



## DAFTAR PUSTAKA

- American Public Health Association (APHA). 2017. Standard Methods for the Examination of Water and Wastewater. American Public Health Association: Washington.
- Adela, B.N., N. Muzzammil, S.K. Loh, dan Y.M. Choo. 2014. Characteristics of Palm Oil Mill Effluent (POME) in an anaerobic biogas digester. Asian Journal of Microbiology, Biotechnology & Environmental Sciences Paper 16:225-231.
- Azmi, N.S. and K.F. Md. Yunos. 2014. Wastewater treatment of palm oil mill effluent (POME) by ultrafiltration membrane separation technique coupled with adsorption treatment as pre-treatment. Agriculture and Agricultural Science Procedia 2:257-264.
- Baek, G., J. Kim, J. Kim, and C. Lee. 2018. Role and potential of direct interspecies electron transfer in anaerobic digestion. Energies 11:1-18.
- Coates, J.D., E.J.P. Phillips, D.J. Lonergan, H. Jenter, and D.R. Lovley. 1996. Isolation of *Geobacter* species from diverse sedimentary environments. Applied and Environmental Microbiology 62:1531-1536.
- Chen, L., W. Fang, J. Chang, J. Liang, P. Zhang, and G. Zhang. 2022. Improvement of direct interspecies electron transfer via adding conductive materials in anaerobic digestion: Mechanisms, performances, and challenges. Frontiers in Microbiology 13:860749.
- Damayanti, S.I., D.F. Astiti, Sarto, and W. Budhijanto. 2019. Inoculum selection and micro-aeration for biogas production in two-stage anaerobic digestion of palm oil mill effluent (POME). Jurnal Bahan Alam Terbarukan 8:14-21.
- Deswati, H. Suyani, A.K. Muchtar, E.F. Abe, Y. Yusuf, and H. Pardi. 2019. Copper, iron and zinc contents in water, pakcoy (*Brassica rapa* L.) and tilapia (*Oreochromis niloticus*) in the presence of aquaponics. Rasayan Journal of Chemistry 12:40-49.
- Fagbohungbe, M. O., I. C. Dodd, B. M. J. Herbert, H. Li, L. Ricketts, and K. T. Semple. 2015. High solid anaerobic digestion: Operational challenges and possibilities. Environmental Technology and Innovation 4:268-284.
- Firdiyani, Z.H. 2020. Pemantauan Evolusi  $CO_2$  pada Proses Fermentasi *Saccharomyces cerevisiae* SW14 Menggunakan Perekam Data Manometer. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.
- Hasanudin, U., R. Sugiharto, A. Haryanto, T. Setiadi, and K. Fujie. 2015. Palm oil mill effluent treatment and utilization to ensure the sustainability of palm oil industries. Water Science & Technology 72:1089-1095.
- Hosseini, S.H., G. Bagheri, M. Khaleghi, and M.A. Wahid. 2015. Combustion of biogas released from Palm oil mill effluent and the effects of hydrogen enrichment on the characteristics of the biogas flame. Journal of Combustion 5:1-12.
- Kaniapan, S., S. Hassan, H. Ya, K.P. Nesan, and M. Azeem. 2021. The utilisation of palm oil and oil palm residues and the related challenges as a sustainable alternative in biofuel, bioenergy, and transporation sector: A review. Sustainability 13:1-25.
- Kato, S., K. Hashimoto, and K. Watanabe. 2012. Methanogenesis facilitated by electric syntrophy via (semi)conductive iron-oxide minerals. Environmental Microbiology 14:1646-1654.



