

## DAFTAR PUSTAKA

- [1] H. Jones, J. McClements, D. Ray, C. S. Hindle, M. Kalloudis, and V. Koutsos, "Thermomechanical Properties of Virgin and Recycled Blends, Polypropylene," 2023.
- [2] B. L. Fernandes and A. J. Domingues, "Mechanical characterization of recycled polypropylene for automotive industry," *Polimeros*, vol. 17, no. 2, pp. 85–87, 2019, doi: 10.1590/s0104-14282007000200005.
- [3] S. Saikrishnan, D. Jubinville, C. Tzoganakis, and T. H. Mekonnen, "Thermo-mechanical degradation of polypropylene (PP) and low-density polyethylene (LDPE) blends exposed to simulated recycling," *Polymer Degradation and Stability*, vol. 182, p. 109390, 2020, doi: 10.1016/j.polymdegradstab.2020.109390.
- [4] A. Shamsuri, S. N. A. Md. Jamil Adlie, and K. Abdan, "A Brief Review on the Influence of Ionic Liquids on the Mechanical, Thermal, and Chemical Properties of Biodegradable Polymer Composites," *Composites, Biodegradable Polymer*, pp. 1–14, 2021, doi: <https://doi.org/10.3390/polym13162597>.
- [5] R. Udhayasankar, B. Karthikeyan, and A. Balaji, "Comparative mechanical, thermal properties and morphological study of untreated and NaOH-treated coconut shell-reinforced cardanol environmental friendly green composites," *Journal of Adhesion Science and Technology*, vol. 34, no. 16, pp. 1720–1740, 2020, doi: 10.1080/01694243.2020.1727643.
- [6] D. Hermawan, A. Agustina, O. Suparno, and I. A. Kartika, "Sifat fisik dan mekanik papan partikel dari cangkang buah jarak pagar," *Jurnal Teknologi Industri Pertanian*, vol. 25, no. 3, pp. 279–292, 2015.
- [7] F. Septiyandi, R. Hanifi, and V. Naubnome, "Pengaruh Waktu Alkalisasi dan Variasi Arah Terhadap Kekuatan Mekanik Komposit Polyester Serat Agave," *Jurnal Ilmiah Wahana Pendidikan*, vol. 9, no. 5, pp. 206–213, 2023, doi: <https://doi.org/10.5281/zenodo.7732624>.
- [8] E. Dara J, N. Omenyi S, and C. Nwigbo S, "Potentials of castor seed shell as a reinforcement in aluminum matrix composite development," *Journal of Engineering and Applied Sciences*, vol. 19, no. 1, pp. 400–408, 2021.
- [9] A. Jamil, "STATISTIK PERKEBUNAN NON UNGGULAN NASIONAL 2020-2022," no. 0, D. Gartina and R. L. L. Sukriya, Eds., REPUBLIK INDONESIA: Sekretariat Direktorat Jenderal Perkebunan, Direktorat Jenderal Perkebunan, Kementerian Pertanian, 2016, pp. 1–23.
- [10] N. A. S. Aprilia, H. P. S. A. Khalil, A. H. Bhat, R. Dungani, and Md. S. Hossain, "Exploring material properties of vinyl ester biocomposites filled carbonized

