



## DAFTAR PUSTAKA

- Arias, S., dan González-Cinca, R. (2016). Analysis of the characteristic lengths in the bubble and *slug* flow regimes generated in a capillary T-junction. International Journal of Multiphase Flow, 87, 167-174.
- Barnea, D., Luninski, Y., & Taitel, Y. (1983). Flow pattern in horizontal and vertical two phase flow in small diameter pipes. Canadian Journal of Chemical Engineering, 61, 617-620.
- Chung, P.M., & Kawaji, M. (2004). The effect of channel diameter on adiabatic two-phase flow characteristics in microchannels ☆. International Journal of Multiphase Flow, 30, 735-761.
- Coleman, J.W., & Garimella, S.S. (1999). Characterization of two-phase flow patterns in small diameter round and rectangular tubes. International Journal of Heat and Mass Transfer, 42, 2869-2881
- Dukler, A.E., & Hubbard, M.G. (1975). A Model for Gas-Liquid *Slug* Flow in Horizontal and Near Horizontal Tubes. Industrial & Engineering Chemistry Fundamentals, 14, 337-347.
- Elazhary, A., & Soliman, H.M. (2012). Two-phase flow in a horizontal mini-size impacting T-junction with a rectangular cross-section. International Journal of Multiphase Flow, 42, 104-114.
- Fukano, T., & Kariyasaki, A. (1993). Characteristics of gas-liquid two-phase flow in a capillary tube. Nuclear Engineering and Design, 141, 59-68.
- Ho, C. M., & Tai, Y. C. (1998). Micro-electro-mechanical-systems (MEMS) and fluid flows. Annual review of fluid mechanics, 30(1), 579-612.
- Humami, F., Dinaryanto, O., Hudaya, A.Z., Widyatama, A., Indarto, & Deendarlianto (2018). Experimental study on the characteristics of flow pattern transitions of air-water two-phase flow in a horizontal pipe.
- Kandlikar, S.G., & Grande, W.J. (2002). Evolution of microchannel flow passages – Thermohydraulic performance and fabrication technology. Taylor and Francis, 24.
- Kawahara, A., Chung, P.M., & Kawaji, M. (2002). Investigation of two-phase flow pattern, void fraction and pressure drop in a microchannel. International Journal of Multiphase Flow, 28, 1411-1435.



- Majumder, A., & Majumder, S. (2015). Effect of Corner Radius of a T-junction Mini-square Channel on Fluid Flow and Heat Transfer in the Developing Region: A Three Dimensional Numerical Simulation. *Procedia Engineering*, 105, 89-95.
- Mandhane, J.M., Gregory, G.A., & Aziz, K. (1974). A flow pattern map for gas—liquid flow in horizontal pipes. *International Journal of Multiphase Flow*, 1, 537-553.
- McAndrew, A. (2015). *A Computational Introduction to Digital Image Processing*.
- Nayak, R., Lobo, O.J., Chatterjee, D., & Das, S. (2018). Effect of geometrical parameters on *slug* behavior and two phase pressure drop in microchannel T-junctions. *Chemical Engineering and Processing*, 130, 76-87.
- Qian, D., & Lawal, A. (2006). Numerical study on gas and liquid *slugs* for Taylor flow in a T-junction microchannel. *Chemical Engineering Science*, 61, 7609-7625.
- Santos, R.M., & Kawaji, M. (2010). Numerical modeling and experimental investigation of gas—liquid *slug* formation in a microchannel T-junction. *International Journal of Multiphase Flow*, 36, 314-323.
- Sudarja, Haq, A., Deendarlianto, Indarto, & Widjaparaga, A. (2018). Experimental study on the flow pattern and pressure gradient of air-water two-phase flow in a horizontal circular mini-channel. *Journal of Hydrodynamics*, 31, 102-116.
- Suo, M., & Griffith, P. (1964). Two phase flow in capillary tubes. *Journal of Basic Engineering*, 86, 576-582.
- Taitel, Y., & Dukler, A.E. (1976). A model for predicting flow regime transitions in horizontal and near horizontal gas-liquid flow. *Aiche Journal*, 22, 47-55.
- Triplett, K.A., Ghiaasiaan, S.M., Abdel-Khalik, S.I., & Sadowski, D.L. (1999). Gas—liquid two-phase flow in microchannels Part I: two-phase flow patterns. *International Journal of Multiphase Flow*, 25, 377-394.
- Ujang, P.M., Lawrence, C.J., Hale, C.P., & Hewitt, G.F. (2006). *Slug* initiation and evolution in two-phase horizontal flow. *International Journal of Multiphase Flow*, 32, 527-552.
- Wallis, G.B. (1969). *One Dimensional Two-Phase Flow*.
- Weisman, J., Duncan, D., Gibson, J., & Crawford, T.J. (1979). Effects of fluid properties and pipe diameter on two-phase flow patterns in horizontal lines. *International Journal of Multiphase Flow*, 5, 437-462.



UNIVERSITAS  
GADJAH MADA

Studi Eksperimental Mengenai Karakteristik Aliran Slug di Downstream T-junction Minichannel

Horizontal Dengan Radius Belokan 0,7 DH

CALISTA ANJANI D, Prof. Dr. Ir. Indarto, DEA, IPM, ASEAN Eng.

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Widyatama, A., Dinaryanto, O., Indarto, & Deendarlianto (2018). The development of image processing technique to study the interfacial behavior of air-water *slug* two-phase flow in horizontal pipes. *Flow Measurement and Instrumentation*, 59, 168-180.

Yamamoto, K., & Ogata, S. (2013). Effects of T-junction size on bubble generation and flow instability for two-phase flows in circular microchannels. *International Journal of Multiphase Flow*, 49, 24-30.

Yang, C., & Shieh, C. (2001). Flow pattern of air–water and two-phase R-134a in small circular tubes. *International Journal of Multiphase Flow*, 27, 1163-117