

DAFTAR PUSTAKA

- Arifin, L., & Rachmat, B. (2016). Abrasi Pantai Dan Pendangkalan Kolam Pelabuhan Jetty Pertamina Balongan, Indramayu Melalui Analisis Arus Pasang Surut, Angin Dan Gelombang. *Jurnal Geologi Kelautan*, 9(1), 15. <https://doi.org/10.32693/jgk.9.1.2011.197>
- Azdan, M. D., & Samekto, C. R. (2008). Kritisnya Kondisi Bendungan di Indonesia 1. *Seminar Nasional Bendungan Besar*, (February), 1–7.
- Bhagwat, S. M., & Ghajar, A. J. (2012). Similarities and differences in the flow patterns and void fraction in vertical upward and downward two phase flow. *Experimental Thermal and Fluid Science*, 39, 213–227. <https://doi.org/10.1016/j.expthermflusci.2012.01.026>
- Deendarlianto, Supraba, I., Majid, A. I., Pradecta, M. R., Indarto, & Widyaparaga, A. (2019). Experimental investigation on the flow behavior during the solid particles lifting in a micro-bubble generator type airlift pump system. *Case Studies in Thermal Engineering*, 13(December 2018), 100386. <https://doi.org/10.1016/j.csite.2018.100386>
- Deendarlianto, Wiratni, Tontowi, A. E., Indarto, & Iriawan, A. G. W. (2015). The implementation of a developed microbubble generator on the aerobic wastewater treatment. *International Journal of Technology*, 6(6), 924–930. <https://doi.org/10.14716/ijtech.v6i6.1696>
- Faturachman, F., Rahardiawan, R., & Raharjo, P. (2016). Pendangkalan Pelabuhan Cirebon Dan Astanajapura Akibat Proses Sedimentasi (Berdasarkan Data Seismik Pantul Dangkal Dan Pemboran Inti). *Jurnal Geologi Kelautan*, 2(1). <https://doi.org/10.32693/jgk.2.1.2004.107>

- Guilizzoni, M., Baccini, B., Sotgia, G., & Colombo, L. P. M. (2018). Image-based analysis of intermittent three-phase flow. *International Journal of Multiphase Flow*, *107*, 256–262. <https://doi.org/10.1016/j.ijmultiphaseflow.2018.06.019>
- Hanafizadeh, P., Ghanbarzadeh, S., & Saidi, M. H. (2011). Visual technique for detection of gas-liquid two-phase flow regime in the airlift pump. *Journal of Petroleum Science and Engineering*, *75*(3–4), 327–335. <https://doi.org/10.1016/j.petrol.2010.11.028>
- Hanafizadeh, P., Ghanbarzadeh, S., & Saidi, M. H. (2011). Visual technique for detection of gas-liquid two-phase flow regime in the airlift pump. *Journal of Petroleum Science and Engineering*, *75*(3–4), 327–335. <https://doi.org/10.1016/j.petrol.2010.11.028>
- Hanafizadeh, P., & Ghorbani, B. (2019). Review Study on Airlift Pumping Systems. *Multiphase Science and Technology*, *24*(4), 323–362. <https://doi.org/10.1615/multscientechn.v24.i4.30>
- Juwana, W. E., Widyatama, A., Dinaryanto, O., Budhijanto, W., Indarto, & Deendarlianto. (2019). Hydrodynamic characteristics of the microbubble dissolution in liquid using orifice type microbubble generator. *Chemical Engineering Research and Design*, *141*, 436–448. <https://doi.org/10.1016/j.cherd.2018.11.017>
- Kassab, S. Z., Kandil, H. A., Warda, H. A., & Ahmed, W. H. (2007). Experimental and analytical investigations of airlift pumps operating in three-phase flow. *Chemical Engineering Journal*, *131*(1–3), 273–281. <https://doi.org/10.1016/j.cej.2006.12.009>
- Khalil, M. F., Elshorbagy, K. A., Kassab, S. Z., & Fahmy, R. I. (1999). Effect of air injection method on the performance of an air lift pump. *International Journal of Heat and Fluid Flow*, *20*(6), 598–604. [https://doi.org/10.1016/S0142-727X\(99\)00051-X](https://doi.org/10.1016/S0142-727X(99)00051-X)

- Kim, S. H., Sohn, C. H., & Hwang, J. Y. (2014). Effects of tube diameter and submergence ratio on *bubble* pattern and performance of air-lift pump. *International Journal of Multiphase Flow*, 58, 195–204. <https://doi.org/10.1016/j.ijmultiphaseflow.2013.09.007>
- Kumar, E. A., Kumar, K. R. V., & Ramayya, A. V. (2003). Augmentation of airlift pump performance with tapered upriser pipe - An experimental study. *Journal of the Institution of Engineers (India): Mechanical Engineering Division*, 84(3), 114–119.
- Li, P. (2006). Development of Advanced Water Treatment Technology Using Microbubbles. *PhD Dissertation Keio University, Japan*, (October).
- Ligus, G., Zając, D., Masiukiewicz, M., & Anweiler, S. (2019). A New Method of Selecting the Airlift Pump Optimum Efficiency at Low Submergence Ratios with the Use of Image Analysis. *Energies*, 12(4), 735. <https://doi.org/10.3390/en12040735>
- Majid, A. I. (2014). The Interfacial Characteristic of Gas-Liquid Plug Two-Phase in a Horizontal Pipe by Using an Image Processing Technique, Yogyakarta.
- Pesco, D. U., & Jos, H. (n.d.). *Matrices and Digital Images*. 1–5.
- Sadatom, M., Kawahara, A., Matsuyama, F., & Kimura, T. (2008). an Advanced Microbubble Generator and Its Application to a Newly Developed *Bubble-Jet-Type* Air-Lift Pump. *Multiphase Science and Technology*, 19(4), 323–342. <https://doi.org/10.1615/multscientechn.v19.i4.20>
- Sadatom, M., Kawahara, A., Matsuyama, F., & Kimura, T. (2008). an Advanced Microbubble Generator and Its Application to a Newly Developed *Bubble-Jet-Type* Air-Lift Pump. *Multiphase Science and Technology*, 19(4), 323–342. <https://doi.org/10.1615/multscientechn.v19.i4.20>

- Sadatomi, M., Kawahara, A., & Nishiyama, T. (2012). Experiment and Performance Prediction of *Bubble-Jet* Type Air-Lift Pump for Dredging Sediments on Sea and Lake Beds. *Advances in Fluid Mechanics and Heat Transfer*, 311–316.
- Science, C. (2004). Alasdair McAndrew School of Computer Science and Mathematics Victoria University of Technology. *Image Processing*.
- Systems, S., Pasteur, L., & Tel, F. (n.d.). *Microbubbles Generator $U\mu BF$ model*. 33(0).
- Tighzert, H., Brahimi, M., Kechroud, N., & Benabbas, F. (2013). Effect of submergence ratio on the liquid phase velocity, efficiency and void fraction in an air-lift pump. *Journal of Petroleum Science and Engineering*, 110, 155–161. <https://doi.org/10.1016/j.petrol.2013.08.047>
- Wiratna, R. H., (2018). Studi Eksperimen Mengenai Karakteristik Distribusi Diameter dan Panjang Semburan *Microbubble* Pada *Microbubble Generator* Jenis *Orifice* Dengan Pipa *Porous*.
- Yoshinaga, T., Sato, Y. (1996). Performance of an Air-Lift Pump for Conveyong Coarse Particles. *International Journal of Multiphase Flow*, 22, 223–238.