

- Aminatun, T., Padmaningrum, R.T., & Yuliati (2016) 'PEMECAHAN MASALAH LIMBAH LAUNDRY DI SLEMAN DENGAN PROGRAM IPTEK BAGI MASYARAKAT (IBM)', *INOTEKS*, (Vol 20, No 1: Februari 2016), hal. 29–38. Tersedia pada: <https://journal.uny.ac.id/index.php/inotek/article/view/11273>.
- Argaman, Y. *et al.* (2000) 'Applicability of Batch Test Data for Industrial Wastewater Continuous Flow Process Design', *Water Environment Research*, 72(3), hal. 348–352. Tersedia pada: <https://doi.org/https://doi.org/10.2175/106143000X137572>.
- Bai, M. *et al.* (2021) 'Experimental study of the effect of salinity and surfactant on mass transfer characteristics of oxygen micro-nano bubbles', *Japanese Geotechnical Society Special Publication*, 9(6), hal. 272–276. Tersedia pada: <https://doi.org/10.3208/JGSSP.V09.CPEG078>.
- Bering, S. *et al.* (2018) 'The application of moving bed bio-reactor (MBBR) in commercial laundry wastewater treatment', *Science of the Total Environment*, 627, hal. 1638–1643. Tersedia pada: <https://doi.org/10.1016/j.scitotenv.2018.02.029>.
- Braga, J.K., Varesche, M.B.A. (2014) 'Commercial Laundry Water Characterisation', *American Journal of Analytical Chemistry*, 05(01), hal. 8–16. Tersedia pada: <https://doi.org/10.4236/ajac.2014.51002>.
- Budhijanto, W. *et al.* (2015) 'Enhancement of aerobic wastewater treatment by the application of attached growth microorganisms and microbubble generator', *International Journal of Technology*, 6(7), hal. 1101–1109. Tersedia pada: <https://doi.org/10.14716/ijtech.v6i7.1240>.
- Burton, F.L. *et al.* (2013) *Wastewater Engineering: Treatment and Resource Recovery*. McGraw-Hill Education. Tersedia pada: <https://books.google.co.id/books?id=6KVKMAEACAAJ>.
- Chun Ho, K. *et al.* (2020) 'Water pathways through the ages: Integrated laundry wastewater treatment for pollution prevention'. Tersedia pada: <https://doi.org/10.1016/j.scitotenv.2020.143966>.
- Dereszewska, A. *et al.* (2015) 'The effect of anionic surfactant concentration on activated sludge condition and phosphate release in biological treatment plant', *Polish Journal of Environmental Studies*, 24(1), hal. 83–91. Tersedia pada: <https://doi.org/10.15244/pjoes/28640>.
- Doran, P.M. (1995) *Bioprocess Engineering Principles, Bioprocess Engineering Principles*. Elsevier. Tersedia pada: <https://doi.org/10.1016/B978-0-12-220855-3.X5000-7>.
- Eriksson, E. *et al.* (2002) 'Characteristics of grey wastewater', *Urban Water*, 4(1), hal. 85–104. Tersedia pada: [https://doi.org/10.1016/S1462-0758\(01\)00064-4](https://doi.org/10.1016/S1462-0758(01)00064-4).
- Espinoza, L.A. (2004) 'Biological treatment of industrial wastewater containing high concentrations of linear alkylbenzene sulfonate (LAS)', *LSU Master's Theses* [Preprint]. Tersedia pada: https://doi.org/10.31390/gradschool_theses.1448.
- Fadlurohman, P. (2013) *The Effect of Bubbling Generation Methods on the*

Falk, N.A. (2019) 'Surfactants as Antimicrobials: A Brief Overview of Microbial Interfacial Chemistry and Surfactant Antimicrobial Activity', *Journal of Surfactants and Detergents*, 22(5), hal. 1119–1127. Tersedia pada: <https://doi.org/10.1002/JSDE.12293>.

Ge, J. *et al.* (2004) 'New bipolar electrocoagulation-electroflotation process for the treatment of laundry wastewater', *Separation and Purification Technology*, 36(1), hal. 33–39. Tersedia pada: [https://doi.org/10.1016/S1383-5866\(03\)00150-3](https://doi.org/10.1016/S1383-5866(03)00150-3).

Ghangrekar, M.M., Behera, M. (2014) *Suspended Growth Treatment Processes, Comprehensive Water Quality and Purification*. Elsevier Ltd. Tersedia pada: <https://doi.org/10.1016/B978-0-12-382182-9.00087-6>.

Ghunmi, L.A. *et al.* (2011) 'Grey water treatment systems: A review', *Critical Reviews in Environmental Science and Technology*, 41(7), hal. 657–698. Tersedia pada: <https://doi.org/10.1080/10643380903048443>.

