

## DAFTAR PUSTAKA

- Adekola, F.A., Hodonou, D.S.S., and Adegoke, H.I., 2016, Thermodynamic and Kinetic Studies of Biosorption of Iron and Manganese from Aqueous Medium Using Rice Husk Ash, *Appl Water Sci*, 6, 319–330.
- Alimohammadi, Z., Younesi, H., and Bahramifar, N., 2016, Batch and Column Adsorption of Reactive Red 198 from Textile Industry Effluent by Microporous Activated Carbon Developed from Walnut Shells, *Waste and Biomass Valor*, 7, 1255–1270.
- Alrozi, R., Zamanhuri, N.A., and Osman, M.S., 2012, Adsorption of Reactive Dye Remazol Brilliant Blue R from Aqueous Solutions by Rambutan Peel, *SHUSER 2012 - 2012 IEEE Symposium on Humanities, Science and Engineering Research*, 21–26.
- Arivithamani, N. and Dev, G., 2016, Salt-free Reactive Dyeing of Cotton Hosiery Fabrics by Exhaust Application of Cationic Agent, *Carbohydr Polym*, 152, 1–11.
- Atangana, G.E., Tchotang, T., Wedaïna, A.G.I., Olembe, Y.R., Djaligue, A., and Mahondé, N., 2025, Effect of Alkaline Treatment on the Physical, Chemical, and Mechanical Properties of Coconut Palm *Nucifera Rachis* Fibres, *Journal of Natural Fibers*, 22, .
- Ayed, L., Mahdhi, A., Cheref, A., and Bakhrouf, A., 2011, Decolorization and Degradation of Azo Dye Methyl Red by an Isolated *Sphingomonas paucimobilis*: Biototoxicity and Metabolites Characterization, *Desalination*, 274, 272–277.
- Ayuba, A.M., Ladan, M., and Muhammad, A.S., 2020, Thermodynamic and Kinetic Study of Pb(II) Amputation by River Sediment,.
- Bayuo, J., Rwiza, M.J., Choi, J.W., Mtei, K.M., Hosseini-Bandegharai, A., and Sillanpää, M., 2024, Adsorption and Desorption Processes of Toxic Heavy Metals, Regeneration and Reusability of Spent Adsorbents: Economic and Environmental Sustainability Approach, *Adv Colloid Interface Sci*, 329, .

- Bhattacharya, S., Gupta, A.B., Gupta, A., and Pandey, A., 2018, Introduction to Water Remediation: Importance and Methods, *Energy, Environment, and Sustainability*, 3–8.
- Bledzki, A.K. and Gassan, J., 1999, Composites Reinforced with Cellulose Based Fibres, *Prog. Polym. Sci*, 24, 221–274.
- Ciobanu, G., Barna, S., and Harja, M., 2016, Kinetic and Equilibrium Studies on of Reactive Blue 19 Dye from Aqueous Solutions by Nanohydroxyapatite Adsorbent, *Archives of Environmental Protection*, 42, 3–11.
- Correia, J., Oliveira, F.R., de Cássia Siqueira Curto Valle, R., and Valle, J.A.B., 2021, Preparation of Cationic Cotton Through Reaction with Different Polyelectrolytes, *Cellulose*, 28, 11679–11700.
- Dalvand, A., Nabizadeh, R., Reza Ganjali, M., Khoobi, M., Nazmara, S., and Hossein Mahvi, A., 2016, Modeling of Reactive Blue 19 Azo Dye Removal from Colored Textile Wastewater using L-arginine-Functionalized Fe<sub>3</sub>O<sub>4</sub> Nanoparticles: Optimization, Reusability, Kinetic and Equilibrium Studies, *J Magn Magn Mater*, 404, 179–189.
- Değermenci, G.D., Değermenci, N., Emin, N., and Aşıkuzun, E., 2022, Characterization of Mg-rich Natural Serpentine Clay Mineral and Removal of Reactive Blue 19 from Aqueous Solutions, *EQA*, 47, 40–55.
- Dewi, I.A., Ihwah, A., Setyawan, H.Y., Kurniasari, A.A.N., and Ulfah, A., 2021, Optimization of NaOH concentration and cooking time in delignification of mature coconut (*Cocus nucifera* L.) coir, *IOP Conf Ser Earth Environ Sci*, 733, 012034.
- Divya, J.M., Palak, K., and Vairavel, P., 2020, Optimization, Kinetics, Equilibrium Isotherms, and Thermodynamics Studies of Coomassie Violet Dye Adsorption Using *Azadirachta Indica* (Neem) Leaf Adsorbent, *Desalination Water Treat*, 190, 353–382.
- Draman, S.F.S., Daik, R., Abdul Latif, F., and El-Sheikh, S.M., 2014, Characterization and Thermal Decomposition Kinetics of Kapok (*Ceiba pentandra* L.)-Based Cellulose,.

