



DAFTAR PUSTAKA

- Adela, B.N., N.Muzzammil, S.K.Loh, and Y.M.Choo. 2014. Characyeristic of palm oil mill effluent (*POME*) in an anaerobic biogas digester. Asian Journal of Microbiology, Biotechnology and Environmental Sciences. 16. 1:225-231.
- Ahmad, A.L., S.Ismail, and S.Bhatia. 2003. Wasterwater treatment: water recycling from palm oil mill effluent (*POME*) using membrane technology. Desalination. 157:87-95.
- Ahmad, A.L., K. Sithamparam, M.M.D. Zulkali, and S. Ismail. 2003. Extraction of residue oil from palm oil mill effluent (*POME*) using organic solvent. AJSTD. 20: 385-394.
- Ahmed,Y., Z.Yaakob, P.Akhtar, and K.Sopian. 2015. Production of biogas and performance evaluation of existing treatment processes in palm oil mill effluent (*POME*). Renewable and Suistanable Energy Reviews. 42:1260-1278.
- Alkarimah, R., S. B. Mahat, A. Yuzir, M. Fadhil and S. Chelliapan. 2011. Perfomance of an innovative multis-stage anaerobic reactor during start-up period. African Journal of Biotechnology 10. 54: 11294-11302.
- Angelidaki, I., D. Karakashev, D.J. Batstone, C.M. Plugge, and A.J.M. Stams. 2011. Biomethanation and its potential. Methods in Enzymology. 494: 327-351.
- Chaiprapat, S. and T. Laklam. 2011. Enhancing digestion efficiency of *POME* in anaerobic sequencing batch reactor with ozonation pretreatment and cycle time reduction. Bioresouce Technology102. 5: 4061-4068.
- Chusna, F.M.A. 2018. Modifikasi zeolite dengan penambahan *trace element* sebagai media imobilisasi dalam proses peruraian anaerobik *palm oil mill effluent* (*POME*). Fakultas Teknik. Universitas Gadjah Mada. Disertasi.
- Choorit, W., and P. Wisarnwan. 2007. Effect of temperature on the anaerobic digestion of palm oil mill effluent. Electronic Journal of Biotechnology. 10 (3):376-385.
- 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*). JBAT. 8: 14-21.
- Detman, A., M. Bucha, L. treu, A. Chojnacka, L. Pleśniak, A Salomon, W. Lupikasza, R. Gromadka, J. Gawor, A. Gromadka, W. Drzewicki, M. Jakubiak, M. Janiga, I. Matyasik, M. K. Blaszczyk, M. O. Jedrysek, S. Campanaro, and A. Sikora. 2021. Evaluation of acidogenesis products effect on biogas production performed with metagenomics and isotopic approaches. Biotechnology for Biofuels 14 : 125.
- Direktorat Jendral Perkebunan Kementrian Pertanian Republik Indonesia. 2019. Statistik Perkebunan Indonesia 2018-2020. <<http://ditjenbun.pertanian.go.id/>>. diakses 20 Oktober 2020.
- Demirel, B., and O. Yenigün. 2002. Two-phase anaerobic digestion processes: a review. Journal of Chemical Technology and Biotechnology 77: 743-755.



