DAFTAR PUSTAKA

Ahmed, S. A., & John, B. (2018). Liquid–Liquid horizontal pipe flow–A review. *Journal of Petroleum Science and Engineering*, *168*, 426–447.

Alam, H. S., Redhyka, G. G., Sugiarto, A. T., Salim, T. I., & Robbihi, I. (2018). Design and performance of swirl flow microbubble generator. *International Journal of Engineering & Technology*, *7*(4), 66–69.

Batubara, Y., & Mawarni, D. I. (n.d.). *Karakterisasi Bubble yang Dihasilkan Microbubble Generator Tipe Aliran Swirl dengan Metode Image Processing*.

Chen, Z., Qu, Z., Zhang, J., Tang, Z., Jiang, H., & Chen, R. (2025). Tubular Janus ceramic membranes for enhanced aeration performance. *Journal of Membrane Science*, 124633.

Clift, R., Grace, J. R., & Weber, M. E. (2005). *Bubbles, drops, and particles*.

Fadillah, F., Suryanto, H., & Suprayitno, S. (2023). Study on effect of 3D printing parameters on surface roughness and tensile strength using analysis of variance. *Mechanical Engineering*, *7*(2), 1.

Farah, S., Anderson, D. G., & Langer, R. (2016). Physical and mechanical properties of PLA, and their functions in widespread applications—A comprehensive review. *Advanced drug delivery reviews*, *107*, 367–392.

Firman, S. W., Nirmala, K., Supriyono, E., & Rochman, N. T. (2019). Evaluasi kinerja pembangkit gelembung mikro terhadap respons fisiologis ikan nila Oreochromis niloticus (Linnaeus, 1758) dengan kepadatan berbeda pada sistem resirkulasi. *Jurnal Ektiologi Indonesia*, *19*(3), 425–436.

Hoque, M. M., Mitra, S., & Evans, G. (2024). Bubble size distribution and turbulence characterization in a bubbly flow in the presence of surfactant. *Experimental Thermal and Fluid Science*, *155*, 111199.

Juwana, W. E., Widyatama, A., Dinaryanto, O., & Budhijanto, W. (2019). Hydrodynamic characteristics of the microbubble dissolution in liquid using orifice type microbubble generator. *Chemical Engineering Research and Design*, *141*, 436–448.

Kocaaslan, O., Ozgoren, M., Aksoy, M. H., & Babayigit, O. (2016). *Numerical Investigation of the Surface Roughness Effect on the Hydraulic Efficiency,*

Head and Shaft Power For a Single Stage Centrifugal Pump.

Mawarni, D. I., Juwana, W. E., Yuana, K. A., & Budhijanto, W. (2022). Hydrodynamic characteristics of the microbubble dissolution in liquid using the swirl flow type of microbubble generator. *Journal of Water Process Engineering*, *48*, 102846.

Parmar, R., & Majumder, S. K. (2013). Microbubble generation and microbubble-aided transport process intensification—A state-of-the-art report. *Chemical Engineering and Processing: Process Intensification*, *64*, 79–97.

Sadatomi, M., Kawahara, A., Kano, K., & Ohtomo, A. (2005). Performance of a new micro-bubble generator with a spherical body in a flowing water tube. *Experimental Thermal and Fluid Science*, *29*(5), 615–623.

Sikora, M., Bohdal, T., Tandecka, K., Kacalak, W., & Mathia, T. G. (2024). The Effect of Channel Surface Roughness on Two–Phase Flow Patterns: A Review. *Energies*, *17*(21), 5483.

Tabei, K., Haruyama, S., Yamaguchi, S., Shirai, H., & Takakusagi, F. (2007). Study of micro bubble generation by a swirl jet (Measurement of bubble distribution by light transmission and characteristics of generation bubbles). *Journal of Environment and Engineering*, *2*(1), 172–182.

Temesgen, T., Bui, T. T., Han, M., Kim, T., & Park, H. (2017). Micro and nanobubble technologies as a new horizon for water-treatment techniques: A review. *Advances in colloid and interface science*, *246*, 40–51.

Tsuge, H. (2010). Fundamentals of microbubbles and nanobubbles. *Bulletin of the Society of Sea Water Science, Japan*, *64*(1), 4–10.

Wickramasinghe, S., Do, T., & Tran, P. (2020). FDM-based 3D printing of polymer and associated composite: A review on mechanical properties, defects and treatments. *Polymers*, *12*(7), 1529.

Zhang, Y., Wu, H., Zhang, L., Yang, Y., Niu, X., Zeng, Z., & Shu, B. (2023). Flow Pattern Study and Pressure Drop Prediction of Two-Phase Boiling Process in Different Surface Wettability Microchannel. *Micromachines*, *14*(5), 958.

Zhou, K., Fattahi, M., Sontti, S. G., & Zhang, X. (2025). Advance in Microbubble-Based Separation Technologies for Microplastics Removal from Water. *Journal of Environmental Chemical Engineering*, 116499.