Alternative of Renewable Energy Resources Microbial Fuel Cells

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Demand for energy is increasing in economically and socially developing societies with higher living standards. Unfortunately higher energy demand is comes with pollution and waste output. At the present time a great proportion of energy requirement is being provided by fossil fuels. These fuels can be counted as a major cause of pollution. Scientific study indicates that reserves for fossil fuels are limited and they are likely to run out in the near future. This forced scientists to look into alternative means of energy sources. In spite of the increasing interest in renewable energy there is yet long ways to go to improve the energy generation technology. Microbial Fuel Cell (MFC) technology, involving generation of electric energy from organic matter has a promising future. The MFCs produce electricity by using the work done during metabolic activities of the microorganisms. In the MFC studies so far performed only monotype microorganisms have been benefited from. This in turn suggests that additional efficiency from different microorganisms acting together has been disregarded. Therefore the subject of this study is to produce environmental friendly, inexpensive and renewable electric energy by microbial fuel cells whereby mix algae culture from Chlorophyte and Cyanobacteria. In the study a microbial fuel cell was prepared and an experiment was done with the mixed algae culture and 0,5978 Volts of electric energy was produced. The study suggests that higher voltage for longer periods can be generated and higher efficiency can be achieved by using multiple fuels cells as a battery.

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