

## DAFTAR PUSTAKA

- [1] R. Salim and T. Taslim, “Edukasi Manfaat Air Mineral pada Tubuh Bagi Anak Sekolah Dasar Secara Online,” Mar. 2021.
- [2] Menteri Kesehatan Republik Indonesia, “PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 41 TAHUN 2014,” 2014.
- [3] W. Siagian, “Perairan PNG Tercemar Merkuri, Warga Jayapura Diimbau Tak Makan Ikan Laut,” detiknews. Accessed: Nov. 21, 2023. [Online]. Available: <https://news.detik.com/berita/d-4789858/perairan-png-tercemar-merkuri-warga-jayapura-diimbau-tak-makan-ikan-laut>
- [4] A. S. Balqis, H. Siswoyo, and E. Yuliani, “Penilaian Kualitas Air Tanah dan Pengaruhnya terhadap Kesehatan Masyarakat di Kecamatan Sukun Kota Malang,” *Jurnal Sains dan Edukasi Sains*, vol. 6, no. 2, pp. 65–74, Aug. 2023, doi: 10.24246/juses.v6i2p65-74.
- [5] Q. Pratiwi and G. Merung, “Satgas Yonif Bantu Kebutuhan Air Bersih Warga di Perbatasan Papua,” Antara. Accessed: Nov. 17, 2023. [Online]. Available: <https://www.antaranews.com/berita/3695967/satgas-yonif-bantu-kebutuhan-air-bersih-warga-di-perbatasan-papua#mobile-nav>
- [6] Rendy Indra, “POS YETTI YONIF 711/RAKSATAMA TA 2021/2022,” 2022. Accessed: Jan. 15, 2024. [Online]. Available: [https://www.youtube.com/watch?app=desktop&v=oV\\_oNvt\\_c1o](https://www.youtube.com/watch?app=desktop&v=oV_oNvt_c1o)
- [7] O. Inbar, I. Gozlan, S. Ratner, Y. Aviv, R. Sirota, and D. Avisar, “Producing Safe Drinking Water Using an Atmospheric Water Generator (AWG) in an Urban environment,” *Water (Switzerland)*, vol. 12, no. 10, pp. 1–19, Oct. 2020, doi: 10.3390/w12102940.
- [8] Universitas Stekom, “Sungai Mamberamo.” Accessed: Nov. 10, 2023. [Online]. Available: [https://p2k.stekom.ac.id/ensiklopedia/Sungai\\_Mamberamo](https://p2k.stekom.ac.id/ensiklopedia/Sungai_Mamberamo)

- [9] Instansi, “POTENSI SUMBERDAYA ALAM KABUPATEN KEEROM.” Accessed: Nov. 11, 2023. [Online]. Available: <https://www.papua.go.id/view-detail-kabupaten-231/potensi-kab-keerom.html>
- [10] Papua.us, “Kabupaten Keerom.” Accessed: Nov. 06, 2023. [Online]. Available: <https://www.papua.us/p/kabupaten-keerom.html>
- [11] A. Farizi Program Studi Teknik Komputer Jurusan Teknologi Informasi Politeknik Negeri Jember, I. Jl Mastrip Kotak Pos, A. Hariyanto Program Studi Teknik Komputer Jurusan Teknologi Informasi Politeknik Negeri Jember, B. Maryuni Susanto Program Studi Teknik Komputer Jurusan Teknologi Informasi Politeknik Negeri Jember, E. Antika Program Studi Teknik Informatika Jurusan Teknologi Informasi Politeknik Negeri Jember Jl Mastrip Kotak Pos, and E. Setiyawan Jullev Atmadji Program Studi Teknik Informatika Jurusan Teknologi Informasi Politeknik Negeri Jember Jl Mastrip Kotak Pos, “Sistem Monitoring Suhu dan Pengairan Otomatis Pada Tanaman Stroberi Berbasis Website,” 2021. [Online]. Available: <https://doi.org/10/25047/jtit.v8i2.255>
- [12] A. Diah Syafaati, Y. Kartika, S. Pemantau Atmosfer Global Puncak Vihara Klademak Sorong, L. Penguji Kualitas Udara BMKG, B. Meteorologi, and dan Geofisika, “Analisis Kualitas Udara Parameter Deposisi Basah dan Deposisi Kering di Sorong Tahun 2022,” 2023. Accessed: Jul. 04, 2024. [Online]. Available: [https://www.researchgate.net/publication/375426514\\_Analisis\\_Kualitas\\_Udara\\_Parameter\\_Deposisi\\_Basah\\_dan\\_Deposisi\\_Kering\\_di\\_Sorong\\_Tahun\\_2022](https://www.researchgate.net/publication/375426514_Analisis_Kualitas_Udara_Parameter_Deposisi_Basah_dan_Deposisi_Kering_di_Sorong_Tahun_2022)
- [13] M. N. Akobiarek dan Edoward Krisson Raunsay, “ANALISIS KUALITAS BEBERAPA SUMBER AIR PADA KAWASAN HUTAN DI ENTROP DISTRIK JAYAPURA SELATAN KOTA JAYAPURA Oleh,” 2016. Accessed: Jul. 04, 2024. [Online]. Available: <https://ejournal.uncen.ac.id/index.php/NG/article/view/961>
- [14] H. Kubelaborbir and K. Yarangga, “Zona Akrogeologi Kabupaten Keerom,” *Jurnal Agrikultura*, 2010.
- [15] D. Marganingrum, N. Sumawijaya, and A. Rachmat, “Studi Kelayakan Sumber Daya Air Baku Pulau Bintan – Tinjauan Aspek Kuantitas dan Kualitas,” *Jurnal*

