

DAFTAR PUSTAKA

- Abudi, Z. N., Hu, Z., Abood, A. R., Liu, D., & Gao, A. (2020). Effects of Alkali Pre-treatment, Total Solid Content, Substrate to Inoculum Ratio, and pH on Biogas Production from Anaerobic Digestion of Mango Leaves. *Waste and Biomass Valorization*, 11(3), 887–897. <https://doi.org/10.1007/S12649-018-0437-0>
- Adnan, A. A., Ismayana, A., Sailah, I., Shobi, I., & Indrasti, N. S. (2020). The potential usage of recycled waste water in small scale tapioca industry in Bogor. *IOP Conference Series: Earth and Environmental Science*, 472(1). <https://doi.org/10.1088/1755-1315/472/1/012033>
- Agung R, T., & Winata, H. S. (2017). Pengolahan Air Limbah Industri Tahu Dengan Menggunakan Teknologi Plasma. *Jurnal Imiah Teknik Lingkungan*, 2(2), 19–28.
- Andareswari, N., Hariyadi, S., & Yulianto, G. (2019). KARAKTERISTIK DAN STRATEGI PENGELOLAAN LIMBAH CAIR USAHA TAPIOKA DI BOGOR UTARA. *Jurnal Ecolab*, 13(2), 85–96. <https://doi.org/10.20886/JKLH.2019.13.2.85-96>
- Azizah, R. N., Slamet, A., & Yuniarto, A. (2017). Evaluasi Instalasi Pengolahan Air Limbah Industri Tapioka Di Kabupaten Lampung Timur. *IPTEK Journal of Proceedings Series*, 3(5). <https://doi.org/10.12962/J23546026.Y2017I5.3126>
- Budiyono, B. (2014). Pengaruh pH dan Rasio COD:N Terhadap Produksi Biogas dengan Bahan Baku Limbah Industri Alkohol (Vinasse). *Eksergi*, 11(1), 1. <https://doi.org/10.31315/e.v11i1.324>
- Budiyono, B., Syaichurrozi, I., Suhirman, S., Hidayat, T., & Jayanudin, J. (2021). Experiment and modeling to evaluate the effect of total solid on biogas production from the anaerobic co-digestion of Tofu liquid waste and rice straw. *Polish Journal of Environmental Studies*, 30(4), 3489–3496. <https://doi.org/10.15244/pjoes/127277>
- Budiyono, B., Syaichurrozi, I., & Sumardiono, S. (2013). Biogas production from bioethanol waste: the effect of pH and urea addition to biogas production rate. *Waste Technology*, 1(1), 1–5. <https://doi.org/10.14710/1.1.1-5>
- Budiyono, Widiassa, I. N., Johari, S., & Sunarso. (2010). The kinetic of biogas production rate from cattle manure in batch mode. *World Academy of Science, Engineering and Technology*, 37(1), 983–988.
