

# **Preparation of adsorbent materials from rice husk via hydrothermal carbonization: optimization of operating conditions and alkali activation**

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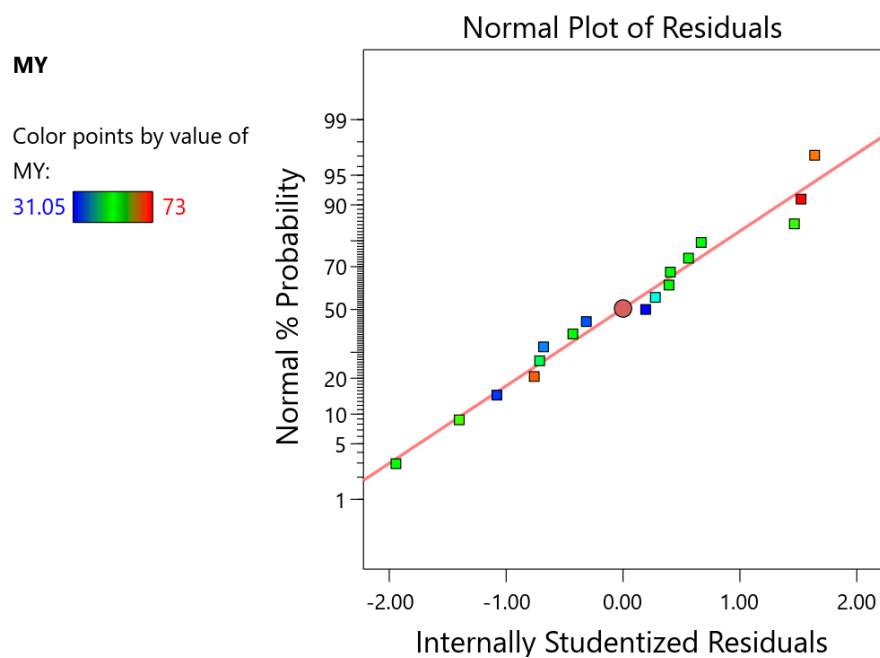
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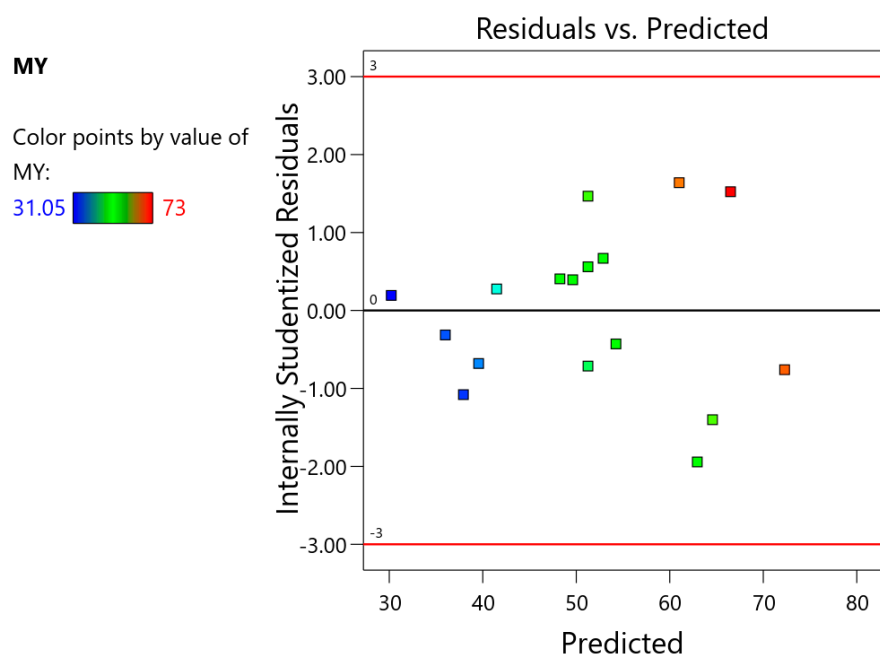
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**Supplementary material**

