

## DAFTAR PUSTAKA

1. Parinduri L, Parinduri T. Konversi Biomassa Sebagai Sumber Energi Terbarukan. *J Electr Technol* [Internet]. 2020;5(2):88–92. Available from: <https://www.dosenpendidikan>.
2. Singh HKAPG, Yusup S, Wai CK. Physicochemical Properties of Crude Rubber Seed Oil for Biogasoline Production. *Procedia Eng*. 2016;148:426–31.
3. Herawaty N, Rifdah R, Pratama MA. Pembuatan Biogasoline Dari Limbah Ampas Tebu Dan Eceng Gondok Dengan Proses Thermal Catalytic. *J Distilasi*. 2018;2(2):15.
4. Makul N, Fediuk R, Amran M, Al-Akwaa MS, Pralat K, Nemova D, et al. Utilization of Biomass to Ash: An Overview of the Potential Resources for Alternative Energy. *Mater* (Basel, Switzerland). 2021 Oct;14(21).
5. Khairiah, Destini R. Analisis Kelistrikan Pasta Elektrolit Limbah Kulit Durian ( Durio Zibethinus ) Sebagai Bio Baterai. *Pros Semin Nas Pendidik FKIP UNTIRTA* 2017. 2017;1:41–4.
6. Pradana YS, Daniyanto, Hartono M, Prasakti L, Budiman A. Effect of calcium and magnesium catalyst on pyrolysis kinetic of Indonesian sugarcane bagasse for biofuel production. *Energy Procedia*. 2019;158:431–9.
7. Sher F, Iqbal SZ, Liu H, Imran M, Snape CE. Thermal and kinetic analysis of diverse biomass fuels under different reaction environment: A way forward to renewable energy sources. *Energy Convers Manag* [Internet]. 2020;203(September):112266. Available from: <https://doi.org/10.1016/j.enconman.2019.112266>
8. Xu K, Li Y, Xu X, Zhou C, Liu Z, Yang F, et al. Single-walled carbon nanotubes supported Ni-Y as catalyst for ultra-deep hydrodesulfurization of gasoline and diesel. *Fuel*. 2015;160:291–6.
9. Rabie AM, Mohammed EA, Negm NA. Feasibility of modified bentonite as acidic heterogeneous catalyst in low temperature catalytic cracking process

of biofuel production from nonedible vegetable oils. *J Mol Liq* [Internet]. 2018;254(2018):260–6. Available from: <https://doi.org/10.1016/j.molliq.2018.01.110>

10. Ridhuan K, Irawan D, Inthifawzi R. Pyrolysis Combustion Process with Biomass Type and Characteristics of The Liquid Smoke Produced. *Turbo*. 2019;8(1):69–78.
11. Lestari SP, Aswan A, Effendy S, Febriana I, S SER, Safitri W, et al. Katalis Zeolit dengan Metode Pirolisis Liquid Fuel Production from Beef Tallow using the Zeolite Catalyst with Pyrolysis Method. *J Kinet*. 2020;11(02):1–9.
12. Qiu Z, Wang Y, Tang Y, Luo W, Ye Z. Analysis of blockage and wrapping by leaves in the cutting mechanism of a sugarcane leaf shredder. *Biosyst Eng*. 2021;211:152–66.
13. Charusiri W, Vitidsant T. Biofuel production via the pyrolysis of sugarcane (*Saccharum officinarum* L.) leaves: Characterization of the optimal conditions. *Sustain Chem Pharm*. 2018;10(September):71–8.
14. Siswoyo E, Zahra RN, Mai NHA, Nurmiyanto A, Umemura K, Boving T. Chitosan of blood cockle shell (*Anadara granosa*) as a natural coagulant for removal of total suspended solids (TSS) and turbidity of well-water. *Egypt J Aquat Res* [Internet]. 2023;49(3):283–9. Available from: <https://doi.org/10.1016/j.ejar.2023.04.004>
15. Azzahro UL, Broto W. Pemanfaatan Limbah Cangkang Kerang Dara Sebagai Katalis CAO pada Pembuatan Biodiesel Minyak Goreng Bekas. *J Sos Teknol*. 2021;1(6):499–507.
16. Cahyono MS. Pengaruh Jenis Bahan pada Proses Pirolisis Sampah Organik menjadi Bio-Oil sebagai Sumber Energi Terbarukan. *J Sains & Teknologi Lingkung*. 2013;5(2):67–76.
17. Tasari FT. Analisis Cangkang Kerang Darah (*Anadara granosa*) sebagai Sumber  $\text{CaCO}_3$  pada Pembuatan Ubin Keramik Dinding. *Prism Fis*. 2023;10(3):352.
18. Ergün BG, Laçın K, Çaloğlu B, Binay B. Second generation *Pichia pastoris* strain and bioprocess designs. *Biotechnol Biofuels Bioprod*. 2022;15(1):150.

