

DAFTAR PUSTAKA

- [1] N. A. Pambudi, “Geothermal Power Generation in Indonesia, A Country Within The Ring of Fire : Current Status, Future Development and Policy,” *Renew. Sustain. Energy Rev.*, vol. 81, no. June 2017, pp. 2893–2901, 2018.
- [2] Indonesia, *Peraturan Pemerintah Republik Indonesia No. 79 Tahun 2004 tentang Kebijakan Energi Nasional*. Jakarta: Lembaran Negara Republik Indonesia, 2014.
- [3] A. D. P. Putera, A. N. Hidayah, and 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.
- [4] H. Nazif, P. Valdimarsson, and S. Thórhallsson, “Developing Choices for Optimal Binary Power Plants in The Existing Geothermal Production Areas in Indonesia,” *Proc. World Geotherm. Congr. 2015*, no. April, 2015.
- [5] I. Bogie, Y. Indra, and M. C. Wisnandary, “Overview of the Wayang Windu Geothermal Field , West Java , Indonesia,” *Geothermics*, vol. 37, pp. 347–365, 2008.
- [6] L. A. Prananto, I. N. Zaini, B. I. Mahendrata, F. B. Juangsa, M. Aziz, and T. A. F. Soelaiman, “Use of the Kalina cycle as a bottoming cycle in a geothermal power plant : Case study of the Wayang Windu geothermal power plant,” *Appl. Therm. Eng.*, vol. 132, pp. 686–696, 2018.
- [7] Kementerian Energi dan Sumber Daya Mineral, “Rencana Umum Ketenagalistrikan Nasional 2019 - 2038,” Jakarta, 2019.
- [8] M. N. Karimi, A. Dutta, A. Kaushik, H. Bansal, and S. Z. Haque, “A Review of Organic Rankie, Kalina and Goswami Cycle,” *Int. J. Eng. Technol. Manag. Appl. Sci.*, vol. 3, pp. 80–105, 2015.
- [9] A. Nemati, H. Nami, F. Ranjbar, and M. Yari, “A Comparative Thermodynamic Analysis of ORC and Kalina Cycles for Waste Heat Recovery : A Case Study for CGAM Cogeneration System,” *Case Stud.*

- Therm. Eng.*, vol. 9, no. November 2016, pp. 1–13, 2017.
- [10] I. K. Smith, N. Stosic, and A. Kovacevic, “Modelling and Performance Calculation of Screw Expanders,” in *Power Recovery from Low Grade Heat by Means of Screw Expanders*, Chandos Publishing, 2014, pp. 59–91.
- [11] S. Lecompte, H. Huisseune, M. Van Den Broek, B. Vanslambrouck, and M. De Paepe, “Review of Organic Rankine Cycle (ORC) Architectures for Waste Heat Recovery,” *Renew. Sustain. Energy Rev.*, vol. 47, pp. 448–461, 2015.
- [12] T. Tartière and M. Astolfi, “A World Overview of the Organic Rankine Cycle Market,” *Energy Procedia*, vol. 129, pp. 2–9, 2017.
- [13] P. Colonna *et al.*, “Organic Rankine Cycle Power Systems: From the Concept to Current Technology , Applications , and an Outlook to the Future,” vol. 137, no. October, pp. 1–19, 2015.
- [14] Suyanto, T. Surana, J. P. Atmojo, and B. T. Prasetyo, “Design of a Geothermal Energy Dryer for Tea Withering and Drying in Wayang Windu Geothermal Field,” *Proc. World Geotherm. Congr. 2010*, 2010.
- [15] R. M. Prasetyo, A. Wicaksono, M. K. Biddinika, and F. Takahashi, “Study of Geothermal Direct Use for Coffee Drying at Wayang Windu Geothermal Field,” *AIP Conf. Proc.*, 2018.
- [16] P. Bombarda, C. M. Invernizzi, and C. Pietra, “Heat recovery from Diesel engines : A thermodynamic comparison between Kalina and ORC cycles,” *Appl. Therm. Eng.*, vol. 30, no. 2–3, pp. 212–219, 2010.
- [17] V. Zare and S. M. S. Mahmoudi, “A thermodynamic comparison between organic Rankine and Kalina cycles for waste heat recovery from the Gas Turbine-Modular Helium Reactor,” *Energy*, vol. 79, pp. 398–406, 2015.
- [18] E. Gholamian and V. Zare, “A comparative thermodynamic investigation with environmental analysis of SOFC waste heat to power conversion employing Kalina and Organic Rankine Cycles,” *Energy Convers. Manag.*, vol. 117, pp. 150–161, 2016.
- [19] E. B. L. Ksayer, “Design of an ORC System Operating with Solar Heat and Producing Sanitary Hot Water,” *Energy Procedia*, vol. 6, pp. 389–395, 2011.

