



DAFTAR PUSTAKA

- Adanenche, D.E., Aliyu, A., Atta, A.Y., dan El-Yakubu, B.J., 2023, Residue fluid catalytic cracking: A review on the mitigation strategies of metal poisoning of RFCC catalyst using metal passivators/traps, *Fuel*, 343, 127894.
- Aitani, A.M., 2004, *Encyclopedia of Energy*, Elsevier Inc., Amsterdam.
- Ali, S. E., El Gedaily, R. A., Mocan, A., Farag, M. A., dan El-Seedi, H. R., 2019, Profiling metabolites and biological activities of sugarcane (*Saccharum officinarum* Linn.) juice and its product molasses via a multiplex metabolomics approach, *Molecules*, 24, 934.
- Ani, J. U., Akpomie, K. G., Okoro, U. C., Aneke, L. E., Onukwuli, O. D., dan Ujam, O. T., 2020, Potentials of activated carbon produced from biomass materials for sequestration of dyes, heavy metals, and crude oil components from aqueous environment, *Appl. Water Sci.*, 10, 1-11.
- Antika, L. dan Ingesti, P. S. V., 2020, Analisis lama waktu pangkal batang tebu (*saccharum officinarum* L.) tertinggal di lahan terhadap nilai rendemen, *Vigor: Jurnal Ilmu Pertanian Tropika dan Subtropika*, 5, 19-23.
- Ariani, D., 2017, Adsorpsi Zat Warna Malasit Hijau dan Metil Violet 2B dengan Ampas Tebu Termodifikasi Ftalat Anhidrida, *Tesis*, Program Studi S2 Kimia Departemen Kimia Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Gadjah Mada, Yogyakarta.
- Artioli, Y., 2008, *Encyclopedia of Ecology*, Academic Press, Cambridge.
- Asmorowati, D.S., Sumarti, S.S., dan Kristanti, I.I., 2020, Perbandingan metode destruksi basah dan destruksi kering untuk analisis timbal dalam tanah di sekitar laboratorium kimia FMIPA UNNES, *Indo. J. Chem. Sci.*, 9, 169-173.
- Barbooti, M.M., Al-Madfaai, S. H., dan Al-Sammerrai, D. A., 1986 Thermogravimetric characterization of Quayarah heavy crude oils, *J. Therm. Anal.*, 31, 253-260.
- Brandão, P. C., Souza, T. C., Ferreira, C. A., Hori, C. E., dan Romanelo, L. L., 2010, Removal of petroleum hydrocarbons from aqueous solution using sugarcane bagasse as adsorbent, *J. Hazard. Mater.*, 175, 1106-1112.
- Brannvall, E., Mažeikienė, A., dan Valentukevičienė, M, 2006, Experimental research on sorption of petroleum products from water by natural clinoptilolite and vermiculite, *Geologija*, 56, 5-12.
- Dewi, A. M. P., Kusumaningrum, M. Y., Edawai, D. N., Pranoto, Y., dan Darmadji, P., 2017, Ekstraksi dan karakterisasi selulosa dari limbah ampas sagu, *Prosiding SNST Fakultas Teknik*, 23 Agustus, Semarang.
- Elwin, L. M. dan Hendrawan, Y., 2013, Analisis kandungan selulosa, lignin, dan hemiselulosa eceng gondong, *Jurnal Keteknikan Pertanian Tropis dan Biosistem*, 2, 104-110.
- Faqihuddin dan Ubaydillah, M.I., 2021, Perbandingan metode destruksi kering dan destruksi basah instrument spektrofotometri serapan atom (SSA) untuk analisis logam, *Seminar Nasional Hasil Riset dan Pengabdian ke-III (SNHRP-111-2021)*, 28 Agustus 2021, Surabaya