- Futalan, C.M., Choi, A.E.S., Soriano, H.G.O., Cabacungan, M.K.B., and Millare, J.C., 2022, Modification Strategies of Kapok Fiber Composites and Its Application in the Adsorption of Heavy Metal Ions and Dyes from Aqueous Solutions: A Systematic Review, *Int J Environ Res Public Health*, 19, .
- Hamidon, M.A.B., Hussin, R., Harun, Z., Yunos, M.Z., Ainuddin, A.R., Rahim, S.M., and Hamidon, N., 2024, Characterization of Kapok (*Ceiba pentandra* (L.) Gaertn.) and Its Reusability in Oil Sorption,.
- Handayani, D.S., Jumina, Siswanta, D., and Mustofa, 2012, Adsorpsi Ion Logam Pb(II), Cd(II) dan Cr(III) Oleh Poli 5 Allil-Kaliks [4] Arena Tetraester,.
- Hirano, A., Gao, W., He, X., and Kono, J., 2017, Destabilization of Surfactant-Dispersed Carbon Nanotubes by Anions, *Nanoscale Res Lett*, 12, .
- Honorato, A., 2015, Main wood chemical constituents of *Ceiba pentandra*, *Hevea Brasiliensis* and *Ochroma pyramidale*,.
- Hussain, M., Levacher, D., Leblanc, N., Zmamou, H., Djeran-Maigre, I., Razakamanantsoa, A., and Saouti, L., 2023, Analysis of physical and mechanical characteristics of tropical natural fibers for their use in civil engineering applications, *Journal of Natural Fibers*, 20, .
- Jawad, A.H., Norrahma, S.S.A., Hameed, B.H., and Ismail, K., 2019, Chitosan-Glyoxal Film as a Superior Adsorbent for Two Structurally Different Reactive and Acid Dyes: Adsorption and Mechanism Study, *Int J Biol Macromol*, 135, 569–581.
- Jiang, X., Sun, Y., Liu, L., Wang, S., and Tian, X., 2014, Adsorption of C.I. reactive blue 19 from aqueous solutions by porous particles of the grafted chitosan, *Chemical Engineering Journal*, 235, 151–157.
- Kang, B., Tang, H., Zhao, Z., and Song, S., 2020, Hofmeister Series: Insights of Ion Specificity from Amphiphilic Assembly and Interface Property, *ACS Omega*, 5, 6229–6239.
- Karan, C.P., Rengasamy, R.S., and Das, D., 2011, Oil Spill Cleanup by Structured fibre Assembly,.
- Khairanti, S.F., 2025, Adsorpsi Remazol Brilliant Blue R Menggunakan Nanokristal Selulosa Ampas Tebu dengan Metode Hidrolisis Asam,.

- Khapre, M., Shekhawat, A., Saravanan, D., Pandey, S., and Jugade, R., 2022a, Mesoporous Fe-Al-doped cellulose for the efficient removal of reactive dyes, *Mater Adv*, 3, 3278–3285.
- Khapre, M., Shekhawat, A., Saravanan, D., Pandey, S., and Jugade, R., 2022b, Mesoporous Fe-Al-doped Cellulose for The Efficient Removal of Reactive Dyes, *Mater Adv*, 3, 3278–3285.
- Khim, O.K., Nor, M.A.M., Mohamad, S., Nasaruddin, N.A.A., Jamari, N.L.A., and Yunus, W.M.Z.W., 2015, Isotherm Study of Reactive Blue 19 Adsorption by an Alum Sludge,. In, *AIP Conference Proceedings*. American Institute of Physics Inc.
- Khoshhesab, Z.M. and Ahmadi, M., 2015, Removal of reactive blue 19 from aqueous solutions using NiO nanoparticles: equilibrium and kinetic studies, *Desalination Water Treat*, 57, 20037–20048.
- Kızıl, Y., Benek, V., Teğın, İ., Önal, Y., Erol, K., and Alacabey, İ., 2024, Reactive Blue 19 Adsorption on Activated Carbon from Pumpkin (Cucurbita Pepo) Seed Waste: Kinetic, Isotherm and Thermodynamic Studies, *Environmental Research, Engineering and Management*, 80, 7–20.
- Kulkarni, M.R., Bhagyalakshmi, C., Anand, D., and Herle, R.N., 2018, Removal of remazol brilliant blue dye from aqueous solutions using water hyacinth root powder, *Desalination Water Treat*, 122, 331–338.
- Larion, M., Muresan, E.I., Radu, C.D., Sandu, I., Cerempei, A., and Cimpoesu, N., 2018, Synthesis, Characterization and Use of Supported Co/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub> for the Removal of Reactive Blue 19 from Aqueous Solutions,.
- Lee, A.H., Jang, Y., Kim, G.H., Kim, J.J., Lee, S.S., and Ahn, B.J., 2017, Decolorizing an Anthraquinone Dye by *Phlebia Brevispora*: Intra-Species Characterization, *Eng Life Sci*, 17, 125–131.
- Li, X., Fu, J., Zhai, S., Wang, J., Xu, B., and Cai, Z., 2024, Efficient Cationization Strategy for Cotton Fabric with Excellent Utilization of Chemical Reagent, *Cellulose*,.

