

## DAFTAR PUSTAKA

- Balirante, M., Lefrandt, L. I. R., & Kumaat, M. (2020). Analisa Tingkat Kebisingan Lalu Lintas di Jalan Raya Ditinjau dari Tingkat Baku Mutu Kebisingan yang Diizinkan. *Jurnal Sipil Statik*, 8(2), 249–256.
- Defrizal, M. (2021). Karakterisasi Koefisien Absorpsi Bunyi dan Impedansi Akustik dari Panel Sekam Padi. *Jurnal Fisika Unand (JFU)*, 10(3), 355–356. <https://doi.org/10.25077/jfu.10.3.355-356.2021>
- Grimalt, J., Frattini, L., Carreras, P., & Fombuena, V. (2023). Optimizing Rheological Performance of Unsaturated Polyester Resin with Bio-Based Reactive Diluents: A Comprehensive Analysis of Viscosity and Thermomechanical Properties. *Polymer Testing*, 129, 108264. <https://doi.org/10.1016/j.polymertesting.2023.108264>
- Gummert, M., Nguyen, Hung, V., Chivenge, P., & Douthwaite, B. (2020). *Sustainable Rice Straw Management*. <https://doi.org/https://doi.org/10.1007/978-3-030-32373-8>
- Gunawan Pasaribu, H., Hidayat, A., Dzil Ikram, F., & Sarwana, W. (2023). Pengaruh Variasi Ukuran Partikel Batang Jagung terhadap Konduktivitas Termal dan Peredaman Suara Komposit Partikel Batang Jagung. *Jurnal Gear: Energi, Perancangan, Manufaktur & Material*, 1(2). <https://jurnal.uts.ac.id/index.php/gearftrs>
- Hansen, C. H. (2018). *Foundations of Vibroacoustics*. CRC Press.
- ISO 10534-2. (1998). *Acoustics-Determination of Sound Absorption Coefficient and Impedance in Impedance Tubes*.
- ISO 11654. (1997). *Acoustics-Sound Absorbers for Use in Buildings-Rating of Sound Absorption*.
- Kang, C.-W., Jang, E.-S., Jang, S.-S., & Kang, H.-Y. (2018). Comparison of Transfer Function Method and Reverberation Room Method in Measuring the Sound Absorption Coefficient of Rice Straw Particle Mat. *Journal of the Korean Wood Science and Technology*, 46(4), 362–367. <https://doi.org/10.5658/WOOD.2018.46.4.362>
- Li, X., Cao, Z., Xu, L., & Liu, B. (2023). Sound Absorption of the Absorber Composed of a Shunt Loudspeaker and Porous Materials in Tandem. *Polymers*, 15(14). <https://doi.org/10.3390/polym15143051>
- Mutia, P., Ngatijo, & Dwi Fahyuan, H. (2019). Pengaruh Jenis Serat Alam Terhadap Koefisien Absorpsi Bunyi Sebagai Peredam Kebisingan. *JIFP (Jurnal Ilmu Fisika dan Pembelajarannya)*, 3(1), 18–23. <https://doi.org/https://doi.org/10.19109/jifp.v3i1.3175>

- Nasution, M. (2019). Ambang Batas Kebisingan Lingkungan Kerja Agar Tetap Sehat dan Semangat Dalam Bekerja. *Buletin Utama Teknik*, 15(1), 1410–4520.
- Padhye, R., & Nayak, R. (2016). *Acoustic Textiles*. Springer Nature. <https://doi.org/10.1007/978-981-10-1476-5>
- Pratiwi, P., Fahmi, H., & Saputra, G. (2019). Pengaruh Panjang Serat terhadap Sifat Akustik Komposit Berpenguat Serat Kulit Buah Pinang dengan Matrik Epoxy. *Jurnal Teknik Mesin*, 9(2), 2089–4880. <https://doi.org/10.21063/jtm.2019.v9.i2.46-51>
- Pratiwi, P., & Yanto, A. (2023). Karakterisasi Koefisien Absorpsi Bunyi dan Impedansi Akustik Komposit Serat Pelepah Sawit dengan Perekat Getah Pinus pada Berbagai Variasi Komposisi. *Jurnal Teknik Mesin*, 13(1), 6–12. <https://doi.org/10.21063/jtm.2023.v13.i1.6-12>
- Rizka, F., Ramli, Yenni, D., & Ratnawulan. (2022). Effect of the Volume of Banana Fiber as a Polymer Composite Reinforcement with Polyester Resin Matrix on the Sound Absorption of Acoustic Materials. *Pillar of Physics*, 15(1), 44–51. <https://doi.org/10.24036/12529171074>
- Sari, T. P., & Elvaswer, E. (2020). Pengaruh Densitas Panel Serat Ampas Tebu terhadap Koefisien Absorpsi Bunyi dan Impedansi Akustik. *Jurnal Fisika Unand*, 9(3), 304–310. <https://doi.org/10.25077/jfu.9.3.304-310.2020>
- Taban, E., Khavanin, A., Jafari, A. J., Faridan, M., & Tabrizi, A. K. (2019). Experimental and Mathematical Survey of Sound Absorption Performance of Date Palm Fibers. *Heliyon*, 5(6). <https://doi.org/10.1016/j.heliyon.2019.e01977>
- Tran, D. T., Nguyen, S. T., Do, N. D., Thai, N. N. T., Thai, Q. B., Huynh, H. K. P., Nguyen, V. T. T., & Phan, A. N. (2020). Green Aerogels from Rice Straw for Thermal and Acoustic Insulation and Oil Spill Cleaning Applications. *Materials Chemistry and Physics*, 253, 123363. <https://doi.org/10.1016/j.matchemphys.2020.123363>
- Wilujeng, A. D., Ulfiyah, L., Annafiyah, A., & Taqiuddin, M. H. (2022). Pembuatan Material Komposit Berbahan Dasar Sabut Kelapa dan Jerami Padi sebagai Peredam Kebisingan. *Jurnal Technopreneur (JTech)*, 10(1), 1–4. <https://doi.org/10.30869/jtech.v10i1.889>
- Zulfadhli, & Huda, M. (2022). Penentuan Konduktivitas Termal dan Akustikal Material Komposit Serat Batang Kelapa Sawit. *Jurnal Teknik Mesin*, 10(1), 17–21. <https://doi.org/https://doi.org/10.24815/jtm.v10i1.27309>