19. Rambabu K, Bharath G, Sivarajasekar N, Velu S, Sudha PN, Wongsakulphasatch S, et al. Sustainable production of bio-jet fuel and green gasoline from date palm seed oil via hydroprocessing over tantalum phosphate. *Fuel* [Internet]. 2023;331(P1):125688. Available from: <https://doi.org/10.1016/j.fuel.2022.125688>
20. Ong YK, Bhatia S. The current status and perspectives of biofuel production via catalytic cracking of edible and non-edible oils. *Energy* [Internet]. 2010;35(1):111–9. Available from: <http://dx.doi.org/10.1016/j.energy.2009.09.001>
21. REGENERASI KATALIS CaO DARI CANGKANG KERANG DARAH ( *Anadara granosa* ) KALSINASI 800. :1–6.
22. Arita S, Adipati AS, Sari DP. Pembuatan Katalis Heterogen Dari Cangkang Kerang Darah ( *Anadara Granosa* ) Dan Diaplikasikan Pada Reaksi Transesterifikasi Dari Crude Palm Oil. *J Tek Kim* [Internet]. 2014;20(3):31–7. Available from: <http://jtk.unsri.ac.id/index.php/jtk/article/view/183/0>
23. Bbrse K. Direktorat jenderal perikanan tangkap. 2014;3519070(021).
24. Muhammad M, Muhammad Syam A, Ibrahim I, Nurfarida N, Darmadi D. Penyerapan Zat Warna Basic Red 18 dan Direct Black 38 dengan Menggunakan Sabut Pinang sebagai Adsorben. *J Rekayasa Kim Lingkung*. 2019;14(1):72–80.
25. Azzahro UL, Broto W. Pemanfaatan Limbah Cangkang Kerang Dara Sebagai Katalis CAO pada Pembuatan Biodiesel Minyak Goreng Bekas. *J Sos Teknol*. 2021;1(6):499–507.
26. Gurdeep Singh HK, Yusup S, Quitain AT, Abdullah B, Ameen M, Sasaki M, et al. Biogasoline production from linoleic acid via catalytic cracking over nickel and copper-doped ZSM-5 catalysts. *Environ Res* [Internet]. 2020;186(January):109616. Available from: <https://doi.org/10.1016/j.envres.2020.109616>
27. Puspawiningtiyas E, Pratiwi M, Purwadi R, Istyami AN, Elizabeth L, Prakoso T, et al. The effect of Ca/Mg/Zn mixing ratio on the research octane number of bio-gasoline during basic soap pyrolysis. *Heliyon* [Internet].