- Wilayah dan Lingkungan*, vol. 8, no. 1, pp. 15–35, Apr. 2020, doi: 10.14710/jwl.8.1.15-35.
- [16] R. Ramadhan Husaini, R. H. Yazid, and M. Al Amin, “IDENTIFIKASI KONDISI DAERAH RESAPAN AIR BERBASIS SIG (Studi Kasus di Kabupaten Bengkalis),” *Jurnal Teknologi dan Rekayasa Sipil*, vol. 01, 2022.
  - [17] detikFood, “Viral Harga Air Putih di Kantong Plastik Rp 5 Ribu di Papua Bikin Netizen Kaget.” Accessed: Dec. 25, 2023. [Online]. Available: <https://food.detik.com/info-kuliner/d-6683066/viral-harga-air-putih-di-kantong-plastik-rp-5-ribu-di-papua-bikin-netizen-kaget>
  - [18] agungpangestuh, “Harga Air di Papua.” 2022. Accessed: Dec. 25, 2023. [Online]. Available: <https://www.tiktok.com/@agungpangestuh/video/7164661729740213530>
  - [19] Kominfo, “Sumur Bor Air Bersih, Dari Rakyat Untuk Rakyat.”
  - [20] Y. R. Astuti, “Pengaruh Sanitasi dan Air Minum Terhadap Stunting di Papua dan Papua Barat,” *Poltekita : Jurnal Ilmu Kesehatan*, vol. 16, no. 3, pp. 261–267, Nov. 2022, doi: 10.33860/jik.v16i3.1470.
  - [21] D. Curto, V. Franzitta, and A. Guercio, “A review of the water desalination technologies,” *Applied Sciences (Switzerland)*, vol. 11, no. 2. MDPI AG, pp. 1–36, Jan. 02, 2021. doi: 10.3390/app11020670.
  - [22] J. Joleha *et al.*, “Penerapan teknologi pemanenan air hujan menuju desa mandiri air bersih di Pulau Merbau,” *Unri Conference Series: Community Engagement*, vol. 1, pp. 317–324, Sep. 2019, doi: 10.31258/unricsce.1.317-324.
  - [23] N. Iswanto, M. Husen, A. D. N. Novitasari, C. Fandeli, and D. Rahyuni, “Kualitas Air Hujan di Desa Sirongo Kecamatan Tidore Utara Kota Tidore Kepulauan,” Yogyakarta, May 2022.
  - [24] “Pahami Sumur Bor, Cara Kerja, Kelebihan, dan Kekurangan.” Accessed: Nov. 08, 2023. [Online]. Available: <https://www.rumah.com/panduan-properti/sumur-bor-29701>