- Buyukkamaci, N., & Filibeli, A. (2004). Volatile fatty acid formation in an

- anaerobic hybrid reactor. *Process Biochemistry*, 39(11), 1491–1494. [https://doi.org/10.1016/S0032-9592\(03\)00295-4](https://doi.org/10.1016/S0032-9592(03)00295-4)
- Carlini, M., Castellucci, S., & Moneti, M. (2015). Biogas production from poultry manure and cheese whey wastewater under mesophilic conditions in batch reactor. *Energy Procedia*, 82, 811–818. <https://doi.org/10.1016/j.egypro.2015.11.817>
- Chakraborty, D., Ganesh, P. S., Suryawanshi, P. C., Kumar, B. G. P., & Ramachandran, S. (2018). Thermophilic Biomethanation of Food Waste for the Production of Biogas and Concomitant Use of Biogas as a Fuel Supplement for Cooking. *Bioprocess Engineering for a Green Environment*, 369–409. <https://doi.org/10.1201/B22021-17>
- Choi, K., Kondaveeti, S., & Min, B. (2017). Bioresource Technology Bioelectrochemical methane (CH₄) production in anaerobic digestion at different supplemental voltages. *Bioresource Technology*, 245(September), 826–832. <https://doi.org/10.1016/j.biortech.2017.09.057>
- Cremonez, P. A., Teleken, J. G., Weiser Meier, T. R., & Alves, H. J. (2021). Two-Stage anaerobic digestion in agroindustrial waste treatment: A review. *Journal of Environmental Management*, 281, 111854. <https://doi.org/10.1016/J.JENVMAN.2020.111854>
- De Vrieze, J., Arends, J. B. A., Verbeeck, K., Gildemyn, S., & Rabaey, K. (2018). Interfacing anaerobic digestion with (bio)electrochemical systems: Potentials and challenges. *Water Research*, 146, 244–255. <https://doi.org/10.1016/j.watres.2018.08.045>
- Deublein, D. and Steinhauser, A. (2011). Biogas from Waste and Renewable Resources: An introduction, John Wiley & Sons. In *Sustainability (Switzerland)* (Vol. 11, Issue 1). http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- Fudge, T., Bulmer, I., Bowman, K., Pathmakanthan, S., Gambier, W., Dehouche, Z., Al-Salem, S. M., & Constantinou, A. (2021). Microbial electrolysis cells for decentralised wastewater treatment: The next steps. *Water (Switzerland)*, 13(4). <https://doi.org/10.3390/w13040445>
- Gomes, C. S., Strangfeld, M., & Meyer, M. (2021). *Diauxie Studies in Biogas Production from Gelatin and Adaptation of the Modified Gompertz Model: Two-Phase Gompertz Model*. <https://doi.org/10.3390/app11031067>
- Han, W., He, P., Lin, Y., Shao, L., & Lü, F. (2019). A Methanogenic Consortium Was Active and Exhibited Long-Term Survival in an Extremely Acidified Thermophilic Bioreactor. *Frontiers in Microbiology*, 10(November), 1–15. <https://doi.org/10.3389/fmicb.2019.02757>

- I. Syaichurrozi, S. Sarto, W.B. Sediawan, M. H. (2023). *View of Effect of Fe Addition on Anaerobic Digestion Process in Treating Vinasse: Experimental and Kinetic Studies*. Periodica Polytechnica Chemical Engineering, 67(1), Pp. 127–140,. <https://pp.bme.hu/ch/article/view/20611/9665>
- Indrianeu, T., & Singkawijaya, E. B. (2019). Pemanfaatan Limbah Industri Rumah Tangga Tepung Tapioka Untuk Mengurangi Dampak Lingkungan. *JURNAL GEOGRAFI Geografi Dan Pengajarannya*, 17(2), 39. <https://doi.org/10.26740/jggp.v17n2.p39-50>
- Joicy, A., Seo, H., Lee, M. E., Kim, D. H., Cho, S. K., & Ahn, Y. (2022a). Enhanced methane production using pretreated sludge in MEC-AD system: Performance, microbial activity, and implications at different applied voltages. *International Journal of Hydrogen Energy*, 47(96), 40731–40741. <https://doi.org/10.1016/j.ijhydene.2022.07.154>
