

## DAFTAR PUSTAKA

- Anggono, W., Suprianto, F. D., Sutrisno, S., & Kasrun, A. W. (2016). Investigation on Biomass Briquette as Energy Source from Waste Leaf Cerbera Manghas. *International Journal of Industrial Research and Applied Engineering*, 1(1). <https://doi.org/10.9744/jirae.1.1.11-14>
- Basu, P., & Kaushal, P. (2023). Biomass Gasification, Pyrolysis, and Torrefaction: Practical Design, Theory, and Climate Change Mitigation, Fourth Edition. In *Biomass Gasification, Pyrolysis, and Torrefaction: Practical Design, Theory, and Climate Change Mitigation, Fourth Edition*. Elsevier. <https://doi.org/10.1016/C2022-0-02464-8>
- Bisen, D., Pratap, A., Chouhan, S., Kumar, A., & Rajamohan, S. (2024). Analisis termogravimetri ko-pirolisis sekam padi dan polietilena densitas rendah : parameter kinetik dan termodinamika. 1–17.
- Bisen, D., Pratap, A., Chouhan, S., Sarma, A. K., & Rajamohan, S. (2024). Thermogravimetric analysis of rice husk and low-density polyethylene co-pyrolysis : kinetic and thermodynamic parameters. 1–17.
- Deng, J., Yi, B., Mašek, O., Yuan, X., Hwang, S. Y., Ong, H. C., Hua, Z., & Ok, Y. S. (2025). Co-pyrolysis of biomass and plastic waste into carbon materials with environmental applications: a critical review. *Green Chemistry*, 27(22), 6320–6341. <https://doi.org/10.1039/D4GC04842C>
- Fatin, S. A., Mustofa, D., & Hayatun, T. N. (2025). Studi nilai kalor co-pirolisis PET dan LDPE dengan minyak bekas sebagai sumber energi. *SNIV: Seminar Nasional Inovasi Vokasi*, 4(1), 163–170.
- Husein, A. (2018). Pengaruh Temperatur Pembentukan Fuel Oil pada Proses Pirolisis Plastik Low Density Polyethylene (LDPE). *Doctoral dissertation, Universitas Brawijaya*, 1–47. <http://repository.ub.ac.id/id/eprint/162371>
- Iswadi, D., Nurisa, F., Liastuti, E., Kimia, J. T., Teknik, F., Pamulang, U., Surya, J., No, K., & Selatan, T. (2017). Pemanfaatan Sampah Plastik Ldpe Dan Pet Menjadi Bahan Bakar Minyak Dengan Proses Pirolisis. *Jurnal Ilmiah Teknik*

- Kimia UNPAM*, 1(2), 1–9.  
<http://openjournal.unpam.ac.id/index.php/JITK/article/view/718>
- k, M. P., & Somasundaram, M. (2021). *Co-pyrolysis of Juliflora biomass with low-density polyethylene for bio-oil synthesis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 43(9), 1134–1149.  
<https://doi.org/10.1080/15567036.2019.1635232>
- Nardella, F., Bellavia, S., Mattonai, M., & Ribechini, E. (2022). *Co-pyrolysis of biomass and plastic: Synergistic effects and estimation of elemental composition of pyrolysis oil by analytical pyrolysis–gas chromatography/mass spectrometry. Bioresource Technology*, 354, 127170.  
<https://doi.org/10.1016/j.biortech.2022.127170>
- Negi, B., Singh, T. P., Singh, J., & Sharma, H. K. (2024). *Utilization of Plastic Waste with Biomass for Production of Co-Pyrolysis Oil*. 6(07), 642–649.  
<https://doi.org/10.35629/5252-0607642649>
- Ridlo, R., & Hakim, A. (2020). ANDASIH Jurnal Pengabdian kepada Masyarakat Model Energi Indonesia, Tinjauan Potensi Energy Terbarukan Untuk Ketahanan. *ANDASIH Jurnal Pengabdian kepada Masyarakat*, 1(1), 1.
- Rony, Z. I., Rasul, M. G., Jahirul, M. I., & Hasan, M. M. (2025). *Properties of pyrolysis oils derived from different organic wastes for assessing their suitability for engine fuel. Energy Conversion and Management: X*, 25, 100875. <https://doi.org/10.1016/j.ecmx.2025.100875>
- Sari, G. L. (2018). Kajian Potensi Pemanfaatan Sampah Plastik Menjadi Bahan Bakar Cair. *Al-Ard: Jurnal Teknik Lingkungan*, 3(1), 6–13.  
<https://doi.org/10.29080/alard.v3i1.255>
- Schutyser, W., Renders, T., Bosch, S. Van Den, Koelewijn, S., Beckham, G. T., & Sels, B. F. (2018). *SI of Chem Soc Rev Chemicals from lignin : an interplay of lignocellulose. Chemical Society Reviews*, 1–40.  
<http://dx.doi.org/10.1039/C7CS00566K>
- Seah, C. C., Tan, C. H., Arifin, N. A., Hafriz, R. S. R. M., Salmiaton, A., Nomanbhay, S., & Shamsuddin, A. H. (2023a). *Co-pyrolysis of biomass and plastic: Circularity of wastes and comprehensive review of synergistic*

