

DAFTAR PUSTAKA

- Abdel-Nasser, A., and El-Henda, W.Y., 2003, Influence of HNO₃ oxidation on the structure and adsorptive properties of corncob-based activated, *Carbon*, 41(4), 713–722.
- Abdullah, M. dan Khairurrijal, 2009, Review: Karakterisasi Nanomaterial, *J. Nano Saintek*, 2(1), 1-9.
- Acharya, J., Sahu, J.N., Sahoo, B.K., Mohanty, C.R. and Meikap, B.C., 2009, Removal of chromium(VI) from wastewater by activated carbon developed from tamarind wood activated with zinc chloride. *Chem. Eng. J.*, 150, 25–39.
- Adamson, A.W., 1990, *Physical Chemistry of Surface*, 4th edition, John Wiley and Sons, New York.
- Adesehinwa, A.O.K., Obi, O.O., Makanjuoa, B.A., Oluwole, O.O., and Adesina, M.A., 2011, Growing Pig Fed Cassava Pees Based Diet Supplemented With or Without Farmazyme 3000 Proenx: Effect On Growth, Carcass and Blood Parameters. *Afr. J. of Biotechnol.*, 14(10), 2791-2796.
- Aksu, Z. and Balibek, E., 2007, Chromium(VI) biosorption by dried *Rhizopus arrhizus*: effect of salt (NaCl) concentration on equilibrium and kinetic parameters, *J. Hazard. Mater.*, 145, 210–220.
- AL-Othman, Z.A., Ali, R., and Naushad, M., 2012, Hexavalent chromium removal from aqueous medium by activated carbon prepared from peanut shell: adsorption kinetics, equilibrium and thermodynamic studies, *Chem. Eng. J.*, 184, 238–47.
- Anonim, 1995, *Arang Aktif Teknis (SNI 06-370-1995)*, Badan Standardisasi Nasional Indonesia, Jakarta.
- Anonim, 2000, *In situ treatment of soil and groundwater contaminated with chromium*, Technical Report:EPA/625/R-00/005, Washington.
- Anonim, 2001, *Peraturan Pemerintah Nomor 82 Tahun 2001 tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air*.
- Anonim, 2012, *Water Quality in Citarum River: Planning interventions to improve water quality in upper Citarum River*, TA 7189 Component B1, ADB (Asian Development Bank).

- Anonim, 2013, *Masyarakat Ekonomi ASEAN 2015: Peluang dan Tantangan bagi UKM Indonesia*, Policy Paper No. 15 (Maret), Kadin Indonesia, Jakarta.
- Anonim, 2016a, *Produksi Ubi Kayu Menurut Provinsi (ton) 1993-2015*, Badan Pusat Statistik (BPS).
- Anonim, 2016b, *Jumlah Perusahaan Industri Mikro dan Kecil Menurut 2-digit KBLI, 2010-2015*, Badan Pusat Statistik (BPS).
- Aripin, A.M., Kassim, A.S.M., Daud, Z. and Hatta, M.Z.M., 2013, Cassava Peels for Alternative Fibre in Pulp and Paper Industry: Chemical Properties and Morphology Characterization, *Int. J. Integrated Engineering*, 1(5), 30-33
- Bert, A.E. and Chen, K.Y., 1982, *Origin and Nature of Selected Inorganic Constituents in Natural Waters*, Vol. 1, Academic Press, New York.
- Boehm, H.P., 1994, Some aspects of the surface chemistry of carbon blacks and other carbons, *Carbon*, 32, 759–769.
- Bose, M., 1954, The reaction of chromate with diphenylcarbazine. I, *Anal. Chim. Acta*, 10, 201–208.
- Brigden, K., Labunska, I., Santillo, D., Wang, M., and Johnston, P., 2013, Organic chemical and heavy metal contaminants in wastewaters discharged from two textile manufacturing facilities in Indonesia, *Greenpeace Research Laboratories Technical Report:02/2013*, Exeter.
- Chiang, H.L., Huang, C.P., and Chiang, P.C., 2002, The surface characteristics of activated carbon as affected by ozone and alkaline treatment, *Chemosphere*, 47, 257–65.
- Demiral, H., Demiral, I., Tmsek, F., and Karabacakoglu, B., 2008, Adsorption of chromium(VI) from aqueous solution by activated carbon derived from olive bagasse and applicability of different adsorption models, *Chem. Eng. J*, 144, 188–96.
- Demirbas, E., Kobya, M., and Konukman, A.E.S, 2008, Error analysis of equilibrium studies for the almond shell activated carbon adsorption of Cr(VI) from aqueous solutions, *J. Hazard. Mater.*, 154, 787–94.
- Deng, J., Xiong, T., Wang, H., Zheng, A., and Wang, Y., 2016, Effects of Cellulose, Hemicellulose, and Lignin on the Structure and Morphology of Porous Carbons, *ACS Sustainable Chem. Eng.*, 4(7), 3750–3756.
- Dewi, R.K.M, 2014, Isomerisasi 1-Oktena Menggunakan Katalis Ni/Karbon Aktif, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