- [25] D. V. Reddy, D. Kumar, K. K. Bhukya, K. K. R. Shiligireddy, and D. Shashidhar, "Exploitation of deep aquifer in granitic terrain and its implications on recharge using isotopes and hydrochemistry," *Environ Earth Sci*, vol. 81, no. 18, Sep. 2022, doi: 10.1007/s12665-022-10563-x.
- [26] J. W. Kusumosusanto and Valentina, *06. BUKU\_SAKU\_PETUNJUK\_KONSTRUKSI\_AIR\_MINUM\_2022*, vol. 6. Jakarta: Kementerian Pekerjaan Umum Dan Perumahan Rakyat, 2022.
- [27] K. Teknologi Pengelolaan Air Bersih dan Limbah Cair and P. Pengkajian dan Penerapan Teknologi Lingkungan, "APLIKASI TEKNOLOGI OSMOSIS BALIK UNTUK MEMENUHI KEBUTUHAN AIR MINUM DI KAWASAN PESISIR ATAU PULAU TERPENCIL Nusa Idaman Said."
- [28] C. C. Bolsinger and S. P. Ralphs, "Atmospheric Water Generation," 2019. [Online]. Available: <https://digitalcommons.wpi.edu/mqp-all/>
- [29] V. P. Joshi, V. S. Joshi, H. A. Kothari, M. D. Mahajan, M. B. Chaudhari, and K. D. Sant, "Experimental Investigations on a Portable Fresh Water Generator Using a Thermoelectric Cooler," in *Energy Procedia*, Elsevier Ltd, Mar. 2017, pp. 161–166. doi: 10.1016/j.egypro.2017.03.085.
- [30] K. Penggunaan, A. S. Cikapundung, A. Bersih, G. Husada, M. Christine, and M. Fransiska, "KAJIAN KELAYAKAN AIR SUNGAI CIKAPUNDUNG SEBAGAI AIR BERSIH."
- [31] B. Niewenhuis -Ee, C. Shepperly -Me, R. Van, B.-M. Eric, and V. Kooten -Me, "DESIGN REPORT ATMOSPHERIC WATER GENERATOR WATER FROM AIR: TEAM 5 Executive Summary," 2012.
- [32] N. Fernandez, "The Prospects of Alternatives to Vapor Compression Cooling Technology for Space Cooling and Refrigeration Applications," 2012. [Online]. Available: <https://www.researchgate.net/publication/297439337>
- [33] T. Anbarasu and S. Pavithra, "Vapour compression refrigeration system generating fresh water from humidity in the air," *IET Conference Publications*, vol. 2011, no. 583 CP, pp. 75–79, 2011, doi: 10.1049/CP.2011.0338.

- [34] R. Ardhana, “Pengembangan Desain dan Uji Kinerja Prototype Alat Pemanen Air Berbasis Sistem Refrigerasi Kompresi Uap,” Semarang, Aug. 2022.
- [35] Y. N. Nandanwar, P. V. Walke, V. P. Kalbande, and M. Mohan, “Performance improvement of vapour compression refrigeration system using phase change material and thermoelectric generator,” *International Journal of Thermofluids*, vol. 18, May 2023, doi: 10.1016/j.ijft.2023.100352.
- [36] R. Nikbakhti, X. Wang, and A. Chan, “Performance analysis of an integrated adsorption and absorption refrigeration system,” *International Journal of Refrigeration*, vol. 117, pp. 269–283, Sep. 2020, doi: 10.1016/J.IJREFRIG.2020.04.019.
- [37] R. A. Ibikunle, M. A. Akintunde, I. F. Titiladunayo, and A. A. Adeleke, “Estimation of coefficient of performance of thermoelectric cooler using a 30 W single-stage type,” *International Review of Applied Sciences and Engineering*, vol. 13, no. 2, pp. 124–132, Aug. 2022, doi: 10.1556/1848.2021.00322.
- [38] G. Raveesh, R. Goyal, and S. K. Tyagi, “Advances in atmospheric water generation technologies,” *Energy Conversion and Management*, vol. 239. Elsevier Ltd, Jul. 01, 2021. doi: 10.1016/j.enconman.2021.114226.
- [39] J. Patel, K. Patel, A. Mudgal, H. Panchal, and K. K. Sadasivuni, “Experimental investigations of atmospheric water extraction device under different climatic conditions,” *Sustainable Energy Technologies and Assessments*, vol. 38, p. 100677, Apr. 2020, doi: 10.1016/J.SETA.2020.100677.
- [40] B. I. Robertson *et al.*, “Experimental study of atmospheric water collection powered by solar energy using the Peltier effect,” *IOP Conf Ser Mater Sci Eng*, vol. 671, no. 1, p. 012155, Jan. 2020, doi: 10.1088/1757-899X/671/1/012155.
- [41] A. Qandil, A. Othman, and N. I. Beithou, “Experimental Analysis of Atmospheric Water Harvester Using Ammonia Vapour Absorption System,” *Journal of Ecological Engineering*, vol. 24, no. 2, pp. 221–229, 2023, doi: 10.12911/22998993/156612.
- [42] P2PTM Kemenkes RI, “Berapa takaran normal air agar tidak kekurangan cairan dalam tubuh?” Accessed: Nov. 10, 2023. [Online]. Available:

<https://p2ptm.kemkes.go.id/infographic-p2ptm/hipertensi-penyakit-jantung-dan-pembuluh-darah/page/14/berapa-takaran-normal-air-agar-tidak-kekurangan-cairan-dalam-tubuh#:~:text=Kebutuhan%20cairan%20tiap%20orang%20berbeda,pada%20tubuh%20yaitu%20sekitar%2020%25>.