Godshall, F.A. (1996) 'Dissolved oxygen management for improved wastewater treatment', *Defense Technical Information Center Compilation Part Notice ADP022456* [Preprint]. Tersedia pada: http://www.researchgate.net/publication/224643263%7B_%7DApplication%7B_%7Dof%7B_%7Dthe%7B_%7DFinite-Element%7B_%7DMICHELLE%7B_%7DBeam%7B_%7DOptics%7B_%7DCode%7B_%7Dto%7B_%7DRF%7B_%7DGun%7B_%7DModeling/file/79e415093fe038d472.pdf%5Cnhttp://oai.dtic.mil/oai (Accessed: 21 May 2021).

Hoinkis, J., Panten, V. (2008) 'Wastewater recycling in laundries-From pilot to large-scale plant', *Chemical Engineering and Processing: Process Intensification*, 47(7), hal. 1159–1164. Tersedia pada: <https://doi.org/10.1016/j.cep.2007.12.010>.

Juwana, W.E. *et al.* (2019) 'Hydrodynamic characteristics of the microbubble dissolution in liquid using orifice type microbubble generator', *Chemical Engineering Research and Design*, 141, hal. 436–448. Tersedia pada: <https://doi.org/https://doi.org/10.1016/j.cherd.2018.11.017>.

Katam, K., Bhattacharyya, D. (2017) 'Biodegradation of Laundry Wastewater Under Aerobic and Anaerobic Conditions: A Kinetic Evaluation.', *Water environment research : a research publication of the Water Environment Federation*, 89(12), hal. 2071–2077. Tersedia pada: <https://doi.org/10.2175/106143017X14902968254638>.

Kumar Singh, N. *et al.* (2020) *Bioreactor and bioprocess technology for bioremediation of domestic and municipal wastewater, Bioremediation of Pollutants*. INC. Tersedia pada: <https://doi.org/10.1016/b978-0-12-819025-8.00011-9>.

Kwok, T.K. (2011) *Assessing the effect of surfactants on activated sludge processes using sequencing batch reactors*. RMIT University. Tersedia pada: <https://researchrepository.rmit.edu.au/esploro/outputs/graduate/Assessing-the-effect-of-surfactants-on-activated-sludge-processes-using-sequencing-batch-reactors/9921863633301341> (Accessed: 20 November 2022).

Li, J., Dagnew, M., & Ray, M.B. (2022) 'Effect of coagulation on microfibers in laundry wastewater', *Environmental Research*, 212, p. 113401. Tersedia pada: <https://doi.org/10.1016/J.ENVRES.2022.113401>.

Liu, C. *et al.* (2009) 'Effects of surfactants on oxygen transfer in microbubble aeration', *2009 International Conference on Energy and Environment Technology, ICEET 2009*, 2, hal. 531–534. Tersedia pada: <https://doi.org/10.1109/ICEET.2009.367>.

Liu, C. *et al.* (2012) 'Effect of microbubble and its generation process on mixed liquor properties of activated sludge using Shirasu porous glass (SPG) membrane system', *Water Research*, 46(18), hal. 6051–6058. Tersedia pada: <https://doi.org/10.1016/J.WATRES.2012.08.032>.

Lou, I., In Jeong, I. (2015) 'Modeling Growth of Filaments and Floc Formers in Activated Sludge Flocs: Integrating the Effects of Kinetics and Diffusion', *Environmental Modeling and Assessment*, 20(3), hal. 225–237. Tersedia pada: <https://doi.org/10.1007/s10666-015-9453-7>.

Merrettig-Bruns, U., & Jelen, E. (2009) 'Anaerobic biodegradation of detergent surfactants', *Materials*, 2(1), hal. 181–206. Tersedia pada: <https://doi.org/10.3390/ma2010181>.

Mungray, A.K., & Kumar, P. (2008) 'Anionic surfactants in treated sewage and sludges: Risk assessment to aquatic and terrestrial environments', *Bioresource Technology*, 99(8), hal. 2919–2929. Tersedia pada: <https://doi.org/10.1016/j.biortech.2007.06.025>.

Mungray, A.K., & Kumar, P. (2009) 'Fate of linear alkylbenzene sulfonates in the environment: A review', *International Biodeterioration and Biodegradation*, 63(8), hal. 981–987. Tersedia pada: <https://doi.org/10.1016/j.ibiod.2009.03.012>.

Nair, S.S., & Swarnalatha, K. (2015) 'Biodegradation of laundry wastewater', *International Research Journal of Engineering and Technology*, 2, hal. 789–793.

