

DAFTAR PUSTAKA

- Al Bazed GA, & Abdel-Fatah MA. (2020). Hydroxyapatite-Based Materials for Heavy Metal Removal in Wastewater Treatment. *Petroleum & Petrochemical Engineering Journal*, 4(2), 1–5.
- Albayati, T. M., Alwan, G. M., & Mahdy, O. S. (2017). High performance methyl orange capture on magnetic nanoporous MCM-41 prepared by incipient wetness impregnation method. *Korean Journal of Chemical Engineering*, 34(1), 259–265. <https://doi.org/10.1007/s11814-016-0231-2>
- Amalia Hariyanto, Y., Taufiq, A., Sunaryono, Mufti, N., Soontaranon, S., & Kamonsutthipajit, N. (2019). Study on Structural Characters of Nano-sized Hydroxyapatite Prepared from Limestone. *IOP Conference Series: Materials Science and Engineering*, 515(1). <https://doi.org/10.1088/1757-899X/515/1/012020>
- Amin, M., & Kurniasih, A. K. (2019). Pengaruh Ukuran Dan Waktu Kalsinasi Batu Kapur Terhadap Tingkat Perolehan Kadar CaO. *Prosiding Seminar Nasional Sains, Matematika, Informatika. Dan Aplikasinya*, 4(1).
- Anisa, Z., Mubarakah, L., Setyaningrum, D., & Novianto, H. (2023). Identifikasi Sifat Termal Dan Ikatan Batu Kapur Alam Dengan Menggunakan DSC-TGA dan FTIR. *Jurnal Inovasi Teknik Kimia*, 8(3), 173–177.
- Ayu Hana Margareta, M., Fuad, A., Alfiah Ilmiawati, S., & Surjani Wonorahardjo, dan. (2015). Sintesa Hydroxyapatite ($\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$) Berbasis Batu Kapur. *Jurnal Penelitian Fisika Dan Aplikasinya (JPFA)*, 5(1). http://en.wikipedia.org/wiki/Calcium_c
- Baloo, L., Isa, M. H., Sapari, N. Bin, Jagaba, A. H., Wei, L. J., Yavari, S., Razali, R., & Vasu, R. (2021). Adsorptive removal of methylene blue and acid orange 10 dyes from aqueous solutions using oil palm wastes-derived activated carbons. *Alexandria Engineering Journal*, 60(6), 5611–5629. <https://doi.org/10.1016/j.aej.2021.04.044>
- Budianto, M. D. I., & Lubis, Z. (2020). Alternatif Penggunaan Agregat Halus Batu Kapur Mantup Dalam Campuran Aspal Panas Ac-Wc U KaRsT. *Deny Irawan Budianto / Ukarst*, 4(1), 2579–4620. <https://doi.org/10.30737/ukarst.v4i1>
- Cahyaningrum, S. E., Herdyastuty, N., Devina, B., & Supangat, D. (2018). Synthesis and Characterization of Hydroxyapatite Powder by Wet Precipitation Method. *IOP Conference Series: Materials Science and Engineering*, 299(1). <https://doi.org/10.1088/1757-899X/299/1/012039>
- Cahyaningrum, S. E., & Insiyah. (2019). Sintesis Dan Karakterisasi Hidroksiapatit Dari Batu Kapur Dengan Metode Pengendapan Basah. *Unesa Journal Of Chemistry*, 8(3).

