



## **DAFTAR PUSTAKA**

- Anonim, 1999, Wastewater Technology Fact Sheet Fine Bubble Aeration, United States Environmental Protection Agency, Office of Water Washington D.C.
- Anonim, 2003, Physical Characteristics of Water (at the atmospheric pressure), from [http://www.thermexcel.com/english/tables/eau\\_atm.htm](http://www.thermexcel.com/english/tables/eau_atm.htm), 19 januari 2014.
- Chu, L.B., Xing, X.H., Yu, A.F., Sun, X.L., Jurcik, B., 2007, Enhanced Ozonation of Textile Wastewater by Microbubble, Proceedings of European Congress of Chemical Engineering (ECCE-6), Copenhagen.
- Eckenfelder, W. W., Malina Jr., J. F., Patterson, J. W., 2002, Aeration : Principles and Practice, CRC Press LLC.
- Evans, G.M. and furlong, J.C., 1988, Environmental Biotechnology, University of Durham, John Wiley and sons, Ltd.
- Fadlurrohman, P., 2013, The Effect of Bubbling Method on the Performance of Micro-bubble Generator, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta.
- Iriawan, A. G. W., 2014, The Study of Micro-bubble Generator on Aerobic Waste Water Treatment using Bio-ball Method, Based on The Bubbling Generating Condition and The Configuration of Micro-bubble Generator, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta.
- Ishikawa, M., Irabu, K., Teruya, I., Nitta, M., 2008, “PIV Measurement of a Contraction Flow Using Micro-Bubble Tracer”, Proc. Of JSMF Annual Meeting 2008, Aizu, Japan, pp. 288-289 (In Japanese).
- Jern, N.W., 2006, Industrial Wastewater Treatment, National University of Singapore, Imperial College Press.
- Kiiskinen, S., Increasing Aeration Efficiency in WWTPs of St. Petersburg, LLC Ecovod, Lisbon, Portugal.
- Kusuma, N. T. P., 2014, Pengaruh Susunan Konfigurasi Microbubble Generator Terhadap Kadar Dissolved Oxygen dan Analisis Kecenderungan Waktu



Kerja Efektif Pompa pada Sistem Pengolahan Air Limbah, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta.

Li, P., 2006, Dissertation : Development of Advanced Water Treatment Technology Using Microbubble, Keio University.

Liu, C., Tanaka, H., Ma, J., et al., Zhang, L., Zhang, J., Huang, X., dan Matsuzawa, Y., 2012, "Effect of Microbubble and Its Generation Process on Mixed Liquor properties of Activated Sludge Using Shirasu Porous Glass (SPG) Membrane System", Water Research Vol 46, pp. 6051-6058.

Masduqi, A. dan Slamet, A., 2002, Satuan Operasi untuk Pengolahan Air, Jurusan Teknik Lingkungan Fakultas Teknik Sipil dan Perencanaan, Institut Teknologi Sepuluh Nopember, Surabaya.

Mittal, A., 2011, "Biological Wastewater Treatment", Water Today-August.

Mott, Robert L., 1990, Applied Fluid Mechanics, Macmillan Publishing Company, New York.

Munson, B. R., Young, D. F., Okiishi, T. H., 2002, Mekanika Fluida, John Willey & Sons, Inc. alih bahasa penerbit Erlangga.

Nakayama, T., 2006, "Improvement of Oyster Cultivation by Micro-Bubbles" (in Japanese), session-.14, 5th Conference on Symbiotic Environmental Systems Engineering of Yamaguchi University.

Nugroho, J., 2013, IPAL Biofilter, ST IPAL BIOFILTER CV. TAQINDO KARYA : Water, Wastewater Treatment & Sanitation Specialist, from <http://www.taqindo.com/ipal-104-ipal-biofilter.html>, 23 Desember 2013.

Ohnari, H., T. Saga, K. Watanabe, K. Maeda and K. Matsuo, 1999, "High Functional Characteristics of Micro-bubbles and Water Purification", Resources Processing, Vol 46, pp. 238-244.

Ohnari, H., 2002, "Water Purification of Ocean Environment and Revival of Fisheries Cultivation Using Micro Bubble Technology", The 21st Symposium on Multiphase Flow, Nagoya, Japan.

