

DAFTAR PUSTAKA

- Abdullah, M., Arutanti, O., Isnaeni, V.A., Fitria, I., Amalia, Maturi, Aliah, H., Khairurrijal, 2010, Pengolahan Air Limbah dengan Material Struktur Nanometer, *Jurnal Seminar Kontribusi Fisika*, INV05.
- Ahmad, F., Daud, W., Ahmad, M., Radzi, R., 2012, Cocoa (Theobroma cacao) Shell-based Activated Carbon by CO₂ Activation in Removing of Cationic Dye from Aqueous Solution: Kinetics and Equilibrium Studies, *Chemical Engineering*, 90, 1480–1490.
- Alam, J.S., Lingkungan, D., Sulianto, A.A., Kurniati, E., Hapsari, A.A., 2018, Perancangan Unit Filtrasi untuk Pengolahan Limbah Domestik Menggunakan Sistem Downflow, *Jurnal Sumber Daya Alam dan Lingkungan*, 6(2), 31–9.
- Albanis, T., Hela, T., Sakellarides, Danis, T., 2000, Removal of Dye from Aqueous Solution by Adsorption on Mixtures of Fly Ash and Soil in Batch and Column Techniques, *Global Nest. The Int. J.*, 2, 237–244.
- Aminullah, M., Sukarno, F., Baiti, I.F., 2019, Pemanfaatan TiO₂ pada Proses Fotodegradasi Limbah Pewarna Batik *Remazol Yellow FG*, *Jurnal Crystal: Publikasi Penelitian Kimia Dan Terapannya*, 1(1), 28-38.
- Anas, A., Ahzan, S., Sabda-Budi, P.D., 2018, Pembuatan Filter Penangkap Emas (Au) Menggunakan Kitin dan Kitosan dari Cangkang Kepiting, *Pendidikan Fisika*, 5(2), 23-30
- Andrzejewska, A., Krysztalkiewicz, K., Jesionowski, T., 2007, Treatment of Textile Dye Wastewater Using Modified Silica, *Dye and Pigments*, 116 – 124.
- Ardiyanto, N. R. N., Arisky, T. N., dan Fadilla, B. M., 2020, Biochar dari Serbuk Gergaji Kayu Mahoni Termodifikasi Magnetite (Fe₃O₄) untuk Menurunkan Kadar Logam Kromium dalam Limbah Batik, *IJCR*, 5(1), 24–31.
- Asmara, A., Purnamadewi, Y.L., Mulatsih, S., Novianti, T., 2013, Faktor - Faktor yang Memengaruhi Perkembangan Investasi pada Industri Tekstil dan Produk Tekstil (TPT) Indonesia, *Jurnal Manajemen Teknologi*, 12(3).
- Atkins, P.W., 1999, *Kimia Fisika Jilid 2*, Edisi ke 4, Terjemahan Kartohadiprojo, Erlangga, Jakarta.

- Atkins, P., Paula, J., 2006, *Physical Chemistry, 8th ed.*, W.H. Freeman and Company, New York.
- Benkhaya, S., M'rabet, S., dan El Harfi, A., 2020, A Review on Classifications, Recent Synthesis and Applications of Textile Dyes, *Inorg. Chem. Commun.*, 115, 107891.
- Bird, T., 1993, *Kimia Fisika untuk Universitas*, Gramedia Pustaka Utama, Jakarta.
- Chatterjee, D., Patnama, V., Sikdar, A., Joshi, P., Misra, R., dan Rao, N., 2008, Kinetics of The Decoloration of Reactive Dyes Over Visible Light Irradiated TiO₂ Semiconductor Photocatalyst, *J. Hazard. Mater.*, 156, 435–441.
- Demarchi, C., Debrassi, A., Buzzi, F., Nedelko, N., Waniewska, A., Dluzewski, P., Magro, J., Scapinello, dan J., Rodrigues, C., 2015, Adsorption of the Dye Remazol Red 198 (RR198) by O-carboxymethylchitosan-N-lauryl/ γ -Fe₂O₃ Magnetic Nanoparticles, *Arab. J. Chem.*
- Faqih, A., 2010, Penurunan Kadar Zat Warna *Remazol Yellow FG* Menggunakan Adsorben Semen Portland, *Skripsi*, Universitas Sebelas Maret, Surakarta.
- Faust, S.D., dan Aly, O.M., 2013, *Adsorption Process for Water Treatment*, Butterworth Publisher, Stoneham.
- Fessenden, R.J. and J.S. Fessenden, 1989, *Kimia Organik*, Jilid 2, Edisi ke-3, Erlangga, Jakarta.
- Haldorai, Y., Kharismadewi, D., dan Tuma, D., 2015, Properties Of Chitosan/Magnetite Nanoparticles Composites For Efficient Dye Adsorption And Antibacterial Agent, *Korean J. Chem. Eng.*, 32, 1688–1693.
- Hallouet, B., Wetzel, B., dan Pelster, R. J., 2007, On the Dielectric and Magnetic Properties of Nanocomposites, *J. Nanomater.*
- Hassani, A., Alidokht, A., Khataee, K., 2014, Optimization of Comparative Removal of Two Structurally Different Basic Dyes Using Coal as a Low-cost and Available Adsorbent, *J. Taiwan Inst. Chem. Eng.*, 45, 1597–1607.
- Ho, Y.S., 2006, Review of Second-Order Models for Adsorption Systems, *J. Hazard Mater.*, B136, 681-689.
- Huda, K., 2015, Kajian Adsorpsi *Remazol Yellow FG* oleh Montmorillonit-Kitosan *Skripsi*, UIN Sunan Kalijaga, Yogyakarta.

