

DAFTAR PUSTAKA

- Adlaa, L. Q., Nengse, S., Setyowati, Rr. D. N., & Nilandita, W. (2025). Kajian Efisiensi Penyisihan Unit IPAM Karangpilang III PDAM Surya Sembada Kota Surabaya. *Jurnal Rekayasa Hijau*, 9(1), 32–43. <https://doi.org/10.26760/jrh.v9i1.32-43>
- Ahmad, H. P. (2024). *Identifikasi Mikroba Dominan pada IPAL Komunal Kabupaten Sleman dengan Tingkat Risiko Tinggi*. Universitas Islam Indonesia.
- Ahmed, M. E., Khajah, M., Abdullah, H., & Al-Matouq, A. (2023). Organics Removal from Office Wastewater in Attached Growth Biological Process of a Packaged Onsite Wastewater Treatment System. *Desalination and Water Treatment*, 310, 78–85. <https://doi.org/10.5004/dwt.2023.29945>
- Alagirusamy, R., & Das, A. (2010). *Technical Textile Yarns A volume in Woodhead Publishing Series in Textiles*. Woodhead Publishing.
- Amalia, N. T., & Prayitno. (2024). Proses *Seeding* dan Aklimatisasi Aerob – Anaerob untuk Pengolahan Air Limbah Industri Gondorukem. *DISTILAT: Jurnal Teknologi Separasi*, 10(1), 48–55. <https://doi.org/10.33795/distilat.v10i1.4920>
- Andika, B., Wahyuningsih, P., & Fajri, R. (2020). Penentuan Nilai BOD dan COD sebagai Parameter Pencemaran Air dan Baku Mutu Air Limbah di Pusat Penelitian Kelapa Sawit (PPKS) Medan. *Quimica: Jurnal Kimia Sains Dan Terapan*, 2(1). <https://ejurnalunsam.id/index.php/JQ>
- Aniriani, G. W., Putri, M. S. A., & Nengseh, T. (2022). Efektivitas Penambahan Moving Bed Biofilm Reactor (MBBR) Terhadap Kualitas Air Limbah di Instalasi Pengolahan Air Limbah Pondok Pesantren Mahasiswa Universitas Islam Lamongan. *JURNAL ILMIAH SAINS*, 22(1), 67. <https://doi.org/10.35799/jis.v22i1.35562>
- Anisa, A., & Herumurti, W. (2017). Pengolahan Limbah Domestik Menggunakan Moving Bed Biofilm Reactor (MBBR) dengan Proses Aerobik-Anoksik untuk Menurunkan Nitrogen. *Jurnal Teknik ITS*, 6(2), 2301–9271.
- Arief, M. Y., & Nisak, M. (2022). Pengaruh Prosedur Kerja, Kompetensi, dan Kepuasan Kerja terhadap Produktivitas Kerja Karyawan PG. Asembagoes. *J-MAS (Jurnal Manajemen Dan Sains)*, 7(1), 386. <https://doi.org/10.33087/jmas.v7i1.349>
- Azmi, K. N., Danumihardja, I. G., & Said, N. I. (2019). Aplikasi Teknologi Pengolahan Air Limbah Domestik Menggunakan Kombinasi Biofilter Aerobik Media Plastik Sarang Tawon dan Biofilter Media Kerikil dengan Aliran ke Atas. *Jurnal Air Indonesia*, 10(2). <https://doi.org/10.29122/jai.v10i2.3760>
- Bastom, B. M. (2015). *Kajian Efek Aerasi pada Kinerja Biofilter Aerob dengan Media Bioball untuk Pengolahan Air Limbah Budidaya Tambak Udang*. Institut Teknologi Sepuluh November.
- Bhattacharya, R., & Mazumder, D. (2021). Simultaneous nitrification and denitrification in moving bed bioreactor and other biological systems. In *Bioprocess and*

Biosystems Engineering (Vol. 44, Issue 4, pp. 635–652). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1007/s00449-020-02475-6>

- Cahyani, N. D., Situmorang, M., Azhura, T., & Apriani, I. (2024). Pengolahan Limbah Cair Tahu Menggunakan Media Lekat Sarang Tawon. *Jurnal Teknologi Lingkungan Lahan Basah*, 12(1), 082–089.
