An Exploitation of Electrical Sensors in Monitoring Pool Chlorination

Authors : Fahad Alamoudi, Yaser Miaji

Abstract : The growing popularity of swimming pools and other activities in the water for sport, fitness, therapy or just enjoyable relaxation have led to the increased use of swimming pools and the establishment of a variety of specific-use pools such as spa pools, water slides, and more recently, hydrotherapy and wave pools. In this research, a few simple equipment is used for test, detect and alert for detection of water cleanness and pollution. YSI Photometer Systems, TDSTestr High model, Rio 12HF and Electrode A1. The researchers used electrolysis as a method of separating bonded elements and compounds by passing an electric current through them. The results which use 41 experiments show the higher the salt concentration, the more efficient the electrode and the smaller the gap between the plates, the lower the electrode voltage. Furthermore, it is proved that the larger the surface area, the lower the cell voltage and the higher current used the more chlorine produced. **Keywords :** photometer, electrode, electrolysis, swimming pool chlorination

Conference Title : ICCSSE 2015 : International Conference on Control Science and Systems Engineering

Conference Location : Paris, France

Conference Dates : April 27-28, 2015