- Joicy, A., Seo, H., Lee, M. E., Kim, D. H., Cho, S. K., & Ahn, Y. (2022b). Enhanced methane production using pretreated sludge in MEC-AD system: Performance, microbial activity, and implications at different applied voltages. *International Journal of Hydrogen Energy*, 47(96), 40731–40741. <https://doi.org/10.1016/J.IJHYDENE.2022.07.154>
- Juanga, J. P., Visvanathan, C., & Tränkler, J. (2007). Optimization of anaerobic digestion of municipal solid waste in combined process and sequential staging. *Waste Management & Research: The Journal of the International Solid Wastes and Public Cleansing Association, ISWA*, 25(1), 30–38. <https://doi.org/10.1177/0734242X07072085>
- Kadier, A., Simayi, Y., Abdeslahian, P., Azman, N. F., Chandrasekhar, K., & Kalil, M. S. (2016). A comprehensive review of microbial electrolysis cells (MEC) reactor designs and configurations for sustainable hydrogen gas production. *Alexandria Engineering Journal*, 55(1), 427–443. <https://doi.org/10.1016/J.AEJ.2015.10.008>
- Kafle, G. K., Kim, S. H., & Sung, K. I. (2013). Ensiling of fish industry waste for biogas production: A lab scale evaluation of biochemical methane potential (BMP) and kinetics. *Bioresource Technology*, 127, 326–336. <https://doi.org/10.1016/J.BIORTECH.2012.09.032>
- Kanellos, G., Tremouli, A., Arvanitakis, G., & Lyberatos, G. (2024). Boosting methane production and raw waste activated sludge treatment in a microbial electrolysis cell-anaerobic digestion (MEC-AD) system: The effect of organic loading rate. *Bioelectrochemistry*, 155, 108555. <https://doi.org/10.1016/J.BIOELECHEMA.2023.108555>
- Karthikeyan, O. P., & Visvanathan, C. (2012). Bio-energy recovery from high-solid organic substrates by dry anaerobic bio-conversion processes: a review. *Reviews in Environmental Science and Bio/Technology* 2012 12:3, 12(3), 257–284. <https://doi.org/10.1007/S11157-012-9304-9>

- Khanal, S. K. (2008). *Anaerobic biotechnology for bioenergy production: principles and applications*. 301.
- Khomariah, N., Syaichurrozi, I., & Kurniawan, T. (2024). Jurnal Bahan Alam Terbarukan Enhanced Biogas Production from Tapioca Wastewater Through the Microbial Electrolysis Cell-Assisted Anaerobic Digestion Process at Various Urea Additions. *Jurnal Bahan Alam Terbarukan*, 13(200), 146–155.
- Kim, D. H., Lee, D. Y., & Kim, M. S. (2011). Enhanced biohydrogen production from tofu residue by acid/base pretreatment and sewage sludge addition. *International Journal of Hydrogen Energy*, 36(21), 13922–13927. <https://doi.org/10.1016/j.ijhydene.2011.03.085>
- Kitching, M., Butler, R., & Marsili, E. (2017). Microbial bioelectrosynthesis of hydrogen: Current challenges and scale-up. *Enzyme and Microbial Technology*, 96, 1–13. <https://doi.org/10.1016/J.ENZMICTEC.2016.09.002>
- Lin, Y., Zhang, W., Li, C., Sakakibara, K., Tanaka, S., & Kong, H. (2012). Factors affecting ethanol fermentation using *Saccharomyces cerevisiae* BY4742. *Biomass and Bioenergy, Complete*(47), 395–401. <https://doi.org/10.1016/J.BIOMBIOE.2012.09.019>
- Matin, H. H. A., Damarjati, B. Y., Shidqi, M. I. G., Budiyono, B., Othman, N. H., & Wahyono, Y. (2024). Biogas Production From the Potato Peel Waste: Study of the Effect of C/N Ratio, Em-4 Bacteria Addition and Initial Ph. *Revista de Gestao Social e Ambiental*, 18(6), 1–21. <https://doi.org/10.24857/rgsa.v18n6-039>
