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

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Module Title : 13. Algal Biomass Processing for bioprospecting

Id : AB/ABPB/13

Pre-requite: Bioprospecting, Micro and macroalgae, Bioactive compounds.

Objectives: To study the algae biomass high values pigments and compounds; and its commercial applications.

Key words: Algal biomass; biorefinary; hydrocolloids; pigments; phycobilins; astaxanthin, fucoxanthin; Fatty acids.

Outcome: At the end of the module, learners would get information about algal biomass potential as not only for energy conversion but also for extracting hydrocolloids and high values pigments and compounds through biorefinary ways.

13.1 Introduction

Algal biomass can be generated by cultivation following different methods which we discussed in the previous module in detail. After harvesting, the algal biomass can be processed not only for energy but for extracting high value compounds, pigments, bioactives and polymers. The harvested biomass are processed either by dry or wet form depending on the end