

Godavari River Pollution & Use of Coconut Shell as Filter Media for Design of Dual Media Filters

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Abstract: *The research and developmental activities for generating new water quality models provide a valuable source of knowledge in the fields of water resources and environmental engineering. Due to limited water quality data and high cost of water quality monitoring, the data based modeling approaches are being extensively used. This paper presents the forecasted monthly values of water quality parameters viz., pH, Water Temperature and Dissolved Oxygen of River Godavari especially in Ramkund region. As the puja materials such as coconut are extensively used in this region, we will analyze the efficiency of coconut shells as filter media, as it is in large quantity in this area. WQI is found out for the specific purpose of 'irrigation'. The Ramkund Region and its surrounding region are subjected to high river pollution due to large bathing and other activities. Also the wastes of all the activities such as puja is generated. Peoples throw large amount of materials such as flowers and coconut shells etc which are also responsible for pollution of river water. The wastes such as coconut are in abundant quantity, which is the main problem regarding pollution. One of the remedial measure regarding this is use of these shells as a filter media and design the dual media filters. The papers also deals with the effectiveness of dual media filter using coconut shell as filter media.*

Keywords: pH, Turbidity, Hardness, BOD, COD, WQI, Dual media filters

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