

DAFTAR PUSTAKA

- Aguado, J., Serrano, D.P., Escola, J.M., and Peral, A., 2009, Catalytic cracking of polyethylene over zeolite mordenite with enhanced textural properties, *J. Anal. Appl. Pyrol.*, 85, 352–358.
- Augustine, R.L., 1996, *Heterogenous catalysis for The Syntetic Chemist*, Marck Avril Dekker, Inc., New York.
- Bajpai, P.K., 1986, *Synthesis of mordenite type zeolite (Zeolites Review)*, Vol. 6, Butterworth & Co (Publishers) Ltd., London.
- Bartholomew, C.H., and Farrauto, R.J., 2006, *Fundamentals of Industrial Catalytic Processes*, 2nd Ed., John Wiley & Sons, Inc., Ottawa.
- Bhatia, S., 1946, *Zeolite Catalysis: Principles and Applications*, CRC Press, Inc., Florida.
- Bijang, C.M., 2001, Pengaruh Metode Pengembangan Logam Ni pada Zeolit-Y terhadap Aktivitas Katalis Ni/Zeorlit-Y dalam Reaksi Hidrorengkah Minyak Bumi, *Tesis*, Program Pasca Sarjana Ilmu Kimia FMIPA UGM, Yogyakarta.
- Campbell, I.A., 1988, *Catalysis at Surface*, Chapman and Hall, Ltd., London.
- Chang, R., 2005, *Kimia Dasar: Konsep-konsep Inti*, (diterjemahkan oleh: Achmadi, S.S.), Jilid 2, Ed. 3, Erlangga, Jakarta.
- Collard, F., and Blin, J., 2014, A review on pyrolysis of biomass constituents: mechanisms and composition of the products obtained from the conversion of cellulose, hemicelluloses and lignin, *Renew. Sust. Energ. Rev.*, 38, 594-608.
- Costa, N.J., and Rossi, L.M., 2012, Synthesis of supported metal nanoparticle catalysts using ligand assisted methods, *J. Nanoscale.*, 4, 5826–5834.
- Deng, W., Tan, X., Fang, W., Zhang, Q., and Wang, Y., 2009, Conversion of Cellulose into Sorbitol over Carbon Nanotube-Supported Ruthenium Catalyst, *J. Cat. Lett.*, 133, 167-174.
- Deng, W., Wang, Y., and Wang, Y., and Zhang, Q., 2012, Development of Bifunctional Catalysts for the Conversions of Cellulose or Cellobiose into Polyols and Organic Acids in Water, *Catal. Surv. Asia.*, 16, 91–105.

- Deng, W., Zhang, Q., and Wang, Y., 2015, Catalytic transformation of cellulose and its derived carbohydrates into chemicals involving C–C bond cleavage, *J. Energ. Chem.*, 24, 595-607.
- Eliyanti, A., Pudiyanto, T.I., Sutontro, R., and Saifullah, 1997, Physical, Chemical, and Catalytic Properties of Modified Indonesian Natural Mordenite, *Natural Zeolite – Sofia '95*, Pensoft Publisher, Moscow.
- Fukuoka, A., and Dhepe, P.L., 2006, Catalytic Conversion of Cellulose into Sugar Alcohols, *J. Angew. Chem. Int. Ed.*, 45, 5161-5163.
- Gates, B.C., 1992, *Catalytic Chemistry*, John Wiley and Sons, Washington, D.C.
- Gates, B.C., Katzer, J.R., and Schuit, G.C., 1995, *Chemistry of Catalytic Process*, McGraw-Hill, New York.
- Gaudin, P., Dorge, S., Nouali, H., Patarin, J., Brilhac, J.F., Fiani, E., Vierling, M., and Moliere, M., 2015, Synthesis of CuO/SBA-15 Adsorbents for SO_x Removal Application Using Different Impregnation Methods, *J. C. R. Chimie*, 18, 1013-1029.
- Gautam, S.P., Bundela, P.S., Pandey, A.K., Jamaluddin, Awasthi, M.K., and Sarsaiya, S., 2010, A review on systematic study of cellulose, *J. Appl. Natural. Sci.* 2, 330-343.
- Grau, J.M., and Parera, J.M., 1993, Conversion of heavy n-alkanes into light isomers over H-mordenite, platinum/H-Mordenite, platinum/alumina and composite catalysts, *J. Appl. Cat. Gen.*, 106, 27-49.
- Jentoft, F.C., 2015, *Advances in Catalysis*, Elsevier, Inc., London.
- Larabi, C., Maksoud, W.A., Szeto, K.C., Garron, A., Arquilliere. P.P., Walter, J.J., and Santini, C.C., 2015, Multifunctional Heterogeneous Catalyst for One Step Transformation of Lignocellulosic Biomass Into Low Oxygenated Hydrocarbons, *J. Appl. Cat. Gen.*, 495, 162-172.
- Lin, J., Chang, Y., and Hsu, Y., 2009, Degradation of cotton cellulose treated with hydrochloric acid either in water or in ethanol, *J. Food. Hydro.*, 23, 1548–1553.
- Mierczynski, P., Manieck, T.P., Kaluzna-Czaplinska, J., Szykowska, M.I., Maniukiewicz, W., Lason-Rydel, M., and Jozwiak, W.K., 2013, Hydroconversion of parafine LTP56-H over nickel/Na-mordenite catalysts, *Cent. Eur. J. Chem.*, 11(2), 304-312.