- [43] L. Juliawati *et al.*, “Kajian Variasi Temperatur Kerja Terhadap Efisiensi Volumetrik Kompresor Piston dan Kinerja Sistem Refrigerasi Kompresi Uap,” Bandung, Jul. 2023.
- [44] U. Wiharja and S. W. Groho, “Analisis Efisiensi Daya Motor Induksi 3 Fasa Dengan Menggunakan Soft Starter Pada Reciprocating Compressor,” *Jurnal Elektro*, vol. 10, Jan. 2022.
- [45] R. W. Wardana, “Analisa Perbandingan Beban Kerja Menggunakan Kompresor Tunggal Dan Ganda Dengan Sistem Expansion Valve Pada Cold Storage Penyimpanan Udang Kaleng,” Kalimantan.
- [46] D. Wu, B. Hu, and R. Z. Wang, “Vapor compression heat pumps with pure Low-GWP refrigerants,” *Renewable and Sustainable Energy Reviews*, vol. 138. Elsevier Ltd, Mar. 01, 2021. doi: 10.1016/j.rser.2020.110571.
- [47] S. J. Hong, S. M. Lee, C. H. Lee, I. G. Kim, and C. W. Park, “Thermally-driven hybrid vapor absorption cycle: Simultaneous and flexible use of steam generation heat pump and refrigeration applications,” *Energy Convers Manag*, vol. 201, Dec. 2019, doi: 10.1016/j.enconman.2019.112100.
- [48] A. Qandil, A. Othman, and N. I. Beithou, “Experimental Analysis of Atmospheric Water Harvester Using Ammonia Vapour Absorption System,” *Journal of Ecological Engineering*, vol. 24, no. 2, pp. 221–229, 2023, doi: 10.12911/22998993/156612.
- [49] J. Venkatesh, “Design Analysis and Fabrication of Atmospheric Water Generator,” *Int J Res Appl Sci Eng Technol*, vol. 10, no. 6, pp. 121–127, Jun. 2022, doi: 10.22214/ijraset.2022.43770.
- [50] S. Zolfagharkhani, M. Zamen, and M. M. Shahmardan, “Thermodynamic analysis and evaluation of a gas compression refrigeration cycle for fresh water production

- from atmospheric air,” *Energy Convers Manag*, vol. 170, pp. 97–107, Aug. 2018, doi: 10.1016/j.enconman.2018.05.016.
- [51] L. Cattani, P. Cattani, and A. Magrini, “Air to Water Generator Integrated System Real Application: A Study Case in a Worker Village in United Arab Emirates,” *Applied Sciences (Switzerland)*, vol. 13, no. 5, Mar. 2023, doi: 10.3390/app13053094.
- [52] L. Cattani, A. Magrini, and P. Cattani, “Water extraction from air: A proposal for a new indicator to compare air water generators efficiency,” *Energies (Basel)*, vol. 14, no. 1, Jan. 2021, doi: 10.3390/en14010224.
- [53] A. H. Shourideh, W. Bou Ajram, J. Al Lami, S. Haggag, and A. Mansouri, “A comprehensive study of an atmospheric water generator using Peltier effect,” *Thermal Science and Engineering Progress*, vol. 6, pp. 14–26, Jun. 2018, doi: 10.1016/j.tsep.2018.02.015.
- [54] Y. Lyu, A. R. M. Siddique, S. H. Majid, M. Biglarbegian, S. A. Gadsden, and S. Mahmud, “Electric vehicle battery thermal management system with thermoelectric cooling,” *Energy Reports*, vol. 5, pp. 822–827, Nov. 2019, doi: 10.1016/j.egyr.2019.06.016.
- [55] A. K. Al-Nadawi, “Irreversibility Analysis of R407C, R404A, and R134A as an Alternatives of R22 in Vapor Compression Chiller under Cycling Conditions,” *International Journal of Thermodynamics (IJOT)*, vol. 24, no. 1, pp. 24–29, Mar. 2021, doi: 10.5541/IJOT.797614.
- [56] Sutrisno, Azharudin, and F. Irawan, “Analisis Perbandingan Kinerja Menggunakan Refrigeran R134A dan Refrigeran R404A pada Mesin Bar Ice Cream Manual Maker,” *Jurnal PETRA*, vol. 1, no. 1, pp. 28–43, Oct. 2015.
- [57] M. S. Abd-Elhady, E. B. Melad, M. Abd-Elhalim, and S. A. Ahmed, “The Cooling Rate of The Heated Vapor Compression Cycle in Case of Using Refrigerants R134a, R22, and R600a,” *Archives of Thermodynamics*, vol. 42, no. 2. Polska Akademia Nauk, pp. 11–30, 2021. doi: 10.24425/ather.2021.137550.

