Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

BIBLIOGRAPHY

Abdelouahed, L., Authier, O., Mauviel, G., Corriou, J. P., Verdier, G., & Dufour, A. (2012). Detailed Modeling of Biomass Gasification in Dual Fluidized Bed Reactors under Aspen Plus. *Energy & Fuels*, (26), 3840–3855.

Alamia, A., Thunman, H., & Seemann, M. (2016). Process Simulation of Dual Fluidized Bed Gasifiers Using Experimental Data. *Energy and Fuels*, *30*(5), 4017–4033. https://doi.org/10.1021/acs.energyfuels.6b00122

American Iron and Steel Institute. (2010). *High Temperature Characteristics of Stainless Steels*. *Handbook Series No 9004*. Nickel Development Institute.

Amundson, M. J. (2016). *An economic comparison of high moisture feedstock biofuel production*. Iowa State University.

ASME. (n.d.). *ASME B31.3 Process Piping Guide*. ASME.

Awalludin, M. F., Sulaiman, O., Hashim, R., & Nadhari, W. N. A. W. (2015). An overview of the oil palm industry in Malaysia and its waste utilization through thermochemical conversion, specifically via liquefaction. *Renewable and Sustainable Energy Reviews*, *50*, 1469–1484. https://doi.org/10.1016/j.rser.2015.05.085

Bartholomew, C. H., & Farrauto, R. J. (2011). *Fundamentals of Industrial Catalytic Processes*. Wiley. Retrieved from https://books.google.co.id/books?id=ornmC_v1AZ8C

BP. (2016). BP energy outlook 2016. *Bp*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Brown, G. G. (1950). *Unit operations*. Wiley. Retrieved from https://books.google.co.id/books?id=cb1TAAAAMAAJ

Brown, R. C., & Stevens, C. (2011). *Thermochemical Processing of Biomass: Conversion into Fuels, Chemicals and Power*. Wiley. https://doi.org/10.1002/9781119990840

Brownell, L. E., Young, E. H., & (Firm), K. (1959). *Process equipment design*. Wiley. Retrieved from https://books.google.co.in/books?id=at5WAAAAMAAJ

Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Chang, C. D. (1992). The New Zealand Gas-to-Gasoline plant: An engineering tour de force. *Catalysis Today*, *13*(1), 103–111. https://doi.org/10.1016/0920-5861(92)80190-X

Cheremisinoff, N. P. (1996). *Materials selection Deskbook*. Noyes Publications.

Corella, J., Orío, A., & Toledo, J. M. (1999). Biomass gasification with air in a fluidized bed: Exhaustive tar elimination with commercial steam reforming catalysts. *Energy and Fuels*, *13*(3), 702–709. https://doi.org/10.1021/ef980221e

Corella, J., Toledo, J. M., & Molina, G. (2007). A review on dual fluidized-bed biomass gasifiers. *Industrial and Engineering Chemistry Research*, *46*(21), 6831–6839. https://doi.org/10.1021/ie0705507

Dahlquist, E. (2013). *Technologies for Converting Biomass to Useful Energy: Combustion, Gasification, Pyrolysis, Torrefaction and Fermentation*. CRC Press. Retrieved from https://books.google.co.in/books?id=g7zLBQAAQBAJ&printsec=frontcover#v=onepage&q&f=false

de Klerk, A. (2011). *Biogas from Waste and Renewable Resources Beyond Oil and Gas : The Methanol Economy Catalysis for Sustainable Energy Production Planning and Integration of Refinery and Petrochemical Operations Hydrogen and Fuel Cells*. Wiley.

Doherty, W., Reynolds, A., & Kennedy, D. (2009). The effect of air preheating in a biomass CFB gasifier using ASPEN Plus simulation. *Biomass and Bioenergy*, *33*(9), 1158–1167. https://doi.org/10.1016/j.biombioe.2009.05.004

Dupont, C., Nocquet, T., Augusto, J., Costa, D., & Verne-tournon, C. (2011). Kinetic modelling of steam gasification of various woody biomass chars : Influence of inorganic elements. *Bioresource Technology*, *102*(20), 9743–9748. https://doi.org/10.1016/j.biortech.2011.07.016

E4tech. (2009). *Review of Technologies for Gasification of Biomass and Wastes*. *Biomass*. https://doi.org/10.1016/j.dsr2.2004.06.026

EIA. (2016a). Petroleum & Other Liquids Overview. Retrieved November 13, 2016, from https://www.eia.gov/petroleum/

Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

EIA. (2016b). What Drives Crude Oil Prices: Spot Prices. Retrieved November 13, 2016, from https://www.eia.gov/finance/markets/spot_prices.cfm

Göransson, K., Söderlind, U., He, J., & Zhang, W. (2011). Review of syngas production via biomass DFBGs. *Renewable and Sustainable Energy Reviews*, *15*(1), 482–492. https://doi.org/10.1016/j.rser.2010.09.032

Graaf, G. H., Winkelman, J. G. M., Stamhuis, E. J., & Beenackers, A. A. C. M. (1988). Kinetics of the three phase methanol synthesis. *Chemical Engineering Science*, *43*(8), 2161–2168. https://doi.org/http://dx.doi.org/10.1016/0009-2509(88)87098-2

Gupta, R. B., & Demirbas, A. (2010). *Gasoline, Diesel, and Ethanol Biofuels from Grasses and Plants*. Cambridge University Press.

Hafiz, M. S., Horst, K., & Ariffin, M. A. M. (2016). Thermal Analysis for Improving Fuel Characteristics of Empty Fruit Bunch (EFB) Fibers. *IOP Conference Series: Earth and Environmental Science*, *32*, 12047. https://doi.org/10.1088/1755-1315/32/1/012047

Haldor Topsøe A/S. (2008). *High Activity Methanol Synthesis Catalyst - MK 121*. Retrieved from http://www.topsoe.com/business_areas/methanol/~/media/PDF files/Methanol/Topsoe_methanol_mk 121.ashx

Haldor Topsøe A/S. (2016). MK-121 Overview. Retrieved February 21, 2017, from http://www.topsoe.com/products/mk-121

Higman, C., & van der Burgt, M. (2003). *Gasification*. *Elsevier*. Gulf Professional Publishing. https://doi.org/http://www.sciencedirect.com/science/article/pii/B9780750677073500000

Holman, J. (2009). *Heat Transfer*. McGraw-Hill Education. Retrieved from https://books.google.co.id/books?id=7TGGPwAACAAJ

Hou, K. (1998). *Experimental Studies of Intrinsic Kinetics and Diffusion during Methane Steam Reforming*. University of Salford.

Hou, K., & Hughes, R. (2001). The kinetics of methane steam reforming over a Ni/α-Al2O catalyst. *Chemical Engineering Journal*, *82*(1–3), 311–328. https://doi.org/10.1016/S1385-

Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

8947(00)00367-3

Isaak, D. (2014). Oil Security Issues in Asia, (400).

JM Katalco. (2016). Delivering World-Class Hydrogen Plant Performance. *Johnson Matthey Catalysts*.

Keil, F. J. (1999). Methanol-to-hydrocarbons : process technology, *29*, 49–66.

Kern, D. Q. (1950). *Process Heat Transfer*. McGraw-Hill. Retrieved from https://books.google.co.in/books?id=5hDNqLZp_L4C

Konsomboon, S., Pipatmanomai, S., Madhiyanon, T., & Tia, S. (2011). Effect of kaolin addition on ash characteristics of palm empty fruit bunch (EFB) upon combustion. *Applied Energy*, *88*(1), 298–305. https://doi.org/10.1016/j.apenergy.2010.07.008

Laurence, T. (2009). *Thermo-Economic Evaluation of the Production of Liquid Fuels from Biomass*.

Lew, S., Jothimurugesan, K., & Flytzani-Stephanopoulos, M. (1989). High-Temperature H2S Removal from Fuel Gases by Regenerable Zinc Oxide-Titanium Dioxide Sorbents. *Ind. Eng. Chem. Res.*, *28*(5), 535–541. https://doi.org/10.1021/ie00089a006

Lichtblau, J. (2014). *World oil outlook. The Leading Edge* (Vol. 4). Organization of the Petroleum Exporting Countries. https://doi.org/10.1190/1.1439163

Luo, Z., Wang, S., Liao, Y., Zhou, J., Gu, Y., & Cen, K. (2004). Research on biomass fast pyrolysis for liquid fuel. *Biomass and Bioenergy*, *26*(5), 455–462. https://doi.org/10.1016/j.biombioe.2003.04.001

McCabe, W. L., Smith, J. C., & Harriott, P. (1993). *Unit Operations of Chemical Engineering*. McGraw-Hill. Retrieved from https://books.google.co.id/books?id=1CkingEACAAJ

NASDAQ. (2016). Crude Oil WTI (NYMEX) Price. Retrieved November 13, 2016, from http://www.nasdaq.com/markets/crude-oil.aspx

