

## DAFTAR PUSTAKA

- [1] Sekretariat Jenderal Dewan Energi Nasional, *Outlook Energi Indonesia 2019*. Sekretariat Jendral Dewan Energi Nasional, 2019.
- [2] Pemerintah Indonesia, *Peraturan Pemerintah Republik Indonesia No. 79 Tahun 2014 tentang Kebijakan Energi Nasional*. Jakarta: Lembaran Negara Republik Indonesia, 2014.
- [3] Pusat Sumber Daya Mineral Batu Bara dan Panas Bumi, *Pemutakhiran Basis Data dan Sumber Daya Panas Bumi Status 2019*. Kementerian Energi dan Sumber Daya Mineral, 2019.
- [4] A. D. P. Putera, A. N. Hidayah, dan A. Subiantoro, “Thermo-Economic Analysis of A Geothermal Binary Power Plant in Indonesia — A Pre-feasibility Case Study of the Wayang Windu Site,” *Energies* 2019, vol. 12, no. 4269, pp. 1–18, 2019.
- [5] A. Poernomo, S. Satar, P. Effendi, A. Kusuma, T. Azimudin, dan S. Sudarwo, “An Overview of Indonesia Geothermal Development – Current Status and Its Challenges,” *Proc. World Geotherm. Congr.*, Melbourne, Australia, Apr. 2015.
- [6] H. Nazif, P. Valdimarsson, dan S. Thòrhallsson, “Developing Choices for Optimal Binary Power Plants in the Existing Geothermal Production Areas in Indonesia,” *Proc. World Geotherm. Congr. 2015*, Melbourne, Australia, Apr, 2015.
- [7] Y. D. Cahyono, “The Assessment of Steam Above Ground System of Unit-1 and Unit-2 Ulubelu Geothermal Field, Indonesia, After 5 Years of Operation,” United Nation University, Reykjavik, Iceland, Rep. 8, 2017.
- [8] A. Mahmoudi, M. Fazli, dan M. R. Morad, “A recent review of waste heat recovery by Organic Rankine Cycle,” *Appl. Therm. Eng.*, vol. 143, pp. 660–675, 2018.
- [9] S. Frick, S. Kranz, G. Kupfermann, A. Saadat, dan E. Huenges, “Making use of geothermal brine in Indonesia: binary demonstration power plant Lahendong/Pangolombian,” *Geotherm. Energy*, vol. 7, no. 1, pp. 1–19, 2019.
- [10] V. Orlandini, “Waste heat recovery systems: numerical and experimental analysis of organic Rankine cycle solutions,” Ph.D. thesis, Dept. Ind. Eng., University of Bologna, Bologna, Italy, 2017.
- [11] A. Franco dan M. Vaccaro, “Recent trends in the development of heat exchangers for geothermal systems,” *J. Phys. Conf. Ser.*, vol. 923, p. 12044, 2017.
- [12] L. Taylor, S. Siwach, dan S. Krumdieck, “Impact of Organic Rankine Cycle Working Fluid Selection on Heat Exchanger Design and Cost,” *Proc. 36th New Zealand Geotherm. Workshop*. Auckland, New Zealand, Nov. 2014.

- [13] N. H. Mohd Razif, N. H. Kamaruddin, A. M. I. Bin Mamat, dan W. A. N. W. Mohamed, "Characteristic of ORC finned - Tube condenser design using ammonia-water mixture," *ARPJ. Eng. Appl. Sci.*, vol. 11, no. 12, pp. 7463–7469, 2016.
- [14] D. Walraven, B. Laenen, dan W. D'haeseleer, "Economic system optimization of air-cooled organic Rankine cycles powered by low-temperature geothermal heat sources," *Energy*, vol. 80(C), pp. 104–113, Des. 2015.
- [15] Kementerian Negara dan Lingkungan Hidup, *Peraturan Menteri Negara Lingkungan Hidup No. 08 Tahun 2009 tentang Baku Mutu Air Limbah Bagi Usaha dan/atau Kegiatan Pembangkit Listrik Tenaga Termal*. Kementerian Negara dan Lingkungan Hidup, 2009.
- [16] C. Liu, C. He, H. Gao, X. Xu, dan J. Xu, "The optimal evaporation temperature of subcritical ORC based on second law efficiency for waste heat recovery," *Entropy*, vol. 14, no. 3, pp. 491–504, 2012.
- [17] Darmawi dan R. H. Malau, "Geothermal Energy Utilization and Environment Impact Prevention on Single Flash Steam Cycle System Case Study: PLTP Ulubelu - Lampung," *Int. J. Sci. Res.*, vol. 7, no. 7, pp. 120–124, 2018.
- [18] Nasruddin dkk., "Potential of geothermal energy for electricity generation in Indonesia: A review," *Renew. Sustain. Energy Rev.*, vol. 53, no. 2016, pp. 733–740, 2016.
- [19] R. DiPippo, *Geothermal power plants: Principles, Applications, Case Studies and Environmental Impact Fourth Edition*. Waltham, MA, USA: Elsevier Ltd., 2016.
- [20] M. Z. Alfathan, "Perancangan Awal Sistem Siklus Rankine Organik pada PLTP Lahendong Unit 3, Studi Kasus Penukar Kalor Rekuperator dan Kondensor," Skripsi, Dept. Teknik Nuklir dan Teknik Fisika, Universitas Gadjah Mada, Yogyakarta, Indonesia, 2018.
- [21] H. Supriyanto, "Perancangan Sistem Siklus Rankine Organik Dua Tingkat pada PLTP PT. Geo Dipa Energi Unit Dieng, Studi Kasus : Evaporator dan Rekuperator Tingkat 2," Skripsi, Dept. Teknik Nuklir dan Teknik Fisika, Universitas Gadjah Mada, Yogyakarta, Indonesia, 2019.
- [22] J. Bao dan L. Zhao, "A review of working fluid and expander selections for organic Rankine cycle," *Renew. Sustain. Energy Rev.*, vol. 24, pp. 325–342, 2013.
- [23] K. Thurairaja, A. Wijewardane, S. Jayasekara, and C. Ranasinghe, "Working fluid selection and performance evaluation of ORC," *Energy Procedia*, vol. 156, pp. 244–248, 2019.

