

## DAFTAR PUSTAKA

- Abbas, M., Cherfi, A., Kaddour, S., dan Aksil, T., 2015, Adsorption in Simple Batch Experiments of Coomassie Brilliant Blue G-250 by Apricot Stone Activated Carbon–Kinetics and Isotherm Modelling, *Desalin. Water Treat.*, 1-12.
- Abrahart, E.N., 1977, *Dyes and Ther Intermediets*, Chemical Publishing, New York.
- Angel, R. J., dan Prewitt, C. T., 1986, Crystal Structure of Mullite: A Re-examination of The Average Structure, *Am. Mineral.*, 71, 1476-1482.
- Asokbunyarat, V., Hullenbusch, E.D., Lens, P.N.L., dan Annachatre, A.P., 2015, Adsorption of Heavy Metals from Acid Mine Drainage by Coal Bottom Ash, *International Conference on Research Frontiers in Chalcogen Cycle Science and Technology*, Thailand.
- Bergmann, C.P., dan Machado, F.M., 2015, *Carbon Nanomaterials as Adsorbents for Environmental and Biological Applications*, Springer International Publishing, Swiss.
- Bojinova, D., dan Teodosieva, R., 2016, Leaching of Valuable Elements from Thermal Power Plant Bottom Ash Using A Thermo–hydrometallurgical Process, *Waste Manag. Res.*, 1-7.
- Bonilla-Petriciolet, A., Mendoza-Castillo, D.I., dan Reynel-Avila, H.E., 2017, *Adsorption Processes of Water Treatment and Purification*, Springer, Swiss.
- Crini, G., dan Badot, P.M., 2008, Application of Chitosan, a Natural Amino-polysaccharide for Dye Removal from Aqueous Solutions by Adsorption Process Using Batch Studies: A Review of Recent Literature, *Prog. Polym. Sci.*, 35, 399-447.
- Crini, G., Peindy, H.N., Gimbert, F., dan Robert, C., 2007, Removal of C.I. Basic Green 4 (Malachite Green) from Aqueous Solutions by Adsorption Using Cyclodextrin-based Adsorbent: Kinetic and Equilibrium Studies, *Sep. Purif. Technol.*, 53, 97-110.
- Dabrowski, A., 2001, Adsorption–from Theory to Practice, *Adv. Colloid Interfac.*, 93, 135-224.
- Delle, S.A., 2001, Factors Affecting Sorption of Organic Compounds in Natural Sorbent–Water Systems and Sorption Coefficients for Selected Pollutants: A Review, *J. Phys. Chem. Ref. Data*, 30(1), 187-439.
- Dincer, A.R., Guner, Y., dan Karakaya, N., 2007, Coal-based Bottom Ash (CBBA) Waste Material as Adsorbent for Removal of Textile Dyestuffs from Aqueous Solution, *J. Hazard Mater.*, 141, 529-535.
- Dotto, G.L., Nascimento dos Santos, J.M., Rosa, R., Pinto, L.A.A., Pavan, F.A., dan Lima, E.C., 2015, Fixed Bed Adsorption of Methylene Blue by