- 2021;7(11):e08314. Available from:  
<https://doi.org/10.1016/j.heliyon.2021.e08314>
28. Wang T, Zhang Q, Ding M, Wang C, Li Y, Zheng Q, et al. Bio-gasoline Production by Coupling of Biomass Catalytic Pyrolysis and Oligomerization Process. *Energy Procedia* [Internet]. 2017;105:858–63. Available from: <http://dx.doi.org/10.1016/j.egypro.2017.03.401>
  29. Dampang S, Purwanti E, Destyorini F, Kurniawan SB, Abdullah SRS, Imron MF. Analysis of Optimum Temperature and Calcination Time in the Production of CaO Using Seashells Waste as CaCO<sub>3</sub> Source. *J Ecol Eng*. 2021;22(5):221–8.
  30. I I, AM S, M M, R M, S M, MR A, et al. Red Clam Shell based Basic Heterogenous Catalyst for Transesterification of *Ricinus communis* L Oil Synthesis and Characterization. *Proc Malikussaleh Int Conf Multidiscip Stud*. 2023;3(3):00017.
  31. Kuntaarsa A. Tinjauan Titik Nyala Dari Pembuatan Bio Oil Dari Pirolisis Kayu Pinus Dengan Katalisator Zeolit Alam. *Simp Nas RAPI XVIII*. 2019;392–7.
  32. Alfernando O, Lince Muis, Siti Junaida, Malem K. Ginting, Muhammad Haviz. Analisis Pengaruh Waktu Torefaksi Terhadap Kualitas Biobriket dari Cangkang Kelapa Sawit (Palm Oil Shell). *J Tek Media Pengemb Ilmu dan Apl Tek*. 2023;21(2):181–90.
  33. Sutanto N, Samik S. Artikel Review : Pemanfaatan Katalis CaO Untuk Pembuatan Biodiesel Menggunakan Metode Transesterifikasi dari Non Edible Oil Article Review : Utilization of CaO Catalyst to Produce Biodiesel by Transesterification Method from Non-Edible Oil. *Univ Negeri Surabaya Jur Kim*. 2021;46–55.
  34. Zulfahmi I, Helmi K, Rahmah S, Kautsari N, Maulida S, Nur FM. Kondisi Biometrik Kerang Darah, *Tegillarca granosa*, di Pesisir Pantai Utara Kota Banda Aceh. *J Ilmu Pertan Indones*. 2021;26(4):620–9.
  35. Sitompul MK. Identifikasi Keanekaragaman Jenis - Jenis Kerang (Bivalvia) Daerah Pasang Surut Di Perairan Desa Teluk Bakau. *J Marit*. 2020;2(1):42–

51.

36. Hongloi N, Prapainainar P, Seubsai A, Sudsakorn K, Prapainainar C. Nickel catalyst with different supports for green diesel production. *Energy* [Internet]. 2019;182:306–20. Available from: <https://doi.org/10.1016/j.energy.2019.06.020>
37. Oko S, Syahrir I. Sintesis Biodiesel dari Minyak Sawit Menggunakan Katalis CaO Superbasa dari Pemanfaatan Limbah Cangkang Telur Ayam. *J Teknol.* 2018;10(2i):113–21.
38. Girish N, Niju SP, Meera Sheriffa Begum KM, Anantharaman N. Utilization of a cost effective solid catalyst derived from natural white bivalve clam shell for transesterification of waste frying oil. *Fuel* [Internet]. 2013;111:653–8. Available from: <http://dx.doi.org/10.1016/j.fuel.2013.03.069>
39. Daniaty Malau N. The Effect of Calcination Time Variation on CaO Synthesa from Limestone. *Int J Progress Sci Technol (IJPSAT)* [Internet]. 2021;25(2):684–9. Available from: <http://ijpsat.ijsht-journals.org>
40. Syam AM, Ibrahim I, Mulyawan R, Fazira L, Tirani T, Vebyca H. BIODIESEL PRODUCTION FROM WASTE COOKING OIL WITH BLOOD CLAM ( *Anadara granosa* ) SHELL BASED HETEROGENEOUS CATALYST. (1).
41. Rosanti AD, Wardani ARK, Anggraeni HA. Pengaruh Suhu Kalsinasi terhadap Karakteristik dan Aktivitas Fotokatalis N/TiO<sub>2</sub> pada Penjernihan Limbah Batik Tenun Ikat Kediri. *Indones E-Journal Appl Chem.* 2020;8(1):26–33.
42. Jusoh WNW, Matori KA, Zaid MHM, Zainuddin N, Khiri MZA, Rahman NAA, et al. Effect of sintering temperature on physical and structural properties of Alumino-Silicate-Fluoride glass ceramics fabricated from clam shell and soda lime silicate glass. *Results Phys.* 2019;12(January):1909–14.
43. Rodríguez-Machín L, Ronsse F, Casas-Ledón Y, Arteaga-Pérez LE. Fast pyrolysis of raw and acid-leached sugarcane residues en route to producing chemicals and fuels: Economic and environmental assessments. *J Clean Prod.* 2021;296.