- Liu, Y., Wang, J., Zheng, Y., and Wang, A., 2012, Adsorption of Methylene Blue by Kapok Fiber Treated by Sodium Chlorite Optimized with Response Surface Methodology, *Chemical Engineering Journal*, 184, 248–255.
- Manohar, D.M., Noeline, B.F., and Anirudhan, T.S., 2006, Adsorption Performance of Al-Pillared Bentonite Clay for The Removal of Cobalt(II) from Aqueous Phase, *Appl Clay Sci*, 31, 194–206.
- Mate, C.J. and Mishra, S., 2020, Synthesis of Borax Cross-Linked Jhingan Gum Hydrogel for Remediation of Remazol Brilliant Blue R (RBBR) Dye from Water: Adsorption Isotherm, Kinetic, Thermodynamic and Biodegradation Studies, *Int J Biol Macromol*, 151, 677–690.
- Miller, R., Grigoriev, D.O., Krägel, J., Makievski, A. V., Maldonado-Valderrama, J., Leser, M., Michel, M., and Fainerman, V.B., 2005, Experimental Studies on The Desorption of Adsorbed Proteins from Liquid Interfaces,. In, *Food Hydrocolloids*. Elsevier, pp. 479–483.
- Musah, M., Azeh, Y., Mathew, J., Umar, M., Abdulhamid, Z., and Muhammad, A., 2022, Adsorption Kinetics and Isotherm Models: A Review, *Caliphate Journal of Science and Technology*, 4, 20–26.
- Mustafa, M.M., Jamal, P., Alkhatib, M.F., Mahmud, S.S., Jimat, D.N., and Ilyas, N.N., 2017, Panus tigrinus as a potential biomass source for Reactive Blue decolorization: Isotherm and kinetic study, *Electronic Journal of Biotechnology*, 26, 7–11.
- Mwaikambo, L.Y. and Ansell, M.P., 2002, Chemical Modification of Hemp, Sisal, Jute, and Kapok Fibers by Alkalization, *J Appl Polym Sci*, 84, 2222–2234.
- Nandanwar, P.M., Doondani, P., Sarvanan, D., and Jugade, R.M., 2024, Amendment of Chitosan Biopolymer with Graphite for Augmented Confiscation of Reactive Blue-19 and Reactive Orange-16 Textile Dyes, *Indian Journal of Chemical Technology*, 31, 710–721.
- Özcan, A., Ömeroğlu, Ç., Erdoğan, Y., and Özcan, A.S., 2007, Modification of Bentonite with a Cationic Surfactant: an Adsorption Study of Textile Dye Reactive Blue 19, *J Hazard Mater*, 140, 173–179.

- Parimelazhagan, V., Yashwath, P., Arukkani Pushparajan, D., and Carpenter, J., 2022, Rapid Removal of Toxic Remazol Brilliant Blue-R Dye from Aqueous Solutions Using Juglans Nigra Shell Biomass Activated Carbon as Potential Adsorbent: Optimization, Isotherm, Kinetic, and Thermodynamic Investigation, *Int J Mol Sci*, 23, .
- Prabawati, S.Y., Aji, D.P., and Rahmadhani, D., 2024, Limbah Kulit Buah Salak Teraktivasi Asam Klorida sebagai Arang Aktif Logam Berat Timbal Pb (II) dan Kromium Cr (VI), *J Chem*, 18, 86–98.
- Pruś, S., Kulpiński, P., Matyjas-Zgondek, E., and Wojciechowski, K., 2022, Eco-friendly Dyeing of Cationised Cotton with Reactive Dyes: Mechanism of Bonding Reactive Dyes with CHPTAC Cationised Cellulose, *Cellulose*, 29, 4167–4182.
- Purnawati, R., Febrianto, F., Wistara, I.N.J., Nikmatin, S., Hidayat, W., Lee, S.H., and Kim, N.H., 2018, Physical and Chemical Properties of Kapok (Ceiba pentandra) and Balsa (Ochroma pyramidale) Fibers, *Journal of the Korean Wood Science and Technology*, 46, 393–401.
- Radaei, E., Moghaddam, M.R.A., and Arami, M., 2014, Removal of Reactive Blue 19 from aqueous solution by pomegranate residual-based activated carbon: Optimization by response surface methodology, *J Environ Health Sci Eng*, 12, .
- Raj, A., Yadav, A., Rawat, A.P., Singh, A.K., Kumar, S., Pandey, A.K., Sirohi, R., and Pandey, A., 2021, Kinetic and Thermodynamic Investigations of Sewage Sludge Biochar in Removal of Remazol Brilliant Blue R Dye from Aqueous Solution and Evaluation of Residual Dyes Cytotoxicity, *Environ Technol Innov*, 23, 101556.
- Ramamurthy, K., Peter, ., Priya, S., Murugan, R., and Arockiaraj, J., 2024, Hues of Risk: Investigating Genotoxicity and Environmental Impacts of Azo Textile Dyes, 31, 33190–33211.
- Ramamurthy, K., Priya, P.S., Murugan, R., and Arockiaraj, J., 2024, Hues of risk: Investigating Genotoxicity and Environmental Impacts of Azo Textile Dyes, *Environmental Science and Pollution Research*, 31, 33190–33211.

