DAFTAR PUSTAKA

Ackley, M.W., Rege, S.U., and Himanshu, S. 2003. Application of Natural Zeolites in the purification and Separationof Gases. Microporous and Mesoporous Materials Journal, 61, pp. 25-42

Aresta, M. Dibenetto, A. Nocito, F. Pastore, C., 2006, A study on the carboxylation of glycerol to glycerol carbonate with carbonate with carbon dixide: the role of catalyst, solvent and reaction condition, *Journal of molecular catalysis* No. 257, 149 – 153.

Aresta, M. Dibenetto, A. Nocito, F. Ferragina, C., 2009, Volarization of bio glycerol : New catalytic materials for the synthesis of glycerol carbonate via glycerolysis of urea, *Journal of Catalysis* 268 : 106 – 114.

Ayoub, M. and Abdullah, A.Z., 2012, Critical Review on the Current Scenario and Significance of Crude Glycerol Resulting from Biodiesel Industry Towards More Sustainable Renewable Energy Industry, *Journal of Renewable and Sustainable Energy Reviews* 16: 2671-2686.

Bambang P, dkk. 1997. Pemanfaatan Zeolit Alam Indonesia Sebagai Adsorben Limbah Cair dan Media Fluiditas dalam Kolom Fluidisasi. Jurnal MIPA. Malang: Universitas Brawijaya.

Casilda, V.C., Mul, G., Fernandez,J.F., Marcos, F.R., and Banares, M.A., 2011. Monitoring the catalytic synthesis of glycerol carbonate by real time attenuated total reflection FTIR spectroscopy. *Applied Catalysis A: general* 409-410.106-112.

Choi, J. I., Hong, W. H., and Cham, H.N., 1996. Reaction Kinetics of Lactic Acid with Methanol Catalyzed by Acid Resins, *Int.J. Chem. Kinet*. 28, 37-41.

Claude, S.,Moulongui, Z., Yoo, J.W., and Gasset, A., 2001, Method for preparing glycerol carbonate, *European Patent* No. 0955298 B1.

Climent, M.J., Corma, A., Pilar De Prutos, Iborra, S., Noy, M., Velty, A., Concepcion P., 2010, Chemical from Biomass : Synthesis of Glycerol Carbonate by Transesterification and Carbonylation with Urea with Hydrotalcite Catalysts. The Role of Acid-Base Pairs, *Journal of Catalysis*, 269 : 140-149

Damayanti, O., Gustanti, Y. dan Roesyadi A., 2012, Pembuatan Gliserol Karbonat Dari Gliserol Dengan Katalis Berbasis Nikel, *Jurnal Teknik ITS*, Vol. 1, No. 1, ISSN : 2301-9271

Dyer, A. (1988) An Introduction to Zeolite Molecular Sieves, *New York*, John Wiley & Sons

Fan, Xiaohun, dkk. 2010. *Glycerol (Byproduct of Biodiesel Production) as a Source for Fuels and Chemicals – Mini Review*. *The Open Fuels & Energy Science Journal*, 2010, 3, 17-22

Fessenden and Fessenden., 1986. *Organic Chemistry*,3th ed.,Wadsworth,Inc., Belmont,California.

Fogler, H.S. 2006. *Elements Of Chemical Reaction Engineering*, 4th Edition Prentice Hall Interna-tional Series in the Physical and Chemical Engineering Sciences.

Gates B.C (1992). Catalytic Chemistry. Wiley Series in Chemical Engineering., *John Wiley and Sons Inc.*, New York.

Gelosa, D., Ramaioli, M., Valente, G., and Morbidelli, M., 2003. Chromatographic Reactors: Esterification of Glycerol with Acetic Acid Using Acidic Polymeric Resins. *Ind. Eng. Chem. Res* 42, 6536-6544.

Gomez, Ochoa., Aberasti, O., and Velasco, M., 2009.Synthesis of Glycerol Carbonate from Glycerol and Dimethyl Carbonate by Transesterification: Catalyst Screening and reaction Optimization. *Applied Catalysis A: General*, 366. 315-324.