44. Widiarti N, Rahayu EF. Sintesis  $\text{CaO}.\text{SeO}$  dan Aplikasinya pada Reaksi Transesterifikasi Minyak Jelantah Menjadi Biodiesel. *Indones J Chem Sci.* 2016;5(1):19–27.
45. Toscano Miranda N, Lopes Motta I, Maciel Filho R, Wolf Maciel MR. Sugarcane bagasse pyrolysis: A review of operating conditions and products properties. *Renew Sustain Energy Rev [Internet].* 2021;149(June):111394. Available from: <https://doi.org/10.1016/j.rser.2021.111394>
46. Koreksi O Le, Andriy I, Pinaa A. Ampas tebu Indonesia untuk produksi biofuel Ampas tebu Indonesia untuk produksi biofuel untuk perkiraan permintaan. 2019;10.
47. Hifzi MI. Pengaruh Proses Densifikasi Bahan Baku Biomassa Daun Tebu Terhadap Hasil Pirolisis Secara Lambat. 2022;70.
48. Shamsul NS, Kamarudin SK, Rahman NA. Conversion of bio-oil to bio gasoline via pyrolysis and hydrothermal: A review. *Renew Sustain Energy Rev.* 2017;80(April 2016):538–49.
49. Vu Ly H, Lee B, Wook Sim J, Khanh Tran Q, Kim SS, Kim J, et al. Catalytic pyrolysis of spent coffee waste for upgrading sustainable bio-oil in a bubbling fluidized-bed reactor: Experimental and techno-economic analysis. *Chem Eng J.* 2022;427(May 2021).
50. Migas K. Standar dan Mutu (spesifikasi) Bahan Bakar Minyak Jenis Bensin(Gasoline) RON 98 Yang Dipasarkan Di Dalam Negeri. 2018. p. 1–5.
51. Gerasimov G, Khaskhachikh V, Potapov O, Dvoskin G, Kornileva V, Dudkina L. Pyrolysis of sewage sludge by solid heat carrier. *Waste Manag [Internet].* 2019;87:218–27. Available from: <https://doi.org/10.1016/j.wasman.2019.02.016>
52. Kementerian Pertanian. Outlook Komoditas Pertanian Padi. *Pus Data dan Sist Inf Pertan.* 2023;1–2.
53. Juneja N, Daskeviciute-Geguziene S, Spalatu N, Mandati S, Katerski A, Grzibovskis R, et al. Employment of dopant-free fluorene-based enamines as innovative hole transport materials to boost the transparency and

performance of Sb<sub>2</sub>S<sub>3</sub> based solar cells. Mater Sci Semicond Process [Internet]. 2024;169(June 2023):107934. Available from: <https://doi.org/10.1016/j.mssp.2023.107934>

54. Selvia Fardhyanti D, Prasetiawan H, Habibah U, Tri Raharjo P. Peningkatan Yield Fenol dari Bio-oil Hasil Pirolisis Bagasse Tebu Melalui Proses Ekstraksi pada Suhu dan Kecepatan Pengadukan. Pros Semin Nas Tek Kim UNNES 2018. 2018;(September):9–17.
55. Anam A, Majid MA. Karakteristik Limbah Daun Tebu Sebagai Sumber Energi Baru Terbarukan Berbasis Densification Method Asroful Anam , dkk ./ Jurnal Rekayasa Mesin. 2020;15(1):59–65.
56. Mendes FL, da Silva VT, Pacheco ME, Toniolo FS, Henriques CA. Bio-oil hydrotreating using nickel phosphides supported on carbon-covered alumina. Fuel [Internet]. 2019;241(December 2018):686–94. Available from: <https://doi.org/10.1016/j.fuel.2018.12.063>
57. Wahyudi E, Zultiniar Z, Saputra E. Pengolahan Sampah Plastik Polypropylene (PP) Menjadi Bahan Bakar Minyak dengan Metode Perengkahan Katalitik Menggunakan Katalis Zeolit X. J Rekayasa Kim Lingkung. 2016;11(1):17–23.
58. Basumatary SF, Brahma S, Hoque M, Das BK, Selvaraj M, Brahma S, et al. Advances in CaO-based catalysts for sustainable biodiesel synthesis. Green Energy Resour [Internet]. 2023;1(3):100032. Available from: <https://doi.org/10.1016/j.gerr.2023.100032>
59. Haryani N, Harahap H, Taslim, Irvan. Biogasoline production via catalytic cracking process using zeolite and zeolite catalyst modified with metals: A review. IOP Conf Ser Mater Sci Eng. 2020;801(1).
60. Taufiqurrahmi N, Bhatia S. Catalytic cracking of edible and non-edible oils for the production of biofuels. Energy Environ Sci. 2011;4(4):1087–112.
61. Rahayu PE, Priatmoko S, Kadarwati S. Jurusan Kimia FMIPA Universitas Negeri Semarang Gedung D6 Kampus Sekaran Gunungpati Telp. (024)8508112 Semarang 50229 Sejarah Artikel: Diterima Mei. J Chem Sci. 2013;2(2).

