

DAFTAR PUSTAKA

- Al-Mumun, et.al. 2019. Photocatalytic activity improvement and application of UV-TiO₂ photocatalysis in textile wastewater treatment: A review. *Journal of Environmental Chemical Engineering*. 7 103248.
- Allen, N.S.et.al. 2008. *Photocatalytic titania based surfaces: environmental benefits, Polymer Degradation and Stability*,1632–1646.
- Alinsafi, A., et.al. 2007. Treatment of textile industry wastewater by supported photocatalysis. Elsevier. 74 439-445
- Akyol A, Bayramog̃lu M. 2005. Photocatalytic degradation of Remazol Red F3B using ZnO catalyst. *J Hazard Mater*;124:241e6.
- A.C. Rodrigues and et al. 2008 Treatment of paper pulp and paper mill wastewater by coagulation? flocculation followed by heterogeneous photocatalysis, *J. Photochem. Photobiol. A* 194 1–10
- Bemis, R.,Ngatijo, Nurjanah, S., Nelson, & Maghviroh, N. 2019. Sintesis dan karakterisasi fotokatalis ZnO/karbon aktif dan aplikasinya pada degradasi rhodamin B. *Chempublish Journal*, 4(2), 101–113.
- Bhatkhande, D. S., Beenackers, A. A. C. M & Pangarkar, V. G. 2002. Photocatalytic degradation for environmental applications - A review. *Journal of Chemical Technology and Biotechnology*, 77(1), 102–116.
- Burbano, A. A., Suidan, M. T., Dionysiou, D. D., & Richardson, T. L. 2005. Oxidation kinetics and effect of pH on the degradation of MTBE with Fenton reagent. *Water Research*, 39(1), 107–118. <https://doi.org/10.1016/j.watres.2004.09.008>
- Cardenas J.A.G., Aguera A., Garcia B.E., Agugliaro F.M Perez and J.A.S. 2020. Wastewatertreatment by advanced oxidation process and their worldwide research trends. *International Journal of Environmental Research and Public Health*.17(170): 1-19
- Cazetta L. A., Eurica M. N., Marcos H. K., Alexandro M. M. Vargas., and et al. 2011. NaOH- Activated Carbon of High Surface Area Produced from Coconut Shell: Kinetics and Equilibrium Studies from The Methlene Blue Adsorption. *Chem. Engener. journal*. 174(1): 117-125
- da Silva L.S., Goncalves M.M.M. and de Araujo L.R.A. 2019. Combined photocatalytic and biological process for textile wastewater treatments. *Water Environment Research*. 91(11): 1490-1497.
- Durri, S., & Sutanto, H. 2015. Karakterisasi Sifat Optik Lapisan Tipis ZnO doping Al yang di Deposisi diatas Kaca dengan Metode Sol-Gel Teknik Spray-Coating. XIX, 38–40
- Duy N. N., Phu D.V., Lan N.T.K., Duoc N.T., Hien N.Q., Hiep B.N., Han B.N. and Ha B.M. 2019. Treatment of real textile wastewater using electron beam irradiation. *Acta Chimica IASI*. 27(2): 303-316.
- Fanani, N., & Ulfindrayani, I. F. 2019. SYNTHESIS OF ACTIVATED CARBON (AC) FROM BAMBOO WASTE AS A SUPPORT OF ZINC OXIDE (ZnO) CATALYST. *Konversi*, 8(2), 108–112.
- Gilars S Pembayun., Y.E. Remigius., Yulianto., rachimoellah, M., & Putri, Endah

- M.M., 2013. Pembuatan karbon aktif dari arang tempurung kelapa dengan aktivator ZnCl_2 dan Na_2CO_3 sebagai adsorben untuk mengurangi kadar fenol dalam air limbah. *Jurnal Teknik Pomits*. 2(1): 2301-3539)
- Habibi, M. H., et.al. 2005. The effect of operational parameters on the photocatalytic degradation of three textile azo dyes in aqueous TiO_2 suspensions. *Journal of Photochemistry and Photobiology A: Chemistry*, 172(1), 89–96.
- Hoffmann, M.R., S.T. Martin, W. Choi, D.W. Bahnemann. 1995. Environmental Applications of Semiconductor Photocatalysis. *Chem. Rev* 95: 69-96.
- J.C. Garcia, T.K.F.S. Freitas, S.M. Palácio, E. Ambrósio, M.T.F. Souza, L.B. Santos, V.C. Almeida, N.E. Souza, Toxicity assessment of textile effluents treated by advanced oxidative process (UV/ TiO_2 and UV/ $\text{TiO}_2/\text{H}_2\text{O}_2$) in the species *Artemia salina* L, *Environ. Monit. Asse.*
- Kasuma, Nola Yulia. 2012. “Penggunaan Komposit ZnO-CuO yang Disintesis secara Sonochemistry yang digunakan sebagai Katalis untuk Fotodegradasi Metil Orange dan Zat Antibakteri.” Skripsi, Universitas Andalas. Padang, Indonesia.
- Khan, W.Z., Najeeb I. and Ishtiaque S. 2016. Photocatalytic degradation of a real textile wastewater using titanium oxide, zinc oxide and hydrogen peroxide. *The International Journal of Engineering and Science*. 5(7): 61-70.
- Lee, K. M., Ngai, K. S., Lai, C. W., & Juan, J. C. 2016. Recent developments of zinc oxide based photocatalyst in water treatment technology: A review. *Water Research*, 88, 428–448.
- Meisrilestari, Y., Khomaini, R., & Wijayanti, H. 2013. Pembuatan Arang Aktif dari Cangkang Kelapa Sawit dengan Aktivasi Secara Fisika, Kimia, dan Fisika-Kimia. *Jurnal Konversi*, 2(1), 45–50.
- Mutiara, S & Miftahul, K. 2022. Penurunan Celah Pita ZnO Dengan Impregnasinya Pada Karbon Aktif. *Ekasakti Jurnal Penelitian & Pengabdian*. 2(2):Hal 122-129.
- Putri, R., & Sanjaya, H. 2022. *Pengaruh Waktu Radiasi Terhadap Degradasi Zat Warna Methanil Yellow Menggunakan Metoda Fotosonolisis dengan Bantuan Katalis ZnO* . 11(1), 98–101.
- Qodri, A. A. 2011. “Fotodegradasi Zat Warna Remazol Yellow FG dengan Fotokatalis Kompleks $\text{TiO}_2/\text{SiO}_2$.” skripsi jurusan kimia FMIPA Universitas Sebelas Maret, Surakarta.
- Rashid, Md Mamunur dan Chikashi Sato. 2011. Photolysis, Sonolysis, and Photosonolysis of Trichloroethane (TCA), Trichloroethylene (TCE) and Tetrachloroethylene (PCE) Without Catalyst. *Water Air Soil Pollut. Vol* 216: 429-440
- Rachman, F.B.A. and Akter M. 2016. Removal of dyes from textile wastewater by adsorption using shrimp shell. *International Journal of Waste Resources*. 6(3): 2-5.
- Safni, Sari, F. Maizatrisna, & Zulfarman. 2009. Degradasi Zat Warna Mathanil Yellow Secara Sonolisis dan Fotolisis dengan Penambahan TiO_2 Anatase. *J. Sains Material Indonesia*, 1(1). 47 –51
- Sakthivel, S. et.al, 2003, Solar photocatalytic degradation of azo dye comparison of photocatalytic efficiency of ZnO and TiO_2 , *Solar Energy Materials and*

