

## DAFTAR PUSTAKA

- Aisyah, A., Azmiyawati, C., & Darmawan, A. (2023). *Synthesis of Graphene Oxide-Coated Mesoporous Silica with Cetyltrimethylammonium Bromide (CTAB) Template for Methylene Blue Adsorption*. 20(9), 2–10.
- Arisky. (2022). Perbandingan Degradasi Methylene Blue (Mb) Dan Methyl Orange (Mo) Menggunakan Titanium Dioksida (TiO<sub>2</sub>) Terlapis Pada Permukaan Semen. 1–75. <https://science.uui.ac.id/surat-digital/validasi/REG142047>.
- Baumgartner, B., Hayden, J., Loizillon, J., Steinbacher, S., Grosso, D., & Lendl, B. (2019). Pore Size-Dependent Structure of Confined Water in Mesoporous Silica Films from Water Adsorption/Desorption Using ATR-FTIR Spectroscopy. *Langmuir*, 35(37), 11986–11994. <https://doi.org/10.1021/acs.langmuir.9b01435>.
- Baunsele, A. B., & Missa, H. (2020). Kajian Kinetika Adsorpsi Metilen Biru Menggunakan Adsorben Sabut Kelapa. *Akta Kimia Indonesia*, 5(2), 76. <https://doi.org/10.12962/j25493736.v5i2.7791>.
- Bromide, C., Sains, F., Diponegoro, U., & Prof, J. (2023). *Greensphere : Journal of Environmental Chemistry*. 3(1).
- Clara Precelia, S., Dirgarini Julia Nurlianti Subagyono, R., Saleh Jurusan Kimia, C., Matematika dan Ilmu Pengetahuan Alam, F., Mulawarman Jalan Barong Tongkok, U., & Gn Kelua, K. (2018). Sintesis Silika Mesopori Tersulfonasi Dari Abu Daun Bambu Petung (*Dendrocalamus Asper*) Synthesis Of Sulfonated Mesoporous Silica From Bamboo Leves Ash (*Dendrocalamus asper*). *Jurnal Atomik*, 03(1), 61–67.
- Costa, J. A. S., Sarmiento, V. H. V., Romão, L. P. C., & Paranhos, C. M. (2020). Adsorption of organic compounds on mesoporous material from rice husk ash (RHA). *Biomass Conversion and Biorefinery*, 10(4), 1105–1120. <https://doi.org/10.1007/s13399-019-00476-4>
- Dhaneswara, D., Tsania, A., Fatriansyah, J. F., Federico, A., Ulfiati, R., Muslih, R., & Mastuli, M. S. (2024). *Synthesis of Mesoporous Silica from Sugarcane Bagasse as Adsorbent for Colorants Using Cationic and Non-Ionic Surfactants*. 15 (November 2023), 373–382. <https://doi.org/10.14716/ijtech.v15i2.6721>.
- Efiyanti, L., Trisunaryanti, W., Bahri, S., Ni'mah, Y. L., Wulandari, N. M., & Sumbogo, S. D. (2021). Synthesis of Mesoporous Silica From Beach Sand Using Variation of Cetyl Trimethyl Ammonium Bromide (CTAB). *Proceedings of the 3rd KOBICONGRESS, International and National Conferences (KOBICINC 2020)*, 14 (Kobicinc 2020), 374–381. <https://doi.org/10.2991/absr.k.210621.063>.
- Ekadenti, A., Sains, F., Diponegoro, U., & Prof, J. (2023). *Greensphere : Journal of Environmental Chemistry*. 3(1).
- Enamia, E. C. (2016). Sintesis Zeolit Analsim Dan Na-P Pori Hierarki Berbasis Silika Ampas Tebu Menggunakan Pati Sebagai Mesoprogen Serta Uji Aktivitas Katalik Pada Reaksi Isomerisasi Glukosa. 1–23.
- Ervianto, Y., Pembimbing, D., Susanti, D., Pratiwi, V. M., Material, D. T., & Industri, F. T. (2018). Bromide Sebagai Template Terhadap Pembentukan