Ohnari, H., 2007, "Micro-bubble Technology, Its Characteristics and Possibilities (in Japanese)", Journal of MMIJ Vol. 123, No.3 pp.89-96.

Parmar, R., Kuma, S., Majumder, 2013, "Micro-bubble Generation and Micro-bubble-aided transport intensification- A state-of-the-art report", Chemical Engineering and Process : Process Intensification Vol 64, pp.79-97.



Sadatomi, M., Kawahara, A., Kano, K., dan Ohtomo, A., 2005, "Performance of New Micro-bubble Generator with a Spherical Body in a Flowing Water Tube", *Experimental Thermal and Fluid Science* Vol 29, pp. 615-623.

Sadatomi, M., Kawahara, A., Matsuyama, F., dan Kimura, T., 2006, "An Advanced Micro-bubble Generator and Its Application to A Newly Developed Bubble-Jet-Type Air-Lift-Pump", 4<sup>th</sup> Japanese-European Two-Phase Flow Group Meeting Kanbaikan, Kyoto, 24-28 September, 2006.

Sadatomi, M., Kawahara, A., Matsuura, H., Shikatani, S., 2008, Micro-bubble Generation and Bubble Dissolution in Water by a Multi-fluid Mixer with Orifice and Porous tube, Kumamoto University, Japan.

Sadatomi, M., Kawahara, A., Matsuura, H., Shikatani, S., "Micro-bubble Generation Rate and Bubble Dissolution Rate Into Water by a Simple Multi-fluid Mixer with Orifice and Porous Tube", 2012, *Experimental Thermal and Fluid Science* Vol 41, pp. 23-30.

Saputra, B. R., 2013, The Effects of Micro-Bubble Generator Configuration on The Oxygen Supplying in Simulating The Wastewater Treatment, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta.

Serizawa, S., Inui, T., Eugchi, T., 2005, "Microparticle-Containing Milky Air that Rises in a Vertical Cylinder-flow Characteristics and the Phenomenon of Pseudo-Laminar Flow of Bubbles in an Aqueous System", *Konsoryu* 19, pp. 335-343.

Setiadi, T., 2008, "Pengantar Teknologi Tepat Guna Pengolahan Air Limbah", Manual Teknologi Tepat Guna Pengolahan Air Limbah, PUSTEKLIM, Yogyakarta.

Solomon, C., Casey, P., Mackne, C., and Lake, A., 1998, Fine Bubble Aeration, Environmental Technology Initiative, National Small Flows Clearinghouse.

Supriyati, Y., 2008, "Aspek Sosial (non teknis) Pembangunan IPAL Komunal", Manual teknologi tepat guna pengolahan air limbah, PUSTEKLIM, Yogyakarta.

Tanaka, N., 2008, "Pengantar Teknologi Tepat Guna Pengolahan Air Limbah", Manual teknologi tepat guna pengolahan air limbah, PUSTEKLIM, Yogyakarta.

Terasaka K., Hirabay, A., Nishino, T., Fujioka, S., dan Kobayashi, D., 2011, "Development of Microbubble Aerator for Wastewater Treatment Using Aerobic Activated Sludge", *Chemical engineering Science* Vol 66, pp. 3172-3179.



Tchobanoglous, G., Burton, F.L., Stensel, H.D., 2003, Wastewater Engineering Treatment and Reuse, 4th ed., Metcalf and Eddy, Inc., McGraw-Hill Companies, inc.

Tsuge, H., 2010, "Fundamental of Microbubbles and Nanobubbles", Bulletin of the Society of Sea Water Science Japan Vol 64, pp. 4-10.

White, Frank M., 1999, Fluid Mechanics Fourth Edition, McGraw-Hill International Edition, United States of America.

Yamasaki, K., Sakata., K., Chuhjoh, K., 2007, Water Treatment Method and Water Treatment Apparatus, US Patent, US20070114176.

Yoen, Roe-Hoan., Adel, G.T., Luttrell G.H., 1991, Process and Apparatus for Separating Fine Particle by micro-bubble Flotation Togeteher with a Process and Apparatus for Generation of Micro-bubbles, US Patent, US498158.