

DAFTAR PUSTAKA

- Anand, M. and Sinha, A.K., 2012, Bioresource Technology Temperature-dependent reaction pathways for the anomalous hydrocracking of triglycerides in the presence of sulfided Co – Mo-catalyst, *Bioresour. Technol.*, 126, 148–155.
- Anand, M., Farooqui, S.A., Kumar, R., Joshi, R., Kumar, R., Sibi, M.G., Singh, H. and Sinha, A.K., 2016, Kinetics, thermodynamics and mechanisms for hydroprocessing of renewable oils. *Appl. Catal., A*, 516, 144-152.
- Anggraeni, I. S. dan Yuliana, L. E., 2015, *Pembuatan Karbon Aktif dari Limbah Tempurung Siwalan (Borassus Flabellifer L.) dengan Menggunakan Aktivator Seng Klorida (ZnCl₂) dan Natrium Karbonat (Na₂CO₃)*, Institut Teknologi Sepuluh Nopember.
- Anjoko, H., Dewi, R., Malik, U., 2014, Karakterisasi Semi Kokas Dan Analisa Bilangan Iodin Pada Pembuatan Karbon Aktif Tanah Gambut Menggunakan Aktivasi H₂O, *JOM FMIPA*, 1(2), 63-69.
- Bouchelta, C., Salah, M., Bertrand, O., and Bellat, J., 2008, Preparation and characterization of activated carbon from date stones by physical activation with steam, *J. Anal. Appl. Pyro.*, 82, 70–77.
- Dutta, S., Bhaumik, A., Wu, K.C.W., 2014, Hierarchically porous carbon derived from polymers and biomass: Effect of interconnected pores on energy applications, *Energy Environ. Sci.*, 7, 3574-3592.
- Felixzak-guzik, A., 2018, Hierarchical zeolites: Synthesis and catalytic properties, *Microporous Mesoporous Mater.*, 259, 33-45.
- Fuentes-Ordonez, E.G., Salbidegoitia, J.A., Gonz, M.P., and Gonz, J.R., 2016, Mechanism and kinetics in catalytic hydrocracking of polystyrene in solution, *Polym Degrad Stab.*, 124, 51–59.
- Garcia-Garcia, A., Gregorio, A., Boavida, D., Gulyurtlu, I., 2002, Production And Characterization of Activated Carbon from Pine Wastes Gasified in A Pilot Reactor, 22, *Edif. J*, 22, 1649-038.
- Ginting, Marga., 1997, *Preparasi Katalis Nikel-Zeolit Untuk Reaksi Hidrogenasi Asam Lemak Tidak jenuh Dalam Minyak Kelapa*, Tesis, Pascasarjana UGM, Yogyakarta.
- Grile, M., Likozar, B., Levec, J., 2014, Hydrodeoxygenation and hydrocracking of solvolysed lignocellulosic biomass by oxide, reduced and sulphide form of NiMo, Ni, Mo and Pd catalysts, *Applied Catalysis B: Environmental*, 57.
- Hasanah, U., 1995, *Impregnasi Nikel pada Karbon Aktif sebagai Katalis Hidrogenasi*, Tesis, Pascasarjana UGM, Yogyakarta.
- Hasanuddin, M.S., Faizal, M., Dahlan, M.H., Wijaya, K., 2013, Hydrocracking of oil residue from palm oil mill effluent to biofuel, *Sustain. Environ. Res.*, 395-400.
- Hasibuan, S., Sahirman, Yudawati, N.M.Y., 2013, Karakteristik fisikokimia dan antibakteri hasil purifikasi minyak biji nyamplung (*Calophyllum inophyllum* L .), *Agritech.*, 33, 311–319.

