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

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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 CO₂ for photosynthesis and thereby contribute to CO₂ 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.


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