DAFTAR PUSTAKA

Abdullah, S.H.Y.S., Hanapi, H.M., Azid, A., Umar, R., Juahir, H., Khatoon, H., and Endut, A., 2016, A Review of Biomass-Derived Heterogeneous Catalyst for a Sustainable Biosolar Production, *Renew. Sust. Energy Rev.*, 70, 1040-1051.

Anand, M. and Sinha, A.K., 2012, Bioresource Technology Temperature Dependent Reaction Pathways for the Anomalous Hydrocracking of Triglycerides in The Presence of Sulfided CoMo Catalyst, *Bioresour. Technol.*, 126, 148–155.

Ao, W., Fu, J., Mao, X., Kang, Q., Ran, C., Liu, Y., Zhang, H., Gao, Z., Liu, G., and Dai, J., 2018, Microwave Assisted Preparation of Activated Carbon from Biomass: A Review, *Renew. Sust. Energy. Rev.,* 92, 958-979.

Argyle, M.D. and Bartholomew, C.H., 2015, Heterogeneous Catalyst Deactivation and Regeneration: A Review, *Catalyst*, 5, 145-269.

Ashok, B., Nanthgopal, K., and Vignesh, D.S., 2018, *Callophyllum innophyllum* Methyl Ester Biosolar Blend as an Alternate Fuel for Solar Engine Applications, *Alex. Eng. J.,* 57 (3), 1239-1247.

Bricker, M., Thakkar, V. and Petri, J., 2015, *Hydrocracking in Petroleum Processing*, Springer International Publishing, Switzerland.

Cuong, D.V., Liu, N.L., Viet, A.N., and Hou, C.H., 2019, Meso/micropore-Controlled Hierarchical Porous Carbon Derived from Activated Biochar as a High Performance Adsorbent for Copper Removal, *Sci. Total Environ.,* 692, 844-853.

De, S., Balu, A.M., Waal, J.C., and Luque, R., 2015, Biomass-Derived Porous Carbon Materia: Synthesis and Catalytic Applications, *Chem. Cat. Chem.,* 7, 1608-1629.

Dewajani, H., Rochmadi, Purwono, S., and Budiman, A., 2016, Effect of Modification ZSM-5 Catalyst in Upgrading Quality of Organic Liquid Product Derived from Catalytic Cracking of Indonesian Nyamplung Oil (*Calophyllum inophyllum*), *AIP Conference Proceedings 1755,* 05002.

Foo, K.Y. and Hameed, B.H., 2012, Mesoporous Activated Carbon from Wood Sawdust by K_2CO_3 Activation Using Microwave Heating, *Bioresour. Technol.,* 111, 425-432.

Gao, X., Wu, L., Li, Z., Xu, Q., Tian, W., and Wang, R., 2017, Preparation and Characterization of High Surface Area Activated Carbon from Pine Wood Sawdust by Fast Activation with H_3PO_4 in a Spouted Bed, *J. Material Cycles and Waste Manag.*, 20(2), 925-936.

Guiza, M., Abdedayem, A., Ghouma, I., and Ouederni, A., 2017, Effect of Copper and Nickel Supported Activated Carbon Catalyst on The Simultaneous Adsorption/Ozonation Process of Nitrobenzene Degradation, *J. Chem. Tech. Metal*, 52 (5), 836-851.

Hasanudin, Said, M., Faizal, M., Hatta, M., Wijaya, K., and Rachmat, A., 2013, Effect of Temperature and Catalyst to Feed Ratio on Production Biofuel from Fatty Acid of Palm Oil Industrial Sludge Hydrocracking, *International Conference on Alternative Energy in Developing Countries and Emerging Economies*, 201-204.

Hu, X., Zhang, Z., Gholizadeh, M., Zhang, S., Lam, C.H., Xiong, Z., and Wang, Y., 2020, Coke Formation during Thermal Treatment of Bio-oil, *Energy Fuels*, 34(7), 7863-7914.

Indrosaptono,D., Sukawi, dan Indraswara, M.S., 2014, Kayu Kelapa sebagai Alternatif Bahan Bangunan, *Modul*, 14(1), 53-58.

