

DAFTAR PUSTAKA

- Adilina, Indri Badria; Rinaldi, Nino; Simanungkalit, Sabar P; Aulia, Fauzan; Oemry, Ferensa; Stenning, Gavin B. G.; Silverwood, Ian P.; Parker, Stewart F. 2019. *Hydrodeoxygenation of Guaiacol as a Bio-Oil Model Compound over Pillared Clay Supported Nickel-Molybdenum Catalysts*. The Journal of Physical Chemistry C : Surfaces, Interfaces, Porous Materials, and Catalysis.
- Atkins P., de Paua J.. 2006. *Physical Chemistry for the Life Sciences*. 256-259. New York. Oxford Univeristy Press.
- Brady, James E. 1990. *General Chemistry*. 5th edition, John Wiley dan Sons, New York, 705.
- Czernik, Stefan., A.V. Bridgwater, 2004. Overview of applications of biomass fast pyrolysis oil. *Energy & Fuels*. American Chemical Society. 18:590-598.
- Dayton, D. C.; Carpenter, J.; Farmer, J.; Turk, B.; Gupta, R.,2013, *Energy Fuels*, 27, 3778–3785.
- Demirbas, A. *Biomass Resource Facilities and Biomass Conversion Processing for Fuel and Chemicals*. *Energy Convers. Manage.* 2001, 42, 1357–1378.
- Deutsch, K. L.; Shanks, B. H. Hydrodeoxygenation of lignin model compounds over a copper chromite catalyst. *Appl. Catal. A Gen.* 2012, 447– 448, 144–150.
- Furimsky, Edward. 2000. *Catalytic hydrodeoxygenation. Applied Catalysis A: General*, 199(2), 147–190.
- Groß, A. 2002. *Theoretical Surface Science: A Microscopic Perspective*. Berlin: Springer Verlag.
- Güvenatama, B.; Kursun, O.; Heeres E. H. J. 2014. Hydrodeoxygenation Of Mono- And Dimeric Lignin Model Compounds On Noble Metal Catalysts. *Catal. Today*, 233, 83–91.
- Henkelman, G., Uberuaga, B. P., & Jónsson, H. 2000. A Climbing Image Nudged Elastic Band Method For Finding Saddle Points And Minimum Energy Paths. *The Journal of chemical physics*, 113(22), 9901-9904.
- Lee, June Gunn. 2017. *Computational Materials Science : An Introduction, Second Edition*. New York. Crc Press.

- Lin, Y. C.; Li, C. L.; Wan, H. P.; Lee, H. T.; Liu, C. F. Catalytic hydrodeoxygenation of guaiacol on Rh-based and sulfided CoMo and NiMo catalysts. *Energy Fuels* 2011, 25, 890–896.
- Mora, I. M. 2017. Effect of Support Modification for CoMo/y Al₂O₃ and CoMo/ASA Catalysts in the Hydrodeoxygenation of guaiacol. *Applied Catalysts*, 59.
- Moreira, R., Ochoa, E., Pinilla, J.L., Portugal, A., dan Suelves, I., 2018, “Liquid- Phase Hydrodeoxygenation of Guaiacol over Mo₂C Supported on Commercial CNF. Effects of Operating Conditions on Conversion and Product Selectivity” dalam *Catalyst Volume 8 (hlm 127)*. Basel:MDPI
- Mortensen, Peter Molgaard., Grundwaldt, Jan-Dierk., Jensen, Peter Arendt., and Jensen, Anker D. 2013. “Screening of Catalysts for Hydrodeoxygenation of Phenol as Model Compound for Bio-oil” dalam *ACS Catalysts Volume 3 (hlm 8)*. Washington D.C:ACS Publication.
- Mukundan, S., Kanarova, M., Atanda, L., Ma, Q., dan Beltramini 2015, “*Guaiacol hydrodeoxygenation reaction catalyzed by highly dispersed, single layered MoS₂/C*”, *Catalysis Science and Technology* 5, 4422.
- Puppan, Daniel. 2002. *Environmental Evaluation of Biofuels*. Periodica Polytechnica Ser Soc Man Sci Vol. 10. 95–116.
- Roldugina, E. A., Naranov, E. R., Maximov, A. L., & Karakhanov, E. A. 2018. *Hydrodeoxygenation of guaiacol as a model compound of bio-oil in methanol over mesoporous noble metal catalysts*. *Applied Catalysis A: General*, 553, 24–35.
- Saha, B.C. 2004. *Lignocellulose Biodegradation and Application in Biotechnology*. US Government Work. American Chemical Society. 2-14.
- Seidel, Rüdiger W., Goddard, Richard. 2015. *Anisole at 100 K: The First Crystal Structure Determination*. *Acta Crystallographica Section C Structural Chemistry*, 71(8), 664–666.
- Silberberg, M., Amateis, P. 2018. *Chemistry : Molecular Nature of Matter and Change (Looseleaf) – 8th edition*. United States : McGraw-Hill Education.
- Sulistiyani, E. T. 2012. Teori Fungsional Densitas dan Penerapannya pada Struktur Atom . *Prosiding Pertemuan Ilmiah XXVI HFI Jateng dan DIY*. Purworejo.

Sulman, Alexandrina; Mäki-Arvela, Päivi; Bomont, Louis; Alda-Onggar, Moldir; Fedorov, Vyacheslav; Russo, Vincenzo; Eränen, Kari; Peurla, Markus; Akhmetzyanova, Uliana; Skuhrovcová, Lenka; Tišler, Zdeněk; Grénman, Henrik; Wärnå, Johan; Murzin, Dmitry Yu. (2019). *Kinetic and Thermodynamic Analysis of Guaiacol Hydrodeoxygenation*. *Catalysis Letters*.

Türe, Semra & Uzun, Davut & Türe, I.Engin, 1997. *The Potential Use of Sweet Sorghum as a Non-Polluting Source of Energy*. *Energy*, Elsevier, vol. 22(1), pages 17-19.

Williams, P. T., and P. A. Horne. 1995. The influence of catalyst regeneration on the composition of zeolite-upgraded biomass pyrolysis oil. *Fuel* 74:1839

Xiu, S., & Shahbazi, A. 2012. *Bio-oil production and upgrading research: A review*. *Renewable and Sustainable Energy Reviews*, 16(7), 4406–4414