- Solar Cells 77(65–82).
- Sari, F., Safni, Maizatisna, dan Zulfarman. 2009. Degradasi zat warna *Methanil yellow* secara sonolisis dan fotolisis dengan penambahan TiO₂ *Anatase*. *indonesian Journal of Materials Science*. 11(1): 47-51
- Sastrawidana D. K. et.al. 2018. Color removal of textile wastewater using indirect electrochemical oxidation with multi carbon electrodes. *Enviromentasia*. 11(3): 170-181.
- Simion V.A., Cretescu I., Lutic D., Luca C. and Poulis I. 2015. Enhancing the fenton process by uv light applied in textile wastewater treatment. *Environmental Engineering and Management Journal*. 14(3): 595-600.
- Surono, Agustya T., Susanto, Heri. 2014. Sifat optik zinc oxide (zno) yang dideposisi di atas substrat kaca menggunakan metode chemical solution deposition (csd) dan aplikasinya untuk degradasi zat warna methylene blue. *Youngster Physics Journal*. 2(1):Hal 7-14
- Sohrabi, M. R., & Ghavami, M. 2008. Photocatalytic degradation of Direct Red 23 dye using UV/TiO₂: Effect of operational parameters. *Journal of Hazardous Materials*, 153(3), 1235–1239. <https://doi.org/10.1016/j.jhazmat.2007.09.114>
- Suparyanto dan Rosad (2015, 2020). 濟無 No Title No Title. *Suparyanto Dan Rosad (2015, 5(3), 248–253*.
- Togas, Christmas., Wuntu, Audy., Koleangan, Harry. 2014. Fotodegradasi zat warna *metanil yellow* menggunakan fotokatalis TiO₂-karbon aktif. *Jurnal MIPA Unsrat Online*. 3(2): 87-91
- Triono, A. 2006. Karakteristik Briket Arang dari Campuran Serbuk Gergajian Kayu Afrika (*Maesopsis eminil EngL*) dan Sengan (*Paraserianthes falcataria L Nielsen*) dengan Penambahan Tempurung Kelapa (*Cocos mucifera L*). [Skripsi]. Departemen Hasil Hutan. Fakultas Pertanian. Institut Pertanian Bogor. Bogor.
- Upita, S., Bella, I., Syukri. 2014. Pembuatan dan Karakterisasi Katalis ZnO/Karbon Aktif Dengan Metode Solid State Dan Uji Aktifitas Kataliknya Pada Degradasi Rhodamin B. *J. Ris. Kim*. 7(2):hal 180-185.
- Wardhani, S. et.al. 2018. Effect of pH and irradiation time on TiO₂-chitosan activity for phenol photo-degradation. *AIP Conference Proceedings*, 2021(2018), 1–7.
- Wismayanti, D., Diantariani, N., & Santi, S. 2015. Pembuatan Komposit ZnO-Arang Aktif Sebagai Fotokatalis Untuk Mendegradasi Zat Warna Metilen Biru. *Jurnal Kimia*, 9(1), 109–116.
- Wijaya, K., E. Sugiharto, I. Fatimah, S. Sudiono, & D. Kurniaysih, 2006, Utilisasi adTiO₂-Zeolit dan Sinar UV untuk Fotodegradasi Zat Warna Congo Red, *Berkala MIPA*, 16(3).
- Yang X., Vilaseca M. Grimau V., and Crespi M. 2020. Treatment of textile wastewater by Cas, MBR, and MBBR: Comparative study from technical, economic, and environmental perspectives. *Water*. 12(1306): 1-17.
- Youssef, N. A., Ibrahim, F. A., Shaban, S. A., & Mahmoud, A. S. 2016. Degradation of methyl orange using Fenton catalytic reaction. *Egyptian Journal of Petroleum*, 25(3), 317–321.