- Canals, J., Cabrera-Codony, A., Carbó, O., Turolla, A., García, S., Lema, J. M., & Monclús, H. (2025). Fostering the performance and stability of the high-rate activated sludge process: Biomass dynamics, oxygen consumption and clarifier operation. *Journal of Environmental Chemical Engineering*, 13(3). <https://doi.org/10.1016/j.jece.2025.116165>
- Capua, F. Di, Iannacone, F., Sabba, F., & Esposito, G. (2022). Simultaneous nitrification–denitrification in biofilm systems for wastewater treatment: Key factors, potential routes, and engineered applications. *Bioresource Technology*, 361, 127702. <https://doi.org/10.1016/J.BIORTECH.2022.127702>
- Chairani, M., Elystia, S., & Muria, S. R. (2021). Penyisihan Nitrogen Total dalam Limbah Cair Hotel dengan Sistem Moving Bed Biofilm Reactor Menggunakan *Chlorella* sp. *Jurnal Sains Dan Teknologi*, 10(1).
- Darwesh, O. M., Mahmoud, M. S., Barakat, K. M., Abuellil, A., & Ahmad, M. E. (2021). Improving the bioremediation technology of contaminated wastewater using biosurfactants produced by novel bacillus isolates. *Heliyon*, 7(12). <https://doi.org/10.1016/j.heliyon.2021.e08616>
- Dewi, M. N., Haliza, D., Dody, A. F., Andreansyah, I., & Samuel Armawan Sandi. (2022). Evaluasi Pengelolaan Air Limbah Dari Proses Produksi Pemutih Pakaian Menggunakan Biofilter Anaerob Aerob. *Seminar Nasional TREN Technology of Renewable Energy and Development*, 2, 29–39.
- Dewi, R. T. Y., Juliani, A., & Nurmiyanto, A. (2018). Penurunan Kadar BOD, COD, TSS, dan Warna Limbah Industri Kampung Batik Giriloyo Menggunakan Reaktor Kombinasi Anaerob-Aerob. *Jurnal UII*, 1–13.
- Dinas Perumahan Rakyat dan Kawasan Permukiman Kota Padang. (2023). *Dokumen Strategi Sanitasi Kota (SSK) Kota Padang (2023 – 2027)*.
- Dorji, U., Dorji, P., Shon, H., Badeti, U., Dorji, C., Wangmo, C., Tijing, L., Kandasamy, J., Vigneswaran, S., Chanan, A., & Phuntsho, S. (2022). On-site domestic wastewater treatment system using shredded waste plastic bottles as biofilter media: Pilot-scale study on effluent standards in Bhutan. *Chemosphere*, 286. <https://doi.org/10.1016/j.chemosphere.2021.131729>
- Dyanto, R., Yusuf, W., & Utomo, K. P. (2015). Evaluasi Unit Biofilter Anaerob Sistem Instalasi Pengolahan Air Limbah (IPAL) Rumah Sakit Ibu dan Anak (RSIA) Anugerah Bunda Khatulistiwa Kota Pontianak. *Teknologi Lingkungan Tanah Basah*, 3(1).

- Fajri, A. J., Fujisawa, T., Trianda, Y., Ishiguro, Y., Cui, G., Li, F., & Yamada, T. (2018). Effect of Aeration Rates on Removals of Organic Carbon and Nitrogen in Small Onsite Wastewater Treatment System (Johkasou). *MATEC Web of Conferences*, 147. <https://doi.org/10.1051/mateconf/201814704008>
- Fauzi, M., Soewondo, P., Handajani, M., Tedjakusuma, T., & Nur, A. (2025). Effect of polymer variation as carrier media for microorganism growth in biofilm development using aerobic fixed-biofilm reactor system. *Results in Engineering*, 25. <https://doi.org/10.1016/j.rineng.2025.104038>
- Fauzi, M., Soewondo, P., Nur, A., Handajani, M., Tedjakusuma, T., Oginawati, K., & Setiyawan, A. S. (2023). Performances of Polyethylene Terephthalate Plastic Bottles Waste as Supporting Media in Domestic Wastewater Treatment Using Aerobic Fixed-Film System. *Journal of Ecological Engineering*, 24(10), 30–39. <https://doi.org/10.12911/22998993/169963>
- Gao, J., Gao, D., Liu, H., Cai, J., Zhang, J., & Qi, Z. (2018). Biopotentiality of High Efficient Aerobic Denitrifier *Bacillus megaterium* S379 for Intensive Aquaculture Water Quality Management. *Journal of Environmental Management*, 222, 104–111. <https://doi.org/10.1016/J.JENVMAN.2018.05.073>
- Gilalom, F., Arifin, & Prio Utomo, K. (2018). Pengolahan Limbah Cair Rumah Makan dengan Biofilter Aerob Menggunakan Media Filter Bio-yarn. *JURLIS: Jurnal Rekayasa Lingkungan Tropis*, 2(1), 161–170.