- Galiwango, E., Rahman, N.S.A., Al-Marzouqi, A.H., Abu-Omar, M.M., dan Khaleel, A.A., 2019, Isolation and characterization of cellulose and α -cellulose from date palm biomass waste, *Heliyon*, 5, e02937.
- García, J. C., Díaz, M. J., Garcia, M. T., Feria, M. J., Gómez, D. M., dan López, F., 2013, Search for optimum conditions of wheat straw hemicelluloses cold alkaline extraction process, *Biochem. Eng. J.*, 71, 127-133.
- Gericke, M., Trygg, J., dan Fardim, P., 2013, Functional cellulose beads: preparation, characterization, and applications, *Chem. Rev.*, 113, 4812-4836.
- Gharibe, S., 2020, ZnAl₂O₄/SiO₂ as an efficient nanocatalyst for esterification of phthalic anhydride by 2-ethylhexanol, *Iranian J. Sci. Technol. Trans. Sci.*, 44, 1349-1355.
- Gurgel, L. V. A., de Freitas, R.P., dan Gil, L.F., 2008, Adsorption of Cu (II), Cd (II), and Pb (II) from aqueous single metal solutions by sugarcane bagasse and mercerized sugarcane bagasse chemically modified with succinic anhydride, *Carb. Polym.*, 74, 922-929.
- Handayani, S. S., Fatimah, H., dan Seftiani, R., 2019, The effects of temperature on alpha-cellulose content and extraction result of tobacco stem, *J. Phy. Conf. Ser.*, 1280, 022012.
- Harini, K. dan Sukumar, M., 2019, Development of cellulose-based migratory and nonmigratory active packaging films, *Carbohydr. Polym.*, 204, 202-213.
- Harini, K. dan Mohan, C. C., 2020, Isolation and characterization of micro and nanocrystalline cellulose fibers from the walnut shell, corncob and sugarcane bagasse, *Int. J. of Biol. Macromol.*, 163, 1375-1383.
- Hokkanen, S., Bhatnagar, A., dan Silanpaa, M., 2016, A review on modification methods to cellulose-based adsorbents to improve adsorption capacity, *Water. Res.*, 91, 156-173.
- Hossain, M.D.F., Akther, N., dan Zhou, Y., 2020, Recent advancements in graphene adsorbents for wastewater treatment: current status and challenges, *Chin. Chem. Lett.*, 31, 2525–2538.
- Huang, Y., Li, S., Chen, J., Zhang, X., dan Chen., 2014, Adsorption of Pb (II) on mesoporous activated carbons fabricated from water hyacinth using H₃PO₄ activation: adsorption capacity, kinetic and isotherm studies, *App. Sur. Sci.*, 293, 160-168.
- Isnaini, J. L., Sunniati, S., dan Asmawati, A., 2015, Pertumbuhan setek tanaman tebu (*Saccharum officinarum* l.) pada berbagai konsentrasi larutan pupuk organik cair, *Agrokompleks*, 14, 46-49.
- Jadoon, S., Amin, A. A., Mahmood, H. K., Hamoodi, D. A., dan Sabir, M. F. M., 2016, Determination of trace metals in crude oils by atomic absorption spectrophotometry in Khurmala and Guwayar Oil Fields of Kurdistan Region, Iraq, *ASRJETS*, 20, 213-223.
- Karnitz Jr, O., Gurgel, L. V. A., De Melo, J. C. P., Botaro, V. R., Melo, T. M. S., de Freitas Gil, R. P., dan Gil, L. F., 2007, Adsorption of heavy metal ion from aqueous single metal solution by chemically modified sugarcane bagasse, *Bioresour. Techno.*, 98, 1291-1297.



- Klemm, D., Schmauder, H.P., dan Heinze, T., 2002, Cellulose. In: De Baets, S., Vandamme, E.J., Steinbuchel, A. (Eds.), *Polysaccharides II. Polysaccharides from Eukaryotes*, 6, 275–320.
- Lappas, A.A., Nalbandian, L., Iatridis, D.K., Voutetakis, S.S., dan Vasalos, I.A., 2001, Effect of metals poisoning on FCC products yield: studies in an FCC short contact time pilot plant unit, *Catal. Today*, 65, 233-240.
- Liu, C. F., Sun, R. C., Zhang, A. P., dan Ren, J. L, 2007, Preparation of sugarcane bagasse cellulosic phthalate using an ionic liquid as reaction medium, *Carbohydr. Polym.*, 68, 17-25.
- Mandal, A. dan Chakrabarty, D., 2011, Isolation of nanocellulose from waste sugarcane bagasse (SCB) and its characterization. *Carbohydr. Polym.*, 86(3), 1291-1299.
- Marhaini, M., Martini, S., dan Iksani, K., 2021, Pengolahan limbah cair minyak bumi secara adsorpsi menggunakan karbon aktif kulit singkong, *TEKNIKA*, 15, 5-11.
- Milner, O.I., Glass, J.R., Kirchner, J.P., dan Yurick, A.N., 1952, Determination of trace metals in crudes and other petroleum oils, *Anal. Chem.*, 24, 1728–32.
- Mutlu, V.N. dan Yilmaz, S., 2016, Esterification pf cetyl alcohol with palmitic acid over $\text{WO}_3/\text{Zr-SBA-15}$ and Zr-SBA-15 catalysts, *Appl. Cat. A: General.*, 522, 194-200.
- Ouellete, R.J. dan Rawn, J.D., 2014, *Organic Chemistry*, Elsevier Inc., Amsterdam.
- Pan,S.S., Lin, L.T.X., Spann, V., Clough, M., dan Yilmaz, B., 2015, Nanomaterials Fueling the World, In: Liu J l, Bashir S, editors. *ACS Symposium Series*, 1213, 3–18.
- Pathak, A., Kothari, R., Vinoba, M., Habibi, N., dan Tyagi, V.V., 2021, Fungal bioleaching of metals from refinery spent catalysts: A critical review of current research, challenges, and future directions. *J. Environ. Manag.*, 280, 111789.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., dan Vyvyan, J.R., 2014, *Introduction to Spectroscopy*, fifth edition, Cengage Learning, Boston.
- Rana, V., Malik, S., Joshi, G., Rajput, N. K., dan Gupta, P. K., 2021, Preparation of alpha cellulose from sugarcane bagasse and its cationization: Synthesis, characterization, validation and application as wet-end additive, *Int. J. Biol. Macromol.*, 170, 793-809.
- Reynolds, J.G., 2004, Removal of Nickel and Vanadium from Heavy Crude Oils by Echange Reaction, *Am. Chem. Soc. Div. Fuel Chem.*, 49, 79-80.
- Rönnback, R., Salmi, T., Vuori, A., Haario, H., Lehtonen, J., Sundqvist, A., dan Tirronen, E., 1997, Development of a kinetic model for the esterification of acetic acid with methanol in the presence of a homogeneous acid catalyst, *Chem. Eng. Sci.*, 52, 3369-3381.
- Rodríguez, A., Moral, A., Serrano, L., Labidi, J., dan Jiménez, L, 2008, Rice straw pulp obtained by using various methods, *Bioresour. Technol.*, 99, 2881-2886.
- Saifudin, M. W., 2021, Sintesis dan karakterisasi α -selulosa sulfat dari eceng gondok sebagai katalis heterogen untuk reaksi transesterifikasi pada



