DAFTAR PUSTAKA

Atkins, P. W., 1999, *Physical Chemistry of Surfaces*, John Wiley and Sons, Inc California.

Bharali, D., and Deka, R. C., 2017, Preferential adsorption of various anionic and cationic dyes from aqueous solution over ternary CuMgAl layered double hydroxide, *Colloids and Surf., A*, 525*:* 64–76.

Bonetto, L.R., Ferrarini, F., De Marco, C., Crespo, J.S., Guégan, R., and Giovanela, M., 2015, Removal of methyl violet 2B dye from aqueous solution using a magnetic composite as an adsorbent, *J. Water Proc., Eng,*. 6: 11–20.

Chen, C.H., Chang, C.F., and Liu, S.M. , 2010, Partial degradation mechanisms of malachite green and methyl violet B by Shewanella decolorationis NTOU1 under anaerobic conditions, *J. Hazard. Mater.*, 177: 281–289.

Chen, L., Ji, T., Mu, L., Shi, Y., Wang, H., and Zhu, J. , 2017, Pore size dependent molecular adsorption of cationic dye in biomass derived hierarchically porous carbon, *J. Environ. Manage.* 196: 168–177.

Chiou, M. S., and Chuang, G. S., 2006, Competitive adsorption of dye metanil yellow and RB15 in acid solutions on chemichally cross-linked chitosan beads, *Chemosphere*, 62: 731-740.

Crini, G., Gimbert, F., Robert, C., Martel, B., Adam, O., Morin-Crini, N., De Giorgi, F., and Badot, P.-M., 2008, The Removal of Basic Blue 3 from Aqueous Solutions by Chitosan-Based Adsorbent: Batch Studies, *J. Hazard. Mater.*, 153: 96-106.

Cullen, S., 2012, Global Plasticizer Update. SPI Flexible Vinyl Product Conference, *Plasticizer and Consultant Report*, Eastman Estimate.

Culp, S. J., Mellick, P. W., Trotter, R. W., Greenlees, K. J., Kodell, R. L., and Beland, F. A., 2006, Carcinogenicity of malachite green chloride and leucomalachite green in B6C3F1 mice and F344 rats, *Food Chem. Toxicol.*, 44*:* 1204–1212

Das, D. dan Pal, A., 2016, Adsolubilization phenomenom perceived in chitosan beads leading to a fast and enhanced malachite green removal, *Chem. Eng. J.* In press.

Diapati, M., 2009, Ampas Tebu sebagai Adsorben Zat Warna Reaktif Cibacron Red, *Skripsi*, Departemen Kimia, Institut Pertanian Bogor, Bogor.

Fayazi, M., and Azizian, S., 2016, Catalytic degradation of methyl violet without light irradiation using nanostructured CuS, *J. Mol. Liq.*, 224*:* 763–767.

Gasser, R. P., 1987, *An Introduction to Chemisorption and Catalysis by Metals*, Oxford Science Publication, New York.

Hameed, B.H., 2008, Equilibrium and kinetic studies of methyl violet sorption by agricultural waste, *J. Hazard. Mater.*, 154: 204–212.

Hameed, B. H., and El-Khaiary, M. I., 2008, Batch removal of malachite green from aqueous solutions by adsorption on oil palm trunk fibre: Equilibrium isotherms and kinetic studies, *J. Hazard. Mater.*, 154*:* 237–244.

Ho, Y. S., and McKay, G., 1999, Pseudo-second order model for sorption processes, *Process Biochem.*, 34: 451–465.

Jalil, A. A., Triwahyono, S., Yaakob, M. R., Azmi, Z. Z. A., Sapawe, N., Kamarudin, N. H. N., Setiabudi, H. D., Jaafar, N. F., Sidik, S. M., Sadam, S. H., and Hameed, B. H., 2010, Utilization of bivalve shell-treated Zea mays I. (maize) husk leaf as a low-cost biosorbent for enhanced adsorption of malachite green, *Bioresour. Technol.*, 120: 218-224.

Kalavathy, M.H., and Miranda, L.R., 2010, Comparison of copper adsorption from aqueous solution using modified and unmodified Hevea brasiliensis saw dust, *Desalination*, 255: 165–174.

Kuppusamy, S., Venkateswarlu, K., Thavamani, P., Lee, Y. B., Naidu, R., and Megharaj, M., 2017, Quercus robur acorn peel as a novel coagulating adsorbent for cationic dye removal from aquatic ecosystems. *Ecol. Eng.*, 101: 3–8.

