

## DAFTAR PUSTAKA

- Andrianto, M, 2012, A CFD Modelling on the Slug Flow Mechanism of Air-Water Two Phase Flow in A Horizontal Pipe By Using A VOF Method, Tesis, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia
- Anonym, 2012, *Image Processing Toolbox™ User's Guide R2012a*, The Mathworks, Inc., Natick MA, Amerika Serikat.
- Aundressi, P, Bendiksen, K, H. An Investigation of Void Fraction in Liquid Slugs for Horizontal and Inclined gas-liquid pipe flow, *Int. J. Multiphase Flow*, Vol. 15 (1989), No.6, pp. 937- 946.
- Baker, O., 1954, Design of Pipelines for Simultaneous Flow of Oil and Gas, *Oil and Gas J.*, pp.26.
- Bendiksen, K. H., 1984, An Experiment Investigation of The Motion of Long Bubbles in Inclined Tubes, *Int. J. Multiphase Flow*, Vol. 10, No.4, pp. 467-483.
- Dinaryanto, O., 2012, Sifat-Sifat Aliran Slug Ditinjau dari Karakteristik Lokal (Visualisasi, Liquid Hold-Up, dan Signal Processing) pada Pipa Horizontal, Tesis, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Do Amaral, C.E.F., Alves, R.F., da Silva M.J., Arruda, L.V.R., Dorini, L., Morales, R.E.M., Pipa, D.R., 2013, Image processing techniques for high-speed videometry in horizontal two-phase slug flows. *Flow Measurement and Instrumentation*, Vol. 33, pp. 257-264.
- Dukler, E. dan Hubbard, M.G., 1975, A model for gas-liquid slug flow in horizontal and near horizontal tubes. *Ind. Eng. Chem. Fundam.*, Vol 14, n.4, pp.377-347
- Fagundes Netto, J.R., Fabre, J., Peresson, L., 1999, Shape of long bubbles in horizontal slug flow, *International Journal of Multiphase Flow*, No. 25, pp 1129-1160.

- Fukano, T., 1998, Measurement of Time Varying Thickness of Liquid Film Flowing with High Speed Gas Flow by a Constant Electric Current Method (CECM), *Nuclear Engineering and Design*, Vol. 184, pp 363-377.
- Franca, F. and Lahey Jr., R.T., 1992. The Use of Drift-Flux Techniques for The Analysis of Horizontal Two-Phase Flows. *Int. J. Multiphase Flow*, Vol 18, No.6, pp. 787-801.
- Gregory, G.A., Nicholson, M.K. dan Aziz, K., 1978. Correlation of Liquid Volume Fraction in Slug for Horizontal Gas Liquid Slug Flow. *International Journal of Multiphase Flow*, Vol. 4, pp. 33-39.
- Gregory, G., Scott, D., 1969. Correlation of liquid slug velocity and frequency in horizontal co-current gas-liquid slug flow. *AIChE J.* 15 (6), 933-935
- Gonzalez, R.C. dan Woods, R.E., 2002, *Digital Image Processing*, Edisi 2, Prentice Hall, Inc., New Jersey, Amerika Serikat
- Gopal, M. Dan Jepson, W.P., 1997, Development of Digital Image Analysis Techniques for the Study of Velocity and Void Profile in Slug Flow, *Int. J. of Multiphase Flow*, Vol. 23, No. 5, pp. 945-965.
- Greskovich, E.J, Shrier, A.L, 1972, Slug Frequency in Horizontal Gas-Liquid Flow. *Ind. Eng. Chem. Process Des. Develop.* 11 No 2, pp. 317-318
- Hetsroni, G., 1982. *Handbook of Multiphase Systems*. New York : McGraw-Hill Book Company
- Heywood, N.I, Richardson, J,F, 1979, Slug Flow of Air—Water Mixtures in A Horizontal Pipe: Determination of Liquid Holdup by Y-ray Absorption, *Chemical Engineering Science*, pp 17-30
- Kuntoro, H.Y., 2014, *The Implementation of Image Processing Technique to Determine The Interfacial Behavior of Gas-Liquid Wavy Two-Phase Flow in A Horizontal Pipe*, Skipsi, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Lin, P.Y. and Hanratty, T.J., 1987, Effect of Pipe Diameter on Flow Patterns for Air-Water Flow in Horizontal Pipes, *Int. J. Multiphase Flow*, Vol. 13, No. 4, pp. 549-563.