- Ibrahin A.F.M. dan Lim Y.S., 2018, Synthesis of graphene oxide membranes on polyester substrate by spray coating for gas separation, *Chem. Eng. Sci.*, 190(23), 312-319.
- Iida, H., Takayanagi, K., Nakanishi, T., dan Osaka, T., 2007, Synthesis of Fe₃O₄ Nanoparticles with Various Size and Magnetic Properties by Controlled Hydrolysis, *J. Colloid. Interf. Sci.*, 314, 274-280.
- Khasanah, E., 2009, Adsorpsi Logam Berat, *Oseana*, 34, 1–7.
- Lacheb, H., Puzenat, E., Marie, J., 2002, Photocatalytic Degradation of Dye (Alizarin S, Crocein Orange G, Methyl Red, Congo Red, Methylen Blue) in Water by UV-Irradiated Titania, *Appl. Catal.*, 39, 75–90.
- Latifah, S., Ridho, R., dan Baiti, I. F., 2020, Imobilisasi Fotokatalis Komposit Tio₂-Kitosan Sebagai Pendegradasi Zat Warna Remazol Yellow FG, *Jurnal Crystal: Publikasi Penelitian Kimia Dan Terapannya*, 2(1), 25-35.
- Latifah, WN., and Rahmayanti, M., 2020, Desorption of Indigosol Blue From Humic Acid Coated Fe₃O₄ Particles, *Proceeding International Conference on Science and Engineering*, 3, 169-170.
- Lestari, I., Prasetyo, E., dan Gusti, D.R., 2021, Penggunaan Karbon Aktif Magnetit-Fe₃O₄ sebagai Penyerap Zat Warna Remazol Yellow, *Journal BiGME*, 1(1), 29-37.
- Liu, Y., Huang Y., Xiao, A., Qiu, H., dan Liu, L., 2019, Preparation Of Magnetic Fe₃O₄/MIL-88A Nanocomposite And Its Adsorption Properties For Bromophenol Blue Dye In Aqueous Solution, *Nanomaterials*, 9(1), 51.
- Lucinaldo, S., Luciano, C., Fransisco, J., Mateus, S., Josy, A., Roosevelt, D., dan Edson, C., 2015, Sorption of the Anionik Rective Red RB Dye in Cellulose: Assesment of Kinetic, Thermodynamic, and Equilibrium, *Open Chem*, 13, 801– 812.
- Mahdavi, M., Namvar, F., Ahmad, M., dan Mohamad, R., 2013, Green Biosynthesis and Characterization Of Magnetic Iron Oxide (Fe₃O₄) Nanoparticles Using Seaweed (Sargassum Muticum) Aqueous Extract, *Molecules*, 18, 5954- 5964.
- Magfiroh, L., 2016, Studi Adsorpsi Remazol Yellow FG dengan Menggunakan Adsorben Selulosa Bakterial *Nata De Coco*, *Skripsi*, Institut Teknologi Sepuluh November, Surabaya.