- Ioannidou, O. and Zabaniotou, A., 2007, Agricultural residues as precursors for activated carbon production—a review, *Renew. Sust. Energ. Rev.*, 11, 1966-2005.
- Kartika, I.A., Cerny, M., Vandenbossche, V., Rigal, L., Sablayrolles, C., Ketaren, S., 2012, *Pengantar Teknologi Minyak dan Lemak Pangan*, UI Press, Jakarta.
- Koohsaryan, E. and Anbia, M., 2016, Nanosized and hierarchical zeolites : A short review, *Chin. J. Catal.*, 37, 447–467.
- Kurniati, S., Soeparman, S., Yuwono, S.S., Hakim, L., 2018, Characteristics and Potential of Nyamplung (*Calophyllum inophyllum* L .) Seed Oil from Kebumen, Central Java , as a Biodiesel Feedstock, *Int. Res. J. Adv. Eng. Sci.* 3, 148–152.
- Leksono, B., Hendrati, R.L., Windyarini, E., Hasnah, T., 2014, Variation of biofuel potency of 12 *Calopyllum inophyllum* populations in Indonesia, *Indonesian Journal of Forestry Research Vol.1 No.2*., 127-138.
- Li, K., Valla, J. and Garcia-Martinez, J., 2014, Realizing the commercial potential of hierarchical zeolites: new opportunities in catalytic cracking, *Chem. Cat. Chem.*, 6, 46-66.
- Liu, W. J., Jiang, H., Yu., H. Q, 2015, Thermochemical conversion of lignin to functional materials: a review and future directions, *Green Chem.*, 17, 4888-4907.
- Marlinda, L., Al-Muttaqii, M., Gunardi, I., Roesyadi, A. and Prajitno, D.H., 2017, Hydrocracking of Cerbera manghas Oil with Co-Ni/HZSM-5 as Double Promoted Catalyst, *Bulletin of Chemical Reaction Engineering & Catalysis*, 12, 167-184.
- Marlinda, L., Al-Muttaqii, M., Gunardi, I., Roesyadi, A. and Prajitno, D.H., 2017, Hydrocracking of Cerbera manghas Oil with Co-Ni/HZSM-5 as Double Promoted Catalyst. *Bulletin of Chemical Reaction Engineering & Catalysis*, 12, 167-184.
- Muhammad, F. R., Jatranti, S., Qadariyah, L., Mahfud, 2014, Pembuatan Biodiesel dari Minyak Nyamplung menggunakan Pemanasan Gelombang Mikro, *Jurnal Teknik Pomits*, 3, 2301-9271.
- Nugraheni, A.Y., 2014, Molecular Bonding and Bandgap of Reduced Graphene Oxide Prepared by Heating Coconut Shell, *Material Science Forum*, 285-289.
- Nwosu, C., 2012, An electronegativity approach to catalytic performance, *JTST*, 1, 25-28.
- Ong, H.C., Milano, J., Silitonga, A.S., Hasan, M.J., Shamsuddin, A.H., Wang, C.T., Indra Mahlia, T.M., Siswantoro, J., Kusumo, F., Sutrisno, J., 2019, Biodiesel production from *Calophyllum inophyllum*-Ceiba pentandra oil mixture: Optimization and characterization, *J. Cleaner Production*, 219, 183-198.
- Pandia, S., Sitorus, R., 2017, Penentuan Bilangan Iodin Adsorben Kulit Jengkol Dan Aplikasinya Dalam Penyerapan Logam Pb (Ii) Pada Limbah Cair Industri Pelapisan Logam, *Jurnal Teknik Kimia USU*, 5(4),8-14.

