

DAFTAR PUSTAKA

- Abdel-Hamid, A. M., Solbiati, J. O., dan Cann, I. K. O., 2013, Insights into Lignin Degradation and its Potential Industrial Applications, *Adv. Appl. Microbiol.*, Vol. 82, 1–28
- Ahonen, R., 2015, Functionalized nanocelluloses and their use in barrier and membrane thin films, Tesis, Faculty of Technology University of Oulo, Oulo.
- Al-Ghouti, M. A., dan Da'ana, D. A., 2020, Guidelines for the use and interpretation of adsorption isotherm models: A review, *J. Hazard. Mater.*, 393
- Apriyansyah, M. I., 2020, Studi Adsorpsi Ion Cu(II) dengan Adsorben Selulosa/Alginat Tertaut Silang-Epiklorohidrin, *Skripsi*, S1 Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Aşçı, Y., dan Kaya., 2016, Sorption of cobalt(II) from an aqueous medium using Amberlite 200C and Dowex 88 resins: Equilibrium and kinetic studies. *Desalin*, 57(28), 13091–13105.
- Azizian, S., Eris, S., dan Wilson, L. D., 2018, Re-evaluation of the century-old Langmuir isotherm for modeling adsorption phenomena in solution, *J. Chem. Phys.*, 513, 99–104.
- Batool, F., Akbar, J., Iqbal, S., Noreen, S., dan Bukhari, S. N. A., 2018, Study of Isothermal, Kinetic, and Thermodynamic Parameters for Adsorption of Cadmium: An Overview of Linear and Nonlinear Approach and Error Analysis, *Bioinorg Chem Appl.*, 2018, 1-11.
- Bernabé, I., Gómez, J. M., Díez, E., Sáez, P., dan Rodríguez, A., 2019, Optimization and Adsorption-Based Recovery of Cobalt Using Activated Disordered Mesoporous Carbons, *Adv. Mater. Sci. Eng.*, 2019, 1-10.
- Boreiko, C. J., 2009, *Encyclopedia of Electrochemical Power Sources*, Newnes London.
- Chai, W. S., Cheun, J. Y., Kumar, P. S., Mubashir, M., Majeed, Z., Banat, F., Ho, S. H., dan Show, P. L., 2021, A review on conventional and novel materials towards heavy metal adsorption in wastewater treatment application, *J. Clean. Prod.*, Vol. 296.
- da Silva, A. S., de Sá, L. R. V., Aguieiras, E. C. G., de Souza, M. F., Teixeira, R. S. S., Cammarota, M. C., Bon, E. P. S., Freire, D. M. G., dan Ferreira-Leitao, V. S., 2017, Productive Chain of Biofuels and Industrial Biocatalysis: Two Important Opportunities for Brazilian Sustainable Development, *Biotechnology of Microbial Enzymes: Production, Biocatalysis and Industrial Applications*, 545–581
- de Boer, J. W., Wesenhagen, P. v., Wenker, E. C. M., Maaijen, K., Gol, F., Gibbs, H., dan Hage, R., 2013, The quest for cobalt-free alkyd paint driers, *Eur. J. Inorg.*

Chem., 21, 3581–3591.

- Fakher, S., dan Imqam, A., 2020, A review of carbon dioxide adsorption to unconventional shale rocks methodology, measurement, and calculation, *SN Appl. Sci.*, 2, 1-15.
- Farizi, M. Al., 2020, *Skripsi*, Sintesis adsorben selulosa-alginat tertaut-silang epiklorohidrin dan aplikasinya untuk adsorpsi malasit hijau, S1 Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Flatt, R., dan Schober, I., 2012, Superplasticizers and the rheology of concrete, *Understanding the Rheology of Concrete*, 144–208,
- Gad, S. C., 2014, *Encyclopedia of Toxicology: Third Edition*, Academic Press Cambridge.
- Gao, X., Guo, C., Hao, J., Zhao, Z., Long, H., dan Li, M., 2020, Adsorption of heavy metal ions by sodium alginate based adsorbent-a review and new perspectives, *Int. J. Biol. Macromol.*, 164, 4423–4434.
- Ghosal, P. S., dan Gupta, A. K., 2017, Determination of thermodynamic parameters from Langmuir isotherm constant-revisited, *J. Mol. Liq.*, 225, 137–146.
- Gong, J., Li, J., Xu, J., Xiang, Z., & Mo, L., 2017, Research on cellulose nanocrystals produced from cellulose sources with various polymorphs, *RSC Adv.*, 7(53), 33486–33493.
- Heinze, T., 2015, Cellulose: Structure and properties, *Adv. Polym. Sci.*, 271, 1–52.
- Hokkanen, S., Bhatnagar, A., dan Sillanpää, M., 2016, A review on modification methods to cellulose-based adsorbents to improve adsorption capacity, *Water Res.*, Vol. 91, 156–173.
- Karak, N., 2012, *Vegetable Oil-Based Polymers*, Elsevier Amsterdam
- Khayyun, T. S., dan Mseer, A. H., 2019, Comparison of the experimental results with the Langmuir and Freundlich models for copper removal on limestone adsorbent, *Appl. Water Sci.*, 9, 8.
- Klavins, M., dan Egl, L., 2002, Immobilisation of humic substances, *Colloids Surf. A: Physicochem. Eng. Asp.*, 203.
- Kögel-Knabner, I., dan Amelung, W., 2013, *Treatise on Geochemistry: Second Edition*, Elsevier Amsterdam, 12, 157–215.
- Li, X., Tang, Y., Cao, X., Lu, D., Luo, F., dan Shao, W., 2008, Preparation and evaluation of orange peel cellulose adsorbents for effective removal of cadmium, zinc, cobalt and nickel, *Colloids Surf. A: Physicochem. Eng. Asp.*, 317(1–3), 512–

521.