Kristianto, D., 2016, Pembuatan Manik Kompleks Polielektrolit Kitosan Pektin sebagai Adsorben Zat Warna Malahite Green dan Metil Violet 2B, *Tesis*, Jurusan Kimia, Universitas Gadjah Mada, Yogyakarta.

Liu, Z., Xu, W., Tian, Y., and Li, H., 2006, Isobaric vapor-liquid equilibria of the binary system maleic anhydride and dimethyl phthalate at 2.67, 5.33 and 8.00 kPa, *Fluid Phase Equilib.*, *247*: 54–58.

Loganathan, P., Vigneswaran, S., and Kandasamy, J., 2013, Enhanced removal of nitrate from water using surface modification of adsorbents - A review, *J. Environ. Manage.*, *131*: 363–374.

Luo, X. P., Fu, S. Y., Du, Y. M., Guo, J. Z., and Li, B., 2017, Adsorption of methylene blue and malachite green from aqueous solution by sulfonic acid group modified MIL-101, *Microporous Mesoporous Mater.*, 237: 268–274.

Maneechakr, P., and Karnjanakom, S., 2017, Adsorption behaviour of Fe(II) and *Cr*(VI) on activated carbon: Surface chemistry, isotherm, kinetic and thermodynamic studies, *J. Chem. Thermodyn.*, 106: 104–112.

Mittelstaedt, R. A., Mei, N., Webb, P. J., Shaddock, J. G., Dobrovolsky, V. N., McGarrity, L. J., and Heflich, R. H., 2004, Genotoxicity of malachite green and leucomalachite green in female Big Blue B6C3F1 mice, *Mutation Research – Genet. Toxicol. Environ. Mutagen.*, 561: 127–138.

Musyoka, S. M., Mittal, H., Mishra, S. B., and Ngila, J. C., 2014, Effect of functionalization on the adsorption capacity of cellulose for the removal of methyl violet, *Inter. J. Biol. Macromol.*, 65: 389–397.

Pavia, D., Lampman, G., Kriz, G., and Vyvyan, J., 2014, *Introduction to Spectroscopy*, Cengange Learning.

Pereira, P. H. F., Voorwald, H. J. C., Cioffi, M. O. H., Da Silva, M. L. C. P., Rego, A. M. B., Ferraria, A. M., and De Pinho, M. N., 2014, Sugarcane bagasse cellulose fibres and their hydrous niobium phosphate composites: Synthesis and characterization by XPS, XRD and SEM, *Cellulose*, 21: 641–652.

Rajabi, M., Mirza, B., Mahanpoor, K., Mirjalili, M., Najafi, F., Moradi, O., and Gupta, V. K., 2016, Adsorption of malachite green from aqueous solution by carboxylate group functionalized multi-walled carbon nanotubes: Determination of equilibrium and kinetics parameters, *J. Ind. Chem. Eng.*, 34: 130–138.

Ramos, S. N. do C., Xavier, A. L. P., Teodoro, F. S., Gil, L. F., and Gurgel, L. V. A., 2016, Removal of cobalt(II), copper(II), and nickel(II) ions from aqueous solutions using phthalate-functionalized sugarcane bagasse: Mono- and multicomponent adsorption in batch mode, *Ind. Crops. Prod.*, 79: 116–130.

Ramos, S. N. do C., Xavier, A. L. P., Teodoro, F. S., Elias, M. M. C., Gonçalves, F. J., Gil, L. F., and Gurgel, L. V. A., 2015, Modeling mono- and multi-component adsorption of cobalt(II), copper(II), and nickel(II) metal ions from aqueous solution onto a new carboxylated sugarcane bagasse. Part I: Batch adsorption study, *Ind. Crops. Prod.*, 74: 357–371.

Reis, D. L., G. T., Robaina, N. F., Pacheco, W. F., and Cassella, R. J, 2011, Separation of Malachite Green and Methyl Green cationic dyes from aqueous medium by adsorption on Amberlite XAD-2 and XAD-4 resins using sodium dodecylsulfate as carrier, *J. Chem. Eng.*, 171: 532–540.

Robinson, T., McMullan, G., Marchant, R., 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.

Santosa, S. J., Jumina, dan Sri, S., 2003, Sintesis Membran Biourai Selulosa Asetat dan Adsorben Super Karboksimetilselulosa dari Selulosa Ampas Tebu Limbah Pabrik Gula, Jurusan Kimia, Universitas Gadjah Mada, Yogyakarta.

Sewu, D. D., Boakye, P., and Woo, S. H., 2016, Highly efficient adsorption of cationic dye by biochar produced with Korean cabbage waste, *Bioresour. Technol.*, 224: 206–213.

