



DAFTAR PUSTAKA

- Adamson, A.W., 1990, *Physical Chemistry of Surfaces*, 5th Ed., John Wiley and Sons, Inc., New York.
- Anggraeny, B., Sabarudin, A., dan Rumhayati, B., 2014, Pembuatan kitosan makropori menggunakan garam dapur dan aplikasinya terhadap adsorpsi jingga metil, *J. Student. Chem.*, 1, 1–7.
- Anirudhan, T. S., and Ramachandran, M. 2015. Adsorptive removal of basic dyes from aqueous solutions by surfactant modified bentonite clay (organoclay); Kinetic and competitive adsorption isotherm. *Process Saf. Environ. Prot.*, 95, 215–225.
- Crini, G., and Badot, P.M., 2008, Application of chitosan, a natural aminopolysaccharide, for dye removal from aqueous solution by adsorption processes using batch studies: A review of recent literature, *Prog. Polym. Sci.*, 33, 399–447.
- Ghaee, A., Shariaty–niassar, M., Barzin, J., and Matsuura, T., 2010, Effects of chitosan membrane morphology on copper ion adsorption, *J. Chem. Eng.*, 165, 46–55.
- Ghaee, A., Shariaty–niassar, M., and Barzin, A., 2012, Adsorption of copper and nickel ions on macroporous chitosan membrane: Equilibrium study, *Appl. Surf. Sci.*, 258, 7732–7743.
- Gottipati, R., and Mishra, S., 2010, Application of Biowaste (Waste Generated in Biodiesel Plant) as an Adsorbent for the Removal of Hazardous Dye Methylene Blue—from Aqueous Phase, *Brazilian Chem. Eng. J.*, 27 (2), 357–367.
- Grupta, V. K. Suhas–ali, I., and Saini, V.K., 2004, Removal of rhodamine B, fast green, and methylene blue from wastewater using red mud, an aluminium industry waste. *Ind. Eng. Chem. Res.*, 43, 1740–1747.
- Hua, S., and Wang, A., 2009, Synthesis, characterization and swelling behaviors of natrium alginate–g–poly(acrylic acid)/Natrium humate superabsorbent, *Carbohydr. Polym.*, 75, 79–84.
- Kannan, N., and Sundram, M. M., 2001, Kinetics and mechanism of removal of methylene blue by adsorption on various carbon—a comparative study, *J. Dye and Pigment.*, 51, 25–40.
- Keputusan Menteri Lingkungan Hidup: Kep–51/MENLH/10/1995 Tentang Baku Mutu Limbah Cair.



- Li, Y., Du, Q., Liu, T., Sun, J., Wang, Y., Wu, S., Wang, Z., Xia, Y., and Xia, L., 2013. Methylene blue adsorption on graphene oxide/calcium alginate composites. *Carbohydr. Polym.*, 95(1), 501–507.
- Liang, C.Z., and Sun, S.P., 2014, Treatment of highly concentrated wastewater containing multiple synthetic dyes by a combined process of coagulation/flocculation and nanofiltration, *J. Membr. Sci.*, 469, 306–315.
- Mardila, V. T., Sabarudin, A., dan Rumhayati, B., 2014, Pembuatan kitosan makropori menggunakan *epichlorohydrin* sebagai *cross-linker* dan aplikasinya terhadap jingga metil, *J. Student. Chem.*, 182–188.
- Muzzarelli, R.A.A., 1977, *Chitin*, Pergamon Press.
- Nawaz, M., and Ahsan, M., 2014, Comparison of physico-chemical, advanced oxidation and biological techniques for the textile wastewater treatment, *Alexandria Eng. J.*, 53, 711–722.
- Ngah, W.S., and Musa, A., 1998, Adsorption of Humic Acid onto Chitin and Chitosan, *J. Appl. Polym. Sci.*, 69, 2305–2310.
- Oscik, J., 1982, *Adsorption*, John Wiley, Chichester.
- Saha, T. K., Bhoumik, N. K., Karmaker, S., Ahmed, M. G., Ichikawa, H., and Fukumori, Y., 2010, Adsorption of Methyl Orange onto Chitosan from Aqueous Solution, *J. Water Resour. Protect.*, 2, 898–906.
- Shenvi, S. S., Isloor, A. M., Ismail, A.F., Shilton, S.J., and Ahmed, A.A., 2015, Humic acid based biopolymeric membrane for effective removal of methylene blue and rhodamin B, *Ind. Eng. Chem. Res.*, 54, 4965–4975.
- Silitonga, S., 2014, Adsorpsi dan desorpsi metilen biru pada membran polielektrolit kompleks kitosan pektin tertaut silang glutaraldehida, *Tesis*, Jurusan Kimia FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Siswati, I., Sabarudin, A., dan Darjito, 2014, Pembuatan kitosan makropori menggunakan *Ethylene Glycol Diglycidyl Ether* (EDGE) sebagai *cross-linker* dan aplikasinya terhadap jingga metil, *J. Student. Chem.*, 1, 175–181.



- Stum, W. and Morgan, J.J., 1981, *Aquatic Chemistry*, John Wileys and Sons Inc., New York.
- Tanasale, B.F.J.D.P., Kilaiy, A., dan Marsela, A.L., 2012, Kitosan dari limbah kulit kepiting Ranjungan (*Portunus sanguinolentus* L.) sebagai adsorben zat warna biru metilen, *Jurnal Natur Indonesia*, 14(2), 165–171.
- Tuny, T., 2013, Adsorpsi desorpsi biru metilen pada membran kompleks PEC kitosan–pektin, *Tesis*, Jurusan Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Verma, A.K., Dash, R.R., and Bhunia, O., 2012, A review on chemical coagulation/flocculation technologies for removal of colour from textile wastewaters, *J. Environ. Manage.*, 92, 154–168.
- Yang, C.L., and McGarrah, J., 2005, Electrochemical coagulation for textile decolorization, *J. Hazard. Mater.*, B127, 40–17.
- Yi, J., and Zhang, L., 2008, Removal of methylene blue dye from aqueous solution by adsorption onto Natrium humate/polyacrylamide/clay hybrid hydrogels, *Bioresour. Technol.*, 99, 2182–2186.
- Zhang, J., Li, A., and Wang, A., 2006, Synthesis and characterization of multifunctional poly(acrylic acid–co–acrylamide)/Natrium humate superabsorbent composite, *React. Funct. Polym.*, 66, 747–756.
- Zhang, X., and Bay, R., 2003, Mechanism and Kinetics of Humic Acid Adsorption onto Chitosan–Coated Gradules, *J. Colloid Interface Sci.*, 264, 30–38.
- Zhang, Z., and Kong, J., 2011. Novel magnetic Fe₃O₄ nanoparticles as adsorbents for removal organic dyes from aqueous solution. *J. Hazard. Mater.*, 193, 325– 329.