Norwegian Petroleum Industry. (2002). *NORSOK STANDARD Materials selection*. *NORSOK*

Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

standard. Retrieved from http://www.standard.no/pagefiles/1176/m-001.pdf

Perry, R. H., & Green, D. W. (1998). *Perry's Chemical Engineers' Handbook*. McGraw-Hill. Retrieved from https://books.google.co.id/books?id=dDQNSQAACAAJ

Ranade, V. V, Chaudhari, R., & Gunjal, P. R. (2011). *Trickle Bed Reactors: Reactor Engineering and Applications*. Elsevier Science. Retrieved from https://books.google.co.id/books?id=N9mF0mW5qwkC

Rase, H. F., & Barrow, M. H. (1961). *Project Engineering of Process Plants*. Wiley. Retrieved from https://books.google.co.id/books?id=MNBHnQEACAAJ

Rostrup-Nielsen, J. (1984). Catalytic Steam Reforming. *Catalysis Science and Technology*, *5*, 1–117. https://doi.org/doi.org/10.1007/978-3-642-93247-2_1

Sie, S. T., & Krishna, R. (1998). Process Development and Scale Up: III. Scale-up and scale-down of trickle bed processes. *Reviews in Chemical Engineering*. https://doi.org/10.1515/REVCE.1998.14.3.203

Sinnott, R. K. (2005). *Chemical Engineering Design: Chemical Engineering*. Elsevier Science. Retrieved from https://books.google.co.id/books?id=DJaxUL3numgC

Sofekun, O. A. (1996). *A kinetic study of the sulfidation-regeneration of zinc oxide sorbent*. Iowa State University.

Spath, P., & Ringer, M. (2005). *Biomass to Hydrogen Production Detailed Design and Economics Utilizing the Battele Columbus Laboratory Indirectly-Heated Gasifier. NREL technical report NREL/TP-5100-51400*.

Tan, E. C. D., Talmadge, M., Dutta, A., Hensley, J., Schaidle, J., Biddy, M., … Lukas, J. (2015). *Process Design and Economics for the Conversion of Lignocellulosic Biomass to Hydrocarbons via Indirect Liquefaction Thermochemical Research Pathway to High-Octane Gasoline Blendstock Through Methanol / Dimethyl Ether Intermediates*. *Pacific Northwest Laboratory Technical Report* (Vol. NREL/TP-51). https://doi.org/10.2172/1215006

Preliminary Design of Palm Fruit Empty Bunch Into Gasoline Plant with Capacity 100,000 Tons of Dry
Biomass/year
LESNA CHRISTWINARSO, Muhammad Mufti Azis, S.T., M.Sc., Ph.D
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Tay, J. H., & Show, K. Y. (1996). Utilization of ashes from oil-palm wastes as a cement replacement material. *Water Science and Technology*, *34*(11 pt 7), 185–192. https://doi.org/10.1016/S0273-1223(96)00837-2

The Jakarta Post. (2016). Pertamina Speeds Up Balikpapan Refinery Upgrade. Retrieved November 13, 2016, from http://www.thejakartapost.com/news/2016/09/08/pertamina-speeds-up-balikpapan-refinery-upgrade.html

Turner, J. H., Viner, A. S., Jenkins, R. E., Vatavuk, W. M., & McKenna, J. D. (1987). Sizing and Costing of fabric Filters. *Japca*, *37*(9), 1105–1112. https://doi.org/10.1080/08940630.1987.10466306

Ulrich, G. D. (1984). *A guide to chemical engineering process design and economics*. Wiley. Retrieved from https://books.google.co.id/books?id=pdVTAAAAMAAJ

Wang, L. K., Williford, C., & Chen, W. (2004). Fabric Filtration. In *Handbook of Environmental Engineering Volume 1: Air Pollution Control Engineering* (Vol. 1, pp. 59–95). Retrieved from http://www.springer.com/978-1-58829-161-5

World Bank. (2016). World Bank Commodities Price Forecast, (July), 1–4.

Yaws, C. (1999). *Chemical Properties Handbook: Physical, Thermodynamics, Environmental Transport, Safety & Health Related Properties for Organic &*. McGraw-Hill Education. Retrieved from https://books.google.co.id/books?id=PH2KG4cbtzYC

Yulianto, I. (2014). *Pertamina Energy Outlook 2015*.

Yusoff, S. (2006). Renewable energy from palm oil - Innovation on effective utilization of waste. *Journal of Cleaner Production*, *14*(1), 87–93. https://doi.org/10.1016/j.jclepro.2004.07.005