Song, H., Yao, J., Liu, J., and Zhou, S., 2005, Effects of phthalic anhydride modification on horseradish peroxidase stability and structure, *Enzyme Microb. Technol*., 36: 605–611.

Sparham, C. J., Bromilow, I. D., and Dean, J. R., 2005, SPE/LC/ESI/MS with phthalic anhydride derivatisation for the determination of alcohol ethoxylate surfactants in sewage influent and effluent samples, *J. Chromatogr. A*, 1062: 39–47.

Sun, R-C., 2010, *Cereal straw as a resource for sustainable biomaterials and biofuels : chemistry, extractives, lignins, hemicelluloses and cellulose*, 1st ed., Elsevier, Oxford, UK.

Suryadi, B. U., 2016, Aplikasi Lignoselulosa Sulfonat Ampas Tebu untuk Adsorpsi Zat Warna Tekstil Kationik Basic Violet 10, J. Kim. dan Pend. Kim., 1: 11-19.

Sutiyani, F., dan Sukarnen, 2015, Uji Efektivitas Pemanfaatan Limbah Ampas Tebu dan Serbuk Kayu Sebagai Adsorben untuk Pengolahan Air Limbah Perwarnaan Jeans, *Tesis*, Jurusan Teknik Lingkungan, Institut Teknologi Adhi Tama Surabaya.

Tang, Y., Zeng, Y., Hu, T., Zhou, Q., and Peng, Y., 2016, Journal of Environmental Chemical Engineering Preparation of lignin sulfonate-based mesoporous materials for adsorbing malachite green from aqueous solution, *Biochem. Pharmacol.*, 4: 2900–2910.

Tian, G., Wang, W., Kang, Y., and Wang, A., 2016, Ammonium sulfide-assisted hydrothermal activation of palygorskite for enhanced adsorption of methyl violet, *J. Env. Sci.*, 41: 33–43.

Tuny, M. T., 2013, Adsorpsi Desorpsi Biru metilen pada Membran Kompleks Polielektrolit (PEC) Kitosan-Pektin, *Tesis*, Jurusan Kimia, Universitas Gadjah Mada, Yogyakarta.

Wibowo, N., Setiawan, J., dan Ismadji, S., 2004, Modifikasi Gugus Aktif Suatu Karbon Aktif dan Karakterisasinya, J. Tekim. Indo., 3: 39-46.

Widjanarko, P. I., Widiantoro, Soetaredjo, L. F. E., and Ismadji, S., 2006, Kinetika Adsorpsi Zat Warna Congo Red dan Rhodamine B dengan Menggunakan Serabut Kelapa dan Ampas Tebu, *J. Teknik Kimia Indonesia*, 5: 461-468.

Wu, W., Luo, Z.-D., Wang, J., and Liu, J., 2017, Photocatalytic degradation of methyl violet and rhodamine B based on an extremely stable metal-organic framework decorated with carboxylate groups, *Inorg. Chem. Commun.* 36: 605-611.

Xu, R. kou, Xiao, S. cheng, Yuan, J. hua, and Zhao, A. zhen., 2011, Adsorption of methyl violet from aqueous solutions by the biochars derived from crop residues, *Bioresour. Technol.*, 102: 10293–10298.

Yu, X., Chen, C., Peng, J., Shi, Z., Shen, Y., Mei, J., and Ren, Z., 2014, Antibacterial-active multilayer films composed of polyoxometalate and Methyl Violet: Fabrication, characterization and properties, *Thin Solid Films*, 571: 69–74.

Zhang, F., Wei, Z., Zhang, W., and Cui, H., 2017, Effective adsorption of malachite green using magnetic barium phosphate composite from aqueous solution, *Spectrochimica Acta Part A: Mol. Biomol. Spectrosc.*, 182: 116–122.

Zhang, F., Ma, B., Jiang, X., and Ji, Y., 2016, Dual function magnetic hydroxyapatite nanopowder for removal of malachite green and Congo red from aqueous solution, *Powder Technol.*, 302: 207–214.

Zhang, L., Cheng, Z., Guo, X., Jiang, X., and Liu, R., 2014, Process optimization, kinetics and equilibrium of orange G and acid orange 7 adsorptions onto chitosan/surfactant, *J. Mol. Liq.*, 197: 353–367.

Zhou, Y., Min, Y., Qiao, H., Huang, Q., Wang, E., and Ma, T., 2015, Improved removal of malachite green from aqueous solution using chemically modified cellulose by anhydride, *Inter. J. Biol. Macromol.*, 74: 271–277.