



DAFTAR PUSTAKA

- Andrade, I. C., Moreno, E. A., Cantor, J. F., 2014, "Purification of Glycerol from Biodiesel Production by Sequential Extraction", Elsevier Publisher, Mexico.
- Andrade. I. C, 2014, "Purification of glycerol from biodiesel production by sequential extraction monitored by ^1H NMR", Mexico, Elsevier.
- Anonim¹, 2017, "Data Kependudukan Jawa Timur", <https://jatim.bps.go.id/linkTabelStatis/view/id/342>, Diakses pada tanggal 25 Oktober 2017 pukul 12.00 WIB.
- Anonim², 2017, "UMR Kota Gresik", <https://www.gajiumr.com/gaji-umr-jawa-timur>, Diakses pada tanggal 25 Oktober 2017 pukul 12.15 WIB.
- Anonim³, 2017, "Daftar Suhu Rerata dan Kelembaban Rerata Jawa Timur", <https://jatim.bps.go.id/linkTabelStatis/view/id/337>, Diakses pada tanggal 25 Oktober 2017 pukul 12.30 WIB.
- Anonim⁴, 2017, "NJOP Kawasan Gresik", <http://peraturan.go.id/inc/view/11e576e28818df44c01a313132353032.html>, Diakses pada tanggal 26 Oktober 2017 pukul 16.44 WIB.
- Anonim⁵, 2017, "Tingkat Pengangguran Terbuka Wilayah Jawa Timur", <https://jatim.bps.go.id/linkTableDinamis/view/id/139>, Diakses pada tanggal 1 November 2017 pukul 7.27 WIB.
- Aries, R. S. and Newton, R. D., 1955, *Chemical Engineering Cost Estimation*, pp. 1-16; 52; 77-78; 97-119; 163-164; 177; 185-197; 203-209, McGraw-Hill Book Company, Inc., New York.
- Arthur, Theophilus., 2010, "Control Structure Design for Methanol Process", NTNY – Trondheim Norwegian University of Science and Technology.
- Brockman, et. al., 1987, "Glycerol Distillation Processes", United States Patent, Number:4655879, United States.
- Brown, G. G., Katz, D., Foust, A. S., and Schneidewind, C., 1950, "Unit Operation", John Wiley and Sons, Inc., New York.
- Brownell, L.E and Young, E.H., 1959., "Equipment Design", John Willey & Sons, Inc., New York.



- C. J. A. Mota, B. P. Pinto, A. L. Lima, 2017, “Glycerol : A Versatile Renewable Feedstock for the Chemical Industry”, Switzerland, Springer International Publishing AG 2017, DOI 10.1007/978-3-319-59375-3
- Chunbao. Xu, 2014, “Purification of Crude Glycerol using Acidification: Effects of Acid Types and Product Characterization”, Canda, Austin Group.
- Coulson & Richardson, 2003, “Chemical Engineering” 3rd edition, Volume 3, Great Britain, Butterworth Heinemann.
- Crowl, A.A. and Louvar, J.F., 2002, “Chemical Process Safety”, 2nd ed., Prentice Hall PTR, New Jersey.
- Evans, F. L., 1980, “Equipment Design Handbook”, Gulf Publising Company, Tokyo.
- Ferreira, I.M. Fonseca, A.M. Ramos, J. Vital, J.E. Castanheiro, Esterification of glycerol with acetic acid over dodecamolybdophosphoric acid encaged in USYzeolite, Catalysis Communications 10 (2009) 481–484.
- Herseczki . Zsanett Szabone, 2013, “Preparation of value – added glycerol derivatives from crude glycerol, the by – product of biodiesel production”, University of Pannonia.
<http://bi.go.id/> diakses pada tanggal 12 Mei 2018 pukul 09:28 WIB.
- <http://matche.com/equipcost/Default.html>, diakses pada tanggal 8 Mei 2018 pukul 15.00 WIB.
- <http://www.alibaba.com/>, diakses pada tanggal 10 Mei 2018 pukul 18.14 WIB.
- <http://www.mhhe.com/engcs/chemical/peters/data/ce.html>, diakses pada tanggal 10 Mei 2018 pukul 17.10 WIB.
- <https://www.sciencelab.com/>, diakses tanggal 6 Mei 2018.
- Hung, S. K, 2014, “Improved Design and Control of Triacetin Reactive Distillation Process for the Utilization of Glycerol”, Taipei, I&Ec Research.
- Kale. Sumeet, 2013, “Esterification of glycerol with acetic acid for improved production of triacetin using toluene as an entrainer”, Barcelona – Spain, 10th Green Chemistry Conference (An International Event)
- Karimi. I. A, 2012, “11th International Symposium on Process System Engineering”, Singapore, National University of Singapore, Elsevier.
- Kern, D.Q., 1965, “Process Heat Transfer”, Int.ed., p. 102-160, New York, McGraw-Hill

Book Company.