- Magriotis, Z., Carvalho, M., Sales, P., Alves, F., Resende, R., dan Saczk, A., 2014, Castor Bean (*Ricinus communis* L.) Presscake from Biodiesel Production: An Efficient Lowcost Adsorbent for Removal of Textile Dyes, *J. Environ. Chem. Eng.*, 2, 1731–1740.
- Mezohegyi, G., Van, D., Front, J., Fortuny, A., dan Fabregat, 2012, Towards Advanced Aqueous Dye Removal Processes: A Short Review on the Versatile Role of Activated Carbon, *J. Environ. Manage.*, 102, 148–164.
- Mustafiah, Darnengsih, D., Sabara, Z., dan Abdul-Majid, R., 2018, Pemanfaatan Kitosan dari Limbah Kulit Udang Sebagai Koagulan Penjernihan Air, *Chem Process Eng-Inz*, 3(1), 27-32.
- No. H, Lee dan Meyers S.P., 2000, Correlation Between Physicochemical Characteristic and Binding Capacities on Chitosan Product, *J. Food Sci.*, 65(7), 1134-1137.
- Olowe, A.A., Refait, P.H., dan Genin, J.M.R., 2001, The Influence of Concentration on the Oxidation of Ferrous Hydroxide in Basic Sulphated Medium: Particle Size Analysis of Goethite and δ -FeOOH, *Corros. Sci.*, 32 (9), 1003-1020.
- Oscik, J., 1982, *Adsorption*, Ellis Harwood Limited Publisher, New York.
- Pujiastuti, P., 2001, Kajian Transformasi Kitin Menjadi Kitosan Secara Kimiawi dan Enzimatis, *Seminar Nasional Jurusan Kimia*, FMIPA, UNS, Surakarta.
- Puspitasari, A., 2007, Pembuatan dan Pemanfaatan Kitosan Sulfat dari Cangkang Bekicot (*Achatina fullica*) sebagai Adsorben Zat Warna *Remazol Yellow FG*, *Skripsi*, Universitas Sebelas Maret, Surakarta.
- Putri, NFY., dan Rahmayanti, M., 2020, Desorption of Naphtol Blue-Black from Humic Acid Modified Magnetite Using Naoh As Desorption Agent, *Proc. Internat. Conf. Sci. Engin*, 3, 157- 158.
- Pylypchuk, I.V., Kołodyńska, D., Koziół, M., 2016, Gd-DTPA Adsorption on Chitosan/Magnetite Nanocomposites, *Nanoscale Res Lett*, 11, 168.
- Qodri, A., 2011, Fotodegradasi Zat Warna *Remazol Yellow FG* dengan Fotokatalis Komposit $\text{TiO}_2/\text{SiO}_2$, *Skripsi*, Universitas Sebelas Maret, Surakarta.
- Qu, J., Liu, G., Wang, Y., dan Hong, R., 2010, Preparation Of Fe_3O_4 -Chitosan Nanoparticles Used For Hyperthermia, *Adv. Powder Technology.*, 21, 461-467.

- Rahmayanti, M., Santosa, S.J., dan Sutarno, 2015, Sonochemical Co-precipitation Synthesis of Gallic Acid-modified Magnetite, *Advanced Materials Research*, 1101: 286-289.
- Rahmayanti, M. Abdillah, G., Santosa, S.J., dan Sutarno, 2019, Application of Humic Acid Isolated From Kalimantan Peat Soil Modifying Magnetite For Recovery Of Gold, *Jurnal Bahan Alam Terbarukan*, 8(2), 77-83.
- Rahmayanti, M., Yunita, E. and Putri, NFY, 2020, Study of Adsorption-Desorption On Batik Industrial Dyes (Naphthol Blue Black) On Magnetite Modified Humic Acid (HA- Fe₃O₄), *Jurnal Kimia Sains dan Aplikasi*, 23(7), 244-248.
- Rahmayanti, M., 2020, Sintesis dan Karakterisasi Magnetit (Fe₃O₄): Studi Komparasi Metode Konvensional Dan Metode Sonokimia, *Al Ulum Sains dan Teknologi*, 6(1), 26-31.
- Ramajo, L. A, Cristóbal, A. A., Botta, P. M., Porto-López, J. M., Reboredo, M. M., dan Castro, M. S., 2009, Dielectric and Magnetic Response of Fe₃O₄/Epoxy Composites, *Composites Part A*, 40, 388–393.
- Rampengan, A.M., 2017, Analisis Gugus Fungsi pada Polimer Polyethylene Glycol (PEG) Terlapis Nanopartikel Oksida Besi Hitam (Fe₃O₄) dan Biomolekul, *Fuller. Nanotub. Carbon Nanostructures*, 2(2), 96-98.
- Rasjid D, G.A. Kasoenarno, Astini S, dan Arifin L., 1976, *Teknologi Pengelantangan, Pencelupan dan Pencapan*, Institut Teknologi Tekstil, Bandung.
- Refait, P.H., dan Genin, J.M.R., 2003, The Oxidation of Ferrous Hydroxide in Chloride-containing Aqueous Media and Pourbaix Diagrns of Green Rust One, *Corros. Sci.*, 34 (5), 797-819.
- Said I., 2017, *Teknologi Pengolahan Air Limbah Teori dan Aplikasi*, Erlangga, Jakarta.
- Santosa, S.J., dan Muzakky, 2002, Kinetika Adsorpsi Logam Berat (Krom, Tembaga dan Uranium) oleh Senyawa Humat dalam Tanah Gambut, *Laporan Penelitian Penelitian Dasar DIKTI Tahun Anggaran 2002*, Yogyakarta.
- Schwertmann, U., 2008, *Iron Oxides Encyclopedia of Soil Science*, Springer, Netherland, 363-369
- Shakoor, S., and Nasar, A., 2016, Removal of Methylene Blue Dye from Artificially Contaminated Water Using Citrus Limetta Peel Waste as A Very Low Cost Adsorbent, *J. Taiwan Inst. Chem. Eng.*, 66, 154-163.