- Jatropha seed shell," *BioResources*, vol. 9, no. 3, pp. 4888–4898, 2014, doi: 10.15376/biores.9.3.4888-4898.
- [11] B. Naik, "Botanical Descriptions of Castor Bean," pp. 1–14, 2018, doi: 10.1007/978-3-319-97280-0\_1.
- [12] O. A. Ogah, M. N. Joseph, O. U. Pauline, and F. O. Ohoke, "Development of Green Composites Based on Castor Bean Shell (*Ricinus communis*) as Filler in Epoxy Resin Polymer," *Journal of Fibers and Polymer Composites*, vol. 1, no. 2, pp. 148–163, 2024.
- [13] T. OG, M. Ic, O. Mu, and O. Hc, "Effect of chemical modification on filler properties of pulverized castor seed ( *Ricinus communis* ) shell powder," *Chemistry*, vol. 2, no. 1, pp. 51–57, 2021.
- [14] T. OG, M. I.C, O. M.U, and O. H.C, "Effect of Chemically Modified Castor Seed (*Ricinus Communis*) Shell Powder on The Mechanical Properties of Natural Rubber Vulcanizate," *Nanotechnology & Applications*, vol. 4, no. 1, pp. 1–9, 2021, doi: 10.33425/2639-9466.1028.
- [15] N. A. Oladoja, C. O. Aboluwoye, Y. B. Oladimeji, A. O. Ashogbon, and I. O. Otemuyiwa, "Studies on castor seed shell as a sorbent in basic dye contaminated wastewater remediation," *Desalination*, vol. 227, no. 1–3, pp. 190–203, 2008, doi: 10.1016/j.desal.2007.06.025.
- [16] F. Romero, Z. Ortega, J. Castellano, A. N. Benítez, M. D. Marrero, and L. Suárez, "Use of *Ricinus communis* shredded material as filler in rotational molded parts to improve the bio-disintegration behavior," *Polymer Bulletin*, vol. 80, no. 10, pp. 11295–11316, 2023, doi: 10.1007/s00289-022-04593-5.
- [17] M. Firdaus, "Pembuatan Papan Komposit Berbasis Serat Pelepah Pinang (Filler) Dan Bahan Plastik Matriks Polypropylene (Pp)," *Skripsi, Teknik Material Universitas Malikussaleh*, 2024.
- [18] H. G. Karian, *HANDBOOK OF POLYPROPYLENE AND POLYPROPYLENEN COMPOSITES*, vol. 4, no. 1. 2017.
- [19] M. Gusty, A. Asmeati, and R. marlany Rannon, *REVOLUSI PLASTIK DAN LINGKUNGAN*, 1st ed. CV. Tohar Media, 2023.
- [20] M. N. Subramanian, *Basics of Polymers*. 2015.
- [21] R. Dewi, N. Sylvia, Zulnazri, and M. Riza, "Melt flow Index (MFI) analysis of sago based thermoplastic starch blend with polypropylene and polyethylene," in *Materials Today: Proceedings*, Elsevier Ltd, 2023, pp. 396–400. doi: 10.1016/j.matpr.2023.04.173.
- [22] S. K. Satya and P. S. R. Sreekanth, "An experimental study on recycled polypropylene and high-density polyethylene and evaluation of their mechanical properties," *Materials Today: Proceedings*, vol. 27, no. xxxx, pp. 920–924, 2020, doi: 10.1016/j.matpr.2020.01.259.

