



DAFTAR PUSTAKA

- Agustin, A.D. and Trisunaryanti, W. (2014) 'Katalis Heterogen $\text{K}_2\text{CO}_3/\gamma$ -Alumina dan CaCO_3/γ -Alumina dalam Pembuatan Biodiesel', Disertasi Program Studi S2 Ilmu Kimia, Universitas Gadjah Mada
- Bakar, R. A., Yahya, R., Gan, S. N. 2016, 'Production of High Purity Amorphous Silica from Rice Husk', *Procedia Chemistry*, Vol. 19, hh. 189-195
- Christina, N., Sungadi, E., Hindarso, H., & Kurniawan, Y. (2013). 'Pembuatan Biodiesel Dari Minyak Nyamplung Dengan Menggunakan Katalis Berbasis Kalsium' *Widya Teknik*, Vol. 12, No. 2, hh. 26-35,
- Daryono, E., Prasetyo, A., Bahri, S., & Sista, E. 2020. 'Produksi Biodiesel tanpa Gliserol dari Minyak Kelapa Sawit dengan Variasi Massa Cosolvent dan Waktu Reaksi', *Jurnal Teknik Kimia USU*, 9(2), pp.51-56
- El Shimi, H. I. et al, 2016, 'Investigation of silicates as a catalyst in biodiesel production: A review', *International Journal of Energy Research*, Vol. 40, hh. 1743-1756
- Eskandari, K., Karami, B., Khodabakhshi, S., 2014 'Novel silica sodium carbonate (SSC): Preparation, characterization and its first catalytic application to the synthesis of new dihydropyrano[2,3-c]pyrazoles,' *Catalysis Communications*, hh. 1-29
- Fachry, A. R., Setyawati, N., Sari, Y. P. 2016, 'Pengaruh Penambahan Abu Sekam Padi Sebagai Filler dan Pemberian 3-Metacryloxypropyl Trimethoxysilane Terhadap Sifat Mekanik Lis Karet Pada Kulkas', *Jurnal Teknik Kimia*, Vol. 22, No. 2, hh. 1-9
- Farahi, M., Karami, B., Tanuraghaj, H. M., & Bazrafshan, Z. 2017, 'A Novel One-pot Protocol for Silica Sodium Carbonate-Catalyzed Synthesis of Pyrano[2,3-h]coumarins', *Journal of Heterocyclic Chemistry*, Vol. 00, No. 00
- Gibson, R.F. 2016, *Principles of Composite Material Mechanics (4th ed.)*, CRC Press. <https://doi.org/10.1201/b19626>
- Hartanto, D et al. 2016, 'Can kaolin function as source of alumina in the synthesis of ZSM-5 without an organic template using a seeding technique',



- Malaysian Journal of Fundamental and Applied Sciences*, Vol. 12, No. 2,
doi: 10.11113/mjfas.v12n2.476
- Huljana, M., Rodiah, S. 2019, 'Sintesis Silika dari Abu Sekam Padi dengan Metode Sol-gel,' *Prosiding Seminar Nasional Sains Universitas Islam Negeri Raden Fatah Palembang*, Vol. 2, hh. 1-8
- Ian M. Campbell, 1988, 'Catalysis at Surface'. New York: Chapman and Hall Ltd.,
- Iler, B. (1978) *The Chemistry Of Silica : Solubility, Polimerization, Colid and Surface Properties and Biochemistry*, Wiley-Interscience, New York
- Inamuddin., Ahamed, M., Bodulla, R., & Rezakazemi, M 2021 *Biodiesel Technology and Applications*, Scrivener Publishing, USA
- Isobe, H., Utsumi, S., Yamamoto, K., Kanoh, H., & Kaneko, K. (2005). Micropore to macropore structure-designed silicas with regulated condensation of silicic acid nanoparticles. *Langmuir : the ACS journal of surfaces and colloids*, Volume 21, No 17, hh. 8042-7.
- Julinawati, Marlina, Nasution, R., & Sheilatina (2015) "Applying SEM-EDX Techniques to Identifying the Types of Mineral of Jades (Giok) Takengon Aceh', *Jurnal Natural*, 15(2), 44–48
- Kalapathy, A. Proctor, dan J. Shultz. (2000). A Simple Method For Production of Pure Silica From Rice Hull Ash. *Bioresource Technology*. No. 73. Hlm. 257- 262.
- Karami, B., Farahi, M., Baraki, Z., 2015 'A Novel One-Pot Method for Highly Regioselective Synthesis of Triazolopyrimidinedicarboxylates Using Silica Sodium Carbonate,' *Synlett*, Vol. 26, No. 13, hh. 1804-1807
- Kurniawan, N. A., Setiawan, F., & Sofyan, E. 2022, 'Pengujian Tarik Komposit Spesimen Campuran Serat Pisang Alur Diagonal dan Pasir Besi Dengan Matrix Resin Polyester Dengan Metode Hand Lay-up', *Jurnal Teknik, Elektronik, Engine*, Vol 8, No. 2, hh. 281-288
- Lumintang, R., Rauf, F. A., & Soplanit, G. D. 2019 'Ketahanan Bending Komposit Matriks Poliester Berpenguat Serat Sabut Kelapa', *Jurnal Tekno Mesin*, Vol. 5, No. 2, hh. 88–94.