- Effebi, K. R., T. Baya, H. Jupsin, and J.L. Vasel. 2011. Acidogenic and methanogenic activities in anaerobic ponds. International Journal of Scientific & Engineering 2. 12: 1-4.
- Garritano, A.N., M. de O.Faber, L.R.V. De Sá, and V.S.Ferreira-Leitão. 2018. Palm oil mill effluent (*POME*) as raw material for biohydrogen and methane production via dark fermentation. Renewable and Sustainable Energy Reviews. 92:676-684.
- Irvan, B. Trisakti, V. Wongistani, and Y. Tomiuchi. 2012. Methane emission from digestion of Palm Oil Mill Effluent (*POME*) in a thermophilic anaerobic reactor. International Journal of Science and Engineering. 3: 32-35.
- Leela, D., S. M. Nur, E. Yandri, and R. Ariati. 2018. Perfomance of palm oil mill effluent (*POME*) as biodiesel source based on different ponds. E3S Web of Conferences. 67: 1-9.
- Madaki, Y.S., and L.Seng. 2013. Palm oil mill effluent (*POME*) from Malaysia palm oil mills: waste or resource. International Journal of Science, Environtment and Technology. 2. 6:1138-1155.
- Maisarah. 2011. Recovery of oil palm oil mill effluent (*POME*) by solvent extraction. Departement of Chemical Engineering. Universiti Teknologi PETRONAS. Dissertation.
- McInerney, M.J., C.G. Struchmeyer, J. Sieber, H. Mouttaki, A.J.M. Stams, B. Schink, L. Rohlin, and R.P. Gunsalus. 2008. Physiology, ecology, and phlogeny of microorganisms capable syntropic metabolism. Annals of the New York Academy of Science. 1125: 58-72
- Mujdalipah, S., S. Dohong, A. Suryani, and A. Fitria. 2014. Pengaruh waktu fermentasi terhadap produksi biogas menggunakan digester dua tahap pada berbagai konsentrasi Palm Oil Mill Effluent (*POME*) dan lumpur aktif. AGRITECH. 34: 56-64.
- Ohimain, E.I., and S.C. Izah. 2017. A review of biogas production from palm oil mill effluent using different configuratioes of bioreactors. Renewable and Sustainable Energy Reviews. 70:242-253
- Poh, P.E. and M.F.Chong. 2009. Development of anaerobic digestion methods for palm oil mill effluent (*POME*) treatment. Bioresource Technology. 100(1):1-9.
- Rajani, A., Kusnadi, A. Santosa. A. Saepudin, S. Gobikrishnan, and D. Andrian. 2019. Review on biogas from Palm Oil Mill Effluent (*POME*): challenges and oppurtunities in Indonesia. IOP Conf.Series: Earth and Environmental Science. 239 : 1-12.
- Ragsdale, S.W., and E. Pierce. 2008. Acetogenesis and the Wood-Ljungdahl pathway of CO₂ fixation. Biochimica et Biophysica Acta 1784: 1873-1898
- Renaili. 2019. Analisa hasil biogas menggunakan isi rumen sapi sebagai starter. Jurnal TEKNO. 16(1):38-46.



- Saka, T.I. 2020. Alkali *pretreatment* pada tandan kosong kelapa sawit (TKKS) dengan natrium hidroksida (NaOH) untuk meningkatkan produksi biogas. Fakultas Teknologi Pertanian. Universitas Gadjah Mada. Skripsi.
- Sarker, S., A.S.R. Nordgård, J.J. Lamb, and K.M. Lien. 2020. Hydrogen, Biomass, and Bioenergy: Integration Pathways for Renewable Energy Applications. Academic Press. London.
- Shakib, N., and M. Rashid. 2019. Biogas production optimization from *POME* by using anaerobic digestion process. *Journal of Applied Science & Process Engineering*. 6: 369-377.
- Sikora, A., A. Detman, D. Mielecki, A. Chojnacka, and M. Blaszezyk. 2018. Searching for metabolic pathways of anaerobic digestion: A useful list of the key enzymes. IntechOpen, London.
- Spirito, C.M., H. Ritcher, K. Rabaey, A.J.M. Stams, L.T. Angenent. 2014. Chain elongation in anaerobic reactor microbiomes to recover resources from waste. *Current Opinion in Biotechnology*. 27: 115-122.
- Suryani, F., M. Madagaskar, and S. Aprilyanti. 2021. The influence analysis of cow dung additional at biogas production of Palm Oil Mill Effluent. *IOP Conf. Series: Earth and Environmental Scienccce* 737: 1-6.
- Trisakti, B., M. Irwan, Taslim, and M. Turmuzi. 2017. 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.
- Winanti, W. S., Prasetyadi, and Wiharja. 2019. Pengolahan Palm Oil Mill Effluent (*POME*) menjadi biogas dengan sistem anaerobic tipe *fixed bed* tanpa proses netralisasi. *Jurnal Teknologi Lingkungan* 20: 143-150.
- Wu, T. Y., A. W. Mohammad, J. M. Jahim, and N. Anuar. 2010. A holistic approach to managing Palm Oil Mill Effluent (*POME*): biotechnological advance in the sustainable reuse of *POME*. *Biotechnology Advance*. 27: 40-52.
- Zuccaro, G., D. Pirozzi, and A. Yousuf. 2020. Lignocellulosic Biomass liquid Biofuels. <https://www.sciencedirect.com/science/article/pii>. diakses 1 Januari 2022.