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References

- [1] Igbinosa, E.O., Odadjare, E. E., Chigor, V. N., Igbinosa, I. H., Emoghene, A. O., Ekhaize, F. O., Igiehon, N. O., Idemudia, O. G., *Toxicological Profile of Chlorophenols and Their Derivatives in the Environment: The Public Health Perspective*. Corporation The Scientific World Journal Volume, <http://dx.doi.org/10.1155/2013/460215>, 2013.
- [2] Radhika, M., Palanivelu, K., *Adsorptive removal of chlorophenols from aqueous solution by low cost adsorbent-Kinetics and isotherm analysis*. J. Hazard. Mater, 2006. **116-124**(138).
- [3] Liu, Q., Zheng, T *Adsorption isotherm some substituted ph* Chemical Engineer 2010. **157**(2-3): p. 32
- [4] Allwar, A., Ahmad Suryani, S., *Towar Mesoporous Activat* Chemical Activation KOH Under Nitroge in CHEMECA. 2009
- [5] Montes-Morán, M. Fuente, E *On the surfaces: an overview*
- [6] Allwar, *Characteris* Chemistry of Activa And Boehm Meth Chemistry 2012. **2**: p
- [7] Allwar and A.B. *Characteristics of Ac Palm Shells Activate Nitrogen and Carl* Science 2008. **19**(2):
- [8] D. Martins, I.C., D Bonfait, *Low Tem Size in Activat* INTEGRATION TECHNOLOGIES, International Cryocooler Conference, Inc, Boulder, CO, 2011. **Cryocooler 16**: p. 567-573.
- [9] F. Rouquerol, J.R.K.S., *Adsorption by Powders and Porous Solids*. Academic Press, 1999.
- [10] Saeidi, N., Parvini, M., Sarsabili, M. R., *Performance of Dubinin-astakhov and Dubinin-raduchkevic Equations to Evaluate Nanopore Volume and Pore Size of MCM-41 Particles*. International Journal of Engineering 2014. **27**(10): p. 1511-1518.
- [11] Ho, Y.S., *Isotherms for the Sorption of Lead onto Peat: Comparison of Linear and Non-Linear Methods*. Pol. J. Environ Stud, 2006. **15**(1): p. 81-86
- [12] Kilic M., A.-V.E., Putin A. E., *Adsorptive removal of phenol from aqueous solutions on activated carbon prepared from tobacco residues: Equilibrium, kinetics and thermodynamics*. Journal of Hazardous Materials, 2011. **189**: p. 397- 403.
- [13] Nagda. G., D., M. and Ghole, S., *Potential of Tendu leaves refuse for phenol removal in aqueous systems*. Applied Ecology and environmental research, 2007. **5**(2): p. 1-9.
- [14] Allaboun, H., Fahmi A. Abu Al-Rub *Removal of 4-Chlorophenol from Contaminated Water Using Activated Carbon from Dried Date Pits: Equilibrium, Kinetics, and hermodynamics Analyses*. Material, 2016. **5**(251): p. www.mdpi.com/journal/materials.
- [15] Gokce, Y., Zeki Aktas, Z, *Nitric acid modification of activated carbon produced from waste teaand adsorption of methylene blue and phenol*. Applied Surface Science, 2014. **313**: p. 352–359.
- [16] Langmuir, I., *The adsorption of gases on plane surfaces of glass, mica and platinum*. J. Am. Chem. Soc, 1918. **40**: p. 1362-1403
- [17] Hall, K.R., Eagleton, L.C., Acrivos, A., and Vermeulen, T., *Pore and solid diffusion kinetics in fixed-bed adsorption under constant pattern conditions*. Industrial fundamentals, 1996. **5**: p.
- [18] Y, Kim, K. P, Rhee, J. S., *Isorption characteristics of on granular activated* (2001. **70**: p. 123-131.