- Gutterer, Bernd., Ulrich, Andreas., & Reuter, Stefan. (2009). *Decentralised Wastewater Treatment Systems (DEWATS) and Sanitation in Developing Countries: a Practical Guide*. Water Engineering and Development Centre (WEDC), Loughborough University.
- Halim, M. A., Evy Hendrarianti, & Hery Setyobudiarso. (2023). Pengaruh Waktu Terhadap Penurunan BOD, COD, dan TSS Limbah Rumah Makan Menggunakan Biofilter Anaerob. *Jurnal Enviro.*
- Helard, D., Fajri, J. A., Setiyawan, A. S., Li, F., Yamada, T., Horio, A., Huang, M., & Kawaguchi, T. (2012). Formation and Role of Bacterial Community in the Sediment Bed of Open Channel Receiving Johkasou Effluent: Multivariate Statiscal Analysis Interpretation. *Journal of Japan Society of Civil Engineers, Ser. G (Environmental Research)*, 68(7), III_1-III_11. https://doi.org/10.2208/jscej.68.iii_1
- Hendrasarie, N., & Febriana, D. F. (2022). Efektivitas Penambahan Serabut Kelapa dan Kulit Buah Siwalan sebagai Adsorben dan Media Lekat Biofilm pada Pengolahan Limbah Domestik Menggunakan Sequencing Batch Reactor. *Jurnal Envirotek Ilmiah Teknik Lingkungan*, 14(1).
- Hendrasarie, N., Pratama, Y. A., Sitogasa, P. S. A., Nisa, S. Z., & Suwandhi, I. A. (2023). Kemampuan Hybrid Anaerobic Baffled Reactor (ABR)-Biofilter dalam Menurunkan Total Nitrogen dan Fosfor pada Air Limbah Apartemen. *Jurnal Ilmu Lingkungan*, 21(3), 574–580. <https://doi.org/10.14710/jil.21.3.574-580>

- Huang, J., Yang, P., Li, C., Guo, Y., Lai, B., Wang, Y., Feng, L., & Zhang, Y. (2015). Effect of Nitrite and Nitrate Concentrations on the Performance of AFB-MFC Enriched with High-Strength Synthetic Wastewater. *Biotechnology Research International*, 2015, 1–6. <https://doi.org/10.1155/2015/798397>
- Kawan, J. A., Suja', F., Pramanik, S. K., Yusof, A., Rahman, R. A., & Hasan, H. A. (2022). Effect of Hydraulic Retention Time on the Performance of a Compact Moving Bed Biofilm Reactor for Effluent Polishing of Treated Sewage. *Water (Switzerland)*, 14(1). <https://doi.org/10.3390/w14010081>
- Kementerian Pekerjaan Umum dan Perumahan Rakyat, Direktorat Jenderal Cipta Karya, & Direktorat Pengembangan Kesehatan Lingkungan Permukiman. (2018). *Panduan Perencanaan Teknik Terinci Bangunan Pengolahan Lumpur Tinja* (Buku A).
- Khattiyavong, C., & Lee, H. S. (2019). Performance Simulation and Assessment of an Appropriate Wastewater Treatment Technology in a Densely Populated Growing City in a Developing Country: A Case Study in Vientiane, Laos. *Water (Switzerland)*, 11(5). <https://doi.org/10.3390/w11051012>
- Kholif, M. Al. (2020). *Pengelolaan Air Limbah Domestik* (M. Al Kholif, Ed.). SCOPINDO Media Pustaka.