- Moore, J.W., and Pearson, R.G., 1981, *Kinetics and Mechanism*, 3th Ed., John Willey & Sons, Inc., Ottawa.
- Nomura, M., Akagi, K., Murata, S., and Matsui, H., 1996, Hydrocracking of polycyclic aromatic compounds using zeolite catalysts: Explanation of product distribution based on a computer aided molecular design study on the interaction of zeolite and substrates, *J. Cat. Tod.*, 29, 235-240.
- Pines, H., 1981, *The Chemistry of Catalytic Hydrocarbon Conversions*, Academic Press Inc., New York.
- Prihandini, D.R., 2016, Sintesis Katalis Ni/Silika-Alumina Mesopori dari Lumpur Sidoarjo dan Cetakan Gelatin Tulang Sapi Untuk Hidrorengkah Pelumas Bekas, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Qiu, B., Yi, X., Lin, L., Fang, W., and Wan, H., 2009, Influence of the Incorporation of Cobalt on Non-sulfided Ni-H₃PW₁₂O₄₀/SiO₂ Hydrocracking Catalysts, *J. Cat. Comm.*, 10(9), 1296-1299.
- Saerodji, G.M., 2013, Preparasi, Karakterisasi dan Uji Aktivitas Katalis Logam Ni, Co, NiMo dan CoMo yang Diembankan pada Zeolit Alam Aktif untuk Hidrorengkah Plastik Polietilena menjadi Fraksi Bensin dan Diesel, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Scherzer, J., and Gruia, A.j., 1996, *Hydrocracking Science and Technology*, Marcel Dekker, Inc., New York.
- Shen, D.K., Gu, S., and Bridgwater, A.V., 2010, The Thermal Performance of the Polysaccharides Extracted from Hardwood: Cellulose and Hemicellulose, *J. Carbohydr. Polym.* 82 (1), 39-45.
- Shi, D., 2003, *Functional Thin Films and Functional Materials: New Concepts and Technologies*, Springer, New York.
- Sie, S.T., 1993, Acid-Catalyzed cracking of Paraffinic Hydrocarbon. Evidence for the protonated Cyclopropane Mechanism from Hydrocracking/Hydroisomerization Experiments, *J. Ind. Eng. Chem. Res.*, 32(3), 403-408.
- Sriningsih, W., Saerodji, M.G., Trisunaryanti, W., Triyono, 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, *J. Envi. Sci.*, 20, 215-224.

- Suyati, L., 2000, Kinetika Reaksi Pirolisis Tir Batubara dengan Menggunakan Katalis Nikel/Zeolit, *Tesis*, Program Pasca Sarjana Ilmu Kimia FMIPA UGM, Yogyakarta.
- Swasdika, F., 2015, Sintesis Karbon Mesopori Dari Gelatin Tulang Sapi Dan Co/Karbon Mesopori Sebagai Katalis Hidrorengkah Pelumas Bekas, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.
- Treacy, M.M., and Higgins, J.B., 2001, *Collection of Simulated XRD Powder Patterns for Zeolites*, 4th Ed., Stucture Commision of the International Zeolite Association-Elsevier, New York.
- Trisunaryanti, W., 2015, *Material Katalis dan Karakterisasinya*, Universitas Gadjah Mada Press, Yogyakarta.
- Trisunaryanti, W., Triyono, Wijaya, K., Majid, A.B., Priastomo, Y., Febriyanti, E., Syafitri, Hasyiyati, dan Nugroho, A., 2012, Karakterisasi dan Uji Aktivitas Katalis Mordenit dan Zeolit-Y Pada Hidrorengkah Ban Bekas menjadi Fraksi Bahan Bakar, *Prosiding Seminar Nasional Kimia Unesa*, ISBN. 978-979-028-550-7.
- Triyono, 2000, *Kimia Katalis*, Universitas Gadjah Mada Press, Yogyakarta.
- Upare, D.P., Park, S., Kim, M.S., Kim, J., Lee, D., Lee, J., Chang, H., Choi, W., Choi, S., Jeon, Y.P., Park, Y.K., and Lee, C.W., 2016, Cobalt Promoted Mo/beta Zeolite for Selective Hydrocracking of Tetralin and Pyrolysis Fuel Oil Into Monocyclic Aaromatic Hydrocarbons, *J. Ind. Eng. Chem.*, 35, 99–107.
- Velden, M., Baeyens, J., Brems, A., Janssens, B., and Dewil, R., 2010, Fundamentals, Kinetics and Endothermicity of the Biomass Pyrolysis Reaction, *J. Renew. Energ.* 35 (1), 232–242.
- Vismara, E., Gastaldi, G., Valerio, A., Bertini, S., Cosentinob, C and Eisleb, G., 2009, Alpha cellulose from industrial and agricultural renewable sources like short flax fibres, ears of corn and wheat-straw and its transformation into cellulose acetates, *J. Mater. Chem.*, 19, 8678–8686.
- Vyver, S., Geboers, J., Jacobs, P.A., and Sels, B.F., 2011, Recent Advances in the Catalytic Conversion of Cellulose, *J. Chem.Cat.Chem.*, 3, 82-94.
- Weitkamp, J., and Puppe, L., 1999, *Catalys and Zeolite Fundamentals and Applications*, Springer, New York.

- Yamaguchi, D., Kitano, M., Suganuma, S., Nakajima, K., Kato, H., and Hara, M., 2009, Hydrolysis of Cellulose by a Solid Acid Catalyst under Optimal Reaction Conditions, *J. Phys. Chem. C*, 113, 3181–3188.
- Zare, A., Zare, A., Shiva, M., and Mirzaei, A.A., 2013, Effect of calcination and reaction conditions on the catalytic performance of Co–Ni/Al₂O₃ catalyst for CO hydrogenation, *J. Ind. Eng. Chem.*, 19, 1858–1868.
- Zhao, Y., and Yu, Y., 2011, Kinetics of Asphaltene Thermal Cracking and Catalytic Hydrocracking, *J. Fuel. Process. Tech.*, 92, 977-982.