- Kasinski, S. 2020. Mesophilic and thermophilic anaerobic digestion of organic fraction separated during mechanical heat treatment of municipal waste. *Applied Science* 10:1-11.
- Khairuddin, M.N., A.J. Zakaria, I. Md. Isa, H. Jol, W.M.N.W.A. Rahman, dan M.K.S. Salleh. 2016. The potential of treated Palm Oil Mill Effluent (POME) sludge as an organic fertilizer. *AGRIVITA Journal of Agricultural Science* 38:142-154.
- Lam, M.K. and K.T. Lee. 2011. Renewable and sustainable bioenergies product from palm oil mill effluent (POME): Win-win strategies toward better environmental protection. *Biotechnology Advances* 29:124-141.
- Li, Jiajia., F. Liu, C. Yang, S. Zheng, L. Xiao, J. Li, C. Tu, Y. Luo. 2019. Inhibition effect of polyvinyl chloride on ferrihydrite reduction and electrochemical activities of *Geobacter metallireducens*. *Journal of Basic Microbiology* 60:1-10.
- Lin, B., H.V. Westerhoff, W.F.M. Roling. 2009. How *Geobacteraceae* may dominate subsurface biodegradation: physiology of *Geobacter metallireducens* in slow growth habitat-simulating retentostats. *Environmental Microbiology* 11:2425-2433.
- Liu, Y., X. Li, S. Wu, Z. Tan, and C. Yang. 2021. Enhancing anaerobic digestion process with addition of conductive material. *Chemosphere* 278:130449.
- Madaki, Y.S. and L. Seng. 2013. Palm oil mill effluent (POME) from Malaysia palm oil mills: waste or resource. *International Journal of Science Environment* 2:1138-1155.
- Mellyanawati, M., F.M.A. Chusna, H. Sudibyo, N. Nurjanah, W. Budhijanto. 2018. Influence of nutrient impregnated into zeolite addition on anaerobic digestion of Palm Oil Mill Effluent (POME). *IOP Conference Series: Materials Science and Engineering* 316:1-7.
- Mohammad, S., S. Baidurah, T. Kobayashi, N. Ismail, and C.P. Leh. 2021. Palm oil mill effluent treatment processes-A review. *Processes* 9:1-22.
- Poh, P.E., W.J. Yong, and M.F. Chong. 2010. Palm Oil Mill Effluent (POME) characteristic in high crop season and the applicability of high-rate anaerobic bioreactors for the treatment of POME. *Industrial & Engineering Chemistry Research* 49:11732-11740.
- Prambudi, T.A., Hadiyanto, S.W.A. Suedy. 2021. Analysis of potential biogas production from a mixture of palm oil mill effluent (POME) and cow dung. *E3S Web of Conferences* 317:1-8.
- Rajani, A., Kusnadi, A. Santosa, A. Saepudin, S. Gobikrishnan, and D. Andriani. 2019. Review on biogas from palm oil mill effluent (POME): Challenges and opportunities in Indonesia. *IOP Conference Series: Earth Environmental Science* 293:012004.
- Rashid, M., N. Shakib, T. Rahman. 2019. Biogas production from POME by optimum level of inputs. *Smart Grid and Renewable Energy* 10:203-212.
- Said, M., S.R.S. Abdullah, A.W. Mohammad. 2016. Palm oil mill effluent treatment through combined process adsorption and membrane filtration. *Sriwijaya Journal of Environment* 1:36-41.
- Sawyerr, N., T. Cristina, W. Tilahun, O. Vincent. 2019. An overview of biogas production: Fundamentals, applications and future research. *International Journal of Energy Economics and Policy* 9:105-116.



- Shahidul, M.I., M.L. Malcolm, and J.J. Eugene. 2018. Methane production potential of POME: A review on waste-to-energy (WTE) model. *Science International (Lahore)* 30:717-728.
- Shelobolina, E.S., H.A. Vrionis, R.H. Findlay, and D.R. Lovley. 2008. *Geobacter uraniireducens* sp. nov., isolated from subsurface sediment undergoing uranium bioremediation. *International Journal of Systematic and Evolutionary Microbiology* 58:1075-1078.
- Sikora, A., A. Detman, D. Mielecki, A. Chojnacka, and M. Blaszczyk. 2018. Searching for metabolic pathways of anaerobic digestion: A useful list of the key enzymes. *IntechOpen* 73348:1-19.
- Summers, Z. M., H. E. Fogarty, C. Leang, A. E. Franks, N. S. Malvankar, and D. R. Lovley. 2010. Direct exchange of electrons within aggregates of an evolved syntrophic coculture of anaerobic bacteria. *Science* 330:1413- 1415.
- Trisakti, B., Irvan, Mahdalena, Taslim, and M. Turmuzi. 2016. Effect of temperature on methanogenesis stage of two-stage anaerobic digestion of palm oil mill effluent (POME) into biogas. *IOP Conference Series: Materials Science and Engineering* 206:1-8.
- Tyagi, V.K., A. Bhatia, K. Kubota, A. Rajpal, B. Ahmed, A.A. Khan, A.A. Kazmi, M. Kumar. 2021. Microbial community dynamics in anaerobic digesters treating organic fraction of municipal solid waste. *Environmental Technology & Innovation* 21:1-19.
- Widder, S., R. J. Allen, T. Pfeiffer, T. P. Curtis, C. Wiuf, W. T. Sloan, O. X. Cordero, S. P. Brown, B. Momeni, W. Shou, H. Kettle, H. J. Flint, A. F. Haas, B. Laroche, J. Kreft, P. B. Rainey, S. Freilich, S. Schuster, K. Milferstedt, J. R. Van der Meer, T. Großkopf, J. Huisman, A. Free, C. Picioreanu, C. Quince, I. Klapper, S. Labarthe, B. F. Smets, H. Wang, and O. S. Soyer. 2016. Challenges in microbial ecology: Building predictive understanding of community function and dynamics. *The ISME Journal* 10:2557-2568.
- Wong, Y.-S., T. T. Teng, S.-A. Ong, M. Norhashimah, M. Rafatullah, and H.-C. Lee. 2013. Anaerobic acidogenesis biodegradation of palm oil mill effluent using Suspended Closed Anaerobic Bioreactor (SCABR) at mesophilic temperature. *Procedia Environmental Sciences* 18:433-441.
- Yadav, M., C. Joshi, K. Paritosh, J. Thakur, N. Pareek, S. K. Masakapalli, V. Vivekanand. 2022. Organic waste conversion through anaerobic digestion: A critical insight into the metabolic pathways and microbial interactions. *Metabolic Engineering* 69:323-337.