- Duranoglu, D., and Beker, U., 2015, Cr(VI) adsorption onto biomass waste material-derived activated carbon, *J. Desalination*, 10, 273-302.
- El-Nemr, A., Khaled, A., Abdelwahab, and O., El-Sikaily, A., 2008, Treatment of wastewater containing toxic chromium using new activated carbon developed from date palm seed, *J. Hazard. Mater.*, 152, 263–75.
- El-Sayed, Y. and Bandosz, T.J., 2004, Adsorption of valeric acid from aqueous solution onto activated carbon: role of surface basic sites, *J. Colloid Interface Sci.*, 273, 64-72
- El-Sheikh, A.H., 2008, Effect of oxidation of activated carbon on its enrichment efficiency of metal ions: Comparison with oxidized and non-oxidized multi-walled carbon nanotubes, *Talanta*, 75, 127-134.
- Foo, K.Y. and Hameed, B.H., 2010, Insights into the modeling of adsorption isotherm systems, *Rev. Chem. Eng. J.*, 156, 2–10.
- Gaur, V. and Shankar, P.A., 2008, Surface modification of activated carbon for the removal of water impurities, *Water Cond. Purif.* 1–5.
- Gokce, Y. and Aktas, Z., 2014, Nitric acid modification of activated carbon produced from waste tea and adsorption of methylene blue and phenol, *Appl. Surf. Sci.*, 313, 352-359.
- Gupta, S. S. and Bhattacharya, K. G., 2005, Interaction of metal ions with clays: I. A case study with Pb(II), *Appl. Clay Sci.*, 30, 199–208.
- Hall, K.R., Eagletow, L.C., Acrivos, A., and Vermeulen, T., 1966, Pore and solid kinetics in fixed-bed adsorption under constant-pattern condition, *Ind. Eng. Chem. Fund.*, 5, 212–223.
- Hernández-Montoya, V., and Bonilla-Petriciolet, A., 2012, *Lignocellulosic precursors used in the synthesis of activated carbon: characterization techniques and applications in the wastewater treatment*, InTech, Rijeka.
- Ho, Y. S. and McKay, G., 1999, Pseudo-second order model for sorption process, *Process Biochem.*, 34, 451-465.
- Hsu, N.H., Wang, S.L., Liao, Y.H., Huang, S.T., Tzou, Y.M. and Huang, Y.M., 2009, Removal of hexavalent chromium from acidic aqueous solutions using rice straw-derived carbon. *J. Hazard. Mater.*, 171, 1066–70.
- Huang, G., Shi, J.X., and Langrish, T.A.G., 2009, Removal of Cr(VI) from aqueous solution using activated carbon modified with nitric acid, *Chem. Eng. J.*, 152, 434-439.