minyak kelapa sawit, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

- Semerjian, L., 2010, Equilibrium and kinetics of cadmium adsorption from aqueous soluting using untreated *Pinus halensis* sawdust, *J. Hazaedd Mater.*, 173,236-242.
- Singh, A., Ranawat, B., dan Meena, R., 2019, Extraction and characterization of cellulose from halophytes: next generation source of cellulose fibre, *SN Applied Sciences*, 1, 1-10.
- Sumada, K., Tamara, P. E., dan Alqani, F., 2011, Kajian proses isolasi α -selulosa dari limbah batang tanaman manihot esculenta crantz yang efisien, *J. Teknik Kimia*, 5, 434-438.
- Sun, J.X., Xu, F., Zhao, H., dan Sun, R.C., 2004, Isolation and characterisation of cellulose from sugarcane bagasse, *Polym. Degrad. Stab.*, 84, 331-339.
- Sutini, Widhihastuty, Y.R., dan Ramadhani, A.N., 2019, Review: Hidrolisis lignoselulosa dari agricultural waste sebagai optimasi produksi fermentable sugar, *Equilibrium*, 3, 59-68.
- Sutiya B., Wiwin, T. I., dan Adi, R., 2012, Kandungan kimia dan sifat serat alang-alang (*Imperata cylindrica*) sebagai gambaran bahan baku pulp dan kertas, *Bioscientiae*, 9, 8-19.
- Tripathi, A. dan Ranjan, M. R., 2015, Heavy metal removal from wastewater using low cost adsorbents, *J. Bioremed. Biodeg.*, 6, 315.
- Turhanen, P. A., Leppänen, J., dan Vepsäläinen, J. J., 2019, Green and efficient esterification method using dried Dowex H⁺/NAI approach, *ACS omega*, 4, 8974-8984.
- Verissimo, G. L., Leiroz, A. J. K., dan Cruz, M. E., 2020, Influence of the pyrolysis and heterogeneous char reactions modeling in the simulation of sugarcane bagasse gasification in a bubbling fluidized bed reactor, *Fuel*, 281, 118750.
- Wiedenfeld, R. P., 2000, Water stress during different sugarcane growth periods on yield and response to N fertilization, *Agric. Water Manag.*, 43, 173-182.
- Wang, H. H., Zhang, X. Q., Long, P., Zhang, A. P., Liu, C. F., dan Sun, R. C., 2016, Reaction behavior of cellulose in the homogeneous esterification of bagasse modified with phthalic anhydride in ionic liquid 1-allyl-3-methylimidazolium chloride, *Int. J. Polymer Sci.*, 2016, 1-9.
- Yasin, G., Bhanger, M.I., Ansari, T.M., Naqvi, S.M.S.R., Ashraf, M., Ahmad, K., dan Talpur, F.N., 2013, Quality and chemistry of crude oils, *J. Pet. Tech. Altern. Fuels.*, 4, 53-63.
- Yu, X., Tong, S., Ge, M., Wu, L., Zuo, J., Cao, C., dan Song, W, 2013, Adsorption of heavy metal ions from aqueous solution by carboxylated cellulose nanocrystals, *J. Enviro. Sci.*, 25, 933-943.
- Zhou, Y., Hu, X., Zhang, M., Zhuo, X., dan Niu, J., 2013, Preparation and characterization of modified cellulose for adsorption of Cd (II), Hg (II), and acid fuchsin from aqueous solutions, *Ind. Eng. Chem. Res.*, 52, 876-884.