- [58] D. Wu, B. Hu, and R. Z. Wang, "Vapor compression heat pumps with pure Low-GWP refrigerants," *Renewable and Sustainable Energy Reviews*, vol. 138. Elsevier Ltd, Mar. 01, 2021. doi: 10.1016/j.rser.2020.110571.
- [59] "Refrigerant R32," Polarin Xinindo. Accessed: Jul. 05, 2024. [Online]. Available: <https://polarin.co.id/product/refrigerant-r32/>
- [60] N. A. A. Rahim, N. M. Noor, S. Y. Yusuf, and M. Elbayoumi, "Investigation of Indoor Air Quality in Natural Ventilated Classroom in Perlis," in *IOP Conference Series: Earth and Environmental Science*, Institute of Physics, 2023. doi: 10.1088/1755-1315/1135/1/012044.
- [61] J. Huang, Z. Huang, and Y. Zhang, "Spatiotemporal Variations in PM2.5 Concentration in Different Areas of Bus Cabin: A Case Study in Shenzhen, China," *Atmosphere (Basel)*, vol. 14, no. 2, Feb. 2023, doi: 10.3390/atmos14020326.
- [62] I. N. A. Junaedi, A. A. N. Amrita, and I. N. Setiawan, "IMPLEMENTASI SISTEM PEMANTAUAN SUHU DAN KELEMBABAN UDARA BERBASIS IOT PADA PLANT FACTORY KEBUN PERCOBAAN," *Jurnal Spektrum*, vol. 9, no. 2, pp. 1–12, Jun. 2022.
- [63] E. R. Fauzi, A. Maharesi, and Kamonthip Doungjan, "Thermostat Automation for Controlled Temperature in Simulated Incubator," *Jurnal Arus Elektro Indonesia (JAEI)*, vol. 9, no. 1, Apr. 2023.
- [64] D. Feriyanto, S. Alva, R. Vikaliana, and A. S. Kristanto, "Analisis Sistem Pendingin Menggunakan Thermostat dan Tanpa Thermostat dalam Pencapaian Panas Mesin pada Alat Uji Prestasi," *Jurnal Rekayasa Mesin*, vol. 13, no. 3, pp. 637–646, Dec. 2022, doi: 10.21776/jrm.v13i3.757.
- [65] R. W. Priambudi and W. D. Kurniawan, "Analisa Sistem Pengendalian Temperatur Berbasis Arduino Uno pada Prototipe Tabung Reaktor," 2021.
- [66] Julaikah and B. Widitia Astuti, "Pengelolaan Air Bersih Siap Guna dengan Metode Filtrasi pada Pondok Pesantren X Daerah Bantul," 2023.
- [67] A. Meidinariasty, M. Zamhari, and D. Septiani, "Uji Kinerja Membran Mikrofiltrasi dan Reverse Osmosis pada Proses Pengolahan Air Reservoir Menjadi Air Minum Isi Ulang," Palembang, Nov. 2019.