- Kiasati, A. I., & Labibah, L. (2023). Pengaruh Variabel dari Technology Acceptance Model (TAM) terhadap Penerimaan Layanan Unggah Mandiri di UPT Perpustakaan ISI Yogyakarta. *Lentera Pustaka: Jurnal Kajian Ilmu Perpustakaan, Informasi Dan Kearsipan*, 9(2), 163–174. <https://doi.org/10.14710/lenpust.v9i2.53427>
- Lamb, M. A., Wiedbrauk, S., & Fairfull-Smith, K. E. (2024). Approaches to Enhance the Antimicrobial Activity of Carbapenems within Bacterial Biofilms. *RSC Pharmaceutics*. <https://doi.org/10.1039/d4pm00141a>
- Lopez, F. J., Pitarch, E., Botero-Coy, A. M., Fabregat-Safont, D., Ibáñez, M., Marin, J. M., Peruga, A., Ontañón, N., Martínez-Morcillo, S., Olalla, A., Valcárcel, Y., Varó, I., & Hernández, F. (2022). Removal efficiency for emerging contaminants in a WWTP from Madrid (Spain) after secondary and tertiary treatment and environmental impact on the Manzanares River. *Science of the Total Environment*, 812. <https://doi.org/10.1016/j.scitotenv.2021.152567>
- Madhushika, H. G., Ariyadasa, T. U., & Gunawardena, S. H. P. (2022). Decolorization of Textile Dyes in a Fixed-Bed Biofilm Reactor. *Chemical Engineering and Technology*, 45(6), 1183–1191. <https://doi.org/10.1002/ceat.202200078>
- Magdum, S., & Kalyanraman, V. (2019). Evaluation of High Rate MBBR to Predict Optimal Design Parameters for Higher Carbon and Subsequent Ammoniacal Nitrogen Removal. *Current Science*, 116(12), 2083–2088. <https://doi.org/10.18520/cs/v116/i12/2083-2088>

- Marlis, I. S., Komala, P. S., & Zulkarnaini. (2023). Penyisihan Nitrogen Melalui Proses Anammox dengan Inokulum Lumpur Instalasi Pengolahan Air Limbah Pabrik Pupuk. *Jurnal Ilmu Lingkungan*, 21(3), 717–724. <https://doi.org/10.14710/jil.21.3.717-724>
- Martini, S., Yuliwati, D., Martini, S., Yuliwati, E., & Kharismadewi, D. (2020). Pembuatan Teknologi Pengolahan Limbah Cair Industri. *Distilasi*, 5(2), 26–33.
- Menteri Lingkungan Hidup dan Kehutanan RI. (2016). *Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia Nomor: P.68/Menlhk-Setjen/2016 tentang Baku Mutu Limbah Domestik*.
- Muhammad, A. A. (2023). *Identifikasi Mikroba Dominan pada IPAL Komunal di Area Sanitasi Tingkat Risiko Sedang di Kabupaten Sleman*. Universitas Islam Indonesia.
- Muliadita, T. S. (2023). *Pengolahan Air Limbah Industri Tahu Menggunakan Kombinasi Teknologi Biofilter Anaerob dan Microbubble Generator*.
- Mutiah, S., Sumardiyono, & Pujiastuti, P. (2022). Analisis Parameter Nitrit, Nitrat, Amonia, Fosfat Pada Air Limbah Pertanian Dusun Bendungan, Genuk Harjo, Wuryantoro, Wonogiri. *Jurna; Kimia Dan Rekayasa*, 3(1), 33–45. <http://kireka.setiabudi.ac.id>
- Nabila, D. Z. W., Ziqri, I. M., Widodo, T. W., & Soolany, C. (2025). A Literature Review: Comparative Effectiveness Of Biofilters, Adsorbents, And Denitrification In Nitrate Wastewater Treatment. *RATIH: JURNAL REKAYASA TEKNOLOGI INDUSTRI HIJAU*, 10(1), 6–12.
- Ningtias, B. C., Moersidik, S. S., Priadi, C. R., & Said, N. I. (2015). Pengolahan Air Limbah Domestik dengan Anoksik-Aerobik Moving Bed Biofilm Reaktor (Studi Kasus: Penyisihan Amonia dan Karbon dalam Air Limbah Domestik). *JAI*, 8(2).
