

## DAFTAR PUSTAKA

- Abbas, M., Kaddour, S. dan Trari, M., 2014, Kinetic and Equilibrium Studies of Cobalt Adsorption on Apricot Stone Activated Carbon, *J. Ind. Eng. Chem.*, 20, 745.
- Agee, B.M., Gene, M. dan Daniel, J.S., 2014, Use of Solar Energy for Biodiesel Production and use of Biodiesel Waste as a Green Reaction Solvent, *Sustain. Chem. Pro.*, 2 (21), 1-10.
- Alda-Onggar, M., Maki-Arvela, P., Aho, A., Simakova, I.L. dan Murzin, D.Y., 2019, Hydrodeoxygenation of Phenolic Model Compounds Over Zirconia Supported Ir and Ni-Catalysts, *React. Kinet., Mech. Catal.*, 126(2), 737-759.
- Alda, T. D., Muhammad, F., Budi, S., Andi, S., dan Rismawati, R., 2021, Uji Aktivitas Katalis NaOH/Nigama Al<sub>2</sub>O<sub>3</sub> pada Proses Transesterifikasi Minyak Kelapa Sawit, *J. Chem. Pro. Eng.*, 6(1), 53–58.
- Aleman-Ramirez, J.L., Joel, M., S.Torres, A., Adriana, L. dan Patrick, U.O., 2020, Preparation of a Heterogeneous Catalyst from Moringa Leaves as a Sustainable Precursor for Biodiesel Production, *Fuel*, 284, 1-7.
- Alimin, Maryono dan Putri, S.E., 2016, Analisis Kandungan Mineral Pasir Pantai Losari Kota Makassar menggunakan XRF dan XRD, *J. Chem.*, 172, 19-23.
- Ansori, A., Wibowo, S.A., Kusuma, H.S., Bhuana, D.S. dan Mahfud, M., 2019, Production of Biodiesel from Nyamplung (*Calophyllum inophyllum* L.) using Microwave with CaO Catalyst from Eggshell Waste: Optimization of Transesterification Process Parameters, *Open Chemistry*, 17(1), 1185-1197.
- Ariharan, A. dan Viswanathan, B., 2018, Nitrogen-Incorporated Carbon Nanotube Derived from Polystyrene and Polypyrrole as Hydrogen Storage Material, *Int. J. Hydrog. Energy.*, 43(10), 5077-5088.
- Arumugam, A. dan Ponnusami, V.J.R.E., 2019, Biodiesel Production from *Calophyllum inophyllum* Oil a Potential Non-Edible Feedstock: An Overview, *Renewable Energy.*, 131, 459-471.
- Atabani, A.E. dan Da Silva Cesar, A., 2014, *Calophyllum inophyllum* L. –A Prospective Non-Edible Biodiesel Feedstock. Study of Biodiesel Production, Properties, Fatty Acid Composition, Blending and Engine Performance, *Renew. Sustain. Energ. Rev.*, 37, 644-655.
- Ballesteros-Plata, D., Infantes-Molina, A. dan Rodriguez-Castelon, 2019, Study of Bifunctionality of Pt/SBA-15 Catalysts for HDO of Dibenzofuran Reaction: Addition of Mo or use of an Acidic Support, *Appl. Catal.*, 580, 93-101.
- Baroutian, S., Aroua, M.K., Raman, A.A.A. dan Sulaiman, N.M.N., 2010, Potassium Hydroxide Catalyst Supported on Palm Shell Activated Carbon for Transesterification of Palm Oil, *F. Proc. Tech.*, 11(91), 1378-1385.
- Bilgin, A., Gulum, M., Koyuncuoglu, I., Nac, E. dan Cakmak, A., 2015, Determination of Transesterification Reaction Parameters Giving the Lowest Viscosity Waste Cooking Oil Biodiesel, *Procedia Social and Behavioral Sciences*, 195, 2492-2500.

- Bintang, M. T. M., Aisyah, A., dan Saleh, A., 2015, Sintesis Biodiesel Dari Minyak Biji Nyamplung (*Calophyllum inophyllum* L.) dengan Metode Ultrasonokimia, *Chimica et Natura Acta.*, 3.
- Borges, M.E. dan Díaz, L., 2012, Recent Developments on Heterogeneous Catalysts for Biodiesel Production by Oil Esterification and Transesterification Reactions: A review, *Renew. Sustain. En. Rev.*, 5(16), 2839-2849.