- Majid, A.I., 2013, *The Study of Plug Flow Characteristics of Gas-Liquid Two Phase Flow in A Horizontal Pipe by Using An Image Processing Technique*, Proceeding Seminar Nasional Tahunan Teknik Mesin XII (SNTTM XII).
- Majid, A.I., 2014, *The Interfacial Characteristics of Gas Liquid Plug Two-Phase Flow In A Horizontal Pipe By Using An Image Processing Technique*, Skripsi, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Mandhane, J.M., Gregory, G.A., Aziz, K., 1974, A Flow Pattern Map For Gas Liquid Flow In Horizontal And Inclined Pipes. *Int. J. of Multiphase Flow*, Vol. 1, pp. 537-553
- Mayor, T.S. 2007. *Hydrodynamics of gas-liquid flows in Slug Flow Regime*, Disertasi, Faculdade de Engenharia Universidade do Porto, Porto, Portugal.
- Mayor, T.S., Pinto, A.M.F.R., Campos, J.B.L.M., 2007, An image analysis technique for the study of gas-liquid slug flow along vertical pipes – associated uncertainty, *Flow Measurement and Instrumentation*, Vol 18, pp. 139-147.
- McAndrew, A., 2004, An Introduction of Image Processing by MATLAB, Notes for SCM2511 Image Processing 1, School of Computer Science and Mathematics Victoria University of Technology, Melbourne, Australia.
- Montoya, G.A., Deendarlianto, Lucas, D., Hohne, T., Vallee, C., 2012. Image Processing Based Study of Interfacial Behavior of the Countercurrent GasLiquid Two-Phase Flow in Hot Leg of a PWR. *Science and Technology of Nuclear Installation*, Vol. 2012, pp. 1-10.
- Morales, R.E.M. ; M. J. da Silva; E. N. Santos; L. Dorini; C. E. F. do Amaral; R. F. Alves. 2011. Image Analysis of Horizontal Two Phase Slug Flows. *ASME*. 54921; *Volume 6: Fluids and Thermal Systems*; Advances for Process Industries, pp 671-677
- Nicklin, D.J., Wilkes, J. and Davidson, J.F., 1962. Two-phase Flow in Vertical Tubs. *Trans. Inst. Chem. Engng*, Vol.40, pp61-68.

- Polonsky, S., Shemer, L., Barnea, D., 1999, The Relation Between Taylor Bubble Motion and Velocity Field Ahead of It. *International Journal of Multiphase Flow*, Vol. 25, pp. 957-975.
- Prawisnugraha, D, 2012, Karakteristik Aliran Slug Air-Udara Searah Pada Pipa Horizontal dengan Metode Visualisasi, Skripsi, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Pujara, M.P, Kumar, L., Mogra, A., 2013, Two Phase Flow Void Fraction Measurement Using Image Processing Technique, *International Journal of Mechanical Engineering and Technology*, Vol.4, Issue 3, pp. 130-135.
- Rosa, E.S., 2004. Flow Structure in the Horizontal Slug Flow. *Engenharia Termica (Thermal Engineering)*, Vol. 3, No. 2, pp. 151-160
- Santoso, B, 2013, Pendeteksian Pola Aliran Dan Kebocoran Pipa Pada Aliran Dua Fase Air-udara Menggunakan Jaringan Syaraf Tiruan (Artificial Neural Network). Disertasi, Jurusan Teknik Mesin dan Industri, Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Taitel, Y. and Dukler, A. E., 1976. A Model for Predicting Flow Regime Transitions in Horizontal and Near Horizontal Gas-Liquid Flow. *AIChE Journal*, Vol. 22, No. 1, pp. 47-55.
- Van Hout, R., Barnea, D., Shemer, L., 2002, Translational velocities of elongated bubbles in continuous slug flow, *International Journal of Multiphase Flow*, Vol. 28, pp. 1333-1350.
- Wallis, G.B., 1969, *One-dimensional Two-Phase Flow*, McGraw-Hill, United States of America.