Jain, A., Jayaraman, S., Ulaganathan, M., Balasubramanian, R., Aracinand, V., Sirnivasan, M.P., and Madhavi, S., 2017, Highly Mesoporous Carbon from Taekwood Sawdust as Prospective Electrode for the Construction of High Energy Li-ion Capacitors, *Elect. Acta,* 228, 131-138.

Ji, T., Chen, L., Mu, L., Ruxia, Y., Knoblauch, M., Bao, F.S., Shi, Y., Wang, H., and Zhu, J., 2016, Green Processing of Plant Biomass Into Mesoporous Carbon as Catalyst Support, *Chem. Eng .J.,* 295, 301-308.

Kopyscinki, J., Rahman, M., Gupta, R., Mims, C.A., and Hill, J.M., 2014, K_2CO_3 Catalyzed CO_2 Gasification of Ash-free Coal. Interactions of the Catalyst with Carbon in N_2 and CO_2 Atmosphere, *Fuels*, 117, 1181-1189.

Li, H., Cheng, S., He, Y., Javed, M., Yang, G., Yang, R., and Tsubaki, N., 2019, A Study on the Effect of pH Value of Impregnation Solution in Nickel Catalyst Preparation for Methane Dry Reforming Reaction, *Chem. Select,* 4, 8953-8959.

Li, X., Luo, X., Dou, L., and Chen, K., 2016, Preparation and Characterization of K_2CO_3-Actvated Kraft Lignin Carbon, *Bioresour.*, 11 (1), 2096-2108.

Noor, P., Khanmohammadi, M., Roozbehani, B., Yaripour, F., and Garmarudi, A.B., 2017, Introduction of Table Sugar as a Soft Second Template in ZSM Nanocatalyst and Its Effect on Product Distribution and Catalyst Lifetime in Methanol to Gasoline Conversion, *J. Energy Chem.,* 27(2), 582-590.

Nunes, C.A. and Guerreiro, M.C., 2011, Estimation of Surface Area and Pore Volume of Activated Carbon by Methylene Blue and Iodine Numbers, *Quim. Nova.*, 34 (3), 472-476.

Nurhadiansyah, A., Faryuni, D.I., dan Lapanporo, B.P., 2018, Sintesis dan Karakterisasi Karbon Aktif dari Limbah Serbuk Kayu Bengkirai sebagai Adsorben Logam Fe pada Air Gambut, *Prisma Fisika,* 6(2), 124-128.

Pacchioni, G., 2015, Numerical Simulations of Defective Structures: The Nature of Oxigen Vacancy in Non-reducible (MgO, SiO, ZrO_2 and Reducible TiO_2, NiO, WO_3) Oxides, *Springer Series in Surface Science,* 58, 1-28.

Rasyid, R., Prihartantyo, A., Mahfud, M., and Roesyadi, A., 2015, Hydrocracking of Calophyllum inophyllum Oil with Non-Sulfide CoMo Catalyst, *Bulletin of Chemical Reaction Engineering & Catalyst*, 10(1), 61-69.

Sanni, S.O., Viljoen, E. L., and Ofomaja, A. E., 2020, Three-dimensional Hierarchical Porous Carbon Structure Derived from Pinecone as a Potential Catalyst Support in Catalytic Remediation of Antibiotics, *RSC Adv.,* 10, 8717-8728.

Savitri, Effendi, R., Primahana, G., and Tursiloadi, S., 2015, Cracking *Callophyllum innophyllum L.* Oil to Bio-gasoline by Microporous based Zeolite and Al_2O_3 Catalysts, *Procedia Chemistry*, 16, 555-562.

Saygili, H. and Saygili, G.A., 2019, Optimized Preparation for Bimodal Porous Carbon from Lentil Processing Waste by Microwave-assisted K_2CO_3 Activation: Spectroscopic Characterization and Dye Decolorization Activity, *J. Clean. Prod.*, 226, 968-976.

Sumbogo, S.D., 2019, Sintesis Hierarki Karbon Aktif dari Kayu Merbau Manokwari Untuk Pengemban Logam Co, Ni, dan Pd Sebagai Katalis Hidrorengkah Minyak Nyamplung menjadi Fraksi Bensin and Solar, *Skripsi*, Fakultas MIPA, Universitas Gadjah Mada.

