**Characterization and electrocoagulative treatment of Yamuna River water**

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**Abstract**

In the present investigations, characterization and removal of iron from the Yamuna river water flowing through Delhi have been carried out during the year 2018. Yamuna River, Delhi segment has been chosen for this study as Delhi is a major industrial center in the country, leading to addition of loads of contaminants into the river Yamuna. Research studies available on Yamuna River indicate a rise in pollution load of the river over the years. Therefore, the objective of the present study is to investigate the current status of heavy metal pollution in River Yamuna, Delhi stretch. Also, the response surface analysis was applied to evaluate the effect of main operational variables and to get a maximum removal efficiency by electrocoagulation process. The removal efficiency increases significantly with the increasing of operating time and mainly increases with the increasing of current density. It can be concluded that our study area as a whole is critically polluted with heavy metals under study due to pollutant load from various anthropogenic activities and electrocoagulation can be applied before further use.

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