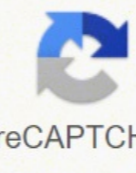
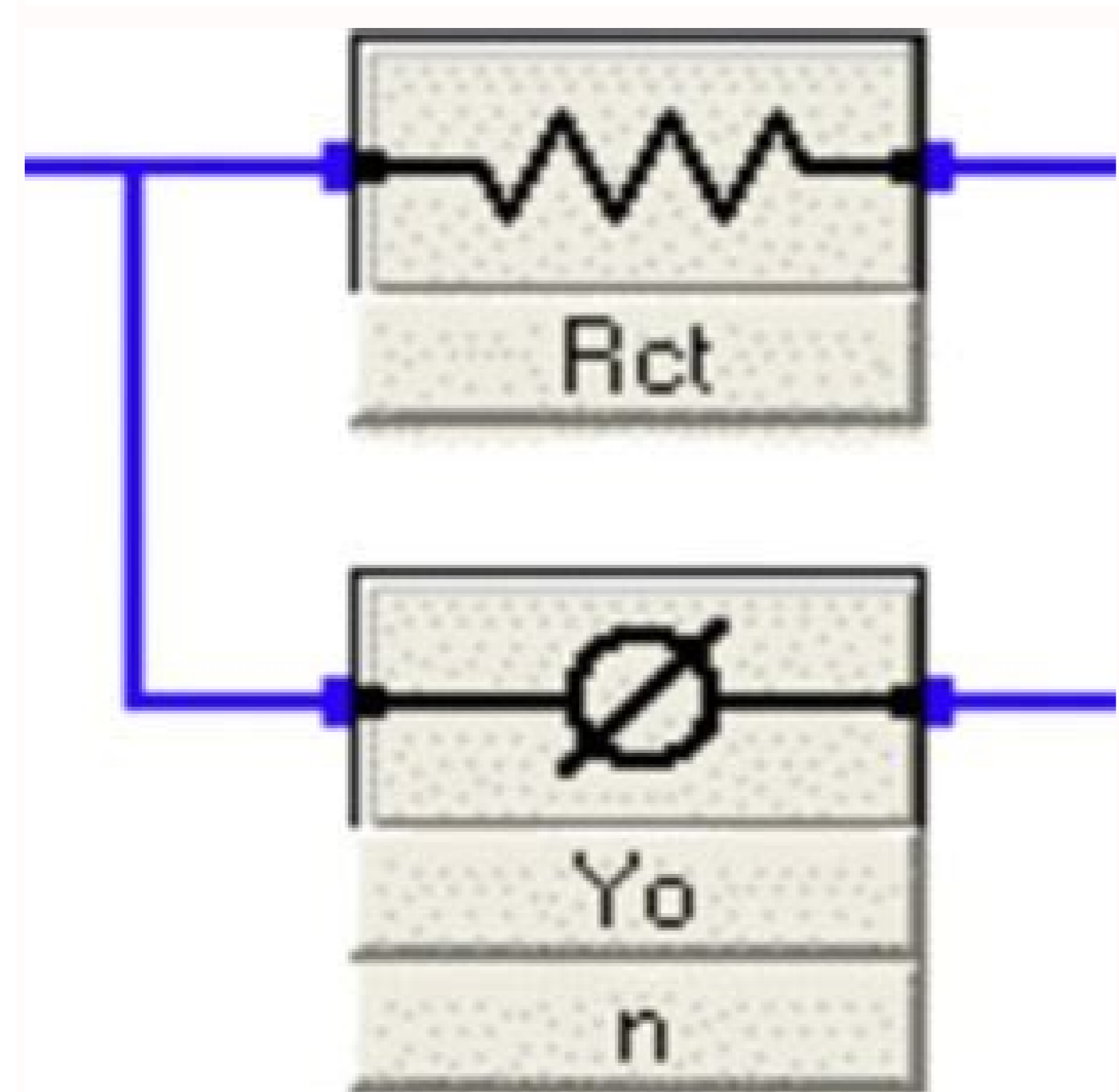