- Silika Mesopori Mcm-41 Dari Sekam Padi Template Terhadap Pembentukan Silika Mesopori Mcm-41.
- Hussain, C. M. (2019). Chemistry and Environmental Science Syllabi CHEM 661 - Instrumentation Analysis Lab. *Chemistry and Environmental Science Syllabi*.
- Irawan, A. (2019). Kalibrasi Spektrofotometer Sebagai Penjaminan Mutu Hasil Pengukuran dalam Kegiatan Penelitian dan Pengujian. *Indonesian Journal of Laboratory*, 1(2), 1. <https://doi.org/10.22146/ijl.v1i2.44750>
- Iskandar, D. (2017). Perbandingan Metode Spektrofotometri Uv-Vis Dan Iodimetri Dalam Penentuan Asam Askorbat Sebagai Bahan Ajar Kimia Analitik Mahasiswa Jurusan Teknologi Pertanian Berbasis Open-Ended Experiment Dan Problem Solving. *Teknologi Technoscientia*, 10(1), 66–70.
- Kankala, R. K., Han, Y., Na, J., Lee, C., & Sun, Z. (n.d.). *Nanoarchitected Structure and Surface Bio-Functionality of Mesoporous Silica Nanoparticles*. <https://doi.org/10.1002/adma.201907035>
- Kimia, J. T., Teknik, F., Malikussaleh, U., Utama, K., Teungku, C., Reuleut, N., & Batu, M. (2022). *Adsorpsi Zat Warna Methylene Blue Menggunakan Adsorben Dari Ampas Teh Pada Kolom Nur Asiah, Novi Sylvia\*, Syamsul Bahri*. 2(Juni), 75–86.
- Lakhi, K. S., Singh, G., Kim, S., Baskar, A. V., Joseph, S., Yang, J. H., Ilbeygi, H., Ruban, S. J. M., Vu, V. T. H., & Vinu, A. (2018). Mesoporous Cu-SBA-15 with highly ordered porous structure and its excellent CO<sub>2</sub> adsorption capacity. *Microporous and Mesoporous Materials*, 267, 134–141. <https://doi.org/10.1016/j.micromeso.2018.03.024>
- Lidia, I., Mursal, P., & Dahlan, D. (2016). Pengaruh Penambahan Ctab Terhadap Nilai Absorbansi Dan Morfologi Lapisan Tipis TiO<sub>2</sub>. *Journal Online of Physics*, 1(2), 5–9. <https://online-journal.unja.ac.id/jop/article/view/2886>
- Nurullita, N., & Zainul, R. (2022). *Pengaruh Pengadukan Pada Degradasi Methylene Blue Menggunakan Fotokatalis ZnO Terdoping Cu*. 11(3), 43–47.
- Purwaningsih, H., Ervianto, Y., Pratiwi, V. M., Susanti, D., & Purniawan, A. (2019). Effect of Cetyl Trimethyl Ammonium Bromide as Template of Mesoporous Silica MCM-41 from Rice Husk by Sol-Gel Method. *IOP Conference Series: Materials Science and Engineering*, 515(1). <https://doi.org/10.1088/1757-899X/515/1/012051>
- Purwanto, A. S., Taslimah, T., & Sriatun, S. (2012). Sintesis dan Karakterisasi Silica Gel dari Tetraetilortosilikat (TEOS) Menggunakan Surfaktan Polyethylene Glycol (PEG) 6000 dalam Kondisi Basa. *Jurnal Kimia Sains dan Aplikasi*, 15(1), 1–6. <https://doi.org/10.14710/jksa.15.1.1-6>
- Purwitasari, et al. (2022). Pisang Sebagai Adsorben Adsorption Of Metal Cadmium ( Cd ) To Cadmium Sulphate ( Cdso 4 ) Using Banana Trees AS. *Jurnal Chemurgy*, 06(1), 131–136.
- Putz, A. M., & Putz, M. V. (2012). Spectral inverse quantum (Spectral-IQ) method for modeling mesoporous systems: Application on Silica films by FTIR. *International Journal of Molecular Sciences*, 13(12), 15925–15941. <https://doi.org/10.3390/ijms131215925>
- Sudarlin. (2012). Prinsip dan Teknik Penggunaan Gas Sorption Analyzer (GSA).

- Prinsip dan Teknik Penggunaan Gas Sorption Analyzer (GSA)*, November 2012, 1–9.
- The, I., Efficiency, E., Existing, O. F., In, B., Through, L., & Technique, R. (2014). *Journal of Faculty of Engineering & Technology*. 21(2), 95–104.
- Tmacl, K., & Tunggal, B. (2008). Jurnal Kimia Sains dan Aplikasi Sintesis Silika Kristalin Menggunakan Surfaktan Cetiltrimetilamonium Bromida ( CTAB ) dan Trimetilamonium. 11(1), 20–28..
- Ummah, M. S. (2019). Dasar-Dasar Spektrofotometri UV-VIS dan Spektrometri Massa untuk Penentuan Struktur Senyawa Organik. *Sustainability (Switzerland)*,11(1),1–14.
- Wang, Z., Zhao, Q., Wang, D., & Cui, C. (2021). Synthesis and Characterization of Ordered Mesoporous Mcm-41 From Natural Chlorite and Its Application in Methylene Blue Adsorption. In *Clays and Clay Minerals* (Vol. 69, Nomor 2, hal. 217–231). <https://doi.org/10.1007/s42860-021-00119-8>.
- Wati, A. M., Mahatmanti, F. W., Jumaeri, J., & Prasetya, A. T. (2021). Adsorpsi Metilen Biru oleh Abu Layang Batu Bara yang Teraktivasi Menggunakan Proses Hidrotermal dengan Bantuan Gelombang Mikro. *ALCHEMY Jurnal Penelitian Kimia*, 18(1), 58. <https://doi.org/10.20961/alchemy.18.1.50935.58-69>.
- Yuan, N., Cai, H., Liu, T., Huang, Q., & Zhang, X. (2019). Adsorptive removal of methylene blue from aqueous solution using coal fly ash-derived mesoporous silica material. *Adsorption Science and Technology*, 37(3–4), 333–348. <https://doi.org/10.1177/0263617419827438>.
- Zikra, F., Oktavia, B., Putra, A., & Kurniawati, D. (2023). Desorpsi Anion Klorida (Cl-) Dari Adsorben Silika Mesopori Template CTAB ( *Cetiltrimetilammoniumbromida* ) Termodifikasi *Dimethylamine*. 12(2).