- [20] A. Mahmoudi, M. Fazli, and M. R. Morad, "A recent review of waste heat recovery by Organic Rankine Cycle," *Appl. Therm. Eng.*, vol. 143, no. July, pp. 660–675, 2018.
- [21] S. Lion, R. Taccani, I. Vlaskos, P. Scrocco, X. Vouvakos, and L. Kaiktsis, "Thermodynamic analysis of waste heat recovery using Organic Rankine Cycle (ORC) for a two-stroke low speed marine Diesel engine in IMO Tier II and Tier III operation," *Energy*, vol. 183, pp. 48–60, 2019.
- [22] D. Hu, S. Li, Y. Zheng, J. Wang, and Y. Dai, "Preliminary design and off-design performance analysis of an Organic Rankine Cycle for geothermal sources," *Energy Convers. Manag.*, vol. 96, pp. 175–187, 2015.
- [23] M. Z. Alfathan, "Perancangan Awal Sistem Siklus Rankine Organik Pada PLTP Lahendong Unit 3, Studi Kasus Penukar Kalor Rekuperator dan Kondensor," Universitas Gadjah Mada, 2017.
- [24] L. Branchini, A. De Pascale, and A. Peretto, "Systematic comparison of ORC configurations by means of comprehensive performance indexes," vol. 61, 2013.
- [25] H. Yu, X. Feng, and Y. Wang, "Working Fluid Selection for Organic Rankine Cycle (ORC) Considering the Characteristics of Waste Heat Sources," *Ind. Eng. Chem. Res.*, vol. 55, no. 5, pp. 1309–1321, 2016.
- [26] H. Chen, D. Y. Goswami, and E. K. Stefanakos, "A Review of Thermodynamic Cycles and Working Fluids for The Conversion of Low-Grade Heat," *Renew. Sustain. Energy Rev.*, vol. 14, pp. 3059–3067, 2010.
- [27] Q. Liu, Y. Duan, and Z. Yang, "Performance analyses of geothermal organic Rankine cycles with selected hydrocarbon working fluids," *Energy*, vol. 63, pp. 123–132, 2013.
- [28] Z. Q. Wang, N. J. Zhou, and J. Guo, "Fluid Selection and Parametric Optimization of Organic Rankine Cycle using Low Temperature Waste Heat," *Energy*, vol. 40, no. 1, pp. 107–115, 2012.
- [29] Turboden, "ORC Units for Geothermal Application." [Online]. Available: <https://www.turboden.com/solutions/1052/geothermal>. [Accessed: 08-Jul-2020].

- [30] Enertime, “ORC Machines.” [Online]. Available: <https://www.enertime.com/en/products/orc-machines>. [Accessed: 08-Jul-2020].
- [31] S. G. Power, “PureCycle Model 280 ORC.” [Online]. Available: <http://www.sumecgeopower.com/en/79/technology/micro-orc-anlagen>. [Accessed: 09-Jul-2020].
- [32] J. Twidell and T. Weir, “Geothermal energy,” in *Renewable Energy Resources*, Third Edit., New York: Routledge, 2015.
- [33] R. Dipippo, *Geothermal Power Plants : Principles , Applications , Case Studies and Environmental Impact Third Edition*, Thirs Edit. North Darmouth, Massachussets: Elsevier Ltd, 2012.
- [34] M. H. Purnanto and A. Purwakusumah, “Fifteen Years (Mid-Life Time) of Wayang Windu Geothermal Power Station Unit-1 : An Operational Review,” *Proc. Clima 2007 WellBeing Indoors*, no. April, 2015.
- [35] N. Yamaguchi, “Design of Wayang Windu Unit 2 Geothermal Power Station,” *Proc. World Geotherm. Congr. 2010*, 2010.
- [36] H. Murakami, Y. Kato, and N. Akutsu, “Construction of The Largest Geothermal Power Plant for Wayang Windu Project, Indonesia,” *Proc. World Geotherm. Congr. 2000*, 2000.
- [37] M. J. Moran, M. B. Bailey, and H. N. Saphiro, *Fundamentals of Engineering Thermodynamics*, 9th Editio. Wiley Publishing, 2018.
- [38] ASHRAE, “Designation and Safety Classification of Refrigerants,” 2018. [Online]. Available: https://www.ashrae.org/File_Library/Technical_Resources/Standards_and_Guidelines/Standards_Addenda/34_2016_g_20180628.pdf. [Accessed: 14-Jan-2020].
- [39] H. Francke and M. Thorade, “Density and viscosity of brine: An overview from a process engineers perspective.,” *Geochemistry*, vol. 70, pp. 23–32, 2010.
- [40] A. B. Abrenica, A. Harijoko, Y. I. Kusumah, and I. Bogie, “Characteristics of Hydrothermal Alteration in Part of the Northern Vapor-Dominated Reservoir of the Wayang Windu Geothermal Field, West Java,” *Proc. World*