- Capitelli, F., Dida, B., Ventura, G. Della, Baldassarre, F., Capelli, D., Senesi, G. S., Mele, A., & Siliqi, D. (2021). *Functional Nano-Hydroxyapatite for Applications in Conservation of Stony Monuments of Cultural Heritage*. 11. <https://doi.org/10.3390/proceedings2020062011>
- Darwish, A. A. A., Rashad, M., & AL-Aoh, H. A. (2019). Methyl orange adsorption comparison on nanoparticles: Isotherm, kinetics, and thermodynamic studies. *Dyes and Pigments*, *160*, 563–571. <https://doi.org/10.1016/j.dyepig.2018.08.045>
- Edahwati, L., Sutiyono, S., Ikaputri, A., & Fuadzi, M. N. (2023). Application Of The Sol-Gel Hydroxapatite Synthesis Method From Green Clam Shell. *International Journal of Science, Technology & Management*, *4*(4), 866–871.
- Elsawy, H. A., Emam, Y. G., & Ali, D. A. (2022). Kinetics And Isotherm Studies For Adsorption Of Methyl Orange Dye From Aqueous Solutions Using Hydroxyapatite. *Journal of Southwest Jiaotong University*, *57*(6), 1043–1052. <https://doi.org/10.35741/issn.0258-2724.57.6.90>
- Farah, R. D. E., Amanda, N. F., Sembiring, S., & Junaidi. (2022). Studi Pendahuluan Pembentukan Gugus Fungsi dari Komposit Perak Silika (Ag/SiO₂) Berbasis Sekam Padi. *Jurnal Teori Dan Aplikasi Fisika*, *10*(01), 31–35.
- Farhan Hanafi, M., & Sapawe, N. (2020). A review on the water problem associate with organic pollutants derived from phenol, methyl orange, and remazol brilliant blue dyes. *Materials Today: Proceedings*, *31*, A141–A150. <https://doi.org/10.1016/j.matpr.2021.01.258>
- Febi, A. (2023). Manabis (Jurnal Manajemen Dan Bisnis) Analisis Penerapan Cost Of Quality Untuk Meningkatkan Kualitas Produk Pada Perusahaan Humble Project Tasikmalaya. *Media Eletronik*, *2*(2), 129–135. <https://doi.org/10.54259/manabis>
- Fern, H. W., & Salimi, M. N. (2021). Hydroxyapatite nanoparticles produced by direct precipitation method: Optimization and characterization studies. *AIP Conference Proceedings*, *2339*. <https://doi.org/10.1063/5.0044252>
- Ghosh, G. C., Chakraborty, T. K., Zaman, S., Nahar, M. N., & Kabir, A. H. M. E. (2020). Removal of methyl orange dye from aqueous solution by a low-cost activated carbon prepared from mahagoni (*Swietenia mahagoni*) Bark. *Pollution*, *6*(1), 171–184. <https://doi.org/10.22059/POLL.2019.289061.679>
- Guerrero-Pérez, M. O., & Patience, G. S. (2020). Experimental methods in chemical engineering: Fourier transform infrared spectroscopy—FTIR. In *Canadian Journal of Chemical Engineering* (Vol. 98, Issue 1, pp. 25–33). Wiley-Liss Inc. <https://doi.org/10.1002/cjce.23664>

- Habibie, S., Santosa Wargadipura, A. H., Gustiono, D., Herdianto, N., Riswoko, A., Nikmatin, S., & Clarke, S. (2017). Production and Characterization of Hydroxyapatite Bone Substitute Material Performed from Indonesian Limestone. *International Journal of Biomedical Engineering and Science*, 4(1), 11–23. <https://doi.org/10.5121/ijbes.2017.4102>
- Haikal Alfajar, S., Febrika Zebua, N., & Sari, N. (2023). *Studi Kopigmentasi Campuran Ekstrak Biji Kesumba Keling (Bixa orellana L.) Dengan Ekstrak Angkak Merah*. <https://www.ojs.unhaj.ac.id/index.php/fj>
- Hamzah, S., Abdullah, S. N., Mohammad, N. A., Harun, M. H. C., Hairom, N. H. H., Azmi, A. A. A. R., Ali, A., Ali, N., & Yatim, N. I. (2023). Integration of Chitosan and Sugar Cane Bagasse as Adsorbent for Remazol Red Dyes Removal. *Biointerface Research in Applied Chemistry*, 13(2). <https://doi.org/10.33263/BRIAC132.137>
- Hossain, M. A., Kayes, Md. N., & Hossain, Md. M. (2021). Removal of Remazol Red RR from Aqueous Solution by Glass Supported Films of Synthesized ZnO Nanoparticles. *ICRRD Quality Index Research Journal*, 2(3). <https://doi.org/10.53272/icrrd.v2i3.2>
- Husien, S., El-taweel, R. M., Salim, A. I., Fahim, I. S., Said, L. A., & Radwan, A. G. (2022). Review of activated carbon adsorbent material for textile dyes removal: Preparation, and modelling. In *Current Research in Green and Sustainable Chemistry* (Vol. 5). Elsevier B.V. <https://doi.org/10.1016/j.crgsc.2022.100325>
- Indah Permata Sari, S., Wardhani, S., Kimia, J., Matematika dan Ilmu Pengetahuan Alam, F., & Brawijaya, U. (2021). *The Indonesian Green Technology Journal Pemanfaatan Cangkang Telur sebagai Bahan Baku Komposit CaCO₃-Alginat untuk Adsorben Metil Jingga*. <https://doi.org/10.21776/ub.igtj.2021.009.01.05>
- Iqhrammullah, M., Marlina, & Nur, S. (2020). Adsorption behaviour of hazardous dye (Methyl Orange) on cellulose-acetate polyurethane sheets. *IOP Conference Series: Materials Science and Engineering*, 845(1). <https://doi.org/10.1088/1757-899X/845/1/012035>
- Iwuozor, K. O., Ighalo, J. O., Emenike, E. C., Ogunfowora, L. A., & Igwegbe, C. A. (2021). Adsorption of methyl orange: A review on adsorbent performance. *Current Research in Green and Sustainable Chemistry*, 4. <https://doi.org/10.1016/j.crgsc.2021.100179>
- Kumbara, A. (2020). *Strategi Management Analisis Swot Pada Lucky Textile Group Dalam Menghadapi Persaingan Industri Textile*. 1(5). <https://doi.org/10.31933/JEMSI>
- Kyzas, G. Z. (2012). A decolorization technique with spent “Greek coffee” grounds as zero-cost adsorbents for industrial textile wastewaters. *Materials*, 5(11), 2069–2087. <https://doi.org/10.3390/ma5112069>