- Ratnamala, G.M., Vidya, S.K., and Srinikethan, G., 2016, Isotherm, Kinetics, and Process Optimization for Removal of Remazol Brilliant Blue Dye from Contaminated Water Using Adsorption on Acid-treated Red Mud, *Desalination Water Treat*, 57, 11361–11374.
- Sangalang, R.H., 2021, Kapok Fiber- Structure, Characteristics and Applications: A Review, *Oriental Journal Of Chemistry*, 37, 513–523.
- Shahwan, T., Erten, H.N., and Unugur, S., 2006, A Characterization Study of Some Aspects of The Adsorption of Aqueous  $\text{Co}^{2+}$  Ions on a Natural Bentonite Clay, *J Colloid Interface Sci*, 300, 447–452.
- Shiozawa, T., Suyama, K., Nakano, K., Nukaya, H., Sawanishi, H., Oguri, A., Wakabayashi, K., and Terao, Y., 1999, Mutagenic Activity of 2-Phenylbenzotriazole Derivatives Related to a Mutagen, PBTA-1, in River Water, *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 442, 105–111.
- Shirzad-Siboni, M., Khataee, A., Vafaei, F., and Woo Joo, S., 2014, Comparative Removal of Two Textile Dyes from Aqueous Solution by Adsorption onto Marine-Source Waste Shell : Kinetic and Isotherm Studies, *Korean J. Chem. Eng*, 31, 1451–1459.
- Singh, N., Sharma, B.K., and Bohra, P.C., 2000, Impact Assessment of Industrial Effluent of Arid Soils by Using Satellite Imageries, *Journal of the Indian Society of Remote Sensing*, 28, 79–92.
- Thangaraj, S., Bankole, P.O., and Sadasivam, S.K., 2021, Microbial Degradation of Azo Dyes by Textile Effluent Adapted, *Enterobacter Hormaechei* under Microaerophilic Condition, *Microbiol Res*, 250, 126805.
- Trivedi, K.N., Boricha, A.B., Bajaj, H.C., and Jasra, R. V, 2009, Adsorption of Remazol Brilliant Blue R Dye from Water by Polyaluminum Chloride, 2, 379–385.
- Wang, J. and Guo, X., 2020, Adsorption Kinetic Models: Physical Meanings, Applications, and Solving Methods, *J Hazard Mater*, 390, .

- Yagub, M.T., Sen, T.K., Afroze, S., and Ang, H.M., 2014, Dye and Its Removal from Aqueous Solution by Adsorption: A review, *Adv Colloid Interface Sci*, 209, 172–184.
- Zahara, T.A., Silalahi, I.H., Nurlina, and Husnul, M., 2015, Adsorpsi Pb (II) Menggunakan Biomassa Genjer (*Limnocharis flava*),.
- Zhai, S., Li, Y., Dong, W., Zhao, H., Ma, K., Zhang, H., Wang, H., Zhao, Y., Li, X., and Cai, Z., 2022, Cationic Cotton Modified by 3-Chloro-2-Hydroxypropyl Trimethyl Ammonium Chloride for Salt-Free Dyeing with High Levelling Performance, *Cellulose*, 29, 633–646.
- Zhang, Y. and Cremer, P.S., 2006, Interactions between Macromolecules and Ions: the Hofmeister Series, *Curr Opin Chem Biol*, 10, 658–663.
- Zheng, Y., Wang, J., Zhu, Y., and Wang, A., 2015, Research and Application of Kapok Fiber as an Absorbing Material: A Mini Review, *Journal of Environmental Sciences*, 27, 21–32.
- Zhou, Yanbo, Lu, J., Zhou, Yi, and Liu, Y., 2019, Recent Advances for Dyes Removal Using Novel Adsorbents: A review, *Environmental Pollution*, 252, 352–365.