- Metcalf & Eddy Inc., Tchobanoglous, G., Burton, F. L., & Stensel, H. D. (2003). Chapter 13: Water Reuse. *Wastewater Engineering - Treatment and Reuse*, 1345–1446. https://books.google.com/books/about/Wastewater_Engineering_Treatment_and_Reu.html?id=L1MAXTAKL-QC
- Neves, C., Maroneze, M. M., dos Santos, A. M., Francisco, E. C., Wagner, R., Zepka, L. Q., & Jacob-Lopes, E. (2016). Cassava processing wastewater as a platform for third generation biodiesel production. *Scientia Agricola*, 73(5), 412–416. <https://doi.org/10.1590/0103-9016-2015-0302>
- Olukanni, D. O., & Olatunji, T. O. (2018). Cassava waste management and biogas generation potential in selected local government areas in Ogun State, Nigeria. *Recycling*, 3(4). <https://doi.org/10.3390/recycling3040058>
- Qiao, F., Zhang, G., Fan, J., Zhang, H., Shi, B., Yang, J., Zhang, J., & Han, Z. (2023). Hydrothermal pretreatment of protein-rich substrate: Modified physicochemical properties and consequent responses in its anaerobic digestion. *Carbon Resources Conversion*, 6(1), 1–10. <https://doi.org/10.1016/J.CRCON.2022.10.001>
- Rivera, I., Schröder, U., & Patil, S. A. (2019). Microbial Electrolysis for

- Biohydrogen Production: Technical Aspects and Scale-Up Experiences. *Biomass, Biofuels, Biochemicals: Microbial Electrochemical Technology: Sustainable Platform for Fuels, Chemicals and Remediation*, 871–898. <https://doi.org/10.1016/B978-0-444-64052-9.00036-4>
- Saputra, A., Rahardianto, T., & Gomez, C. (2016). Dampak Pembuangan Limbah Tapioka Terhadap Kualitas Air Tambak di Kecamatan Margoyoso Kabupaten Pati. *Prosiding Seminar Nasional Geografi UMS*, 577–587. <http://publikasiilmiah.ums.ac.id/handle/11617/8575>
- Sensih, D. G., & Prayitno, P. (2020). LIMBAH TAPIOKA UNTUK PRODUKSI BIOGAS: ALTERNATIF PENGOLAHAN DAN PENGARUH KONSENTRASI SUBSTRAT. *DISTILAT: Jurnal Teknologi Separasi*, 6(2), 457–467. <https://doi.org/10.33795/DISTILAT.V6I2.158>
- Shitophyta, L. M., Maryudi, M., & Budiyono, B. (2017). COMPARISON OF KINETIC MODELS FOR BIOGAS PRODUCTION FROM RICE STRAW. *Jurnal Bahan Alam Terbarukan*, 6(2), 107–111. <https://doi.org/10.15294/JBAT.V6I2.9325>
- Soeprijanto, S., Kaiser, A. A., & Amalia, D. F. (2021). Biogas Production from Water Spinach and Banana Peel Waste Using Plug Flow Reactor. *IPTEK The Journal of Engineering*, 7(2), 46. <https://doi.org/10.12962/j23378557.v7i2.a9928>
- Speece, R. E. (1983). Anaerobic biotechnology for industrial wastewater treatment. *Environmental Science and Technology*, 17(9), 416A-427A. <https://doi.org/10.1021/ES00115A001>
- Sun, R., Zhou, A., Jia, J., Liang, Q., Liu, Q., Xing, D., & Ren, N. (2015). Characterization of methane production and microbial community shifts during waste activated sludge degradation in microbial electrolysis cells. *Bioresource Technology*, 175, 68–74. <https://doi.org/10.1016/J.BIORTECH.2014.10.052>
- Syaichurrozi, I. (2017). Pengaruh Ph Umpan Terhadap Produksi Biogas Dari Kiambang. *Jurnal Integrasi Proses*, 6(4), 180. <https://doi.org/10.36055/jip.v6i4.2543>