- Geotherm. Congr.*, 2010.
- [41] G. Towler and R. Sinnott, *Chemical Engineering Design: Principles, Practice and Economics of Plant and Process Design*, 2nd editio. Elsevier Ltd, 2012.
- [42] A. Al, A. Daabo, R. K. Al-dadah, S. Mahmoud, and A. Bahr, “Development of micro-scale axial and radial turbines for low-temperature heat source driven organic Rankine cycle,” *Energy Convers. Manag.*, vol. 130, pp. 141–155, 2016.
- [43] S. Clemente, D. Micheli, M. Reini, and R. Taccani, “Bottoming organic Rankine cycle for a small scale gas turbine: A comparison of different solutions,” *Appl. Energy*, vol. 106, pp. 355–364, 2013.
- [44] J. M. Campbell, *Gas Conditioning and Processing, Volume 2: The Equipment Modules*, 9th ed. Norman, Oklahoma: Campbell Petroleum Series, 2014.
- [45] E. Macchi and M. Astolfi, *Organic Rankine Cycle (ORC) Power Systems: Technologies and Applications*. Duxford, United Kingdom: Woodhead Publishing, 2016.
- [46] Y. Yuxin, Z. Hongguang, T. Guohong, X. U. Yonghong, W. Chongyao, and G. Jianbing, “Performance Analysis of a Multistage Centrifugal Pump Used in an Organic Rankine Cycle (ORC) System under Various Condensation Conditions,” *J. Therm. Sci.*, vol. 28, no. 4, pp. 621–634, 2019.
- [47] F. A. Kulacki, V. K. Dhir, and M. P. Mengüç, “Heat Transfer Equipment,” in *Handbook of Thermal Science and Engineering*, Switzerland: Springer, 2018, pp. 1293–1609.
- [48] J. P. Holman, *Heat Transfer*, Tenth Edit. New York: McGraw-Hill, 2010.
- [49] B. Fu, Y. Lee, and J. Hsieh, “Design , construction , and preliminary results of a 250-kW organic Rankine cycle system,” *Appl. Therm. Eng.*, vol. 80, pp. 339–346, 2015.
- [50] A. K. Coker, *Ludwig’s Applied Process Design for Chemical and Petrochemical Plants*. 2015.
- [51] R. K. Sinnot, *Coulson & Richardson’s Chemical Engineering Series:*

Chemical Engineering Design, Fourth edi. Elsevier, 2005.

- [52] TEMA (Tubular Exchanger Manufacturers Association), *Standards of The Tubular Exchanger Manufacturers Association*, 9th editio. Tarrytown, New York, 2007.
- [53] W. Roetzel, X. Luo, and D. Chen, “Basic Thermal Design Theory for Heat Exchangers,” in *Design and Operation of Heat Exchangers and their Networks*, Academic Press, 2020, pp. 13–69.
- [54] D. Taler, “Prediction of heat transfer correlations for compact heat exchangers,” *Forsch. im Ingenieurwes.*, vol. 69, pp. 137–150, 2005.
- [55] A. Fakheri, “Heat Exchanger Efficiency,” *J. Heat Transfer*, vol. 129, no. 9, pp. 1268–1276, 2007.
- [56] Q. Liu, Y. Duan, and Z. Yang, “Performance analyses of geothermal organic Rankine cycles with selected hydrocarbon working fluids,” *Energy*, vol. 63, pp. 123–132, 2013.
- [57] S. L. Phillips, J. A. Fair, H. Ozbek, and M. Tavana, *A Technical Databook for Geothermal Energy Utilization*. 1981.
- [58] R. Wang, G. Kuang, L. Zhu, and S. Wang, “Experimental Investigation of a 300 kW Organic Rankine Cycle Unit with Radial Turbine for Low-Grade Waste Heat Recovery,” *Entropy*, 2019.
- [59] The Weather Channel, “Cuaca Pangalengan.” [Online]. Available: <https://weather.com/id-ID/cuaca/10hari/l/Pangalengan+Indonesia+IDXX1211:1:ID>.