- Botas, J. A., Serrano, D. P., García, A., de Vicente, J., dan Ramos, R., 2012, Catalytic conversion of rapeseed oil into raw chemicals and fuels over Ni- and Mo-modified nanocrystalline ZSM-5 zeolite, *Catal. T.*, 195(1), 59–70.
- Da Silva Pelissari, M.R., Archela, E., Tarley, C.R.T. dan Dall'Antonia, L. H., 2019, Ascorbic Acid Electrocatalytic Activity in Different Electrolyte Solutions using Electrodeposited Co(OH)<sub>2</sub>, *Ionics*, 4(25), 1911-1920.
- Das, K.K. dan Büchner, V., 2007, Effect of Nickel Exposure on Peripheral Tissues: Role of Oxidative Stress in Toxicity and Possible Protection by Ascorbic Acid, *Rev. Environ. Health*, 2(22), 157-173.
- Debaut, V. J., Jean, Y. B., dan Greentech, S. A., 2005, Tamanol a Stimulan for Collagen Synthesis for Use in anti Wrinkle and anti Stretch Mark Products Cosmetic and Toiletries Manufacture World Wide, *Greentech, St. France*.
- Du, L., Li, Z., Ding, S., Chen, C., Qu, S., Yi, W., Lu, J., dan Ding, J., 2019, Synthesis and characterization of carbon-based MgO catalysts for biodiesel production from castor oil, *Fuel*, 258, 116122.
- Elmagirbi, A., dan Sulistyarti, H., 2012, Study of Ascorbic Acid as Iron(III) Reducing Agent for Spectrophotometric Iron Speciation, *J. Pure App. Chem. Res*, 2012(1), 11–17
- Fadhlullah, M., Widiyanto, S.N.B. dan Restiawaty, E., 2015, The Potential of Nyamplung (*Calophyllum inophyllum* L.) Seed Oil as Biodiesel Feedstock: Effect of Seed Moisture Content and Particle Size on Oil Yield, *Energy Procedia*, 68, 177-185.
- Ganesan, D., Rajendran, A. dan Thangavelu, V., 2009, An overview on Recent Advances in the Transesterification of Vegetable Oils for Biodiesel Production using Chemical and Biocatalyst, *Rev. Environ. Sci. Biotechnol.*, 8, 367-394.
- Gashaw, A., Getachew, T. dan Teshita, A., 2015, A Review on Biodiesel Production as Alternative Fuel, *J. For. Pro. & Ind.*, 2(4), 80-85.
- Gimba, C.E. dan Muiyawa, T., 2008, Optimum Conditions for Carbonization of Coconut Shell, *Sci. Afr.*, 2(7), 1-8.
- Guo, F., dan Fang, Z., 2011, Biodiesel production with solid catalysts, *Bio. Feed. Proc. Tech.*, 16, 339-358.
- Hadi, W.A., 2009, Pemanfaatan Minyak Biji Nyamplung (*Calophyllum inophyllum* L.) sebagai Bahan Bakar Minyak Pengganti Solar, *Jurnal Riset Daerah*, 2(8), 1044-1052.
- Hidayu, A., Mohamad, N.F., Matali, S. dan Sharifah, A.K., 2013, Characterization of Activated Carbon Prepared from Oil Palm Empty Fruit Bunch using BET and FT-IR Techniques, *Procedia Eng.*, 68, 379-384.

- Ibrahim, M.S., Trisunaryanti, W. dan Triyono, T., 2022, Nickel Supported Parangtritis Beach Sand (PP) Catalyst for Hydrocracking of Palm and Malapari Oil into Biofuel, *Bull. Chem. React. Eng. Catal.*, 3(17), 638-649.
- Irawan, A., Latifah, U. dan Meity, D.I.P., 2017, Effect of Torrefaction Process on the Coconut Shell Energy Content Shell Energy Content for Solid Fuel, *AIP Conf. Proc.*, 1826, 1-7.
- Islam, M.S., Ang, B.C., Gharekhani, S. dan Afifi, A.B.M., 2016, Adsorption Capability of Activated Carbon Synthesized from Coconut Shell, *Carbon Lett.*, 20, 1-9.
- Iwanow, M., Gärtner, T., Sieber, V., dan König, B., 2020, Activated carbon as catalyst support: precursors, preparation, modification and characterization, *Beilstein J. Org. Chem.*, 16, 1188-1202.