- [68] R. M. Khair, “Pengaruh Ozon dan Media Filter Zeolit Pasir Aktif dalam Penyisihan Warna Air Gambut dengan Aliran Paksa,” Kalimantan Selatan, 2016.
- [69] Marsono, I. K. Daging, E. Mustono, A. Hermawan, E. Sugriwa Husen, and M. F. Fauzi Herdiansyah, “RANCANG BANGUN ALAT FILTRASI DAN STERILISASI ULTRAVIOLET DENGAN SISTEM KONTROL OTOMATIS BERBASIS ARDUINO,” *Journal of Innovation Research and Knowledge*, vol. 3, 2023.
- [70] R. A. Furqoni, M. P. Aji, and Sulhadi, “Pengembangan Filter Air dengan Bahan Keramik untuk Peningkatan Kualitas Air Sungai,” in *Prosiding Seminar Nasional Fisika (E-Journal)*, Universitas Negeri Jakarta, 2016, pp. SNF2016-BMP-49-SNF2016-BMP-52. doi: 10.21009/0305020310.
- [71] M. H. Mulia, “PENGOLAHAN AIR BERSIH DENGAN METODE FILTRASI MENGGUNAKAN MEDIA PASIR BESI,” Banda Aceh, 2021.
- [72] PT Holland for Water, “Bagaimana cara perak dalam filter keramik Nazava dapat membunuh bakteri?,” info@nazava.com. Accessed: Dec. 27, 2023. [Online]. Available: <https://www.nazava.com/cara-perak-dapat-membunuh-bakteri-virus-dan-kuman-dalam-air/>
- [73] A. Syahlan *et al.*, “Kalibrasi Sensor Ultrasonik HC-SR04 Pada Prototipe Water Tank Level Control System,” *Jurnal Mekanova : Mekanikal, Inovasi dan Teknologi*, vol. 10, no. 1, 2024.
- [74] L. P. Hapsari, R. P. Pasaribu, and I. Anjani, “The Use of An Arduino Uno Ultrasonic Sensor in Desalination Equipment’s Water Filling Control,” *Circuit: Jurnal Ilmiah Pendidikan Teknik Elektro*, vol. 7, no. 2, p. 164, Aug. 2023, doi: 10.22373/crc.v7i2.15567.
- [75] A. Munandar, N. David Maria Veronika, D. Abdulllah, and E. Sahputra, “Miniature Design of Liquid Filling Machine Automatically Using ESP32 Based IOT (Internet of Things) Perancangan Miniatur Mesin Pengisi Cairan Otomatis Menggunakan ESP32 Berbasis IOT (Internet of Things),” *JURNAL KOMITEK*, vol. 3, no. 1, pp. 69–78, doi: 10.53697/jkomitek.v3i1.

- [76] M. Alsheekh, S. E. Najim, and H. S. Sultan, "Air Purification and Water Generation Using A Compression Refrigeration System," in *Journal of Physics: Conference Series*, IOP Publishing Ltd, Aug. 2021. doi: 10.1088/1742-6596/1973/1/012091.
- [77] F. I. BAGUS IBRAHIM, "EXPERIMENTAL STUDY CHARACTERISTIC AND PERFORMANCE OF TEC (THERMOELECTRIC COOLER) 1-12706," 2017.
- [78] S. E. Sofyan, M. Farhan, Khairil, Jalaluddin, and Akram, "Theoretical Study of the Absorption Refrigeration Cycle Using Water-Lithium Bromide as Working Pair for Cold Storage Application," in *IOP Conference Series: Materials Science and Engineering*, Institute of Physics Publishing, Apr. 2020. doi: 10.1088/1757-899X/796/1/012015.
- [79] V. Yadav, G. Supradeepa Panual, N. Yadav, R. Bordia, R. Soni, and R. Khandey, "Design and fabrication of solar powered vapour absorption refrigeration system," in *E3S Web of Conferences*, EDP Sciences, May 2020. doi: 10.1051/e3sconf/202017002011.
- [80] C. C. Weiss, "Mobile H2O Generator Pulls Drinking Water from Air For Off-Grid Nomads," *New Atlas*. Accessed: Jan. 01, 2024. [Online]. Available: <https://newatlas.com/outdoors/mobile-h2o-generator-drinking-water-from-air/>
- [81] V. P. Joshi, V. S. Joshi, H. A. Kothari, M. D. Mahajan, M. B. Chaudhari, and K. D. Sant, "Experimental Investigations on a Portable Fresh Water Generator Using a Thermoelectric Cooler," in *Energy Procedia*, Elsevier Ltd, Mar. 2017, pp. 161–166. doi: 10.1016/j.egypro.2017.03.085.
- [82] G. G. Rahul. T. S. K. Raveesh, "ATMOSPHERIC WATER GENERATION: CONCEPTS AND CHALLENGES." Accessed: Dec. 25, 2023. [Online]. Available: <https://thermopedia.com/content/10265/>
- [83] S. Cashman, "United States Environmental Protection Agency REVISED DRAFT Life Cycle and Cost Assessments of Atmospheric Water Generation Technologies and Alternative Potable Water Emergency Response Options," 2018.
- [84] "Thermoelectric Cooling A Closer Look".