- Silva, M., Oliveira, M., Filho, E., 2012, Adsorption of an Industrial Anionik Dye by Modified-KSFMontmorillonite: Evaluation of the Kinetic, Thermodynamic, and Equilibrium Data, *Chemical Engineering*, 203, 259–268.
- Sime R. J., 1990, *Physical Chemistry Methods, Techniques and Experiments*, Sounders College Publishing, Philadelphia.
- Singh, L.H., Govindaraj, R., Amarendra, G., dan Sundar, C.S., 2013, Atomic Scale Study on the Thermal Evolution of Local Structure and Magnetic Properties in Oleic Acid Coated Iron Oxide Nanoparticles, *J. Phys. Chem.*, 117, 25042–25051.
- Stumm, W., dan Morgan, J.J., 1996, *Aquatic Chemistry: Chemical Equilibria and Rates In Natural Water*, Third Edition, John Wiley & Sons, Inc, New York.
- Sugiyanti, D., Darmadji, P., Santoso, U., Pranoto, Anwa C., Anggrahini, S., 2018, Biological Activity of Native and Low Molecular Weight Chitosan obtained by Steam Explosion Process, *Pak J Biol Sci.*, 21(9), 441-447.
- Suherman, S.D.M., Firdaus, M. A., Ryansyah, M.H.D., dan Sari, D.A., 2020, Teknologi Dan Metode Pengolahan Limbah Cair Sebagai Pencegahan Pencemaran Lingkungan, *Barometer*, 5(1), 232–238.
- Tao Lee, S., Long Mi, F., Ju Shen., dan Shing Shyu, S., 2001, Equilibrium and Kinetic Studies of Copper (II) Ion Uptake by Chitosan-Tripolyphosphate Chelating Resin, *Polymer.*, 42, 1879-1892.
- Teja, A.S., dan Koh, Pei-Yoong., 2009, Synthesis, Properties, And Applications Of Magnetic Iron Oxide Nanoparticles, *Progress In Crystal Growth And Characterization Of Materials*.
- Umpuch, C., dan Sakaew, S., 2013, Removal of Methyl Orange from Aqueous Solutions by Adsorption Using Chitosan Intercalated Montmorillonite. Songklanakarin, *J. Sci. Technol*, 35(4), 451-459.
- Ventura-Aguilar, R.I., Baños, S.B., García, G.F., Avejar, L.Z., 2018, Impact of Chitosan Based Edible Coatings Functionalized with Natural Compound on *Colletotrichum Fragariae* Development and The Quality Of Strawberries, *Food Chem.*, 262(1), 142-149.

- Widodo, A., Mardiah, dan Andi, P., 2005, Potensi Kitosan dari Sisa Udang sebagai Koagulan Logam Berat Limbah Cair Industri Tekstil, *Skripsi*, ITS, Surabaya.
- Windasari, R., 2009, Adsorpsi Zat Warna Tekstil Direct Blue 86 oleh Kulit Kacang Tanah, *Skripsi*, Universitas Negeri Semarang, Semarang.
- Wilcox, C.F., dan Wilcox M.F., 1995, *Experimental Organik Chemistry: A Small – scale Approach*, 2nd edition, Prentice Hall, New Jersey.
- Yagub, M., Sen, T., Afroze, S., dan Ang, H., 2014, Dye and Its Removal from Aqueous Solution by Adsorption: A Review, *Adv. Colloid Interface Sci.*
- Younas, M., Sohail, M., Leong, L.K., Bashir, M.JK., dan Sumathi, S., 2016, Feasibility of CO₂ Adsorption by Solid Adsorbents: A Review on Low-Temperatur Sistesms, *Int. J. Environ. Sci. Technol.*, 13, 1839-1860.
- Zhang, L., He, R., dan Gu, H-C., 2006, Oleic Acid Coating on The Monodisperse Magnetite Nanoparticles, *Appl. Surf. Sci.*, 253, 2611–2617.
- Zhang, B., Hu, R., dan Sun, D., 2018, Fabrication of Chitosan/Magnetite-Graphene Oxide Composites As A Novel Bioadsorbent For Adsorption And Detoxification Of Cr (VI) From Aqueous Solution, *Sci Rep*, 8, 15397.