

ABSTRACT

Alkaline water is alkaline water that has a pH of more than 7, where the benefits generated are based on the results of existing research, which is when consuming water, one of which is to facilitate the digestive system. The constraints for this water producer are the high cost of making alkaline water and the absence of utilizing solar energy as its power supply. Considering the use of renewable energy which is growing at this time, therefore the authors conducted a study of making alkaline water with a power supply system using a cell solar.

Components that will be used in this final project include solar cell stabilized into 12V as a voltage source inverter and rectifier, electrolytic vessel, pH sensor, voltage sensor that is connected with a microcontroller and relay to switch to a 12 V battery that will be connected to a solar cell. The results of this final project produce a pH of 8-9 water, 6,586 Watt power with a current of 28.89mA and an output voltage of 227.85V using solar energy.

Keywords: *Power Supply, Sollar cell, Alkaline Water, pH*