



## Use of industrial waste based on lignine removal from aqueous solution by sorption

SUTEU Daniela, MALUTAN T., RUSU Gabriela - Universitatea Tehnică "Gheorghe Asachi" Iasi

The batch equilibrium of Brilliant Red HE-3B reactive dye sorption on industrial lignin was investigated in order to explore its potential to be use as low cost sorbent for wastewater treatment. Sorption isotherms were determined at 200 C and the experimental data obtained were modeled with the Langmuir and Freundlich isotherm equations. Also, it was studied the influence of some operating variable: initial dye concentration, sorbent mass, pH, temperature. For determination the sorption equilibrium concentrations of dye were used a UV-vis spectrophotometry analytical method. The results indicate that the industrial waste based on lignin can be an attractive option for reactive dye, like Brilliant Red HE-3B, removal from dilute aqueous solutions.