- [23] N. L. Safitri and N. Khoiriyah, "Laporan Magang Pt Natura Plastindo Pasuruan-Jawa Timur Program Studi Teknik Kimia Universitas Internasional Semen Indonesia Gresik 2022," pp. 1–77, 2022.
- [24] S. C. Nwigbo, T. C. Okafor, and C. U. Atuanya, "The mechanical properties of castor seed shell-polyester matrix composites," *Research Journal of Applied Sciences, Engineering and Technology*, vol. 5, no. 11, pp. 3159–3164, 2013.
- [25] R. S. Lacerda *et al.*, "Castor bean (*ricinus communis*) cake protein extraction by alkaline solubilization: Definition of process parameters," *Chemical Engineering Transactions*, vol. 37, pp. 775–780, 2014, doi: 10.3303/CET1437130.
- [26] M. C. G. Rocha, N. I. A. de Acevedo, C. I. R. de Oliveira, M. C. Sanches, and N. N. Coelho, "Mercerization effect on the properties of LDPE/PHB composites reinforced with castor cake," *Polimeros*, vol. 30, no. 4, pp. 1–9, 2020, doi: 10.1590/0104-1428.07720.
- [27] P. Sahu and M. K. Gupta, "A review on the properties of natural fibres and its bio-composites: Effect of alkali treatment," *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, vol. 234, no. 1, pp. 198–217, 2020, doi: 10.1177/1464420719875163.
- [28] M. J. Mochane *et al.*, "Recent progress on natural fiber hybrid composites for advanced applications: A review," *Express Polymer Letters*, vol. 13, no. 2, pp. 159–198, 2019, doi: 10.3144/expresspolymlett.2019.15.
- [29] Y. Kondo and M. Arsyad, "Efek perendaman alkali terhadap kandungan lignoselulosa serat sabut kelapa," *Prosiding Seminar Hasil Penelitian (SNP2M)*, vol. 2018, no. 1, pp. 40–44, 2018.
- [30] M. H. E. Seshweni *et al.*, "Evaluation of Mechanical and Thermal Properties of Polypropylene-Based Nanocomposites Reinforced with Silica Nanofillers via Melt Processing Followed by Injection Molding," *Journal of Composites Science*, vol. 7, no. 12, pp. 1–12, 2023, doi: 10.3390/jcs7120520.
- [31] F. J. Lanyi, N. Wenzke, J. Kaschta, and D. W. Schubert, "On the Determination of the Enthalpy of Fusion of  $\alpha$ -Crystalline Isotactic Polypropylene Using Differential Scanning Calorimetry, X-Ray Diffraction, and Fourier-Transform Infrared Spectroscopy: An Old Story Revisited," *Advanced Engineering Materials*, vol. 22, no. 9, 2020, doi: 10.1002/adem.201900796.
- [32] A. B. Ginting *et al.*, "PENENTUAN PARAMETER UJI DAN PADA DIFFERENTIAL SCANNING CALORIMETER  $\Delta H = m C_p \Delta T$ ," vol. 1, no. 1, pp. 34–45, 2005.
- [33] American Society for Testing and Material, "Standard Test Method for Transition Temperatures of Polymers by Differential Scanning Calorimetry. ASTM D3418-03.," *American Society Standard Testing and Materials*, pp. 1–7, 2003.
- [34] ASTM D1238, "Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastomer," vol. 08, no. Reapproved 1989, pp. 3–4, 2000, doi: 10.1520/C1709-18.

- [35] I. Mewardi and H. Lubis, *Proses Manufaktur Plastik dan Komposit: Edisi Revisi*. Andi, 2019.
- [36] F. I. Aryanti, "Modul Praktikum Kimia Polimer," pp. 25–26, 2020.
- [37] R. D. Mayasari *et al.*, "Turunan Fosfinat Menggunakan Metode Ekstrusi  
Fabrication of Polyester Fibers Modified Phosphinate Derivative Compounds  
Using Extrusion Method," *Arena Tekstil*, vol. 635, no. 2, pp. 61–66, 2020.
- [38] Teknik kimia polimer, "Fasilitas – Teknik Kimia Polimer." Accessed: Jul. 16, 2024.  
[Online]. Available: <https://tkp.stmi.ac.id/fasilitas/>
- [39] Roosmariharso, "Petunjuk praktik pemrosesan polimer," pp. 1–22, 2021.
- [40] A. B. Baunsele and H. Missa, "Langmuir and Freundlich Equation Test on  
Methylene Blue Adsorption by Using Coconut Fiber Biosorbent," *Walisongo  
Journal of Chemistry*, vol. 4, no. 2, pp. 131–138, 2021, doi:  
10.21580/wjc.v4i2.8941.
- [41] N. Wathoni, "Mengenal Analisis Termal Differential Scanning Calorimetry (DSC),"  
*Nazroel.Id*, 2016.
- [42] M. S. de Carvalho, J. B. Azevedo, and J. D. V. Barbosa, "Effect of the melt flow  
index of an HDPE matrix on the properties of composites with wood particles,"  
*Polymer Testing*, vol. 90, p. 106678, 2020, doi:  
10.1016/j.polymertesting.2020.106678.
- [43] tri sakti indra Guna, "Densitas (Rapatan)," p. 32, 2020.
- [44] R. FRIASNYAH, "Analisis penerapan komposit poliester berpenguat serat gelas dan  
nanoselulosa untuk pembuatan dashboard dengan metode hand lay up,"  
INSTITUT TEKNOLOGI SEPULUH NOPEMBER SURABAYA, 2018.