Groggins, P.H., 1958, *Unit Processes in Organic Synthesis*, pp.699, McGraw Hill, Inc., New York.

Hammond, C., Lopez-Sanchez, J.A., Ab Rahim, M.H., Dimitratos, N., Jenkins, R.L., Carley, A.F., He, Q., Kiely C.J., Knight, D.W., and Hutchings G.J., 2011, Synthesis of glycerol Carbonate from Glycerol and Urea with Gold-Based Catalysts, *The Royal Society of Chemistry*, 40: 3927-3937.

Hutabarat, H. 2010. Pendayagunaan Zeolite Di Bidang Peternakan. *Skripsi:* Universitas HKBP Nommensen Medan

Hu, Jianglin., Li, Guangxing and Li, Jinjin., 2010. Oxidative Carbonylation of Glycerol to Glycerol Carbonate Catalyzed by PdCl2 (phen)/KI. *Applied Catalysis A: General*, 386. 188 – 193.

Kim, D., Kim, M., Roshith, K., Kim, I., Kwak, M., and Park D., 2014, Comparative Catalytic Activity of Supported $ZnBr_2$ – Containing Ionic Liquid Catalysts for Preparation of Glycerol carbonate by Glycerolisis of Urea, *Korean J. Chem. Eng*., 31 (6) : 972-980.

Kim, D., Park, M., Selvaraj, M., Park, G., Lee, S., and Park, D., 2011, Catalytic Performanceof Polymer-Supported Ionic Liquids in The Synthesis of

Glycerol Carbonate from Glycerol and Urea, *Res.Chem. Intermed* 37: 1305-1312.

Levenspiel, O., 1999. *Chemical Reaction Engineering 3rd*, John Wiley and Sons Inc., New York.

Li, J. dan Wang, T., 2010, Coupling Reaction and Azeotrop Distillation for Synthesis of Glycerol Carbonate from Glycerol and Dimethyl Carbonate, *Journal of Chemical Engineering and Processing*, Vol.49, page 530 – 535.

Li. J. dan Wanng, T., 2011, Chemical Equilibrium of Glycerol Carbonate Synthesis from Glycerol, *Journal of Chemical Thermodynamics*, Vol. 43, page 731 736.

Malyaadri, M., Jagadeeswaraiah, K., Prasad. S., and Lingaiah, N., 2011. Synthesis of Glycerol Carbonate by Transesterification of Glycerol With Dimethyl carbonate Over Mg/Al/Zr Catalysts. *Applied Catalysis A: General* 401. 153-157.

Miner & Dalton., 1953. Chemical properties and Derivatives of Glycerol. *Reinhold Publishing Corp.* New York.

Mukti, R. R., A. Jentys, and J.A. Lercher, 2007, Orientation of Alkyl – Substituedd Aromatic Molecules during Sorption in the Pores of H/ZSM-5 Zeolite, *J. Phys. Chem., 111, 3973 – 3980.*

Nuryoto, 2011, Kinetika Reaksi Esterifikasi Gliserol dengan Asam Asetat Menggunakan Katalisator Indion Na 225 Na, *Jurnal Rekayasa Proses,* 5 (2)

Nuryoto, Sulistyo, H., Sri Rahayu, S., dan Sutijan, 2010, Esterifikasi Gliserol dan Asam Asetat Dengan Katalisator Indion 225 Na, *Seminar Nasional Perkembangan Riset dan Teknologi di Bidang Industri ke -16*, PSIT UGM Yogyakarta.

Othmer, Kirk., 1990. *Encyclopedia of Chemical Technology, 4th edition.* Volume 1: A to Alkaloids. John Wiley & Sons Inc., New York.

