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DAFTAR PUSTAKA

Barcelo, D., 2001, Modern Fourier Transform Infrared Spectroscopy Vol.35, Wilson and Wilson's, Inc., New York.

Bhattacharyya, K.G., and Gupta, S.S., 2008, Adsorption of a Few Heavy Metals on Natural and Modified Kaolinite and Montmorillonite-A Review, *Advances. In.Colloid.and.Interface.Sci*, 140: 114-131.

Bilal, M., Shah, J.A., Ashfaq, T., Gardazi, S.M.H., Tahir, A.A., Pervez, A., Haroon, H., and Mahmood, Q., 2013, Wate Biomass Adsorbents for Copper Removal from Industrial Wastewater-A review, *J.Hazard. Mater*., Vol.263, 38-55.

Çeribasi, I. H., and Yetis, U.., 2013, Biosorption of Ni(II) and Pb(II) by Phanerochaete Chrysosporium from a Binary System-Kinetic, *Water SA*., 27(1): 15-20.

Coffey, K.P., Granade, G.V., and Moyer, J.L., 1995, In Vitro Digestibility and Preference by Sheep for Silage Made from Whole-Plant Soybeans. Prof. Anim. *Prof. Anim. Sci*., 11:81.

Fessenden, R.J., and Fessenden, J.S., 1994, *Kimia Organik, Jilid 1, Edisi Ketiga diterjemahkan oleh Aloysius Hadyana Pudjaatmaka dari Organic Chemistry, 4th Ed., by Fessenden, R.J., and Fessenden*, J.S., Penerbit Erlangga, Jakarta.

Fuadi, A., 2012, Ultrasonik sebagai Alat Bantu Ekstraksi Oleoresin Jahe, *J.Teknol.*, 12(1): 14-21.

Gorgievski M., Bozic D., Stankovic V., Strbac N. and Serbula S., 2013, Kinetics, Equilibrium and Mechanism of Cu^{2+}, Ni^{2+} and Zn^{2+} Ions Biosorption using Wheat Straw, *Ecol.Eng.*,58, 113– 122.

Hansen, H.K., Arancibia, F., and Gutiérrez, C., 2010 Adsorption of Copper onto Agriculture Waste Materials, *J. Hazard. Mater*., 180, 442–448.

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Ibbet, R.N., Kaenthong, S., Phillips, D.A.S., and Wilding, M.A. 2007. Characterisationof Porosity of Regenerated Cellulosil Fibres Using Classical DyeAdsorption Techniques Lenzinger Berichte, *J. Mater. Sci*., Vol 88, 77-88.

Iqbal, M., Saeed, A., and Zafar, S.I., 2009, FTIR Spectrophotometry, Kinetics and Adsorption Isotherms Modeling, Ion Exchange, and EDX Analysis for Understanding the Mechanism of Cd^{2+} and Pb^{2+}Removal by MangoPeel Waste, *J. Hazard. Mater*, 164, 161–171.

Irawati, D.A., Hamzah, B., and Rahman, N., 2017, Pengaruh Ion Logam Cu(II) Terhadap Persen Ekstraksi Ion Pb(II) Menggunakan TeknikEmulsi Membran Cair, *J. Akad. Kim*, 5(4): 172-177.

Kusumawardani, R, Zaharah, T.A., and Destiarti, L., 2018, Adsorpsi kadmium(II) menggunakan adsorben selulosa ampas tebu teraktivasi asam nitrat, *J. Kim. Khatulistiwa*, vol. 7, no. 3, 2018.

Lasheen, M.R., Ammar, N.S., and Ibrahim, H.S., 2012, Adsorption/Desorption of Cd(II), Cu(II) and Pb(II) using Chemically Modified Orange Peel: Equilibrium and Kinetic Studies, *Solid. State. Sciences*, 14, 202-210.

Li, Y., Xia B., Zhao Q., Liu, F., Zhang P., Du, Q., Wang, D., Li, D., Wang, Z., and Xia, Y., 2011, Removal of Copper Ions from Aqueous Solution by Calcium Alginate Immobilized Kaolin, *J.Environ.Sci*., 23(3) 404–411.

Maulidiyah, V.O., 2011, Pemanfaatan Ampas Kelapa Kering pada Proses Adsorpsi Ion Logam Berat Cd(II) dengan Variasi Waktu Kontak dan pH, *J. Kim*., 19(1) : 21-25.

Pavia, D.L., Lampman, G.M., Kriz, G.S. and Vyvyan, J.R., 2009, Introduction to Spectroscopy, 4th Ed., Brooks/Cole Cengage Learning, Washington.

Purawisastra, S., 2011, The Use Of Various Ashes for Galactomanan Compound Isolation from Coconut Dregs, J. *Teknol. Pencegah. Pencemaran Ind.*, 4(1), 260-266.

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Puspita, Y.V.D., Ibnu, M.S., and Wonorahardjo, Surjani., 2012, Karakteristik dan Uji Kemampuan Serbuk Ampas Kelapa Asetat Sebagai Adsorben Belerang Dioksida (SO_2). *J.Kim,*. Universitas Negeri Malang: Malang.

Rahayu, P., and Khabibi, K., 2016, Adsorpsi Ion Logam Nikel(II) oleh Kitosan Termodifikasi Tripolifosfat, *J.Kim. Sains dan Apl*, 19(1) : 21-26.

Sari, I.P., and Amran, M.B., 2021, Sintesis dan Karakterisasi SiO_2 APTES-IIP sebagai Material Fungsional Penjerap Ion Kadmium (II), *Ind. J. Chem. Anal*, 4(01) : 18-29.

Setyawan, M.N., Wardani, S., and Kusumastuti, E., 2018, Arang Kulit Kacang Tanah Teraktivasi H_3PO_4 sebagai Adsorben Ion Logam Cu(II) dan Diimobilisasi dalam Bata Beton, *Indones. J. Chem*, 7(3): 263-269.

Siregar, T.H., 2009, Pengurangan Cemaran Logam Berat pada Perikanan dan Produk Perikanan dengan Metode Adsorbsi, *Squalen Bull. Mar. Fish. Postharvest Biotechnol.*, 4(1): 24- 30.

Sud, D., Mahajan, G., and Kaur, M.P., 2008, Agricultural Waste Material as Potensial Adsorbent for Sequestering Heavy Metal Ions from Aqueos Solution, A Review, *Bioresour. Technol.*, 99: 6017- 6027.

Stumm, W., and Morgan, J.J., 1996, *Aquatic Chemistry 3rd Ed, John Wiley and Sons Inc*., New York.

Volesky, B., 2007, Review Biosorption dan Me, *Water Res*., 41, 4017 – 4029.

Widowati, W., Sastiono, A., & Jusuf, R., 2008, *Efek Toksik Logam Pencegahan dan Penanggulangan Pencemaran*, Yogyakarta: Penerbit Andi.

Yan, C., Li, G., Xue, P., Wei, Q. and Li, Q., 2010, Competitive Effect of Cu(II) and Zn(II) on the Biosorption of Lead(II) by Myriophyllum Spicatum, *J. Hazard. Mater*,179, 721–728.

Yulviyanti, M., Ernayati, W., Tarsono, and R, M. A., 2015, Pemanfaatan Ampas Kelapa Sebagai Bahan Baku Tepung Kelapa Tinggi Serat dengan Metode Freeze Drying, *J. Integr. Proses*, 2(5):101-107.