- Maryam, S., & Hidayanti, N. (2023). Identifikasi Gugus Fungsi Limbah Minyak Trafo yang Digunakan sebagai Minyak Obat Luka Menggunakan FTIR. *Makassar Pharmaceutical Science Journal*, 1(2), 2023–2115. <https://journal.farmasi.umi.ac.id/index.php/mpsj>
- Miri Noviana Sariana Sarana, & Narimo. (2022). Equation Study of Langmuir and Freundlich Isotherms on Adsorption of Heavy Metal Fe (II) with Zeolite and Activated Carbon from Biomass: Review: Kajian Persamaan Isoterm Langmuir dan Freundlich pada Adsorpsi Logam Berat Fe (II) dengan Zeolit dan Karbon Aktif dari Biomassa. *Jurnal Kimia Dan Rekayasa*, 2(2), 58–71.
- Mohd Pu'ad, N. A. S., Koshy, P., Abdullah, H. Z., Idris, M. I., & Lee, T. C. (2019). Syntheses of hydroxyapatite from natural sources. In *Heliyon* (Vol. 5, Issue 5). Elsevier Ltd. <https://doi.org/10.1016/j.heliyon.2019.e01588>
- Oko, S., Harjanto, H., Kurniawan, A., & Winanti, C. (2022). Penurunan Kadar Zat Warna Remazol Brilliant Blue R Dengan Metode Adsorpsi Menggunakan Serbuk CaCO₃ Dari Cangkang Telur Dan Karbon Aktif. *METANA*, 18(1), 39–45. <https://doi.org/10.14710/metana.v18i1.45766>
- Pipil, H., Yadav, S., Chawla, H., Taneja, S., Verma, M., Singla, N., & Haritash, A. K. (2022). Comparison of TiO₂ catalysis and Fenton's treatment for rapid degradation of Remazol Red Dye in textile industry effluent. *Rendiconti Lincei*. <https://doi.org/10.1007/s12210-021-01040-x>
- Pratama, Y., & Irfa'i, M. A. (2023). Pengaruh Suhu Dan Waktu Kalsinasi Terhadap Kemurnian Hidroksiapatit Berbasis Tulang Sapi Dengan Metode Presipitasi. *Jurnal Teknik Mesin*, 11(01), 7–12.
- Pratiwi, S. W., Sari, S. N., Nurmalasari, R., & Indriani, M. (2020). Utilization of Nata De Coco as Adsorben in Methyl Orange Adsorption. *EduChemia (Jurnal Kimia Dan Pendidikan)*, 5(2), 187. <https://doi.org/10.30870/educhemia.v5i2.7977>
- Rahmi, R., & Sajidah, S. (2018). Pemanfaatan Adsorben Alami (Biosorben) Untuk Mengurangi Kadar Timbal (Pb) Dalam Limbah Cair. In R. Rahmi & Sajidah (Eds.), *Prosiding Seminar Nasional Biologi, Teknologi dan Kependidikan* (pp. 271–279).
- Ramutshatsha-Makhwedzha, D., Mavhungu, A., Moropeng, M. L., & Mbaya, R. (2022). Activated carbon derived from waste orange and lemon peels for the adsorption of methyl orange and methylene blue dyes from wastewater. *Heliyon*, 8(8). <https://doi.org/10.1016/j.heliyon.2022.e09930>
- Rasyid, R., & Yani, S. (2018). Penjerapan Logam Berat Timbal (Pb) Dengan Menggunakan Lignin Hasil Isolasi Jerami Padi. *Journal Of Chemical Process Engineering*, 03(01).