- Novembry, N. D., Yulistyorini, A., & Mujiyono. (2022). Effectivity of the Upflow and Downflow Filter Septic Tank for Domestic Wastewater Treatment. *Jurnal Permukiman*, 17(2), 69–76.
- Nur, A., & Komala, P. S. (2021). Plastic bottles waste as attached growth media in the removal of organic and nutrients for small-scale wastewater treatment. *IOP Conference Series: Materials Science and Engineering*, 1098(5), 052045. <https://doi.org/10.1088/1757-899x/1098/5/052045>
- Octaerlian, A. R. (2020). *Unjuk Kerja Ecological Floating Bed (EFB) dengan Media Penyangga Polyurethane Sponge untuk Penyisihan Nitrit (NO₂ –) dan Nitrat (NO₃ –) pada Air Limbah Greywater*.
- Paray, A. A., Singh, M., & Amin Mir, M. (2023). Gram Staining: A Brief Review. *International Journal of Research and Review*, 10(9), 336–341. <https://doi.org/10.52403/ijrr.20230934>

- Permadi, R. B. (2015). *Perbandingan DED IPAL Attached Growth Anaerobic Filter dengan Suspended Growth Upflow Anerobic Sludge Blanket untuk Pusat Perbelanjaan di Surabaya*. Institut Teknologi Sepuluh Nopember.
- Pradnyadari, I. G. A. L., Suyasa, I. W. B., & Suastuti, N. G. A. M. D. A. (2018). Penyisihan Amonia, Nitrit, dan Nitrat dengan Biofilter Menggunakan Plastik Bekas Sebagai Media Penopang Biofilm. *Jurnal Media Sains*, 2(2), 76–82.
- Prayatni, S. (2021). *Keberadaan Mikroplastik di Instalasi Pengolahan Air Limbah Permukiman (Studi Kasus Kota Bandung)*. <https://www.researchgate.net/publication/372403699>
- Pribadi, R. N., Zaman, B., & Purwono. (2016). Pengaruh Luas Penutupan Kiambang (*Salvinia molesta*) Terhadap Penurunan COD, Amonia, Nitrit, dan Nitrat pada Limbah Cair Domestik (Greywater) dengan Sistem Kontinyu. *Jurnal Teknik Lingkungan*, 5(4). <http://ejournal-s1.undip.ac.id/index.php/tlingkungan>
- Putri, H. M., Saraswati, S. P., & Mahathir, J. S. (2022). Penyisihan Material Organik dan Nitrogen dengan Proses Aerasi Menggunakan Microbubble Generator (MBG) pada Instalasi Pengolahan Air Limbah (IPAL) Asrama. *Jurnal Ilmu Lingkungan*, 20(1), 127–138. <https://doi.org/10.14710/jil.20.1.127-138>
- Putri, R. D., Arfan, A. R., & Pratiwi, A. S. (2025). Pengaruh Penambahan Reagen Anti-Rh terhadap Pemeriksaan Kolesterol CHOD-PAP pada Serum yang Mengandung Eritrosit. *UMI Medical Journal*, 10(1), 11–17. <https://doi.org/10.33096/umj.v10i1.360>
- Qasim, Syed. R., & Zhu, G. (2018). *Wastewater Treatment and Reuse Theory and Design Examples* (Vol. 1). Taylor & Francis Group. <https://twwe.ir>
- R, Shavira Aileen. (2023). *Optimalisasi Kinerja Sistem Upflow Anaerobic Sludge Blanket-Downflow Hanging Sponge dalam Penyisihan Amonium, Nitrat, Nitrit Limbah Rumah Potong Hewan dengan Variasi Hydraulic Retention Time*. Andalas University.
- Rahadi, B., Wirosoedarmo, R., & Harera, A. (2018). Sistem Anaerobik-Aerobik pada Pengolahan Limbah Industri Tahu untuk Menurunkan Kadar BOD5, COD, dan TSS. *Jurnal Sumberdaya Alam Dan Lingkungan*, 5(1), 17–26. <https://doi.org/10.21776/ub.jsal.2018.005.01.3>
- Rahayu, W. I., Maresti, F. A., Wardana, A. R., & Ramadhani, F. U. (2025). Penerapan ANOVA One Way untuk Menganalisis Pengaruh Pendidikan Terhadap Pendapatan Individu Menggunakan Python serta Visualisasi Data dengan Looker Studio. *Data Sciences Indonesia (DSI)*, 4(2), 85–95. <https://doi.org/10.47709/dsi.v4i2.5363>
- Reichelt, A. (2023). *Marine Pollution-Monitoring, Management and Mitigation*.