- Kinhal, K.V., Bhatt, N. dan Pushpavanam, S., 2021, Unraveling Reaction Pathways for Tuning Bimetallic Nanoparticle Structures: Role of Reactant Addition Sequence, *Nano. Res.*, 7(23), 1-17.
- Leksono, B., Hendrati, R.L., Windyarini, E. dan Hasnah, T., 2014, Variation in Biofuel Potential of Twelve *Calophyllum Inophyllum* Populations in Indonesia, *Ind. J. For. Res.*, 1(2), 127-138.
- Lee, D. W., dan Lee, K. Y., 2014, Heterogeneous solid acid catalysts for esterification of free fatty acids, *Catal. Surv. from Asia*, 18, 55-74.
- Li, W., Peng, J., Zhang, L., Yang, K., Xia, H., Zhang, S., dan Guo, S., 2009, Preparation of activated carbon from coconut shell chars in pilot-scale microwave heating equipment at 60 kW, *Waste Manage.*, 29(2), 756-760.
- Liu, X., He, H., Wang, Y., Zhu, S. dan Piao, X., 2008, Transesterification of Soybean Oil to Biodiesel using CaO as a Solid Base Catalyst, *Fuel*, 87, 216-221.
- Mahlia, T.M.I., Syazmi, Z.A.H.S., Mofijur, M. dan Abas, A.E.P., 2020, Patent Landscape Review on Biodiesel Production: Technology Updates, *Renew. Sust. Energ. Rev.*, 118, 109526.
- Majid, D., Subandowo, M., Budipramana, K. Dan Prama, Y.B., 2019, Biodiesel dari Minyak Biji Nyamplung melalui Proses Transesterifikasi dengan Reaktor Sistem Aliran Berkelanjutan, *JTK*, 1(2), 19-26.
- Maneerung, T., Kawi, S., Dai, Y., dan Wang, C. H., 2016, Sustainable biodiesel production via transesterification of waste cooking oil by using CaO catalysts prepared from chicken manure, *Energy Convers. Manag.*, 123, 487-497.
- Srinivas, D., dan Satyarthi, J. K., 2011, Biodiesel production from vegetable oils and animal fat over solid acid double-metal cyanide catalysts, *Catal. Surv. from Asia*, 15, 145-160.
- Mohammadi, M., Najafpour, G.D. dan Mohamed, A.R., 2011, Production of Carbon Molecular Sieves from Palm Shell through Carbon Deposition from Methane, *Chem. Ind. & Chem. Eng. Quar.*, 4(17), 525-533.
- Muhammad, F.R., Safetyllah, J., Lailatul, Q. dan Mahfud, 2014, Pembuatan Biodiesel dari Minyak Nyamplung menggunakan Pemanasan Gelombang Mikro, *POMITS*, 2(3), 154-159.

- Muderawan, W., Ketut, N., dan Daiwataningsih, P., 2016, Pembuatan Biodiesel Dari Minyak Nyamplung (*Calophyllum Inophyllum L.*) dan Analisis Metil Esternya dengan GC-MS, *Prosiding Seminar Nasional MIPA*.
- Oktarina, A., 2020, Uji Kinerja Katalis Berbasis Karbon Aktif dari Tempurung Kelapa Diimpregnasi KOH pada Reaksi Transesterifikasi Sintesis Biodiesel, *Disertasi*, Politeknik Negeri Sriwijaya.
- Patil, S.A. dan Supriya, B.C., 2014, Heterogeneous Catalysts for Biodiesel Synthesis by Transesterification, *International Journal of Innovative Research in Science, Engineering and Technology*, 3(5), 43-46.
- Pratiwi, R.D. dan Perdana, M.P., 2018, Hidrogenasi Glukosa menjadi Sorbitol dengan menggunakan Katalis Berbasis Nikel, *Disertasi*, Institut Teknologi Sepuluh Nopember.
- Prihanto, A., Pramudono, B. dan Santosa, H., 2013, Peningkatan *Yield* Biodiesel dari Minyak Biji Nyamplung melalui Transesterifikasi Dua Tahap, *Majalah Ilmiah MOMENTUM*, 2(9), 5-9.
- Ratna, D. P., dan Mahendra, P. P., 2018, Hidrogenasi Glukosa Menjadi Sorbitol Menggunakan Katalis Berbasis Nikel. *Institut Teknologi Sepuluh Nopember*.
- Shakil, R., Shaikh, M.N., Shah, S.S., Reaz, A.H., Roy, C.K., Chowdhury, A.N. dan Aziz, M.A., 2021, Development of a Novel Bio-Based Redox Electrolyte using Pivalic Acid and Ascorbic Acid for the Activated Carbon-based Supercapacitor Fabrication, *J. of Org. Chem.*, 8(10), 2220-2230.