- Ultrasonic Surface Modified Chitin Supported on Sand, *J. Chem. Eng. Res. Des.*, 100, 302-310.
- Dwivedi, M.K., Jain, N., Sharma, P., dan Alawa, C., 2015, Adsorption of Safranin from Wastewater Using Coal Fly Ash, *IOSR-JAC*, 8(4), 27-35.
- Febrianto, J., Kosasih, A.N., Sunarso, J., Ju, Y.H., Indraswati, N., dan Ismadji, S., 2009, Equilibrium and Kinetic Studies in Adsorption of Heavy Metals Using Biosorbent: A Summary of Recent Studies, *J. Hazard Mater.*, 162(2-3), 616-645.
- Ghaly, A.E., Ananthashankar, R., Alhattab, M., dan Ramakrishnan, V.V., 2014, Production, Characterization and Treatment of Textile Effluent: A Critical Review, *J. Chem. Eng. Process Technol*, 5(1), 1-18.
- Gorme, J.B., Maniquiz, M.C., Kim, S.S., Son, Y.G., Kim, Y.T., dan Kim, L.H., 2010, Characterization of Bottom Ash as an Adsorbent of Lead from Aqueous Solutions, *Environ. Eng. Res.*, 15(4), 207-210.
- Guo, L., Sun, C.M., Li, G.Y., Liu, C.P., dan Ji, C.N., 2009, Thermodynamics and Kinetics of Zn (II) Adsorption on Crosslinked Starch Phosphate, *J. Hazard Mater.*, 161, 510-515.
- Gupta, V.K., Ali, I., Saini, V.K., Gerven, T.V., Bruggen, B.V., dan Vandecasteele, C., 2005, Removal of Dyes from Wastewater Using Bottom Ash, *Ind. Eng. Chem. Res.*, 44, 3655-3664.
- Hamdaoui, O., dan Chiha, M., 2007, Removal of Methylene Blue from Aqueous Solutions by Wheat Bran, *Acta Chim. Slov.*, 54, 407-418.
- Hao, O.J., Kim, H., dan Chiang, P.C., 2000, Decolorization of Wastewater, *Crit. Rev. Environ. Sci. Technol.*, 30(4), 449-505.
- Holkar, C.R., Jadhav, A.J., Pinjari, D.V., Mahamuni, N.M., dan Pandit, A.B., 2016, A Critical Review on Textile Wastewater Treatments: Possible Approaches, *J. Environ. Manag.*, 182, 351-366
- Hoque, M., dan Philip, O., 2011, Biotechnological Recovery of Heavy Metals from Secondary Sources – An Overview, *Mater. Sci. Eng. C.*, 31, 57-66.
- Hunger, K., 2003, *Industrial Dyes: Chemistry, Properties, Applications*, Wiley-VCH, Weinheim.
- Jain, A.K., Gupta, V.K., Bhatnagar, A., dan Suhas, 2003, A Comparative Study of Adsorbents Prepared from Industrial Wastes for Removal of Dyes, *Sep. Sci. Technol.*, 38(2), 463-481.
- Jain, C.K., Singhal, D.C., dan Sharma, M.K., 2004, Adsorption of Zinc on Bed Sediment of River Hindon: Adsorption Models and Kinetics, *J. Hazard Mater.*, 114, 231-239.
- Jarusiripot, C., 2014, Removal of Reactive Dye by Adsorption over Chemical Pretreatment Coal Based Bottom Ash, *Procedia Chem.*, 9, 121-130.

- Jegatheesan, V., Pramanik, B.K., Chen, J., Navaratna, D., Chang, C.Y., dan Shu, L., 2016, Treatment of Textile Wastewater with Membrane Bioreactor: A Critical Review, *Bioresour. Technol.*, 204, 202-212.
- Jones, K.B., Ruppert, L.F., dan Swanson, S.M., 1979, Leaching of Elements from Bottom Ash, Economizer Fly Ash, and Fly Ash from Two Coal-Fired Power Plants, *Int. J. Coal Geol.*, 94, 337-348.
- Khattri, S.D., dan Singh, M.K., 2009, Removal of Malachite Green from Dye Wastewater Using Neem Sawdust by Adsorption, *J. Hazard Mater.*, 167, 1089-1094.
- Largitte, L., dan Pasquier, R., 2016, Largitte dan Pasquier, 2016, A Review of the Kinetics Adsorption Models and Their Application to the Adsorption of Lead by an Activated Carbon, *Chem. Eng. Res. Des.*, 109, 495-504.
- Levien, L., Prewitt, C. T., dan Weidner, D. J., 1980, Structure and Elastic Properties of Quartz at Pressure (P) = 1 atm, *Am. Mineral.*, 65, 920-930.
- Liu, S., 2015, Cooperative Adsorption on Solid Surfaces, *J. Colloid Interf. Sci.*, 450, 224-238.
- Maharmani, F.W., dan Sumarni, W., 2003, Kajian Termodinamika Penyerapan Zat Warna Indikator Metil Oranye (MO) dalam Larutan Air oleh Adsorben Kitosan, *JSKA*, 2(6), 1-19.
- Malik, A., dan Grohmann, E., 2012, *Environmental Protection Strategies for Sustainable Development, Strategies for Sustainability*, Springer Science + Business Media, Dordrecht.
- Mittal, A., Gupta, V.K., Malviya, A., dan Mittal, J., 2008, Process Development for The Batch and Bulk Removal and Recovery of a Hazardous, Water-soluble Azo Dye (Metanil Yellow) by Adsorption Over Waste Materials (Bottom Ash and De-Oiled Soya), *J. Hazard Mater.*, 151, 821-832.
- Mittal, A., Mittal, J., Malviya, A., Kaur, D., dan Gupta, V.K., 2010, Adsorption of Hazardous Dye Crystal Violet from Wastewater by Waste Materials, *J. Colloid Interface Sci.*, 343, 463-473.
- Morikawa, Y., Shiomi, K., Ishihara, Y., dan Matsuura, N., 1997, Triple Primary Cancers Involving Kidney, Urinary Bladder, and Liver in a Dye Worker, *Am. J. Ind. Med.*, 31(1), 44-49.
- Nethaji, S., Sivasamy, A., dan Mandal, A.B., 2013, Adsorption Isotherms, Kinetics and Mechanism for the Adsorption of Cationic and Anionic Dyes onto Carbonaceous Particles Prepared from *Juglans regia* Shell Biomass, *Int. J. Environ. Sci. Technol.*, 10, 231-242.
- Ntuli, F., Ikhu-Omoregbe, D., Pardon, K., Edison, M., dan Belaid, M., 2009, Characterization of Effluent from Textile Wet Finishing Operations, *The World Congress on Engineering and Computer Science*, San Francisco.