- Syaichurrozi, I. (2022). *TEKNOLOGI BIOGAS - Dr. Iqbal Syaichurrozi, S.T., M.T.* - Google Buku. Adab. <https://books.google.co.id/books?id=hhVyEAAQBAJ&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Syaichurrozi, I., Murtiningsih, I., Angelica, E. C., Susanti, D. Y., Raharjo, J., Timuda, G. E., Darsono, N., Primeia, S., Suwandi, E., Kurniawan, & Khaerudini, D. S. (2024). A preliminary study: Microbial electrolysis cell assisted anaerobic digestion for biogas production from Indonesian tofu-processing wastewater at various Fe additions. *Renewable Energy*, 234. <https://doi.org/10.1016/j.renene.2024.121203>

- Syaichurrozi, I., Rusdi, R., Hidayat, T., & Bustomi, A. (2016). Kinetics Studies Impact of Initial pH and Addition of Yeast *Saccharomyces cerevisiae* on Biogas Production from Tofu Wastewater in Indonesia. *International Journal of Engineering*, 29(8), 1037–1046. https://www.ije.ir/article_72765.html
- Teguh, T. E., Zakaria, W. A., Indah, L. S. M., & Seta, A. P. (2022). Strategies and Policies To Increase Competitiveness of Cassava in Lampung Province, Indonesia. *Jurnal Manajemen Dan Agribisnis*, 19(3), 492–500. <https://doi.org/10.17358/jma.19.3.492>
- Villano, M., Scardala, S., Aulenta, F., & Majone, M. (2013). Carbon and nitrogen removal and enhanced methane production in a microbial electrolysis cell. *Bioresource Technology*, 130, 366–371. <https://doi.org/10.1016/J.BIORTECH.2012.11.080>
- Wang, X. T., Zhang, Y. F., Wang, B., Wang, S., Xing, X., Xu, X. J., Liu, W. Z., Ren, N. Q., Lee, D. J., & Chen, C. (2022). Enhancement of methane production from waste activated sludge using hybrid microbial electrolysis cells-anaerobic digestion (MEC-AD) process - A review. *Bioresource Technology*, 346. <https://doi.org/10.1016/J.BIORTECH.2021.126641>
- Xiaomei, Z., Rujing, L., Jun, X., Yingying, H., Xinying, Z., & Li, X. (2022). Enhanced methane production by bimetallic metal–organic frameworks (MOFs) as cathode in an anaerobic digestion microbial electrolysis cell. *Chemical Engineering Journal*, 440(January), 135799. <https://doi.org/10.1016/j.cej.2022.135799>
- Xing, T., Yun, S., Li, B., Wang, K., Chen, J., Jia, B., Ke, T., & An, J. (2021a). Coconut-shell-derived bio-based carbon enhanced microbial electrolysis cells for upgrading anaerobic co-digestion of cow manure and aloe peel waste. *Bioresource Technology*, 338(May), 125520. <https://doi.org/10.1016/j.biortech.2021.125520>
- Xing, T., Yun, S., Li, B., Wang, K., Chen, J., Jia, B., Ke, T., & An, J. (2021b). Coconut-shell-derived bio-based carbon enhanced microbial electrolysis cells for upgrading anaerobic co-digestion of cow manure and aloe peel waste. *Bioresource Technology*, 338, 125520. <https://doi.org/10.1016/J.BIORTECH.2021.125520>
- Yu, Z., Leng, X., Zhao, S., Ji, J., Zhou, T., Khan, A., Kakde, A., Liu, P., & Li, X. (2018). A review on the applications of microbial electrolysis cells in anaerobic digestion. *Bioresource Technology*, 255, 340–348. <https://doi.org/10.1016/J.BIORTECH.2018.02.003>
- Zhao, L., Wang, X. T., Chen, K. Y., Wang, Z. H., Xu, X. J., Zhou, X., Xing, D. F., Ren, N. Q., Lee, D. J., & Chen, C. (2021). The underlying mechanism of enhanced methane production using microbial electrolysis cell assisted anaerobic digestion (MEC-AD) of proteins. *Water Research*, 201(May). <https://doi.org/10.1016/j.watres.2021.117325>

Zou, L., Wang, C., Zhao, X., Wu, K., Liang, C., Yin, F., Yang, B., Liu, J., Yang, H., & Zhang, W. (2021). Enhanced anaerobic digestion of swine manure via a coupled microbial electrolysis cell. *Bioresource Technology*, 340(July). <https://doi.org/10.1016/j.biortech.2021.125619>