

DAFTAR PUSTAKA

- [1] “Plastics and the Environment – Geneva Environment Network.” <https://www.genevaenvironmentnetwork.org/resources/updates/plastics-and-the-environment/> (accessed Jul. 14, 2021).
- [2] US EPA, “Advancing sustainable materials management: facts and figures 2018,” *United States Environmental Protection Agency*, 2020.
- [3] VinylPlus, “PVC Recycling Technologies”, Accessed: Jul. 18, 2021. [Online]. Available: https://vinylplus.eu/uploads/downloads/VinylPlus_Recycling_Technologies_30012017.pdf
- [4] W. C. Li, H. F. Tse, and L. Fok, “Plastic waste in the marine environment: A review of sources, occurrence and effects,” *Science of the Total Environment*, vol. 566–567, pp. 333–349, 2016, doi: 10.1016/j.scitotenv.2016.05.084.
- [5] S. D. A. Sharuddin, F. Abnisa, W. M. A. W. Daud, and M. K. Aroua, “Pyrolysis of plastic waste for liquid fuel production as prospective energy resource,” 2018, doi: 10.1088/1757-899X/334/1/012001.
- [6] Y. Takeshita, K. Kato, K. Takahashi, Y. Sato, and S. Nishi, “Basic study on treatment of waste polyvinyl chloride plastics by hydrothermal decomposition in subcritical and supercritical regions,” *Journal of Supercritical Fluids*, vol. 31, no. 2, pp. 185–193, 2004, doi: 10.1016/j.supflu.2003.10.006.
- [7] A. N. Rollinson and J. M. Oladejo, “‘Patented blunderings’ efficiency awareness, and self-sustainability claims in the pyrolysis energy from waste sector,” *Resources, Conservation and Recycling*, vol. 141, no. February, pp. 233–242, 2019, doi: 10.1016/j.resconrec.2018.10.038.
- [8] A. Rollinson, “Why pyrolysis and ‘plastic to fuels’ is not a solution to the plastics problem -Low impact living info, training, products & services,” *Blushful Earth*, 2018. <https://www.lowimpact.org/pyrolysis-not-solution-plastics-problem/> (accessed Nov. 23, 2020).
- [9] K. Ninomiya *et al.*, “Pretreatment of bagasse with a minimum amount of cholinium ionic liquid for subsequent saccharification at high loading and co-fermentation for ethanol production,” *Chemical Engineering Journal*, vol. 334, no. October 2017, pp. 657–663, 2018, doi: 10.1016/j.cej.2017.10.113.

- [10] H. Wang, Z. Li, Y. Liu, X. Zhang, and S. Zhang, "Degradation of poly(ethylene terephthalate) using ionic liquids," *Green Chemistry*, vol. 11, no. 10, pp. 1568–1575, 2009, doi: 10.1039/b906831g.
- [11] H. Tadesse and R. Luque, "Advances on biomass pretreatment using ionic liquids: An overview," *Energy and Environmental Science*, vol. 4, no. 10, pp. 3913–3929, 2011, doi: 10.1039/c0ee00667j.
- [12] American Chemistry Council, "How plastics are made," 2020. <https://plastics.americanchemistry.com/How-Plastics-Are-Made/>
- [13] Y. Zheng, E. K. Yanful, and A. S. Bassi, "A review of plastic waste biodegradation," *Critical Reviews in Biotechnology*, vol. 25, no. 4, pp. 243–250, 2005, doi: 10.1080/07388550500346359.
- [14] M. Sadat-Shojai and G. R. Bakhshandeh, "Recycling of PVC wastes," *Polymer Degradation and Stability*, vol. 96, no. 4, pp. 404–415, Apr. 2011. doi: 10.1016/j.polymdegradstab.2010.12.001.
- [15] I. Pratama, *SIMULASI PRODUKSI BIOETANOL GENERASI DUA DARI BAGAS DENGAN HIDROLISIS ASAM MENGGUNAKAN SUPERPRO DESIGNER 5.5*. 2012.
- [16] Z. Montazer, M. B. Habibi-Najafi, M. Mohebbi, and A. Oromiehei, "Microbial Degradation of UV-Pretreated Low-Density Polyethylene Films by Novel Polyethylene-Degrading Bacteria Isolated from Plastic-Dump Soil," *Journal of Polymers and the Environment*, vol. 26, no. 9, pp. 3613–3625, 2018, doi: 10.1007/s10924-018-1245-0.
- [17] Y. Guo, J. Chen, M. Su, and J. Hong, "Bio-based Plastics with Highly Efficient Esterification of Lignocellulosic Biomass in 1-methylimidazole under Mild Conditions," *Journal of Wood Chemistry and Technology*, vol. 38, no. 4, pp. 338–349, 2018, doi: 10.1080/02773813.2018.1488876.
- [18] Sigma Aldrich, "1-Methylimidazole ReagentPlus®, 99 % _ 616-47-7." <https://www.sigmaaldrich.com/catalog/product/aldrich/m50834?lang=en®ion=ID> (accessed Apr. 04, 2021).
- [19] R. Liu, M. Liu, S. Wu, X. Che, J. Dong, and J. Yang, "Assessing the influence of various imidazolium groups on the properties of poly(vinyl chloride) based high temperature proton exchange membranes," *European Polymer Journal*, vol. 137, no. July, pp. 1–8, 2020, doi: 10.1016/j.eurpolymj.2020.109948.

