



## DAFTAR PUSTAKA

- [1] M. Muchlis and A. D. Permana, “Proyeksi Kebutuhan Listrik PLN Tahun 2003 s.d 2020,” p. 11, 2003.
- [2] Indonesia International Geothermal & Exhibition, “Pemerintah Berupaya Kembangkan Energi Panas Bumi | IIGCE2017,” 2016. [Online], dalam: <http://www.iigce.com/>. [diakses: 12 April 2018].
- [3] G. Kurniawan, “Pemanfaatan Panas Bumi (Geothermal) di Indonesia,” *Kompasiana*, 2013. [Online], dalam: <https://www.kompasiana.com/>. [diakses: 12 April 2018].
- [4] A. Rettig, M. Lagler, T. Lamare, S. Li, V. Mahadea, S. McCallion, and J. Chernushevich., “Application of Organic Rankine Cycles (ORC),” World Engineers Convention, Geneva, 2011.
- [5] I. Vankeirsbilck, B. Vanslambrouck, S. Gusev, and M. D. Paepe, “Organic Rankine Cycle as Efficient Alternative to Steam Cycle for Small Scale Power Generation,” p. 8.
- [6] F. Campana and J. Bonafin, “Turboden Geothermal Applications,” Mitsubishi Heavy Industries, LTD, 2013.
- [7] A. M. Al Jubori, R. K. Al-Dadah, S. Mahmoud, and A. Daabo, “Modelling and parametric analysis of small-scale axial and radial-outflow turbines for Organic Rankine Cycle applications,” *Appl. Energy*, vol. 190, pp. 981–996, Mar. 2017,
- [8] I. P. Generation, “PLTP Lahendong - PLN & Pertamina Geothermal Energy.” [Online], dalam: <https://repit.wordpress.com/>. [diakses: 12 April 2018].
- [9] Sekolah Tinggi Teknologi Nasional, “Geothermal Lahendong Sulawesi Utara,” p. 35, 2016.
- [10] S. Frick, A. Saadat, T. Surana, E.E. Siahaan, G.A. Kupfermann, K. Erbas, E. Huenges, and M.A. Gani, “Geothermal Binary Power Plant for Lahendong, Indonesia: A German-Indonesian Collaboration Project,”, *Proc. World Geothermal Congress*, pp. 1.1-5, 2015.
- [11] A. J. Nugroho, “Evaluation Of Waste Brine Utilization From LHD UNIT III For Electricity Generation in Lahendong Geothermal Field, Indonesia,”, Reykjavik, p. 25, 2007.



- [12] S. Douvartzides and I. Karmalis, “Working Fluid Selection For The Organic Rankine Cycle (ORC) Exhaust Heat Recovery of an Internal Combustion Engine Power Plant,” presented at the Materials Science and Engineering Conference Series, 2016, vol. 161, p. 012087, 2016.
- [13] S. Quoilin, M. V. D. Broek, S. Declaye, P. Dewallef, and V. Lemort, “Techno-Economic Survey of Organic Rankine Cycle (ORC) Systems,” *Renew. Sustain. Energy Rev.*, vol. 22, pp. 168–186, Jun. 2013
- [14] D. D. Risqiawan, A. B. K. Putra, and J. A. R. Hakim, “Studi Eksperimen Perbandingan Pengaruh Variasi Tekanan Inlet Turbin dan Variasi Pembebaan Terhadap Karakteristik Turbin Pada Organic Rankine Cycle,” vol. 2, no. 1, p. 5, 2013.
- [15] O. Badr, P. W. O’Callaghan, and S. D. Probert, “Rankine-Cycle Systems For Harnessing Power From Low-Grade Energy Sources,” *Appl. Energy*, vol. 36, no. 4, pp. 263–292, Jan. 1990
- [16] F. Vélez, J. J. Segovia, M. C. Martín, G. Antolín, F. Chejne, and A. Quijano, “A technical, economical and market review of organic Rankine cycles for the conversion of low-grade heat for power generation,” *Renew. Sustain. Energy Rev.*, vol. 16, no. 6, pp. 4175–4189, Aug. 2012.
- [17] S. Masheiti, B. Agnew, S. Walker, “An Evaluation of R134a and R245fa as the working fluid in an Organic Rankine Cycle energized from a low temperature geothermal energy source,” *Energy Power Eng.*, 2011.
- [18] A. M. Al Jubori, R. Al-Dadah, and S. Mahmoud, “Performance enhancement of a small-scale organic Rankine cycle radial-inflow turbine through multi-objective optimization algorithm,” *Energy*, vol. 131, pp. 297–311, Jul. 2017.
- [19] M. Yulianto, Y. S. Gaos, M. Juarsa, and E. Marzuki, “Analisa Effisiensi pada Fluida kerja berdasarkan Variasi Temperatur masuk Turbin pada Pengembangan Organic Rankine Cycle Analysis of Efficiency Working Fluids Based on Variation of Inlet Temperature at Turbin in the Organic Renkine Cycle Development”, Bogor.
- [20] K. Rahbar, S. Mahmoud, R. K. Al-Dadah, and N. Moazami, “Parametric analysis and optimization of a small-scale radial turbine for Organic Rankine Cycle,” *Energy*, vol. 83, pp. 696–711, Apr. 2015.
- [21] M. Manurung, “Perancangan dan Simulasi Aliran Fluida pada Turbin Uap Siklus Rankine Organik dengan Daya Output 110 kW”, Skripsi, Departemen Teknik Mesin, Fakultas Teknik, Universitas Sumatera Utara, Medan, 2010.