Suripatty, H.J., Rahanra,N., dan Dharsono, W.W., 2018, Pembuatan Arang Briket Dari Serbuk Gergajian Kayu Limbah Industri Pengolahan Kayu Merbau, *Jurnal Akrab Juara*, 3(3), 1-8.

Tadda, M.A., Ahsan, A., Shitu, A., Elsergany, M., Arunkumar, T., Jose, B., Razaque, M.A., and Daud, N.N., 2016, A Review on Activated Carbon: Process, Application and Prospects, *Journal of Advanced Civil Engineering Practice and Research,* 2 (1), 7-13.

Trisunaryanti, W., Kartika, I.A., Mukti, R.R., Hartati, Triyono, Widyawati, R., and Suarsih, E., 2019, Preparation of Ni- and Mo-Based Catalysts Supported on γ-Al_2O_3 for Hydrocracking of *Calophyllum inophyllum* Oil, *Biofuels*.

Trisunaryanti, W., Triyono, Falah, I.I, Siagian, A.D., and Marsuki, M.F., 2018, Synthesis of Ce-Mesoporous Silica Catalyst and Its Lifetime Determination

for the Hydrocracking of Waste Lubricant, *Indones. J. Chem.,* 18 (3), 441-447.

Tye, C.T., 2019, *Catalyst for Hydroprocessing of Heavy Oils and Petroleum Residue: Processing of Heavy Crude Oils-Challenges and Opportunities*, Ramasamy Marappa Gounder, IntechOpen.

Veriansyah, B., Han, J.Y., Kim, S.K., Hong, S.A., Kim, Y.J., Lim, Y.J.S., Shu, Y.W., Oh, S.G., and Kim, J., 2012, Production of Renewable Solar by Hydrocracking of Soybean Oil: Effect of Catalyst, *Fuels*, 94, 578-585.

Wang, H., Li, G., Rogers, K., Lin, H., Zheng, Y., and Ng, S., 2017, Hydrotreating of Waste Cooking Oil Over Supported CoMoS Catalyst-Catalyst Deactivation Mechanism Study, *Molecular Catalyst,* 443, 228-240.

Wang, L., Sun, F., Hao, F., Qu, Z., Gao, J., Liu, M., Wang, K., Zhao, G., and Qin, Y., 2020, A Green Trace K_2CO_3 Induced Catalytic Activation Strategy for Developing Coal-Converted Activated Carbon as Advanced Candidate for CO_2 Adsorption and Supercapacitors, *Chem. Eng. J.*, 383.

Yang, Y., Al, S., Wang, Q., Zhang, X., Wang, L., and Li, G., 2013, Hydrotreating of C_{18} Fatty Acids to Hydrocarbons on Sulphided NiW/SiO_2-Al_2O_3, *Fuel Process. Technol.*, 116, 165-174.

Yang, Y., Chiang, K., and Burke, N., 2011, Porous Carbon-Supported Catalyst for Energy and Environment Applications: A Short Review, *Catal. Tod.*, 178(1), 197-205.

Yang, H., Yan, R., Chen, H., Lee, D.H., and Zheng, C., 2017, Characteristics of Hemicellulose, Cellulose, and Lignin Pyrolysis, *Fuel*, 86, 1781-1788.

Yang, Y., Li, L., Li, Y., Rooke, J., Sanchez, C., and Su, B., 2017, Hierarchically Porous Material: Synthesis Strategies and Structure Design, *Chem. Soc. Rev.,* 45, 481-558.

Zhang, J., Gao, J., Chen, Y., Hao, X., and Jin, X., 2017, Characterization, Preparation, and Reaction Mechanism of Hemp Stem Based Activated Carbon, *Res. Phys.,* 7, 1628-1633.

Zhou, W., Teo, W.L., Wong, D., Zuo, G., Jana, D., Qian, C., Wang., H., Liu, J., and Zhao, Y., 2020, Efficient Noble Metal-Free Catalyst Supported by Three-Dimensional Ordered Hierarchical Porous Carbon, *Chem. Asian J.,* 15(16), 2513-2532.