- [20] C. Berthomieu and R. Hienerwadel, "Fourier transform infrared (FTIR) spectroscopy," *Photosynthesis Research*, vol. 101, no. 2–3, pp. 157–170, 2009, doi: 10.1007/s11120-009-9439-x.
- [21] P. Larkin, *Infrared and Raman Spectroscopy Principles and Spectral Interpretation*, vol. 9, no. 10. Elsevier, 2011. doi: 10.3390/rel9100297.
- [22] A. Gupper, P. Wilhelm, and M. Schiller, "Degradation of poly(vinyl chloride) with different additives, studied by micro Raman spectroscopy," *Polymers and Polymer Composites*, vol. 11, no. 2, pp. 123–132, 2003, doi: 10.1177/096739110301100207.
- [23] A. K. Al-Dossary, M. Gilbert, and D. Hitt, "Evaluating PVC degradation using UV and Raman spectroscopies," *Advanced Materials Research*, vol. 83–86, pp. 923–930, 2010, doi: 10.4028/www.scientific.net/AMR.83-86.923.
- [24] S. S. Thavamani and T. P. Amaladhas, "Encapsulation of Cu (II), Ni (II) and V (IV) - imidazole complexes in fly ash zeolite , characterisation and catalytic activity towards hydroxylation of phenol," *Journal of Materials and Environmental Science*, vol. 7, no. 7, pp. 2314–2327, 2016.
- [25] G. Socrates, *Infrared and Raman Characteristic Group Frequencies Contents*, Third Edit. John Wiley & Sons Ltd., 2001.
- [26] Y. Kato and E. Sudo, "Acceleration and Inhibition Effect of Tertiary Amines on Thermal Degradation of Poly (Vinyl Chloride)," 2019, doi: 10.1002/vnl.21738.
- [27] D. A. Carter and J. E. Pemberton, "Raman spectroscopy and vibrational assignments of 1- and 2-methylimidazole," *Journal of Raman Spectroscopy*, vol. 28, no. 12, pp. 939–946, 1997, doi: 10.1002/(SICI)1097-4555(199712)28:12<939::AID-JRS186>3.0.CO;2-R.
- [28] V. Allen and J. H. Kalivas, "Post-Consumer Plastic Identification Using Raman," vol. 53, no. 6, 1999.
- [29] R. Bacaloglu and M. Fisch, "Degradation and stabilization of poly (vinyl chloride). I . Kinetics of the thermal degradation of poly (vinyl chloride)," vol. 45, pp. 301–313, 1994.
- [30] A. Kaynak, J. P. Bartley, G. A. George, A. Kaynak, J. P. Bartley, and G. A. George, "FT-RAMAN SPECTROSCOPIC STUDY OF THE FORMATION OF POLYENES DURING THERMAL DEGRADATION OF POLY (VINYL CHLORIDE) AND POLY (N-VINYL-2-PYRROLIDONE) BLENDS FT-RAMAN SPECTROSCOPIC STUDY OF THE

FORMATION OF POLYENES DURING THERMAL DEGRADATION OF POLY (VINYL,” vol. 1325, no. August 2016, 2006, doi: 10.1081/MA-100105964.

- [31] A. Bayu, D. Nandiyanto, R. Oktiani, and R. Ragadhita, “Indonesian Journal of Science & Technology How to Read and Interpret FTIR Spectroscopy of Organic Material,” no. 1, pp. 97–118, 2019.
- [32] A. F. A. Naim, H. Alfannakh, S. Arafat, and S. S. Ibrahim, “Characterization of PVC/MWCNTs Nanocomposite: Solvent Blend,” *Science and Engineering of Composite Materials*, vol. 27, no. 1, pp. 55–64, 2020, doi: 10.1515/secm-2020-0003.