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sotherm parameters	Parameter value
Langmuir	
$Q_m(\text{mg g}^{-1})$	115
$K_L(\text{L mg}^{-1})$	1.2×10^{-3}
R^2	0.978
Freundlich	
n	2.70
$K_F(\text{mg g}^{-1})(\text{L mg}^{-1})^{1/n}$	10.22
R^2	0.969
Temkin	
$b(\text{L mg}^{-1})$	0.307
A	18.27
$E_a(\text{J mol}^{-1})$	137
R^2	0.934
Dubinin-Redushkevich	
$Q_{DR}(\text{mg g}^{-1})$	178.7
$k(\text{Mol J}^{-1})^2$	4.24×10^{-9}
$E(\text{kJ Mol}^{-1})$	10.85
R^2	0.976

Cystein	$n=0.96$ $K_F=0.58$	$Q_m=22.37$ $K_L=0.03$	$B=0.26$ $K_T=1.69$	$R^2=0.44$
Glycine	$R^2=0.99$ $n=1.88$ $K_F=0.10$	$R^2=0.90$ $Q_m=0.78$ $K_L=0.14$	$R^2=0.98$ $B=0.60$ $K_T=1.55$	$R^2=0.94$
Histidin	$R^2=0.96$ $n=1.5$ $K_F=0.007$	$R^2=0.61$ $Q_m=2.07$ $K_L=5.13$	$R^2=0.99$ $B=0.73$ $K_T=0.64$	$R^2=0.87$
Phenylalanine	$R^2=0.90$ $n=0.54$ $K_F=1.40$	$R^2=0.69$ $Q_m=10.36$ $K_L=0.10$	$R^2=0.81$ $B=0.35$ $K_T=1.88$	$R^2=0.82$
Proline	$R^2=0.98$ $n=1.80$ $K_F=0.005$	$R^2=0.99$ $Q_m=0.58$ $K_L=0.03$	$R^2=1$ $B=0.55$ $K_T=0.05$	$R^2=0.94$
Threonine	$R^2=1$ $n=1.13$ $K_F=0.50$	$R^2=0.89$ $Q_m=0.44$ $K_L=0.006$	$R^2=0.99$ $B=0.79$ $K_T=18.95$	$R^2=0.87$
Valine	$R^2=0.99$ $n=1.09$ $K_F=0.04$	$R^2=0.95$ $Q_m=0.16$ $K_L=0.1$	$R^2=0.96$ $B=1.31$ $K_T=2.83$	$R^2=0.89$
Metionine	$R^2=0.99$ $n=1.6$ $K_F=0.01$	$R^2=0.94$ $Q_m=0.52$ $K_L=0.05$	$R^2=0.81$ $B=1.09$ $K_T=2.87$	$R^2=0.90$



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[PubMed] [CrossRef] [Google Scholar]Page 2Identified functional groups present in Saccharum arundinaceum by FTIR spectroscopy.Possible functional groupsRaw (cm⁻¹)Base treated (cm⁻¹)Acid treated (cm⁻¹)OH stretching3309-37513211-3400 =CH 3294C-H2858-2918 (bifurcate)29102922C=O Secondary amide164516081654.92-NH C-O11071222 C-N105110561043 Malandrino M., Abollino O., Giacomino A., Aceto M., Mentasti E. doi: 10.1016/j.seppur.2007.10.002. 1990;24(1):112-118. 2001;35(5):1125-1134. D., Spiridon O. 2015;2(1):36-46. 2013;8(1) doi: 10.15376/biores.8.1.1147-1165. Iqbal M., Saeed A., Zafar S. FTIR spectrophotometry, kinetics and adsorption isotherms modeling, ion exchange, and EDX analysis for understanding the mechanism of Cd²⁺ and Pb²⁺ removal by mango peel waste. doi: 10.1007/s11783-009-0030-7. doi: 10.1016/s0043-1354(00)00389-4. Colloids and Surfaces B: Biointerfaces. doi: 10.1016/j.watres.2005.10.040. doi: 10.1016/j.jcis.2006.03.011. doi: 10.1016/j.desal.2005.10.032. 2008;144(2):235-244. 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