62. Mazurova K, Miyassarova A, Eliseev O, Stytsenko V, Glotov A, Stavitskaya A. Fischer–Tropsch Synthesis Catalysts for Selective Production of Diesel Fraction. *Catalysts*. 2023;13(8).
63. Ardhyananta H, Triwicaksono S, Kurniawansyah F. Catalytic Cracking of Crude Palm Oil into Biogasoline Over HZSM-5 and USY-Zeolite Catalysts: A Comparative Study. *South African J Chem Eng* [Internet]. 2024; Available from: <https://doi.org/10.1016/j.sajce.2024.07.009>
64. Kementerian Energi dan Sumber Daya Mineral. Standar dan mutu (spesifikasi) b35 [Internet]. Situs Ditjen Migas. 2023. Available from: <https://migas.esdm.go.id/cms/uploads/regulasi/regulasi- kkk/2023/170.K.HK.02.DJM.2023.pdf>
65. Nguyen TAH, Ngo HH, Guo WS, Nguyen THH, Soda S, Vu ND, et al. White hard clam (*Meretrix lyrata*) shells media to improve phosphorus removal in lab-scale horizontal sub-surface flow constructed wetlands: Performance, removal pathways, and lifespan. *Bioresour Technol*. 2020;312(April).
66. Takeno ML, Mendonça IM, Barros S de S, de Sousa Maia PJ, Pessoa WAG, Souza MP, et al. A novel CaO-based catalyst obtained from silver croaker (*Plagioscion squamosissimus*) stone for biodiesel synthesis: Waste valorization and process optimization. *Renew Energy*. 2021;172:1035–45.
67. Mistar EM, Alfatah T, Supardan MD. Synthesis and characterization of activated carbon from *Bambusa vulgaris striata* using two-step KOH activation. *J Mater Res Technol*. 2020;9(3):6278–86.
68. Fuseini M, Zaghloul MMY, Elkady MF, El-Shazly AH. Evaluation of synthesized polyaniline nanofibres as corrosion protection film coating on copper substrate by electrophoretic deposition. *J Mater Sci* [Internet]. 2022;57(10):6085–101. Available from: <https://doi.org/10.1007/s10853-022-06994-3>
69. Prajapati AK, Das S, Mondal MK. Exhaustive studies on toxic Cr(VI) removal mechanism from aqueous solution using activated carbon of *Aloe vera* waste leaves. *J Mol Liq*. 2020;307:112956.
70. Solihudin S, Haryono H, Noviyanti AR, Ridwansyah MR. Pengaruh Suhu

Kalsinasi terhadap Karakteristik Komposit Forsterit-Karbon Tersintesis dalam Medium Gas Argon. *ALCHEMY J Penelit Kim.* 2020;16(2):163.

