

عنوان مقاله:

Water Purification by Solar Powered Electrocoagulation System

محل انتشار:

فصلنامه انرژی و محیط زیست ایران, دوره 8, شماره 3 (سال: 1396)

تعداد صفحات اصل مقاله: 6

نویسنده:

N Patcharaprakiti - Department of Electrical Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna Chiang Rai, Thailand

خلاصه مقاله:

This paper demonstrates technique of water purification using electro-coagulation method. This system is composed of DC electric source 200 V 30 A connect to the anode and cathode terminals. The DC power supply can be received from utility or solar energy. The sample of raw water from reservoir is used to conduct experimental reaction with electrocoagulation system in order to improve water quality. The water purification experimental was implemented by batch processing with varying electrolysis time. The parameter of electro-coagulation and water quality parameters are collected such as electric voltage, electric current, water temperature, pH, dissolved oxygen (DO), total dissolved solid (TDS) and electro-conductivity. The result found that the water quality has improved with the standard of domestic water supply and also drinking water standard

کلمات کلیدی:

,Water purification,Electro-coagulation,Photovoltaic system

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/794401