- Rizka, M., Fauzi, M., Soewondo, P., Handjani, M., & Tedjakusuma, T. (2024). Pengaruh Beban Influen terhadap Performa Pengolahan Air Limbah Domestik Menggunakan Fixed Bed System dengan Media Penunjang PVC Sarang Tawon.

- Rout, P. R., Shahid, M. K., Dash, R. R., Bhunia, P., Liu, D., Varjani, S., Zhang, T. C., & Surampalli, R. Y. (2021). Nutrient removal from domestic wastewater: A comprehensive review on conventional and advanced technologies. *Journal of Environmental Management*, 296. <https://doi.org/10.1016/j.jenvman.2021.113246>
- Rover, Mayerni, R., Yanti, Y., & Syarif, A. (2019). Isolation and Characterization of Endofytic Bacteria Indigenus Potentially Producing IAA (Indole Acetic Acid) in West Sumatera and Their Effect on Nursery Palm Oil (*Elaeis guineensis* jacq). *Journal of Applied Agricultural Science and Technology*, 3(2), 257–267. <https://doi.org/10.32530/jaast.v3i2.116>
- Said, N. I., & Hartaja, D. R. K. (2015). Leachate Treatment Using Anaerobic-Aerobic Biofilter and Denitrification Process. *JAI*, 8(1).
- Sali, G. P., Suprabawati, A., & Purwanto, Y. (2018). *Efektivitas Teknik Biofiltrasi Dengan Media Sarang Tawon Terhadap Penurunan Kadar Nitrogen Total Limbah Cair*. 15(1).
- Sasmitha, D. (2017). *Pemanfaatan Sampah Plastik Polyethylene Terephthalate (PET) sebagai Media pada Unit Pre-Filter*. Institut Teknologi Sepuluh Nopember.
- Sasse, L. (1998). *Decentralised Wastewater Treatment in Developing Countries DEWATS*. Bremen Overseas Research and Development Association.
- Semarta, I. W. W. A., Hartati, E., & Salafudin. (2020). Proses *Seeding* dan Aklimatisasi pada Anaerobic Trickling Reactor. *Jurnal Institut Teknologi Nasional Maret*, 8(1).
- Sepehri, A., & Sarrafzadeh, M. H. (2019). Activity enhancement of ammonia-oxidizing bacteria and nitrite-oxidizing bacteria in activated sludge process: metabolite reduction and CO₂ mitigation intensification process. *Applied Water Science*, 9(5). <https://doi.org/10.1007/s13201-019-1017-6>
- Setiyawan, A. S., Nur, A., Fauzi, M., Oginawati, K., & Soewondo, P. (2023). Effects of Different Polymeric Materials on the Bacterial Attachment and Biofilm Formation in Anoxic Fixed-Bed Biofilm Reactors. *Water, Air, and Soil Pollution*, 234(3). <https://doi.org/10.1007/s11270-023-06174-2>
- Shah, U. (2005). *Report to the Puget Sound Action Team Nitrogen Reducing Technologies for Onsite Wastewater Treatment Systems-Report to the Puget Sound Action Team*.
- Singga, S., & Dukabain, O. M. (2019). Kombinasi Metode Anaerob dan Aerob pada Septik Tank untuk Menurunkan Kadar BOD, TSS dan Coliform pada Limbah Cair Rumah Tangga. *Oehonis : The Journal of Environmental Health Research*, 3(1), 180–184.

