



International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.10 No.6, pp 152-157,2017

Experimentation in procuring and characterizing Biofuel Obtained from Micro Algae from Sewage Treatment Plant and Municipal Waste

Mainak Mukherjee¹, Debajyoti Bose^{1*}, Haroon Salam T A²

¹Department of Electrical Power & Energy, University of Petroleum & Energy Studies, Dehradun, India

²Energy Technologies and IPR, Department of Electrical Power & Energy, University of Petroleum & Energy Studies, Dehradun, India

Abstract:Concerns over energy shortage and environmental influence have led to improvements in renewable energy sources. Microalgae are potential energy carriers. Their biomass productivity is 5-30 times higher than other biomass. Algae exploit various nutrients present in wastewater such as local municipal wastes, diary, food processing industry, textile industry, pharmaceutical industry which are opulent in nutrients namely, nitrogen and phosphorus, and produce energy rich biomass. Additionally, they utilize CO_2 for photosynthesis and thereby contribute to CO_2 redressal. This work represents a review of the availability of wastewaters as per different sectors. The quantity of nutrients within the easy reach of micro algae for their growth is reviewed for different sources. In the end, the economy generation from this process of, treating waste water and production of biofuel, is computed.

Keywords: Alternate Fuels, Microalgae, Renewable Energy, Wastewater, Algal biomass.

Debajyoti Bose *et al*/International Journal of ChemTech Research, 2017,10(6): 152-157.