- Li, Z., Schwier, A.N., Sareen, N., Mcneill, V.F., 2011, "Reactive Processing of Formaldehyde and Acetaldehyde in Aqueous Aerosol Mimics: Surface Tension Depression and Secondary Organic Product", *Atmos. Chem. Phys.*, p.11616-11629.
- Li. K. L., 2014, "Design and Optimization of Acetic Acid Dehydration Processes", Taiwan, National Taiwan University.
- Limin, Z., Adesina, A. A., Ngonyen, T.H., 2012, "Acetylation of Glycerol Over Amberlyst-15: Kinetic and Product Distribution", Elsevier Publisher, Sydney.
- Madu, C. And Sodeinde O.A., 2007, "Hazard and Operability Analysis (HAZOP) of Boiler Section Egbin Power Plant Lagos", Lagos State Polytechnic.
- Metcalf dan Eddy, 2003, "Wastewater Engineering Treatment and Reuse", 4th ed., Mc Graw Hill Companies, Inc. Hongkong.
- Mufrodi. Zahru, 2012, "Chemical Kinetics for Synthesis of Triacetin from Biodiesel Byproduct", *International Journal of Chemistry* Vol. 4, No. 2; April 2012, DOI:10.5539/ijc.v4n2p101.
- Mufrodi. Zahrul, 2014, "Synthesis Acetylation of Glycerol Using Batch Reactor an Continuous Reactive Distillation Column", *Engineering Journal* Volume 18 Issue 2 DOI:10.4186/ej.2014.18.2.29
- P. S. Kong, M. K. Aroua, W. M. A. W. DAUD, H. V. lee, P. Cognet and Y. Pérès-Lucchese, "Catalytic Role of Solid Acid Catalysts in Glycerol Acetylation for the Production of Bio-additive: A Review", *RSC Adv.*, 2016, DOI: 10.1039/C6RA10686B.
- Perry, R.H., 1999, "Perry's Chemical Engineer's Handbook", 7 ed., p. 2.37-2.38, New York, McGraw-Hill Book Company.
- Peters, M. S. and Timmerhaus, K. D., 1991, *Plant Design and Economics for Chemical Engineers*, 4th ed., pp. 150-209; 618-686; 708-713, McGraw-Hill Book Company, Inc., New York.
- Powell, S.T., 1954, "Water Conditioning for Industry", 1st ed., Mc Graw Hill Book Co., Tokyo.
- Rase, H. F., and Barrow, M. H., 1977, "Chemical Reactor Design for Process Plant", 1st ed., Mc Graw Hill Book Company, Inc., New York.

- Riso, Forskningscenter., 1982, "Risk Analysis of A Distillation Unit", Technical University of Denmark, Denmark.
- Saifudin. N, 2013, "Rapid Purification of Glycerol by-product from Biodiesel Production through Combined Process of Microwave Assisted Acidification and Adsorption via Chitosan Immobilized with Yeast" , Selangor Malaysia, Research Journal of Applied Sciences, Engineering and Technology.
- Sinnott, R.K., 2005, "Chemical Engineering Design", 4 ed., p. 587-609, Oxford, Elsevier.
- Smith, J.M., Ness, H.C.V., Abbott, M.M., 2001, "Chemical Engineering Thermodynamics", Volume 6, p.635-636, New York, Mc Graw Hill.
- Treybal, R.E., 1981, "Mass-Transfer Operations", Int.ed., p. 139-210, Singapore, McGraw-Hill Book Company.
- Trifoi. Ancuta Roxana, 2013, "Complete integration of glycerol in biodiesel production process by making acetals additives", Babes – Bolyai University.
- Ulukardesler, A.H. dkk., 2009, "Determination of Optimun Condition and The Kinetics of Methanol Oxidation", Chem.Eng.Tech, Turkey, Bornova-Ishmir pp. 167-170.
- W.N.R.W. Isahak, M. Ismail, M.A. Yarmo, J.M. Jahim and J. Salimon, 2010. Purification of Crude Glycerol from Transesterification RBD Palm Oil over Homogeneous and Heterogeneous Catalysts for the Biolubricant Preparation. Journal of Applied Sciences, 10: 2590-2595.
- Welty, J.R., Wicks, C.E., Wilson, R.E., Rorrer, G., 2005, "Fundamentals of Momentum, Heat and Mass Transfer", 4 ed., p. 421.451, John Willey & Sons, Inc., New York.
- Wepoh. Heng, 2015, "Synthesis of Triacetin from Glycerol", Universiti Tunku Abdul Rahman.
- X. Liao, Y. Zhu, S. Wang, H. Chen, Y. Li, Theoretical elucidation of acetylating glycerol with acetic acid and acetic anhydride, Applied Catalysis B: Environmental94 (2010) 64–70.
- Yaws. Carl, 1999, "Chemical Properties Handbook", Texas, Chemical Engineerig Lamar University, McGraw-Hill.
- Ziels, 1956, " Recovery and Purification of Glycerol", The Journal of The American Oil Chemist Society, Vol.33, pp: 556-565.