Pagliaro, Mario, Rossi, Michele, 2008. The Future of Glycerol: New Uses of a Versatile Raw Material. *RSC Green Chemistry Book Series.*

Pathak, K.K., Reddy, M.N.N., Dalai,B.A.K.,2010. *Catalytic Convertion of Glycerol to Value Added Liquid Products.* Elsevier Applied Catalysis A: General 372, 224-238.

Payra, P., Dutta, P.K., 2003, Zeolite : A primer, In Aurebach, S.M., Carrado, K.A., Dutta, P.K., (Ed). Handbook of Zeolite Science and Technology, Marcel Dekker New York, pp 1-19

Perry, R.H., and Green, D. (1999)" Perry's Chemical Engineer's Handbook"' 7th ed. New York : McGraw-Hill Book Company.

Prasetyo, Ari Eko., Widhi, Anggara dan Widayat., 2012. Proses Reaksi Gliserol Dan Asam Benzoat Dengan Menggunakan Katalis Asam Sulfat. *Jurnal Teknologi Kimia dan Industri* Vol. 1, No. 1, Tahun 2012, Halaman 118 – 123.

Rouquerol, F., Rouquerol, J. dan Sing, K., 1999. Adsorption by Powders and Porous Solids Principles, Methodology and Applications, Elsevier.

Sastiano Astiana., 1991. Karakterisai Deposit Mineral Zeolit Dalam Aspek Pemanfaatan di Bidang Pertanian, jilid 1, Indonesia, Vol 1, Bogor.

Scwailem, M.S.A. 2007. Characteristics of Lead Sorption by Zeolite Minerals. *Journal of Applied Sciences* 7. 1718-1725.

Seemann, L., Kaszonyi, A., 2011, *S*tudy of Preparation of Glycerol Crabonate from Glycerol, *45th International Petroleum Conference*, Bratislava.

Setiadi dan Pertiwi, A., 2007. *Preparasi dan Karakterisasi Zeolit Alam untuk Konversi Senyawa Abe Menjadi Hidrokarbon*. *Prosiding Symposium dan Konggres Masyarakat Katalis Indonesia Kedua*, Jurusan TK FT UNDIP dan Jurusan Kimia MIPA UNNES, Semarang.

Setyawan, D. dan Handoko, P., 2002. *Preparasi Katalis Cr/Zeolit Melalui Modifikasi Zeolit Alam*. *Jurnal Ilmu Dasar*, Vol 3, No. hal 15-23.

Smith, J.M. 1981. Chemical Engineering Kinetics. *McGraw-Hill Book Co*, Singapura

Srihapsari, 2006. Penggunaan Zeolit Alam yang Telah Diaktivasi Dengan Larutan HCl untuk Menjerap Logam – Logam Penyebab Kesadahan Air. *Skripsi: Universitas Negeri Semarang*.

Trisunaryanti, W., Triyono., dan Taufiyanti, F., 2002, Deaktivasi dan Regenerasi Katalis Cr / Zeolite Alam Aktif untuk Proses Konversi Metil Isobutil Keton, *Gama Sains IV* (2).

Ucko DA. 1982. Basic for Chemistry. *New York:* Academic Press.

Wang, B., 2007, Zeolite Deactivation During Hydrocarbon Reactions: Characterisation of Coke Precursors and Acidity, *Thesis: The University Collage London.*

Wardani, C.K., 2007. Pemanfaatan Gliserol Sebagai Bahan Baku Sintesa Gliserol Karbonat. *Skripsi: Institut Pertanian Bogor*.

Widhiyanriyawan, D., dan Hamidi, Nurkholis., 2013. Variasi Temperature Pemanasan Zeolite Alam NaOH untuk Pemurnian Biogas. *Jurnal Energi dan Manufaktur* 6, No.1, april 2013: 1-94.

Zhang, J., and He, D., 2014, Lanthanum-Based Mixed Oxides for The Synthesis of Glycerol Carbonate from Glycerol and Urea, *Reac. Kinet. Mech. Cat.*, DOI 10.1007/s11144-014-0739-6.