- [22] P. N. Wiryawan “Perancangan Turbin Uap Impuls-Reaksi Satu Rumah dengan Daya 250 MW, Putaran 3000 rpm, Tekanan Uap Masuk 140 bar dan Temperatur 560°C” Skripsi, Jurusan Teknik Mesin dan Industri, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta, 2015.
- [23] N. Saptadji, “Sekilas Tentang Panas Bumi, Materi Panas Bumi”, Institut Teknologi Bandung, Bandung.
- [24] R. DiPippo, *Geothermal power plants: principles, applications, case studies and environmental impact*, 2nd. ed., Amsterdam: Elsevier BH, Butterworth-Heinemann, 2008.
- [25] Y. A. Cengel, M. Boles, Thermodynamics: An Engineering Approach 5<sup>th</sup> Edition, Megraw-Hill, International Edition, 2006
- [26] S. Ciptadi and S. Patangke, “Evaluasi Potensi Silica Scaling pada Pipa Produksi Lapangan Panas Bumi Lahendong-Sulawesi Utara”, *Proceeding of the 5<sup>th</sup> INAGA Annual Scientific Conference & Exhibitions*, Yogyakarta, Marh 7 - 10, 2001.
- [27] T. Delft, “Cycle-Tempo Reference Guide: TU Delft”, Dokumen Teknis.
- [28] P. Shlyakhin, *Turbin Uap : Teori dan Rancangan*. Ciracas, Jakarta: Penerbit Erlangga, 1999.
- [29] Y. S. P. Zuniga, “Design of an Axial Turbine and Thermodynamic Analysis and Testing of a K03 Turbocharger,” p. 66.
- [30] N. Smirnoff, “The Design of an Impulse Stage for Steam Turbines”, The City College of New York, New York, 2016.
- [31] BOC, A Member of The Linde Group, “Safety data sheet 1,1,1,3,3-Pentafluoropropane (R 245fa),” 2011
- [32] HoneyWell, “Working Fluid Developments for HT Pumps and ORC System.”, Edinburg, 2011.
- [33] F. Burlian and A. Ghafara, “Perancangan Ulang Heat Recovery Steam Generator Dengan Sistem Dual Pressure Melalui Pemanfaatan Gas Buang Sebuah Turbin Gas Berdaya 160 Mw,” *J. Rekayasa Mesin Univ. Sriwijj.*, vol. 13, no. 1, pp. 21–33, 2013.
- [34] The Dow Chemical Company, “Dowtherm J Synthetic Organic Heat Transfer Fluid-Liquid and Vapor Phase Data”, No. 176-01465-1101 AMS, U.S.A