- Ozkaraova, E.B., Akbal, F., dan Kuleyin, A., Potensial Reuse of Treated Industrial Wastewater in Agriculture: Textile Wastewater, *Mech. Agric. Conserv. Resour.*, 4, 138-140.
- Pereira, L., Coelho, A.V., Viegas, C.A., Santos, M.M.C., Robalo, M.P., dan Martins, L.O., 2009, Enzymatic Biotransformation of The Azo Dye Sudan Orange G with Bacterial CotA-Laccase, *J. Biotechnol.*, 139, 68-77.
- Rashed, M.N., 2013, *Organic Pollutants—Monitoring, Risk ad Treatment*, IntechOpen, London.
- Repo, E., Warchol, J.K., Bhatnagar, A., dan Sillanpaa, M., 2011, Heavy Metals Adsorption by Novel EDTA-modified Chitosan–silica Hybrid Materials, *J. Colloid Interface Sci.*, 358(1), 261-267.
- Robinson, T., McMullan, G., Marchant, R., dan Nigam, P., 2001, Remediation of Dyes in Textile Effluent: A Critical Review on Current Treatment Technologies with a Proposed Alternative, *Bioresour. Technol.*, 77, 247-255.
- Rodrigues, A.E., 2015, *Simulated Moving Bed Technology: Principles, Design, and Process Applications*, Elsevier, Amsterdam.
- Rouquerol, F., Rouquerol, J., dan Singh, K.S.W., 2014, *Adsorption by Powders and Porous Solids: Principles, Methodology, and Applications*, Elsevier, Amsterdam.
- Salleh, M.A.M., Mahmoud, D.K., Karim, W.A.W.A., dan Idris, A., 2011, Cationic and Anionic Dye Adsorption by Agricultural Solid Wastes: A Comprehensive Review, *Desalination*, 280, 1-13.
- Sekomo, C.B., Rousseau, D.P.L., Saleh, S.A., dan Lens, P.N.L., 2012, Heavy Metal Removal in Duckweed and Algae Ponds as A Polishing Step for Textile Wastewater Treatment, *Ecol. Eng.*, 44, 102–110
- Sharma, G., Naushad, M., Kumar, A., Rana, S., Sharma, S., Bhatnagar, A., Stadler, F.J., Ghfar, A.A., dan Khan, M.R., 2017, Efficient Removal of Coomassie Brilliant Blue R-250 Dye Using Starch/Poly(alginic acid-cl-acrylamide) Nanohydrogel, *Process Saf. Environ.*, 109-301-310.
- Singh, M., dan Siddique, R., 2013, Effect of Coal Bottom Ash as Partial Replacement of Sand on Properties of Concrete, *Resour. Conserv. Recy.*, 72, 20-32.
- Srivastava, V.C., Mall, I.D., dan Mishra I.M., 2007, Adsorption Thermodynamics and Isothermic Heat of Adsorption of Toxic Metal Ions onto Bagasse Fly Ash (BFA) and Rice Husk Ash (RHA), *J. Chem. Eng.*, 132, 267-278.
- Terrazas, C.G.D., Ibarra R.J., Ortiz-Méndez, U., dan Torres-Martínez, L.M., 2005, Iron Leaching of a Mexican Clay of Industrial Interest by Oxalic Acid, *Adv. Technol. Mat. Mat. Process.*, 7(2), 161–166

- Valaskova, M., Martynkova, G.S., Mateika, V., dan Kratosova, G., 2007, Chemically Activated Kaolinites After Deintercalation of Formamide, *Ceram-Silikaty*, 51(1), 24-29.
- Voudrias, E., Fytianos, K., dan Bozani, E., 2002, Sorption – Desorption Isotherms of Dyes from Aqueous Solutions and Wastewaters with Different Sorbent Materials, *Global Nest: Int. J.*, 4(1), 75-83.
- Wang, Y., Ren, D., dan Zhao, F., 1999, Comparative Leaching Experiments for Trace Elements in Raw Coal, Laboratory Ash, Fly Ash and Bottom Ash, *Int. J. Coal Geol.*, 40, 103-108.
- Yaseen, D.A., dan Scholz, M., 2016, Shallow Pond Systems Planted with *Lemna minor* Treating Azo Dyes, *Ecol. Eng.*, 94, 295-305
- Zhuannian, L., Anning, Z., Guirong, W., dan Xiaoguang, Z., 2009, Adsorption Behavior of Methyl Orange onto Ultrafine Coal Powder, *Chin. J. Chem. Eng.*, 17(6), 942-948.