71. Spektra A, Xrd D, Katalis M, Ni B, Impregnasi M. Sintesis dan Analisis Spektra IR , Difraktogram XRD , SEM pada Material Katalis Berbahan Ni / zeolit Alam Teraktivasi dengan Metode Impregnasi. 2020;(January):1–6.
72. Saleem M, Jamil F, Qamar OA, Akhter P, Hussain M, Khurram MS, et al. Enhancing the Catalytic Activity of Eggshell-Derived CaO Catalyst and Its Application in Biodiesel Production from Waste Chicken Fat. *Catalysts.* 2022;12(12).
73. Chansiriwat W, Chotwatcharanurak L, Khumta W, Suwannaruang T, Shahmoradi B, Kumsaen T, et al. Biofuel production from waste cooking oil by catalytic reaction over thai dolomite under atmospheric pressure: Effect of calcination temperatures. *Eng Appl Sci Res.* 2021;48(1):102–11.
74. Monika I, Umar D, Hardian A, Astriana R, Sulistyohadi F. Pengaruh penambahan katalis TiO<sub>2</sub> terhadap sifat kimia permukaan komposit karbon aktif untuk penyerapan gas SO<sub>2</sub>. *J Teknol Miner dan Batubara.* 2021;17(3):153–65.
75. Jaiswal S, Sharma YC. Ni modified distillation waste derived heterogeneous catalyst utilized for the production of glycerol carbonate from a biodiesel by-product glycerol: Optimization and green metric studies. *Waste Manag.* 2023;156(May 2022):148–58.
76. Nabillah A, Zamhari M, Dewi E. Sintesis Katalis Karbon Aktif Tandan Kosong Kelapa Sawit Terimpregnasi Naoh Pada Reaksi Tranesterifikasi Biodiesel. *J Teknol Kim Unimal.* 2023;12(2):165.
77. Miftah AK, Sittijunda S, Imai T, Salakkam A, Reungsang A. Biohydrogen and Methane Production from Sugarcane Leaves Pretreated by Deep Eutectic Solvents and Enzymatic Hydrolysis by Cellulolytic Consortia. *Fermentation.* 2022;8(8).
78. Razali SZ, Yunus R, Abdul Rashid S, Lim HN, Mohamad Jan B, Hamid HA. Process intensification of 2-ethylhexyl caprylate/caprate synthesis via a pulsed loop reactor: Multi-objective optimization. *Chem Eng Process -*

- Process Intensif [Internet]. 2020;149(February):107837. Available from: <https://doi.org/10.1016/j.cep.2020.107837>
79. Arpa O, Yumrutas R, Demirbas A. Production of diesel-like fuel from waste engine oil by pyrolytic distillation. *Appl Energy* [Internet]. 2010;87(1):122–7. Available from: <http://dx.doi.org/10.1016/j.apenergy.2009.05.042>
  80. Kadarwati S, Wahyuni S. Characterization and performance test of palm oil based bio-fuel produced via ni/zeolite-catalyzed cracking process. *Int J Renew Energy Dev*. 2015;4(1):32–8.
  81. Mehrabadi A, Craggs R, Farid MM. Pyrolysis of wastewater treatment high rate algal pond (WWT HRAP) biomass. *Algal Res* [Internet]. 2017;24:509–19. Available from: <http://dx.doi.org/10.1016/j.algal.2016.08.007>
  82. Widyastuti, Zulfa LL, Safrida N, Ardhyananta H, Triwicaksono S, Kurniawansyah F, et al. Catalytic cracking of crude palm oil into biogasoline over HZSM-5 and USY-Zeolite catalysts: A comparative study. *South African J Chem Eng* [Internet]. 2024;50(July):27–38. Available from: <https://doi.org/10.1016/j.sajce.2024.07.009>
  83. Firdausi NI. PRODUKSI DAN KARAKTERISASI BAHAN BAKAR GREEN DIESEL DARI PIROLISIS MINYAK JELANTAH BERBANTUAN GELOMBANG MIKRO. *Kaos GL Derg* [Internet]. 2020;8(75):147–54. Available from: <https://doi.org/10.1016/j.jnc.2020.125798>  
<https://doi.org/10.1016/j.smr.2020.02.002>  
<http://www.ncbi.nlm.nih.gov/pubmed/810049>  
<http://doi.wiley.com/10.1002/anie.197505391>  
<http://www.sciencedirect.com/science/article/pii/B9780857090409500205>  
<http://>
  84. Suwannasingha N, Kantavong A, Tunkijjanukij S, Aenglong C, Liu HB, Klaypradit W. Effect of calcination temperature on structure and characteristics of calcium oxide powder derived from marine shell waste. *J Saudi Chem Soc* [Internet]. 2022;26(2):101441. Available from: <https://doi.org/10.1016/j.jscs.2022.101441>
  85. Maghfury TI. Analisis X-Ray Diffraction (XRD) Pada Brazing Aluminium Seri 1000 Dan Stainless Steel Seri 304 Dengan Penambahan Serbuk