- [24] S. Douvartzides dan I. Karmalis, "Working fluid selection for the Organic Rankine Cycle (ORC) exhaust heat recovery of an internal combustion engine power plant," *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 161, p. 12087, 2016.
- [25] K. Thulukkanam, *Heat Exchanger Design Handbook, Second Edition*. Boca Raton, FL, USA: CRC Press 2013.
- [26] P. Herlambang, "Analisis Desain Kondensor pada Pemanfaatan Kalor Buang Mesin Diesel Berbasis Siklus Rankine Organik," Skripsi, Dept. Teknik Nuklir dan Teknik Fisika, Universitas Gadjah Mada, Yogyakarta, Indonesia, 2019.
- [27] Turboden, "ORC Units for Geothermal Application." [Daring]. Tersedia di: <https://www.turboden.com/solutions/1052/geothermal>. [Diakses: 21-Jul-2020]
- [28] Enertime, "ORC Machines." [Daring]. Available: <https://www.enertime.com/en/products/orc-machines>. [Diakses: 21-Jul-2020]
- [29] W. E. Glassley, *Geothermal Energy: Renewable Energy and the Environment, Second Edition*. Boca Raton, FL, USA: CRC Press, 2015.
- [30] M. J. Moran, H. N. Shapiro, D. D. Boettner, dan M. B. Bailey, *Fundamentals of Engineering Thermodynamics, 9th Edition*. John Wiley & Sons, Inc, 2018.
- [31] K. Darvish, M. A. Ehyaei, F. Atabi, dan M. A. Rosen, "Selection of optimum working fluid for organic rankine cycles by exergy and exergy-economic analyses," *Sustain.*, vol. 7, no. 11, pp. 15362–15383, 2015.
- [32] G. Li, "Organic Rankine cycle performance evaluation and thermoeconomic assessment with various applications part I: Energy and exergy performance evaluation," *Renew. Sustain. Energy Rev.*, vol. 53, pp. 477–499, 2016.
- [33] The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), "ANSI/ASHRAE Standard 34-2016, Designation and Safety Classification of Refrigerants." [Daring]. Tersedia di: <https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-addenda/addenda-to-standard-34-2016>. [Diakses: 05-Jul-2020]
- [34] D. Luo, A. Mahmoud, dan F. Cogswell, "Evaluation of Low-GWP fluids for power generation with Organic Rankine Cycle," *Energy*, vol. 85, pp. 481–488, 2015.
- [35] R. Sinnott dan G. Towler, *Coulson and Richardson's Chemical Engineering Series: Chemical Engineering Design, Sixth Edition*. Oxford, UK: Elsevier Ltd., 2020.
- [36] Y. A. Çengel dan A. J. Ghajar, *Heat and Mass Transfer: Fundamentals and Application, Fifth Edition*. New York: McGraw-Hill Education, 2015.

- [37] A. M. Flynn, T. Akashige, dan L. Theodore, *Kern's Process Heat Transfer, Second Edition*. Beverly, MA, USA: Scrivener Publishing, 2019.
- [38] National Programme on Technology Enhanced Learning, "Lecture 1: Heat Exchangers Classifications," *Chem. Eng. Des. - II*, pp. 1–41, 2006.
- [39] J. P. Holman dan J. Lloyd, *Heat Transfer, Tenth Edition*. New York: McGraw-Hill Education, 2010.
- [40] TU-Delft, *Cycle Tempo: Introduction*. Dokumen teknis, Delft University of Technology, 2007.
- [41] S. K. Bhatti, C. M. Krishna, C. Vundru, M. L. Neelapu, dan I. N. N. Kumar, "Estimating number of shells and determining the log mean temperature difference correction factor of shell and tube heat exchangers," *WIT Trans. Eng. Sci.*, vol. 53, pp. 323–335, 2006.
- [42] Tubular Exchanger Manufacturers Association (TEMA), *Standards of The Tubular Exchanger Manufacturers Association, Tenth Edition*. Tubular Exchanger Manufacturers Association Inc., 2019.
- [43] Turboden, *Organic Rankine Cycle Technology*. Dokumen teknis, Turboden Inc., 2016.