer; Atomic absorption spectrophotometer; Bomb calorimeter; Elemental analyzer; Organic carbon analyzer.

Outcome:At the end of the modules, learner come to know how to analyse the certain characteristics of biomass using the instruments such as hot air oven, Muffle furnace, various types of UV/Vis spectrophotometer, Infrared spectrophotometer, Fluorescence spectrophotometer, Atomic absorption spectrophotometer, Bomb calorimeter, Elemental analyzer and Organic carbon analyzer.

In this module, we are going to discuss in detail about various tools and techniques(Instruments) that are involved for characterizing the properties of the biomass.