

## DAFTAR PUSTAKA

- Altiocka, M.R., Akbay, E., dan Him, Z., 2014, "*Impregnation of 12-Tungstophosphoric acid on tonsil : An Effective catalyst for esterification of formic acid with n-butyl alcohol and kinetic modelling,*" Journal of Molecular Catalysis A : Chemical, 385, 18-25.
- Bambase, M.E., Nakamura, N., Tanaka, J. and Matsumura, M., 2007, "*Kinetics of hydroxidecatalyzed methanolysis of crude sunflower oil for the production of fuel-grade methyl esters*", Journal of Chemical Technology and Biotechnology, 82, 3, (March 2007) (273-280), 0268-2575.
- Bringué, R., Tejero, J., Iborra, M., Izquierdo, J.F., Fité C. Cunill. F., 2006, "*Journal of Catalysis,*" 244, 33-42.
- Chu, B.S., Quek, S.Y., Baharin, B.S., 2003, "*Optimization of enzymatic hydrolysis for concentration of vitamin E in palm fatty acid distillate,*" J. Food Chem., 80 (3), 295 – 302.
- Di Serio, M.; Tesser, R.; Pengmei, L.; and Santacesaria, E., 2008, "*Heterogeneous Catalysts for Biodiesel Production*", Energy and Fuels, 22, 207–217.
- Kastner, J.R., Miller, J., Geller, D.P., dan Locklin, J., 2012, "*Catalytic esterification of fatty acids using solid acid catalyst generated from biochar and activated carbon,*" Catalysis Today, 100, 122 – 132.
- Kaewthong, W., 2004, "*Continuous production of monoacylglycerol by glycerolysis of palm olein with immobilized lipase.*" Doctor of Philosophy Thesis in Biotechnology. Prince of Songkla University.
- Kotwal, M., Deshpande, S.S., dan Srinivas, D., 2011, "*Esterification of fatty acids with glycerol ove Fe-Zn double-metal cyanide catalyst,*" Catalyst Communications, 12, 1302 – 1306.
- Lenntech, "Dowex DR 2030", <http://www.lenntech.com/Data-sheets/Dowex-DR-2030-L.pdf> (diakses tanggal 11 Oktober 2014).
- Mostafa, N.A., Maher, A., dan Abdelmoez, A., 2013, "*Production of mono-, di-, and triglycerides from waste fatty acid through esterification with glycerol,*" ABB : Advances in Bioscience and Biotechnology, 04, 09.



- Oldring, P.K.T., and Hayward, G., 1987, "Resins for Surface Coatings", London : SITA Technoogy.
- Orjuela, A., Yanez, A.J., Santhanakrishnan, A., Lira, C.T., dan Miller, C.T., 2012, "*Kinetics of mixed succinic acid/acetic acid esterification with Amberlyst 70 ion exchange resin as catalyst*," Chemical Engineering Journal, 188, 98 – 107.
- Privett, O.S., Blank, M.L., and Lundberg, W.O., 1961, "*Determination of Mono-, Di-, Triglycerides by Molecular Distillation and Thin – Layer Chromatography*", J. Amer. Oil Chem., 38, 312 – 316.
- Rodriguez, A., Esteban, L., Martin, L., 2012, "*Synthesis of 2-monoacylglycerols and structured triacylglycerol rich in polyunsaturated fatty acids by enzyme catalyzed reactions*," Enzyme and Microbial Technology, 51, 148 – 155.
- Sakhtivel, A., Nakamura, R., Komura, K., dan Sugi, Y., 2007, "*Esterification of glycerol by lauric acid over aluminium and zirconium containing mesoporous molecular sieves in supercritical carbon dioxide medium*," J. of Supercritical Fluid, 42, 219 – 225.
- Sihite, J., "Produksi CPO Indonesia 2014 31,5 juta ton", <http://www.mediaindonesia.com/misore/read/212/Produksi-CPO-Indonesia-2014-315-juta-ton/2015/01/30> (diakses tanggal 22 Maret 2015).
- Silva, M.J., Cardoso, A.L., Menezes, F.L., 2012, "*Heterogeneous Catalyst Based on  $H_3PW_{12}O_{40}$  Heteropolyacid for Free Fatty Acid Esterification*," Brazil : Federal University of Vicosa/Chemistry Department.
- Thomas, A.E., Scharoun, J.E., and Ralston, H., 1965, "*Quantitative Estimation of Isomeric Monoglycerides by Thin-Layer Chromatography*", J. Amer. Oil Chem., 42, 789 – 792.
- Tsai, Y., Lin, H., dan Lee, M., 2011, "*Kinetics behavior of esterification of acetic acid with methanol over Amberlyst 36*," Chemical Engineering Journal, 171, 1367 – 1372.
- Wibowo, T.Y., Zakaria, R., dan Abdullah, A.Z., 2010, "*Selective Glycerol Esterification Over Organomontmorillonite Catalysts*," Sains Malaysiana, 39, 811-816.



Zeng, Z., Cui, L., Xue, W., Chen, J., dan Che, Y., 2012, "*Recent Development on the Mechanism and Kinetics of Esterification Reaction Promoted by Various Catalysts*," P.R. China : Institute of Chemical Engineering, East China University of Science and Technology.

Zullaikah, S., Lai, C. C., Vali, S. R. and Ju, Y.H., 2005, "*A two-step acid-catalyzed process for the production of biodiesel from rice bran oil*", Bioresource Technology, 96, 1889–1896.