- Shamsuddin, M.S., Yusoff, N.N. dan Sulaiman, M.A., 2016, Synthesis and Characterization of Activated Carbon Produced from Kenaf Core Fiber using  $H_3PO_4$  Activation, *Procedia Chemistry*, 19, 558-565.
- Sinha, M.K., Purcell, W. dan Van Der Westhuizen, W.A., 2020, Recovery of Manganese from Ferruginous Manganese Ore using Ascorbic Acid as Reducing Agent, *Miner. Eng.*, 154, 106406.
- Sun, K., Qiu, J., Liu, J., dan Miao, Y., 2009, Preparation and characterization of gold nanoparticles using ascorbic acid as reducing agent in reverse micelles, *J. Mater. Sci.*, 44(3), 754–758.
- Suriati, G., Mariatti, M. dan Azizan, A., 2014, Synthesis of Silver Nanoparticles by Chemical Reduction Method: Effect of Reducing Agent and Surfactant Concentration, *J. Mech. Eng.*, 10, 1920.
- Suryanto, A., 2021, Uji Aktifitas Katalis NaOH/Ni/Gamma  $Al_2O_3$  pada Proses Transesterifikasi Minyak Kelapa Sawit, *JCPE*, 1(6), 53-58.
- Talha, N. S., dan Sulaiman, S., 2016, Overview of catalysts in biodiesel production, *ARPJ. Eng. App. Sci.*, 11, 439-442.
- Trisunaryanti, W., 2015, Material Katalis dan Karakterisasinya., *Gadjah Mada University Press*, Yogyakarta.
- Trisunaryanti, W., 2016, Konversi Fraksi Aspal Buton menjadi Fraksi Bahan Bakar, *Gadjah Mada University Press*, Yogyakarta.
- Trisunaryanti, W., Triyono, R. C., Saptoadi, H., Alimuddin, Z., Syamsiro, M., & Yoshikawa, K., 2013, Characteristics of metal supported-zeolite catalysts for hydrocracking of polyethylene terephthalate, *IORS-JAC*, 3, 29-34.

- Utomo, S., 2014, Pengaruh Waktu Aktivasi dan Ukuran Partikel terhadap Daya Serap Karbon Aktif dari Kulit Singkong dengan Aktivator NaOH, *Prosiding Semnastek*, 1(1), 1-7.
- Wahyudi Anggoro Hadi, 2009, Pemanfaatan minyak biji nyamplung (*Calophyllum inophyllum L.*) sebagai bahan bakar minyak pengganti solar. *Jurnal Riset Daerah*, 2(8), 1044–1052.
- Wen, X., Xu, L., Chen, M., Shi, Y., Lv, C., Cui, Y., Wu, X., Cheng, G., Wu, C.E., Miao, Z. and Wang, F., 2021, Exploring the influence of nickel precursors on constructing efficient Ni-based CO<sub>2</sub> methanation catalysts assisted with in-situ technologies, *Appl. Catal. B Environ.*, 297, 120486.
- Wijaya, K., Hadi, K., Herlina, I., dan Kurnia, A. T., 2016, Nanomaterial: Aplikasinya dalam Pembuatan Biofuel, *Gadjah Mada University Press*.
- Yang, X., Leza, D.S., Porcel, E., Vargas, C.R.G., Savina, F., Dragoe, D., Remita, H. dan Lacombe, S., 2020, A Facile One-Pot Synthesis of Versatile Pegylated Platinum Nanoflowers and Their Application in Radiation Therapy, *Int. J. Nol. Sci.*, 21(1619), 1-20.
- Zahan, K. A., dan Kano, M., 2018, Biodiesel production from palm oil, its by-products, and mill effluent: A review, *Energies*, 11, 2132.
- Zielinsik, M., Wojcieszak, R., Monteverdi, S., Mercy, M. dan Bettahar, M.M., 2007, Hydrogen Storage in Nickel Catalysts Supported on Activated Carbon, *International Journal of Hydrogen Energy*, 32, 1024-1032.
- Zuhra, Z., Husin, H., Hasfita, F. Dan Rinaldi, W., 2015., Preparasi Katalis Abu Kulit Kerang untuk Transesterifikasi Minyak Nyamplung menjadi Biodiesel, *Agritech*, 1(35), 69-77.