- mechanism. Results in Engineering*, 17(October 2022), 100989.  
<https://doi.org/10.1016/j.rineng.2023.100989>
- Seah, C. C., Tan, C. H., Arifin, N. A., Hafriz, R. S. R. M., Salmiaton, A., Nomanbhay, S., & Shamsuddin, A. H. (2023b). Co-pyrolysis of biomass and plastic: Circularity of wastes and comprehensive review of synergistic mechanism. *Results in Engineering*, 17, 100989.  
<https://doi.org/10.1016/j.rineng.2023.100989>
- Sharma Timilsina, M., Chaudhary, Y., Bhattarai, P., Uprety, B., & Khatiwada, D. (2024a). Optimizing pyrolysis and Co-Pyrolysis of plastic and biomass using Artificial Intelligence. *Energy Conversion and Management: X*, 24.  
<https://doi.org/10.1016/j.ecmx.2024.100783>
- Sharma Timilsina, M., Chaudhary, Y., Bhattarai, P., Uprety, B., & Khatiwada, D. (2024b). Optimizing pyrolysis and Co-Pyrolysis of plastic and biomass using Artificial Intelligence. *Energy Conversion and Management: X*, 24, 100783.  
<https://doi.org/10.1016/j.ecmx.2024.100783>
- Singh, E., Kumar, A., Mishra, R., You, S., Singh, L., Kumar, S., & Kumar, R. (2021). Pyrolysis of waste biomass and plastics for production of biochar and its use for removal of heavy metals from aqueous solution. *Bioresource Technology*, 320(PA), 124278.  
<https://doi.org/10.1016/j.biortech.2020.124278>
- Singo, V. H., Fajimi, L. I., Seedat, N., & Roopchund, R. (2025). Synergistic Effects of Waste Tires, Plastic, and Biomass in Pyro-Oil Production. *ACS Omega*, 10(8), 7609–7620. <https://doi.org/10.1021/acsomega.4c02777>
- Siti Miskah, Tine Aprianti, Sarah Swasti Putri, & Siti Haryanti. (2018). Purifikasi minyak jelantah menggunakan karbon aktif dari kulit durian. *Jurnal Teknik Kimia*, 24(1), 32–39. <https://doi.org/10.36706/jtk.v24i1.423>
- Surono, U. B., & Ismanto. (2016). Pengolahan Sampah Plastik Jenis PP, PET dan PE Menjadi Bahan Bakar Minyak dan Karakteristiknya. *ARMATUR : Artikel Teknik Mesin & Manufaktur*, 1(1), 32–37.
- Untoro Budi, S. (2018). Berbagai Metode Konversi Sampah Plastik Menjadi Bahan Bakar Minyak. *Jurnal Envirotek*, 3(1), 32–40.

- Usman, N. W., Suryanto, S., & Kalla, R. (2025). Pengaruh variasi waktu dan suhu pirolisis terhadap kualitas bio-oil dari limbah biomassa plant filter aid (Lignoselulosa D07). *Jurnal Teknik Industri Terintegrasi*, 8(1), 1484–1493. <https://doi.org/10.31004/jutin.v8i1.42125>
- Vilas-Boas, A. C. M., Tarelho, L. A. C., Moura, J. M. O., Gomes, H. G. M. F., Marques, C. C., Pio, D. T., Nunes, M. I. S., & Silvestre, A. J. D. (2025). Methodologies for bio-oil characterization from biomass pyrolysis: A review focused on GC-MS. *Journal of Analytical and Applied Pyrolysis*, 185. <https://doi.org/10.1016/j.jaap.2024.106850>
- Vo, T. A., Tran, Q. K., Ly, H. V., Kwon, B., Hwang, H. T., Kim, J., & Kim, S.-S. (2022). Co-pyrolysis of lignocellulosic biomass and plastics: A comprehensive study on pyrolysis kinetics and characteristics. *Journal of Analytical and Applied Pyrolysis*, 163, 105464. <https://doi.org/10.1016/j.jaap.2022.105464>
- Wang, G., Dai, Y., Yang, H., Xiong, Q., Wang, K., Zhou, J., Li, Y., & Wang, S. (2020). A review of recent advances in biomass pyrolysis. *Energy and Fuels*, 34(12), 15557–15578. <https://doi.org/10.1021/acs.energyfuels.0c03107>
- Wang, S., Dai, G., Yang, H., & Luo, Z. (2017). Lignocellulosic biomass pyrolysis mechanism: A state-of-the-art review. *Progress in Energy and Combustion Science*, 62, 33–86. <https://doi.org/10.1016/j.pecs.2017.05.004>
- Wu, W., Li, P., Huang, L., Wei, Y., Li, J., Zhang, L., & Jin, Y. (2023). The Role of Lignin Structure on Cellulase Adsorption and Enzymatic Hydrolysis. *Biomass (Switzerland)*, 3(1), 96–107. <https://doi.org/10.3390/biomass3010007>
- Xue, Y., Zhou, S., Brown, R. C., Kelkar, A., & Bai, X. (2015). Fast pyrolysis of biomass and waste plastic in a fluidized bed reactor. *Fuel*, 156, 40–46. <https://doi.org/10.1016/j.fuel.2015.04.033>