

DAFTAR PUSTAKA

- [1] D. Dermawan, J. Suhartono, J. T. Kimia, F. T. Industri, dan J. Barat, "Pengembangan Pelumas Ramah Lingkungan Dengan Ester Borat," *Teknoin*, vol. 22, no. 6, hal. 421–428, 2016, doi: 10.20885/teknoin.vol22.iss6.art3.
- [2] M. Wozniak, D. Batory, K. Siczek, dan G. Ozuna, "Changes in Total Friction in the Engine, Friction in Timing Chain Transmissions and Engine Emissions Due to Adding TiO₂ Nanoparticles to Engine Oil," *Emiss. Control Sci. Technol.*, vol. 6, no. 3, hal. 358–379, 2020, doi: 10.1007/s40825-020-00167-x.
- [3] S. K. Kurre dan J. Yadav, "A review on bio-based feedstock, synthesis, and chemical modification to enhance tribological properties of biolubricants," *Ind. Crops Prod.*, vol. 193, hal. 116122, 2023, doi: <https://doi.org/10.1016/j.indcrop.2022.116122>.
- [4] Z. Luan *et al.*, "Study on pH-dependence of Electroosmosis Effect and Tribological Behavior of Water-based Lubricants at Friction Interfaces," *Tribol. Int.*, hal. 109151, 2023, doi: <https://doi.org/10.1016/j.triboint.2023.109151>.
- [5] D. Gasni, I. H. Mulyadi, dan J. Affi, "Studi Sifat Fisik dan Tribologi dari Minyak Kelapa dan Minyak Sawit Sebagai Zat Aditif," no. Snttm Xv, hal. 5–6, 2016.
- [6] F. MUHAMMAD, "PENGARUH PENAMBAHAN TiO₂ PADA BIOLUBRICANT MINYAK KELAPA SAWIT TERHADAP SIFAT KOEFISIEN GESEKNYA." Univeersitas Andalas, 2022.
- [7] A. Nur Priyatno dan Suparno, "Pengaruh Penambahan Konsentrasi Surfaktan Na₂EDTA Terhadap Tegangan Permukaan dan Viskositas Oli Pertamina Enduro 4 Stroke," *J. Fis.*, vol. 5, no. 1, hal. 37–46, 2016.
- [8] M. S. Effendi dan R. Adawiyah, "Penurunan nilai kekentalan akibat pengaruh kenaikan temperatur pada beberapa merek minyak pelumas," *J.*

INTEKNA Inf. Tek. dan Niaga, vol. 14, no. 1, 2014.

- [9] S. M. K. P. Mesin, "MINYAK PELUMAS."
- [10] A. Permsubscul, T. Vitidsant, dan S. Damronglerd, "Catalytic cracking reaction of used lubricating oil to liquid fuels catalyzed by sulfated zirconia," *Korean J. Chem. Eng.*, vol. 24, no. 1, hal. 37–43, 2007, doi: 10.1007/s11814-007-5006-3.
- [11] M. Arisandi, D. Darmanto, dan T. Priangkoso, "Analisa pengaruh bahan dasar pelumas terhadap viskositas pelumas dan konsumsi bahan bakar," *J. Momentum UNWAHAS*, vol. 8, no. 1, hal. 114585, 2012.
- [12] R. Sudradjat, R. Ariatmi, dan D. Setiawan, "Pengolahan minyak jarak pagar menjadi epoksi sebagai bahan baku minyak pelumas," *J. Penelit. Has. Hutan*, vol. 25, no. 1, hal. 57–74, 2007.
- [13] B. Suroso, "PENGARUH MEDIA KOROSIF TERHADAP DAYA TAHAN KOROSI TANGKI BAHAN BAKAR DAN MINYAK PELUMAS," *SUBSET-Jurnal Pendidik. Mat. dan Terap.*, vol. 2, no. 1, hal. 26–33, 2023.
- [14] I. Syafa'at, "Tribologi, daerah pelumasan dan keausan," *Maj. Ilm. Momentum*, vol. 4, no. 2, 2008.
- [15] D. R. Muhammad, "Perbandingan Sifat Fisik dan Keausan dari Pelumas Bekas (Used Lubricant) dan Pelumas Baru." Universitas Andalas, 2020.
- [16] R. Gohar dan H. Rahnejat, *Fundamentals of tribology*. World Scientific, 2018.
- [17] Y. Meng, J. Xu, Z. Jin, B. Prakash, dan Y. Hu, "A review of recent advances in tribology," *Friction*, vol. 8, hal. 221–300, 2020.
- [18] G. Stachowiak dan A. W. Batchelor, *Engineering tribology*. Butterworth-heinemann, 2013.
- [19] I. Hutchings dan P. Shipway, *Tribology: friction and wear of engineering materials*. Butterworth-heinemann, 2017.

- [20] Z. Fuadi dan D. Rahmadiawan, *Tribologi Pelumasan: Pelumas Terbaru*. Syiah Kuala University Press, 2023.
- [21] V. Hegadekatte, N. Huber, dan O. Kraft, "Modeling and simulation of wear in a pin on disc tribometer," in *International joint tribology conference*, 2006, vol. 42592, hal. 567–575.
- [22] D. Godfrey, "Friction oscillations with a pin-on-disc tribometer," *Tribol. Int.*, vol. 28, no. 2, hal. 119–126, 1995.
- [23] H. YOLANDRA, "PENGARUH PENAMBAHAN NANO MATERIAL PADA BIOLUBRICANT TERHADAP SIFAT FISIK DAN KEAUSAN PIN ON DISC." UNIVERSITAS ANDALAS, 2022.
- [24] S. M. Moshirian Farahi *et al.*, "The effects of titanium dioxide (TiO₂) nanoparticles on physiological, biochemical, and antioxidant properties of Vitex plant (*Vitex agnus - Castus L.*)," *Heliyon*, vol. 9, no. 11, hal. e22144, 2023, doi: <https://doi.org/10.1016/j.heliyon.2023.e22144>.
- [25] H. Irwansyah dan S. Kamal, "PENGARUH TEMPERATUR DAN FRAKSI VOLUME TERHADAP KONDUKTIVITAS TERMAL FLUIDA NANO TiO₂/OLI TERMO XT32," 2015.
- [26] Y. A. Prasetyo, "Analisis sifat termofisik pelumas 5w-30 dengan tambahan nanomaterial al₂o₃, tio₂, dan hybrid al₂o₃/tio₂ menggunakan surfaktan oleic acid terhadap performa sepeda motor honda beat." Universitas Negeri Malang, 2022.
- [27] H. F. Aritonang, D. R. Gusti, dan M. I. Taroreh, "PROSES PRODUKSI BAHAN DASAR PELUMAS DENGAN MEMANFAATKAN ASAM LEMAK MINYAK KELAPA," 2009.
- [28] R. A. Welter, H. Santana, L. G. de la Torre, M. Robertson, O. P. Taranto, dan M. Oelgemöller, "Methyl Oleate Synthesis by TiO₂ Photocatalytic Esterification of Oleic Acid: Optimisation by Response Surface Quadratic Methodology, Reaction Kinetics and Thermodynamics," *ChemPhotoChem*, vol. 6, no. 7, 2022, doi: 10.1002/cptc.202200007.

- [29] P. Zulhanafi, S. Syahrullail, dan Z. N. Faizin, “Tribological performance of trimethylolpropane ester bio-lubricant enhanced by graphene oxide nanoparticles and oleic acid as a surfactant,” *Tribol. Int.*, vol. 183, hal. 108398, 2023, doi: <https://doi.org/10.1016/j.triboint.2023.108398>.