- Isa, M.H., Ibrahim, N., Aziz, H.A., Adlan, M.N., Sabiani, N.H.M., Zinatizadeh, A.A.L., Kutty S.R.M., 2008, Removal of chromium(VI) from aqueous solution using treated oil palm fibre. *J. Hazard. Mater.*, 152, 662–68.
- Jacobs, A.J. and Testa, S.M., 2004, *Overview of chromium(VI) in the environment: background and history Chromium VI Handbook*, CRC Press Inc., Florida.
- Jiang, Z., Liu, Y., Sun, X., Tian, F., Sun, F., Liang, C., You, W., Han, C. and Li, C., 2003, Activated Carbons Chemically Modified by Concentrated H₂SO₄ for the Adsorption of the Pollutants from Wastewater and the Dibenzothiophene from Fuel Oils, *Langmuir*, 19(3), 731-736
- Karge, H. G. and Weittkamp, J., 2008, *Molecular Sieves: Adsorption and Diffusion*, 7, Springer, Germany.
- Kumar, A. and Jena, H.M., 2015, High surface area microporous activated carbons prepared from Fox nut (*Euryale ferox*) shell by zinc chloride activation, *Appl. Surf. Sci.*, 356, 753-761.
- Liu, C., Gao, N.Y. and Huang, T.L., 2005, The research development of the chemical modification of the activated carbon, *Water Purif. Technol.*, 24(4), 50–52.
- Liu, W., Zhang, J., Zhang, C., Wang, Y., and Li, Y., 2010, Adsorptive removal of Cr(VI) by Fe-modified activated carbon prepared from *Trapa natans* husk, *Chem. Eng. J.*, 162, 677–84.
- Marsh, H. and Rodriguez-Reinoso, F., 2006, *Activated Carbon*, Elsevier Science & Technology Books.
- Masel, R.I., 1996, *Principles of Adsorption and Reaction on Solid Surface*, 1st edition John Wiley and Sons Inc., Canada.
- Mohammadi, S.Z., Hamidian, H., and Moeinadini, Z., 2014, High surface area-activated carbon from *Glycyrrhiza glabra* residue by ZnCl₂ activation for removal of Pb(II) and Ni(II) from water samples, *J. Ind. Eng. Chem. Res.*, 20(6), 4112-4118.
- Mohan, D. and Pittman, U. 2006, Activated carbons and low cost adsorbents for remediation of tri- and hexavalent chromium from water, *J. Hazard. Mater.*, B137, 762–811.
- Moreno-Castilla, C., Carrasco-Marín, F., López-Ramón, M.V. and Alvarez-Merino, M.A., 2001, Chemical and physical activation of olive-mill waste water to produce activated carbons, *Carbon*, 39(9)1415–1420

- Mustanginah, T., 2011, Analisis Spesies Logam Fe(II), Fe(III), Cr(III) dan Cr(VI) dalam Limbah Cair Industri Menggunakan Metode Kombinasi Spektrofotometri UV-Tampak dan Spektrofotometri Serapan Atom (AAS), *Thesis*, Universitas Gadjah Mada, Yogyakarta.
- Oscik, J., and Cooper, L., 1982, *Adsorptions*, Ellis Horwoo Limited John Willey & Sons, New York.
- Parkinson, R. and Hart, T., 1995, Electroplating on Plastics, *NiDI Technical Series N/10/078*, Canada.
- Pereira, M.F.R., Soares, S.F., Orfao, J.J.M and Figueiredo, J.L., 2003, Adsorption of dyes on activated carbon: influence of surface chemical groups, *Carbon*, 41, 811-821.
- Purwanto dan Huda, S., 2005, *Teknologi Industri Elektroplating*, Badan Penerbit Universitas Diponegoro, Semarang.
- Rajeshvarisivaraj, Sivakumar, S., Senthilkumar, P., and Subburam, V., 2001, Carbon from Cassava peel, an agricultural waste, as an adsorbent in the removal of dyes and metal ions from aqueous solution, *Bioresour. Technol.*, 80, 233-235.
- Rodriguez-Reinoso, F. and Molina-Sabio M., 1992, Activated carbons from lignocellulosic materials by chemical and/or physical activation: an overview. *Carbon*, 30(7), 1111–1118
- Santosa, S.J. dan Muzakky, 2002, *Kinetika Adsorpsi Logam Berat (krom, Tembaga dan Uranium) oleh Asam Humat dalam Tanah Gambut*, Laporan Penelitian Penelitian Dasar Tahun Anggaran 2002, Yogyakarta.
- Selvakumar, R., Kavitha, S., Sathiskumar, M., and Swaminathan, K., 2008, Arsenic adsorption by polyvinyl pyrrolidone K25 coated cassava peel carbon from aqueous solution, *J. Hazard. Mater.*, 153, 67-74.
- Shafeeyan, M.S., Daud, W.M.A.W., Houshmand, A. and Shamiri, A., 2010, A Review on Surface Modification of Activated Carbon for Carbon Dioxide Adsorption, *J. Anal. Appl. Pyrolysis*, 89, 143-151.
- Sperling, M., Xu, S., and Welz, B., 1992, Determination of chromium (III) and chromium (VI) in water using flow injection on-line preconcentration with selective adsorption on activated alumina and flame atomic absorption spectrometric detection, *Anal. Chem.*, 64(24), 3101-3108.