- Muhammad, A. A., Venisia, D. A., Dewati, R. 2021, 'Sintesis Komposit Fiber-Silika Dari Abu Sekam Padi dan Pulp Dengan Metanol', *Journal of Chemical and Process Engineering*, Vol. 02 No. 3, hh. 51-57
- Mujiyanti, R. D., Ariyani, D., & Elyasat, R. P. N. 2022, 'Analisis Kandungan Silika Hasil Ekstraksi Pada Padi Siam Mutiara Kalimantan', *Jurnal Natural Scientiae*, Vol. 2, No. 2, hh. 8-15
- Muljani, S., & Kurniati, E. (2018). Effect of Acidic salts on Characteristics of Precipitated Silica from Geothermal Sludge.
- Muljani, S., Setyawan, H., Irianto, F., & Fransisco, S. 2021, 'CO₂ Capture using Sodium Silicate Solution in a Packed Bed Column', *ICST Journal*, 1–4.
- Muljani, S., Setyawan, H., Wibawa, G., & Altway, A. 2014 'A facile method for the production of high-surface-area mesoporous silica gels from geothermal sludge', *Advance Powder Technology*, Vol.25, No.5, hh. 1593-1599
- Muljani, S., Wahyudi, B., Suprihatin, & Sumada., K. 2018, 'Synthesis of Matrix Si-K-HAs Gel From Geothermal Sludge and Peat', *Reaktor*, Vol. 18, No. 2, hh. 76-83
- Muljani, S., Setyawan, H., & Nugraha, R. E., 2023, 'Bubble formation phenomenon on the absorber column for CO₂ absorption and to produce precipitated silica sodium carbonate', *Royal Society of Chemistry*, Vol. 13, No. 47, hh. 33471-33483
- Nasikin, M., Heru, B. S. 2010, *Katalisis Heterogen*, Edisi Pertama, Universitas Indonesia Press
- Rosmiyani, T., Sari, T. K., Alizar, & Mulia, M., 2023, 'Metode Sol Gel Untuk Mengekstraksi Silika Dari Abu Sekam Padi,' *Chemistry Journal of Universitas Negeri Padang*, Vol. 12, No. 3, hh. 67-70
- Setiorini. I. A, dkk, (2023) 'Karakteristik Biodiesel Dari Minyak Jelantah Menggunakan Proses Transesterifikasi Dengan Katalis Karbon Aktif'. *Jurnal Teknik Patra Akademika*, No. 02, Vol. 14
- Siregar, A.G.A., Manurung, R., and Taslim, T. (2021) 'Synthesis and characterization of sodium silicate produced from corncobs as a heterogeneous catalyst in biodiesel production', *Indonesian Journal of Chemistry*, 21(1), pp. 88–96.
-



- Sisca, V., et al., 2021, 'Synthesis and Characterization of CaO Limestone from Lintau Buo Supported by TiO_2 as a Heterogeneous Catalyst in the Production of Biodiesel', *Indonesia Journal Chemistry*, Vol. 21, No. 4, hh. 979-989
- Surdia, T. & Saito, S. 2000. *Pengetahuan Bahan Teknik*. Jakarta (ID): Pradanya Pramita
- Suryandari A.S. et al, 2021, 'Sintesis Biodiesel melalui Transesterifikasi Minyak Goreng Bekas Berbasis Katalis Heterogen CaO dari Limbah Cangkang Telur Ayam', *Jurnal Rekayasa Bahan Alam dan Energi Berkelanjutan*, Vol. 5, No. 1, hh. 22-27
- Swapna, M. S., Saritha, D. H., Sebastian, R., Ambadas, G., & Sankararaman, S. (2017) 'Natural precursor based hydrothermal synthesis of sodium carbide for reactor applications', *Materials Research Express*, 4(12), 1–18.
- Trianasari, Manurung, P., Karo, P. K, 2017, 'Analisis dan Karakterisasi Kandungan Silika (SiO_2) sebagai Hasil Ekstraksi Batu Apung (*Pumice*)', *Jurnal Teori dan Aplikasi Fisika*, Vol. 05, No. 02, hh. 179-186
- Wahyuni, S., Ramli, & Mahrizal 2015, 'Pengaruh Suhu Proses dan Lama Pengendapan Terhadap Kualitas Biodiesel Dari Minyak Jelantah', *Pillar of Physics*, Vol. 6, hh. 33-40
- Zhang, S., Fu, J., Xing, S., Li, M., Liu, X., Yang, L. and Lv, P. (2023) 'Sodium silicates modified calcium oxide as a high-performance solid base catalyst for biodiesel production', *Catalysts*, 13(4), p. 775.