- Pinatik, H., Tooy, D., 2014, Quality Analysis of Activated Coconut Shell Charcoal Briquette Dust in Water Purification at Various Water Sources, *International Institute of Engineers*, 11-12.
- Rasyid, R., Prihatantyo, A., Mahfud, M., Roesyadi, A., 2015, Hydrocracking of Calophyllum inophyllum oil with non-sulfide CoMo catalysts, *Bull. Chem. Res. Eng. Cat.*, 10, 61-69.
- Roozbeh, H.H., Arash, A.A., Ashri, W.M., Daud, W., J.N. Sahu, 2013, Preparation and Characterization of Activated Carbon from Apple Waste by Microwave-Assisted Phosphoric Acid Activation: Application in Methylene Blue Adsorption, *Bioresources*, 8(2), 2950 - 2966.
- Santi, D., Triyono, Trisunaryanti, W., Izul Falah, I., 2020, Hydrocracking of pyrolyzed α - cellulose to hydrocarbon over $MxOy$ /Mesoporous carbon catalyst ($M = Co$ and Mo): Synthesis and characterization of carbon-based catalyst support from saw waste of Merbau wood, *Journal of Environmental Chem. Engineering*, 103735.
- Santi, D., Triyono, Trisunaryanti, W., Izul Falah, I., 2020, Template-Free Synthesis of Porous Carbon from Merbau Wood by H_2O_2 - $ZnCl_2$ Hydrothermal Treatment, *Asian Journal of Chemistry*, 32, 810-814.
- Sie, S.T., 1993, Acid-catalyzed cracking of paraffinic hydrocarbons. 3. Evidence for the protonated cyclopropane mechanism from hydrocracking/hydroisomerization experiments, *Ind. Eng. Chem. Res.*, 32, 403-408.
- Sriningsih, W., Saerodji, M.G., Trisunaryanti, W., Armunanto, R., and Falah, I.I., 2014, Fuel Production from LDPE Plastic Waste over Natural Zeolite Supported Ni, Ni-Mo, Co and Co-Mo Metals, *Procedia Environ. Sci.*, 20, 215–224.
- Sudibandriyo, M., 2009, A Generalized Ono-Kondolattice Model for High Pressure on Carbon Adsorben, *Disertation*, Oklahoma State University, Oklahoma.
- Sumbogo, S.D., 2019, Sintesis Hierarki Karbon Aktif dari Kayu Merbau Manokwari untuk Pengembangan Logam Co, Ni, dan Pd Sebagai Katalis Hidrorengkah Minyak Nyamplung Menjadi Fraksi Bensin Dan Solar, *Skripsi*, FMIPA, Universitas Gadjah Mada.
- Sunarminto, B.H., 2015, *Pertanian Terpadu untuk Mendukung Kedaulatan Pangan Nasional*, Gadjah Mada University Press, Yogyakarta.
- Tamunaidu, P., Bhatia, S., 2007, Catalytic cracking of palm oil for the production of biofuel: Optimization studies, *Bioresour. Technol.*, 98, 3593–3601.
- Tengker, S.M.T., Kumajas, J., 2019, Karakterisasi material mesopori Ni/MCM-41 dan pengaruh penambahan logam nikel terhadap tingkat keasaman material, *Fullerene Journal of Chemistry*, Vol (4).
- Trisunaryanti, W., 2018, *Material Katalis dan Karakterisasinya*, Universitas Gadjah Mada Press, Yogyakarta.
- Trisunaryanti, W., Triyono, Izul Falah, I., Siagian, A.D., 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.

- Trisunaryanti, W., Triyono, Armunanto, R., Hastuti, L.P., Ristiana, D.D., Ginting, R.V., 2018, Hydrocracking of α -cellulose using Co, Ni, and Pd supported on mordenite catalysts, *Indones. J. Chem.*, 18, 166-172.
- Vialle, C., et al., 2018, Direct Calophyllum oil extraction and resin separation with a binary solvent of n - hexane and methanol mixture, *Fuel*, 221, 159–164.
- Widiyarti, G. dan Rahayu, W.S, 2010, Pengaruh metode preparasi dan kandungan logam aktif terhadap Aktivitas Katalis Ni/kieselguhr, *Jurnal Sains Materi Indonesia*, 11 (2) : 1-5.
- Widyawati, R., 2018, Preparasi dan Karakterisasi Katalis Ni/ γ -Al₂O₃, Mo/ γ -Al₂O₃, NiMo/ γ - Al₂O₃ dan Aplikasinya Dalam *Hydrocracking* Minyak Biji Nyamplung (*Calophyllum Inophyllum L*) Menjadi Biofuel , *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Wijaya, K., Baobalabuana, G., Trisunaryanti, W., and Syoufian, A., 2013, Hydrocracking of palm oil into biogasoline catalyzed by Cr/natural zeolite, *Asian J. Chem.*, 25 (16), 8981–8986.
- Yahya, M.A., Al-Qodah, Z. and Ngah, C.Z., 2015, Agricultural bio-waste materials as potential sustainable precursors used for activated carbon production: A review, *Renew. Sust. Energ. Rev.*, 46, 218-235.
- Yang, Y., Al, S., Wang, Q., Zhang, X., Wang, L., and Li, G., 2013, Hydrotreating of C 18 fatty acids to hydrocarbons on, *Fuel Process. Technol.*, 116, 165–174.
- Yerizam Muhammad et al. Characteristics of Composite Rice Straw and Coconut Shell as Biomass Energy Resources (Briquette), *Journal on Advance Science Engineering Information*, 42-48.
- Yu, J.H., Joo, S.Y., Sim, T., Hong, S.C., Kim, O.S., Kang, J.M., 2020, Post-KOH activation of nitrogen-containing porous carbon with ordering mesostructure synthesized through a self-assembly, *Chem. Phys.*, 739, 137028.
- Zhang, X.W., Shen, S.C., Yu, L.E., Kawi, S., Hidajat, K., Simon Ng, K.Y., 2003, Oxidative decomposition of naphthalene by supported metal catalysts, *Applied Catalysis A: General* 250, 341–352.