- Subhaktiyasa, P. G., Candrawati, S. A. K., Sumaryani, N. P., Sunita, N. W., & Syakur, A. (2025). Penerapan Statistik Deskriptif: Perspektif Kuantitatif dan Kualitatif. *Emasains : Jurnal Edukasi Matematika Dan Sains*, 14(1), 96–104. <https://doi.org/10.59672/emasains.v14i1.4450>
- Syahidah, S., Effendy, V. V., & Fananda, A. A. (2021). *Pengembangan Sistem FBBR (Fixed Bed Biofilm Reactor) Melalui Pemanfaatan Nanomaterial dan Enzim Lipase Rekombinan sebagai Solusi Penanganan FOG (Fat, Oil, Grease) pada Air Limbah*. <https://www.researchgate.net/publication/357323220>
- Syahrin, A., Andrio, D., Veronika, N., Prodi Teknik Lingkungan, M., Teknik, F., Riau, U., Prodi Teknik Lingkungan, D., Prodi Teknik Pengolahan Sawit, D., & Kampus Bina Widya Jl Soebrantas, P. H. (2016). Proses *Seeding* dan Aklimatisasi Untuk Pengolahan Anaerob Limbah Cair Produksi Minyak Sawit. *Jom F TEKNIK*, 3(2).
- Tan, S.-Y., Sethupathi, S., Leong, K.-H., & Ahmad, T. (2023). Acid-Modified Coffee Grounds Biochar for Nitrate and Nitrite Removal: an Optimization via Central Composite Design. *International Journal of Environmental Science and Technology*, 21, 3221–3234.
- Tchobanoglous, G., Stensel, H. D., Tsuchihashi, R., & Burton, F. (2014). *Wastewater Engineering Treatment and Resource Recovery* (L. Buczek, Ed.; Fifth Edition). McGraw-Hill Education.
- Trianda, Y., Desmiarti, R., Fujisawa, T., Ishiguro, Y., & Li, F. (2018). Study of Suspended Impurities Origin and Composition in the Treatment Process of Johkasou System. *AJChE*, 54–61.
- Uluçay, O. (2023). Mikroorganizmalar ve Bakteri Çeşitliliği. In *Matematik ve Fen Bilimleri Üzerine Araştırmalar*. Özgür Yayınları. <https://doi.org/10.58830/ozgur.pub81.c476>
- US EPA, & WHO. (2016). *Nitrate and Nitrite in Drinking-water Background document for development of WHO Guidelines for Drinking-water Quality*. <http://www.who.int/publications/guidelines/>
- Vandith, V., Soleh Setiyawan, A., Soewondo, P., Bophann, P., & Hardjono. (2018). Kinetics of nutrient removal in an on-site domestic wastewater treatment facility. *MATEC Web of Conferences*, 147. <https://doi.org/10.1051/mateconf/201814704004>
- Wang, X., Cheng, S., & Chen, H. (2024). Evaluating the Mechanisms and Efficiency of Johkasou Systems for Decentralized Domestic Effluent Treatment: A Review. In *Water (Switzerland)* (Vol. 16, Issue 16). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/w16162266>
- Widiyanti, V. R., Sedjati, S., & Nuraini, R. A. T. (2018). Korelasi Kandungan Nitrat Dan Fosfat Dalam Air Dan Sedimen Dengan Kerapatan Lamun Yang Berbeda Di Perairan Teluk Awur, Jepara. *Journal of Marine Research*, 7(3), 193–200.

- Yusal, Muh. S., Hasyim, A., Hastuti, H., Arif, A., & Pratomo, R. H. S. (2025). Review Eutrofikasi: Risiko dalam Kesuburan Lingkungan Perairan dan Upaya Penanggulangannya. *Jurnal Kesehatan Lingkungan Indonesia*, 24(1), 124–135. <https://doi.org/10.14710/jkli.24.1.124-135>
- Zhao, Y., Liu, D., Huang, W., Yang, Y., Ji, M., Nghiem, L. D., Trinh, Q. T., & Tran, N. H. (2019). Insights into biofilm carriers for biological wastewater treatment processes: Current state-of-the-art, challenges, and opportunities. In *Bioresource Technology* (Vol. 288). Elsevier Ltd. <https://doi.org/10.1016/j.biortech.2019.121619>
- Zuraidah, Wahyuni, D., & Astuty, E. (2020). Karakteristik Morfologi dan Uji Aktivitas Bakteri Termofilik dari Kawasan Wisata Ie Seuum (Air Panas). *Jurnal Ilmu Alam Dan Lingkungan*, 11(2), 40–47.