- Sudarna, A., 2015, *Press Release: Bedah Kasus Pencemaran dan/atau Kerusakan Lingkungan di Kecamatan Rancaekek Kabupaten Bandung*, Badan Pengelolaan Lingkungan Hidup Jawa Barat (BPLHD Jabar).
- Sudaryanto, Y., Hartono, S.B., Irawaty, W., Hindarso, H. and Ismadji, S., 2006, High surface area activated carbon prepared from cassava peel by chemical activation, *Bioresour. Technol.*, 97(5), 734-739.
- Sudrajat, R., 1994, *Petunjuk Pembuatan Arang Aktif*, Badan Penelitian dan Pengembangan Kehutanan.
- Tao, H., Zhang, H., Li, J., and Ding, W., 2015, Biomass based activated carbon obtained from sludge and sugarcane bagasse for removing lead ion from wastewater, *Bioresour. Technol.*, 192, 611-617.
- Valdes, H., Sanchez-Polo, M., Rivera-Utrilla, J. and Zaror, C.A., 2002, Effect of ozone treatment on surface properties of activated carbon, *Langmuir*, 18, 2111-2116.
- Vinke, P., van der Eijk, M., Verbree, M., Voskamp, A.F., and van Bekkum, H., 1994, Modification of the surfaces of a gas-activated carbon and a chemically activated carbon with nitric acid, hypochlorite, and ammonia, *Carbon*, 32(4), 675-686.
- Weiner, E.R., 2000, *Applications of Environmental Chemistry, A Practical Guide For Environmental Professionals*, CRC Press, Florida.
- Yahya, M.A., Al-Qodah, Z., and Ngah, C.W.Z., 2015, Agricultural bio-waste materials as potential sustainable precursors used for activated carbon production: A review, *Renew. Sustainable Energy Rev.*, 46, 218-235.
- Yao, S., Zhang, J., Shen, D., Xiao, R., Gu, S., Zhao, M., and Liang, J., 2016, Removal of Pb(II) from water by the activated carbon modified by nitric acid under microwave heating, *J. Colloid Interface Sci.*, 463, 118-127.
- Zhang, H., Tang, Y., Cai, D., Liu, X., Wang, X., Huang, Q., and Yu, Z., 2010, Hexavalent chromium removal from aqueous solution by algal bloom residue derived activated carbon: equilibrium and kinetic studies, *J. Hazard. Mater.*, 181, 801-808.
- Zhao, N.Q., Wei, N., Li, J.J., Qiao, Z.J., Cui, J., and He, F., 2005, Surface properties of chemically modified activated carbons for adsorption rate of Cr(VI), *Chem. Eng. J.*, 1-2(115), 133-138.