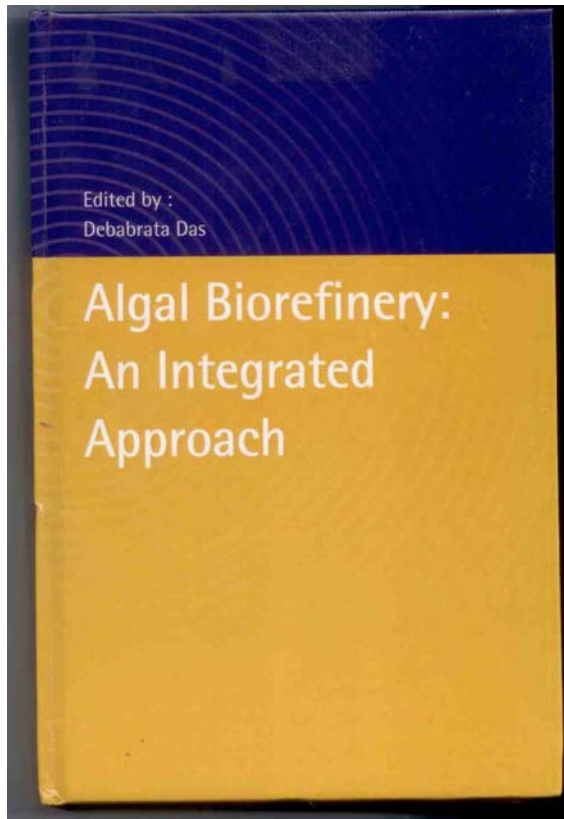


Algal Biorefinery: An Integrated Approach

Editor	Debabrata Das
Publisher	Capital Publishing Company, New Delhi and Springer, Switzerland
Year	2015



For realizing the commercial potential of algal biorefinery concept has been envisioned that help to extract maximum benefits out of biomass. A refinery concept promotes harvest multiple products from the feedstock so as to make the process economically attractive. For last few decades, algal biomass has been explored for various products such as fuel, agricultural crops, pigments, pharmaceuticals, bioremediation etc. To meet the huge demand of algal biomass, a greater emphasis has been given on large scale production of biomass in closed or open photobioreactors. Different nutritional conditions for algal growth have been explored like photoautotrophic, heterotrophic, mixotrophic, oleaginous. The present book covers and discusses different aspects of algal production systems and several drawbacks related to microalgal biorefinery production viz. low biomass yield, energy consumption, harvesting, dewatering, drying and extraction process. These provide a background of the state-of-the-art technologies towards algal cultivation, carbon dioxide sequestration, and large scale application of algal cultivation systems.