- Lison, D., 2007, *Handbook of the Toxicology Metals Cobalt*, Université Catholique de Louvain, Belgium
- Liu, J., Yu, Z., Li, Q., Lv, Y., Lin, C., Huang, J., Liu, Y., dan Liu, M., 2021, Adsorption behavior of gardenia yellow pigment on embedded spherical cellulose adsorbent, *RSC Adv.*, *11*(8), 4407–4416.
- Montes de Oca-Palma, R., Solache-Ríos, M., Jiménez-Reyes, M., García-Sánchez, J. J., dan Almazán-Sánchez, P. T., 2021, Adsorption of cobalt by using inorganic components of sediment samples from water bodies, *Int. J. Sediment Res.*, *36*(4), 524–531.
- Morford, J. L., 2019, Redox-sensitive metals, *Encyclopedia of Ocean Sciences*, 323–328,
- Puscaselu, R. G., Lobiuc, A., Dimian, M., dan Covasa, M., 2020, Alginate: From food industry to biomedical applications and management of metabolic disorders, *Polymers*, *12*, Issue 10, 1–30.
- Rashid, R., Shafiq, I., Akhter, P., Muhammad, dan, Iqbal, J., dan Hussain, M., 2021, A state-of-the-art review on wastewater treatment techniques: the effectiveness of adsorption method, *Environ, Sci. Pollut. Res.*, *28*, 9050-9066.
- Sahoo, D. R., dan Biswal, T., 2021, Alginate and its application to tissue engineering, *SN Appl. Sci.*, *1*, 3.
- Salisu, A., Sanagi, M. M., Abu Naim, A., Wan Ibrahim, W. A., dan Abd Karim, K. J., 2016, Removal of lead ions from aqueous solutions using sodium alginate-graft-poly(methyl methacrylate) beads, *Desalination and Water Treatment*, *57*(33), 15353–15361.
- Suhas, Gupta, V. K., Carrott, P. J. M., Singh, R., Chaudhary, M., dan Kushwaha, S., 2016, Cellulose: A review as natural, modified and activated carbon adsorbent. In *Bioresour. Technol.*, *216*, 1066–1076,
- Sutirman, Z. A., Sanagi, M. M., dan Wan Aini, W. I., 2021, Alginate-based adsorbents for removal of metal ions and radionuclides from aqueous solutions: A review, *Int. J. Biol. Macromol.*, *174*, 216–228.
- Tao, R., Rong, Z., Xiao, Y. Y., Zhang, S., Zhong, H. Y., 2016, Water hyacinth (*Eichhornia crassipes*) biomass as a biofuel feedstock by enzymatic hydrolysis, *BioRes.*, *11*(1), 2372-2380.
- Tien, C., 2019, *Introduction to Adsorption*, Elsevier Amsterdam.
- Tripathi, S., Arora, N., Gupta, P., Pruthi, P. A., Poluri, K. M., dan Pruthi, V., 2019,

Advanced Biofuels: Applications, Technologies and Environmental Sustainability, Woodhead Publishing Cambridge.

Udoetok, I. A., Dimmick, R. M., Wilson, L. D., dan Headley, J. v., 2016, Adsorption properties of cross-linked cellulose-epichlorohydrin polymers in aqueous solution. *Carbohydr, Polym.*, 136, 329–340.

van Roosendael, S., Onghena, B., Roosen, J., Michielsens, B., Wyns, K., Mullens, S., dan Binnemans, K., 2019, Recovery of cobalt from dilute aqueous solutions using activated carbon-alginate composite spheres impregnated with Cyanex 272, *RSC Adv.*, 9(33), 18734–18746

Wang, J., dan Guo, X., 2020, Adsorption kinetic models: Physical meanings, applications, and solving methods, *J. Hazard. Mater.*, 390, 1-18

Zeng, M., dan Pan, X., 2020, Insights into solid acid catalysts for efficient cellulose hydrolysis to glucose: progress, challenges, and future opportunities, *Cataly Rev Sci Eng*, 64, 1-46.

Zhang, J., Zhou, H., Liu, D., dan Zhao, X., 2019, *Lignocellulosic Biomass to Liquid Biofuels*, Academic Press Cambridge.

Zhao, D., Zhu, Y., Cheng, W., Chen, W., Wu, Y., dan Yu, H., 2021, Cellulose-Based Flexible Functional Materials for Emerging Intelligent Electronics, *Adv. Mater.*, 33.

Zhuang, S., Zhu, K., dan Wang, J., 2021, Fibrous chitosan/cellulose composite as an efficient adsorbent for Co(II) removal, *J. Clean. Prod.*, 285, 1-10