- [85] S. Ranjan Mohanty, “i A Project Report on DESIGN, OPTIMIZATION AND ECONOMIC FEASIBILITY OF ABSORPTION REFRIGERATION SYSTEM USING (LITHIUM BROMIDE + WATER) AS WORKING PAIR,” 2014.
- [86] P. P. Xinindo, “Refrigerant R134A.” Accessed: Dec. 14, 2023. [Online]. Available: <https://polarin.co.id/product/refrigerant-r134a/>
- [87] BPPSDM MekanisasiKP Bantul, “Pentingnya Faktor Lingkungan ODP dan GWP dalam Pemilihan Refrigerant.” Accessed: Dec. 14, 2023. [Online]. Available: <http://www.mekanisasi.kp.web.id/2020/11/pentingnya-faktor-lingkungan-odp-dan.html>
- [88] A. Titlov, E. Osadchuk, A. Tsoy, A. Alimkeshova, and R. Jamasheva, “Development of cooling systems on the basis of absorption water-ammonia refrigerating machines of low refrigeration capacity,” *Eastern-European Journal of Enterprise Technologies*, vol. 2, no. 8–98, pp. 57–67, 2019, doi: 10.15587/1729-4061.2019.164301.
- [89] D. Chandler, “Water, water everywhere ... even in the air.”
- [90] PT. Abdi Karya Sejati, “COMPRESSOR VASCO,” [abdikaryasejati.com](http://abdikaryasejati.com). Accessed: Jun. 03, 2024. [Online]. Available: <http://abdikaryasejati.com/products/product/458-compressor-vasco>
- [91] A. Susilo, “Tabel Ukuran Pipa Kapiler AC 1 PK,” [HomeTronik.web.id](http://HomeTronik.web.id). Accessed: Jun. 28, 2024. [Online]. Available: <https://hometronik.web.id/tabel-ukuran-pipa-kapiler/>
- [92] Warunglistrik, “RAYDEN Cooling Fan AC 220V ukuran 8cm x 8cm x 2.5cm / kipas.” Accessed: Jun. 30, 2024. [Online]. Available: [https://www.tokopedia.com/warunglistrik/rayden-cooling-fan-ac-220v-ukuran-8cm-x-8cm-x-25cm-kipas?extParam=ivf%3Dfalse%26keyword%3Dcooling+fan+rayden%26search\\_id%3D20240630060534A596FBF5B61726127NZB%26src%3Dsearch](https://www.tokopedia.com/warunglistrik/rayden-cooling-fan-ac-220v-ukuran-8cm-x-8cm-x-25cm-kipas?extParam=ivf%3Dfalse%26keyword%3Dcooling+fan+rayden%26search_id%3D20240630060534A596FBF5B61726127NZB%26src%3Dsearch)
- [93] eeze, “RFan Rayden 12 x 12 x 3,8CM.” Accessed: Jun. 30, 2024. [Online]. Available: <https://eeze.co.id/product/fan-rayden-12-x-12-x-3-8cm-ff2956324b>

- [94] “Refrigerant R134a - Polarin Xinindo.” Accessed: Nov. 22, 2023. [Online]. Available: <https://polarin.co.id/product/refrigerant-r134a/>
- [95] MIISO Authorized Store Jakarta, “MIISOO Pompa Galon Elektrik Us Smart Pumping Unit Rechargerable Pompa Galon.”
- [96] “Cara kerja filter air Nazava, begini cara saringan air berfungsi - Nazava.” Accessed: Nov. 23, 2023. [Online]. Available: <https://www.nazava.com/cara-kerja-filter-air-nazava-dan-cara-saringan-air-berfungsi/>
- [97] “XH-3001 Operating instruction.”
- [98] “Multi Use Temperature/Humidity Data logger RC-4HC General Description.”
- [99] “Power Supply LED Slim 10A,” Visero. Accessed: Jun. 28, 2024. [Online]. Available: <https://visero.co.id/product/power-supply-led-slim-10a/>
- [100] jaya light77, “Power Supply Adaptor Switching Trafo LED Strip 12V 3A ,5A,10A 12V - 3A.” Accessed: Jun. 30, 2024. [Online]. Available: [https://www.tokopedia.com/jayalight7/power-supply-adaptor-switching-trafo-led-strip-12v-3a-5a-10a-12v-3a-22c42?extParam=ivf%3Dfalse%26keyword%3Dpower+supply+12v+3a%26search\\_id%3D202406300626216878A5ED8537482DBXJB%26src%3Dsearch](https://www.tokopedia.com/jayalight7/power-supply-adaptor-switching-trafo-led-strip-12v-3a-5a-10a-12v-3a-22c42?extParam=ivf%3Dfalse%26keyword%3Dpower+supply+12v+3a%26search_id%3D202406300626216878A5ED8537482DBXJB%26src%3Dsearch)
- [101] “Arduino® UNO R3.”
- [102] E. J. Morgan, “HC-SR04 ETC2 | Alldatasheet.”
- [103] “10mm LED Specifications,” Make-It.Ca.
- [104] “RELAY MODULES RELAY WORKING IDEA Relay modules 1-channel features.”
- [105] “Testing Methods for Pumps and Compressors,” View Point Systems. Accessed: Jun. 27, 2024. [Online]. Available: <https://www.viewpointusa.com/TM/ar/testing-methods-pumps-compressors/>
- [106] Menteri Kesehatan RI, “PMK No. 492 ttg Persyaratan Kualitas Air Minum,” *Peraturan Menteri Kesehatan RI*.
- [107] Y. Tjandi, “Prototype Alat Kendali Listrik Berbasis Relay Arduino,” *INTEC Journal: Information Technology Education Journal*, vol. 1, no. 2, 2022.