## LAMPIRAN

### Lampiran 1. Dokumentasi Pembuatan Sampel



(a) Menyiapkan jerami padi lalu dipotong kecil



(b) Mencuci jerami padi menggunakan aquades



(c) Menjemur jerami padi dibawah sinar matahari



(d) Memblender jerami padi



(e) Menimbang jerami padi



(f) Menyiapkan matriks perekat kedalam gelas ukur



(g) Mencampurkan jerami padi dengan matriks perekat



(h) Pencetakan sampel

### Lampiran 2. Hasil Variasi Sampel



(a) Sampel A



(b) Sampel B



(c) Sampel C



(d) Sampel D



(e) Sampel E



(f) Sampel F

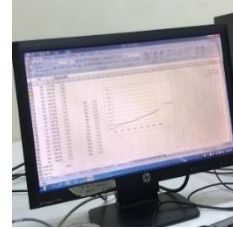
### Lampiran 3. Pengukuran Nilai Koefisien Absorpsi Bunyi



(a) Pemasangan sampel

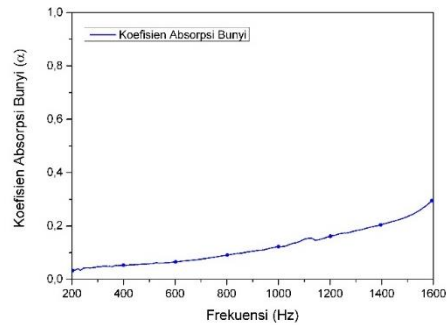


(b) Proses pengukuran

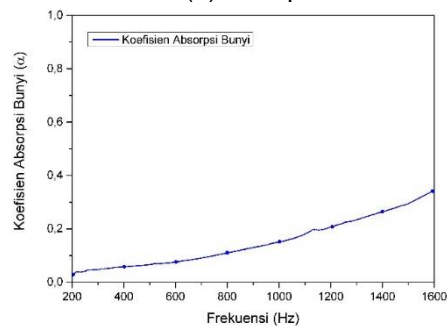


(c) Hasil pengukuran

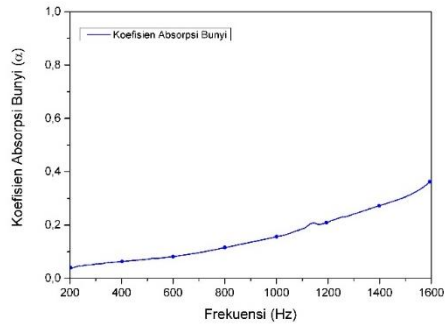
### Lampiran 4. Grafik Nilai Koefisien Absorpsi Bunyi



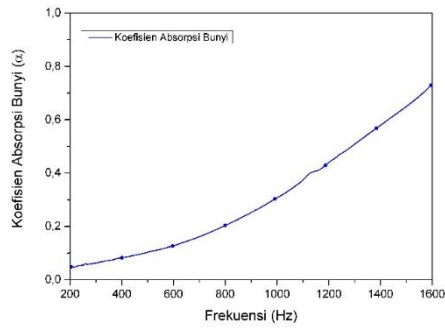
(a) Sampel A



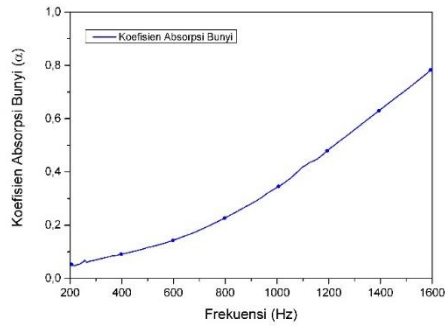
(b) Sampel B



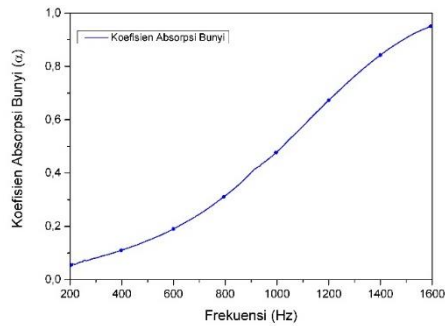
(c) Sampel C



(d) Sampel D



(e) Sampel E



(f) Sampel F