## Diagnostic plots for HYDROCHAR MASS YIELD (MY)

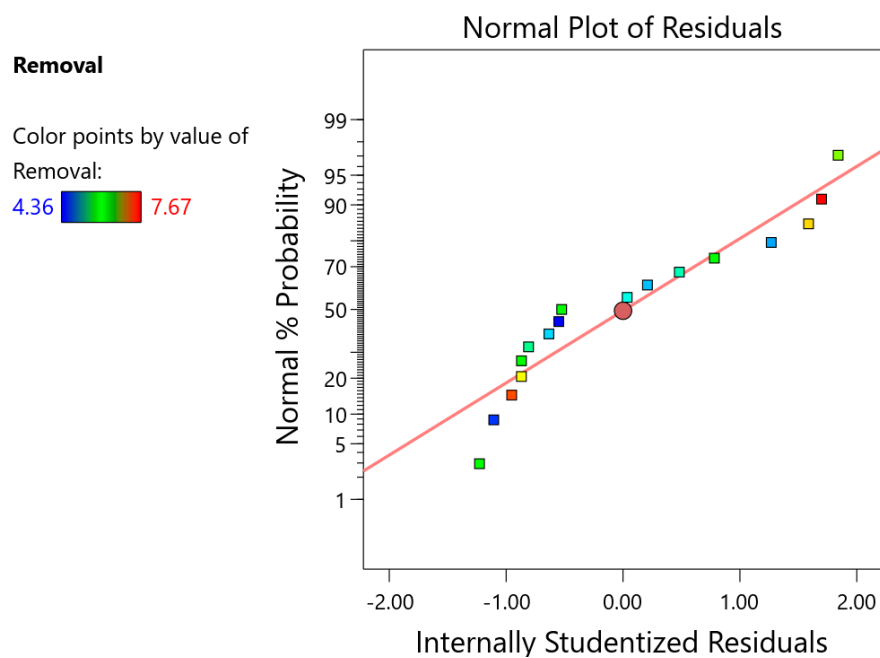


**Figure S1.** Normal plot of residuals for MY

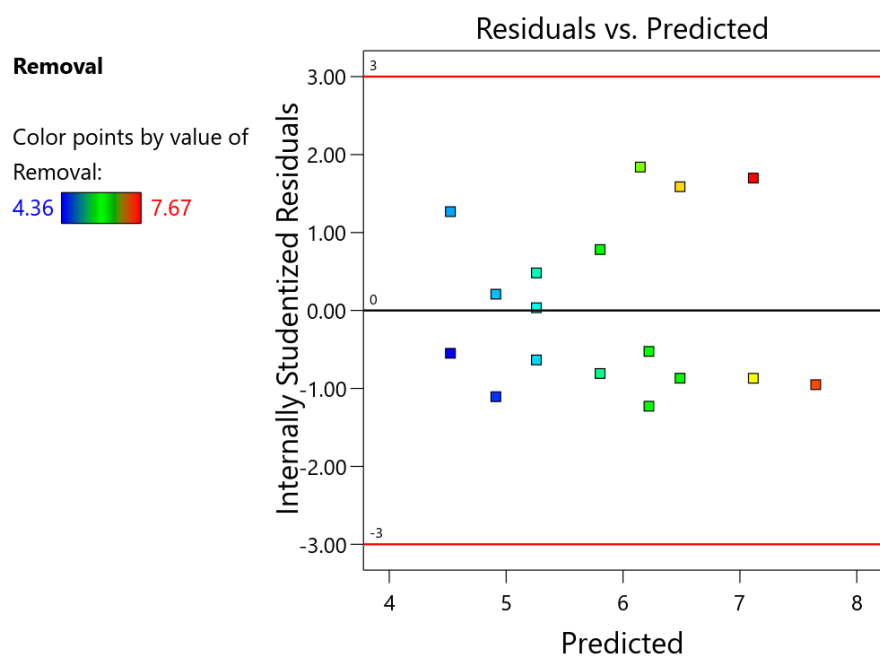


**Figure S2.** Residuals versus predicted plot for MY

## Diagnostic plots for ADSORPTION CAPACITY AT EQUILIBRIUM ( $q_e$ )



**Figure S3.** Normal plot of residuals for  $q_e$



**Figure S4.** Residuals versus predicted plot for  $q_e$

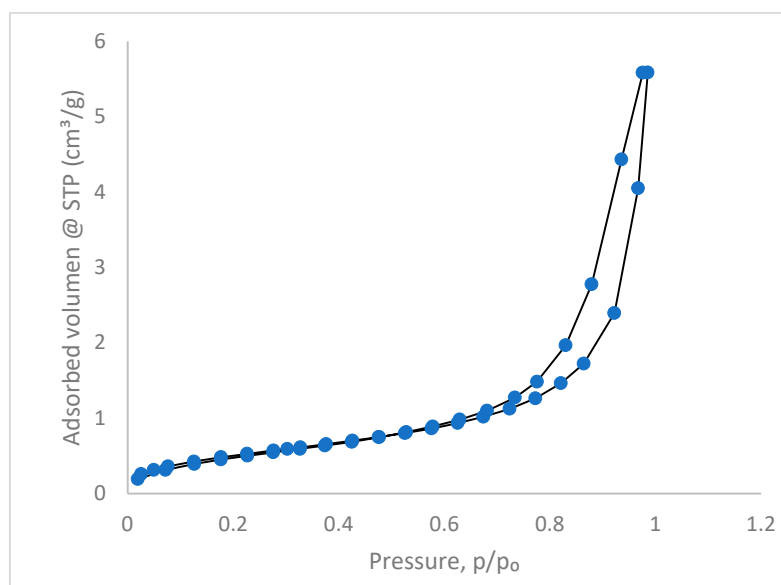
### **Pictures of the reactor and raw biomass**



**Figure S5.** Reactor for hydrothermal carbonization experiments.



**Figure S6.** Rice husk used as raw material.



**Figure S7.** Exemplary N2 adsorption and desorption isotherm for H1.