- Rattanapan, S., Srikrum, J., & Kongsune, P. (2017). Adsorption of Methyl Orange on Coffee grounds Activated Carbon. *Energy Procedia*, 138, 949–954. <https://doi.org/10.1016/j.egypro.2017.10.064>
- Setyoprato, P., Srihari, E., Agustriyanto, R., Tan'im Nur, M., Hudin, A., & Sihombing, R. (2022). Peran Gugus Fungsi Pada Adsorpsi Zat Warna Menggunakan Pasir Sungai The Role Of Functional Groups In Adsorption Of Dyes Using River Sand. In *Jurnal Teknik Kimia* (Vol. 17, Issue 1).
- Shi, D., Tong, H., Lv, M., Luo, D., Wang, P., Xu, X., & Han, Z. (2021). Optimization of hydrothermal synthesis of hydroxyapatite from chicken eggshell waste for effective adsorption of aqueous Pb(II). *Environmental Science and Pollution Research*, 28(41), 58189–58205. <https://doi.org/10.1007/s11356-021-14772-y>
- Silviyanti, I. (2012). *Pengolahan Zat Warna Tekstil Hingga Metil Menggunakan Bentonit Terpillar TiO₂*. Universitas Airlangga.
- Sinulingga, K., Sirait, M., Siregar, N., & Abdullah, H. (2021). Synthesis and characterizations of natural limestone-derived nano-hydroxyapatite (HAp): A comparison study of different metals doped HAp on antibacterial activity. *RSC Advances*, 11(26), 15896–15904. <https://doi.org/10.1039/d1ra00308a>
- Sirait, M., Sinulingga, K., Siregar, N., & Siregar, R. S. D. (2020). Synthesis of hydroxyapatite from limestone by using precipitation method. *Journal of Physics: Conference Series*, 1462(1). <https://doi.org/10.1088/1742-6596/1462/1/012058>
- Siswanto, Sormin, D. P., Hikmawati, D., Aminatun, & Apsari, R. (2021). Effect of pH condition during sol-gel synthesis on the volume fraction of hydroxyapatite from sea coral. *Journal of Physics: Conference Series*, 1825(1). <https://doi.org/10.1088/1742-6596/1825/1/012045>
- Siti Rahmalia, Yelmida Azis, & Ida Zahrina. (2019). *EFISIENSI ADSORPSI BEBERAPA ZAT WARNA SINTETIS GOLONGAN AZO MENGGUNAKAN HIDROKSIAPATIT*. 6(2).
- Tan, Y., Luo, S., Liu, Y., & Li, J. (2019). *Hydroxyapatite Applications in Environmental Monitoring and Treatment Advances in Chemical Engineering*. <https://www.researchgate.net/publication/335739865>
- Tasari, S., Iqbal, & Badaruddin. (2019). Penentuan Lama Kalsinasi Kalsium Karbonat CaCO₃ dari Batu Kapur Tanjung Karang Donggala . *Gravitasi*, 18(2), 137–147.
- Venkata Ratnam, M., Vangalapati, M., Nagamalleswara Rao, K., & Ramesh Chandra, K. (2022). Efficient removal of methyl orange using magnesium oxide nanoparticles loaded onto activated carbon. *Bulletin of the Chemical Society of Ethiopia*, 36(3), 531–544. <https://doi.org/10.4314/bcse.v36i3.4>

- Wahyuningsih, A. W. K., Ulfin, I., & Suprpto, S. (2019). Pengaruh pH dan Waktu Kontak pada Adsorpsi Remazol Brilliant Blue R menggunakan Adsorben Ampas Singkong. *Jurnal Sains Dan Seni ITS*, 7(2), 17–19.
- Wardiana, A. E., Shalli, G., Saputra, C., & Cahyaningrum, S. E. (2019). Pemanfaatan Batu Kapur Sebagai Bahan Baku Hidroksiapatit Utilization Of Limestone As Hydroxyapatite Raw Material. In *UNESA Journal of Chemistry* (Vol. 8, Issue 2).
- Yanti, P. H., & Gandi, Y. (2020). Pengaruh Waktu Kalsinasi Terhadap Sifat Fisika-Kimia Hidroksiapatit Dari Cangkang Geloina Coaxans. *Chemistry Progress*, 13(2). <https://doi.org/10.35799/cp.13.2.2020.31473>
- Zhang, B., Wu, Y., & Cha, L. (2020). Removal of methyl orange dye using activated biochar derived from pomelo peel wastes: performance, isotherm, and kinetic studies. *Journal of Dispersion Science and Technology*, 41(1), 125–136. <https://doi.org/10.1080/01932691.2018.1561298>