Othman, M.Z., Ding, L., & Jiao, Y. (2009) 'Effect of anionic and non-ionic surfactants on activated sludge oxygen uptake rate and nitrification', *World Academy of Science, Engineering and Technology*, 58(10), hal. 1199–1205.

Pakou, C. *et al.* (2007) 'On the complete aerobic microbial mineralization of linear alkylbenzene sulfonate', *Desalination*, 215(1–3), hal. 198–208. Tersedia pada: <https://doi.org/10.1016/J.DESAL.2006.11.020>.

Paramesti, A. *et al.* (2020) 'Development of Low-Cost Aerobic Bioreactor for Decentralized Greywater Treatment BT - Advances in Waste Processing Technology', in A.Z. Yaser (ed.). Singapore: Springer Singapore, hal. 111–125. Tersedia pada: https://doi.org/10.1007/978-981-15-4821-5_7.

Parker, J.J. (2001) *The Effects of Dissolved Oxygen Concentration and Biological Solids Retention Time on Activated Sludge Treatment Performance*. The University of Tennessee. Tersedia pada: https://trace.tennessee.edu/utk_gradthes/1982/.

Pitot, H.C. (2021) 'SELECTION OF WATER QUALITY VARIABLES', *Water Quality Assessments*, hal. 81–148. Tersedia pada: <https://doi.org/10.4324/NOE0419216001-8/SELECTION-WATER-QUALITY-VARIABLES-DEBORAH-CHAPMAN>.

Ramcharan, T., & Bissessur, A. (2016) 'Analysis of Linear Alkylbenzene Sulfonate in Laundry Wastewater by HPLC–UV and UV–Vis Spectrophotometry', *Journal of Surfactants and Detergents*, 19(1), hal. 209–218. Tersedia pada:

Rochman (2009) 'Pembuatan Ipal Mini Untuk Limbah', *Peneliti Med. Eksakta.*, 8(2), hal. 134–142.

Sadatomi, M. *et al.* (2012) 'Micro-bubble generation rate and bubble dissolution rate into water by a simple multi-fluid mixer with orifice and porous tube', *Experimental Thermal and Fluid Science*, 41, hal. 23–30. Tersedia pada: <https://doi.org/10.1016/j.expthermflusci.2012.03.002>.

Shalindry, R. *et al.* (2015) 'Penguraian Limbah Organik Secara Aerobik Dengan Aerasi Menggunakan Microbubble Generator Dalam Kolam Dengan Imobilisasi Bakteri', *Jurnal Rekayasa Proses*, 9(2), hal. 58–64. Tersedia pada: <https://doi.org/10.22146/jrekpros.31035>.

Shuler, M.L., & Kargi, F. (2002) *Bioprocess Engineering: Basic Concepts*. 2nd edn. New Jersey: Prentice Hall, Inc.

Sumithra, P., Smily, B., & J., M. (2017) 'Degradation of Household detergents using fungi isolated from freshwater ecosystem', *Int. J. Adv. Res. Biol. Sci.*, 4(4), hal. 37–43. Tersedia pada: <https://doi.org/10.22192/ijarbs>.

Tchobanoglous, George; Burton, F. (2013) *Wastewater Engineering: Treatment and Reuse*. 5th edn. McGraw-Hill Education (McGraw-Hill series in civil and environmental engineering).

Terasaka, K. *et al.* (2011) 'Development of microbubble aerator for waste water treatment using aerobic activated sludge'. Tersedia pada: <https://doi.org/10.1016/j.ces.2011.02.043>.

Wang, M. *et al.* (2019) 'Laundry detergents and detergent residue after rinsing directly disrupt tight junction barrier integrity in human bronchial epithelial cells', *Journal of Allergy and Clinical Immunology*, 143(5), hal. 1892–1903. Tersedia pada: <https://doi.org/10.1016/j.jaci.2018.11.016>.

Westerling, K. (2014) *Biological Treatment 101 Suspended Growth Vs Attached Growth, Biological Treatment 101*. Tersedia pada: <https://www.wateronline.com/doc/biological-treatment-suspended-growth-vs-attached-growth-0001> (Accessed: 30 June 2021).

Yao, K. *et al.* (2016) 'The effect of microbubbles on gas-liquid mass transfer coefficient and degradation rate of COD in wastewater treatment', *Water Science and Technology*, 73(8), hal. 1969–1977. Tersedia pada: <https://doi.org/10.2166/wst.2016.018>.

Yuliani, R.L., Purwanti, E., & Pantiwati, Y. (2015) 'Pengaruh Limbah Detergen Industri Laundry Terhadap Mortalitas dan Indeks Fisiologi Ikan Nila (*Oreochromis niloticus*)', in *Seminar Nasional XII Pendidikan Biologi FKIP UNS*, hal. 822–828.