- [108] A. Syahlan *et al.*, “Kalibrasi Sensor Ultrasonik HC-SR04 Pada Prototipe Water Tank Level Control System,” *Jurnal Mekanova: Mekanikal, Inovasi dan Teknologi*, vol. 10, no. 1, 2024.
- [109] A. Husaini, M. Yenni, C. Wuni, S. Tinggi, I. Kesehatan, and H. I. Jambi, “Efektivitas Metode Filtrasi dan Adsorpsi dalam Menurunkan Kesadahan Air Sumur di Kecamatan Kota Baru Kota Jambi,” 2020. [Online]. Available: <http://formilkesmas.respati.ac.id>
- [110] U. Nurullita, R. Astuti, M. Z. Arifin, F. Kesehatan, M. Univeritas, and M. Semarang, “PENGARUH LAMA KONTAK KARBON AKTIF SEBAGAI MEDIA FILTER TERHADAP PERSENTASE PENURUNAN KESADAHAN  $\text{CaCO}_3$  AIR SUMUR ARTETIS.” [Online]. Available: <http://jurnal.unimus.ac.id48>
- [111] S. Febriani, “Analisis Deskriptif Standar Deviasi,” 2022.
- [112] Eley Metrology, “Accuracy vs. Precision in Measurement Explained.” Accessed: Jun. 27, 2024. [Online]. Available: <https://eyleymet.com/2023/04/24/accuracy-vs-precision-in-measurement-explained/>
- [113] “Termometer Termokopel AMTAST AMF068,” AMTAST Indonesia. Accessed: Jun. 28, 2024. [Online]. Available: <https://amtast.id/product/termometer-termokopel-amtast-amf068/>
- [114] “Multi Use Temperature/Humidity Data logger RC-4HC General Description.”
- [115] Made-in-China.com, “Multifunction 5 in 1 pH TDS Ec Salinity Temp. Water Quality Tester Meter.” Accessed: Jun. 28, 2024. [Online]. Available: <https://green-lake.en.made-in-china.com/product/tBEQRPIysvri/China-Multifunction-5-in-1-pH-TDS-Ec-Salinity-Temp-Water-Quality-Tester-Meter.html>
- [116] “UT363/UT363 BT Series Mini Anemometers Specification”.
- [117] “PMK No. 492 ttg Persyaratan Kualitas Air Minum”.
- [118] DANDY RIEVALDO, “Pengukuran Kualitas Air Hujan (pH, Konduktivitas, dan Ion) dan Curah Hujan Dalam Pengamatan Tingkat Keasaman Air Hujan di Cekungan Bandung Raya,” in *Pengukuran Kualitas Air Hujan (pH, Konduktivitas,*

- dan Ion) dan Curah Hujan Dalam Pengamatan Tingkat Keasaman Air Hujan di Cekungan Bandung Raya*, 2021. Accessed: Jul. 04, 2024. [Online]. Available: <https://repository.telkomuniversity.ac.id/pustaka/169171/pengukuran-kualitas-air-hujan-ph-konduktivitas-dan-ion-dan-curah-hujan-dalam-pengamatan-tingkat-keasaman-air-hujan-di-cekungan-bandung-raya.html>
- [119] GAWSORONG, “Info Kualitas Udara.” Accessed: Jul. 04, 2024. [Online]. Available: <https://www.gawsorong.id/infoku.php>
- [120] INVIRO, “Kegunaan Fungsi Filter ORP (Oxidation Reducion Potensial).” Accessed: Jul. 05, 2024. [Online]. Available: <https://inviro.id/fungsi-filter-orp/>