Tembaga. Univ Muhammadiyah Surakarta. 2020;1–29.

86. Marsh ATM, Brown AP, Freeman HM, Walkley B, Pendlowski H, Bernal SA. Determining aluminium co-ordination of kaolinitic clays before and after calcination with electron energy loss spectroscopy. *Appl Clay Sci* [Internet]. 2024;255(May):107402. Available from: <https://doi.org/10.1016/j.clay.2024.107402>
87. Eknapakul T, Jiamprasertboon A, Amonpattaratkit P, Pimsawat A, Daengsakul S, Tanapongpisit N, et al. Unraveling the structural complexity of and the effect of calcination temperature on calcium phosphates derived from *Oreochromis niloticus* bones. *Heliyon* [Internet]. 2024;10(8):e29665. Available from: <https://doi.org/10.1016/j.heliyon.2024.e29665>
88. Silalahi D, Supeno M, Taufik M. Conversion of Palm Oil (CPO) into Fuel Biogasoline through Thermal Cracking Using a Catalyst Based Na-Bentonite and Limestone of Soil Limestone NTT. *Int J Biol Phys Chem Stud*. 2021;3(2):01–15.
89. Brites CDS, Fiaczyk K, Ramalho JFCB, Sójka M, Carlos LD, Zych E. Widening the Temperature Range of Luminescent Thermometers through the Intra- and Interconfigurational Transitions of  $\text{Pr}^{3+}$ . *Adv Opt Mater*. 2018;6(10):1–5.
90. Kusmiyati K, Prasetyoko D, Murwani S, Fadhilah MN, Oetami TP, Hadiyanto H, et al. Biodiesel production from reutealis trisperma oil using KOH impregnated eggshell as a heterogeneous catalyst. *Energies*. 2019;12(19).
91. Rifqi K, Kadarwati S, Wahyuni S. *Info Artikel*. 2012;1(2252).
92. Govindarajan N, Kastlunger G, Heenen HH, Chan K. Improving the intrinsic activity of electrocatalysts for sustainable energy conversion: where are we and where can we go? *Chem Sci*. 2022;13(1):14–26.
93. Sujadmiko MAT. Sintesis Bahan Bakar menggunakan Metode Konversi Katalitik dari Limbah Plastik Polipropilena. 2017;108.
94. Wijanarko A, Mawardi DA, Nasikin M. Produksi Biogasoline Dari Minyak Sawit Melalui Reaksi Perengkahan Katalitik Dengan Katalis  $\gamma$ -Alumina.

MAKARA Technol Ser. 2010;10(2).

95. Jin X, Yan L, Cui B, Kong J, Wang M, Chang L, et al. Nickel loaded on carbon materials prepared from co-pyrolysis of biochar and caking coal for catalytic conversion of volatiles. *J Anal Appl Pyrolysis* [Internet]. 2023;169(December 2022):105825. Available from: <https://doi.org/10.1016/j.jaap.2022.105825>
96. Indonesia SN, Nasional BS. Sni 7182:2015. 2015;
97. Xiao H, Wang W, Bao H, Li F, Zhou L. Title : Author names and affiliations : Corresponding author : Biodiesel-diesel blend optimized via leave-one cross- validation based on kinematic viscosity , calorific value , and flash point. (68).
98. Wibawa A, Santosa B, Mulyatno IP. Pemanfaatan Tenaga Angin Dan Surya Sebagai Alat Pembangkit Listrik Pada Bagan Perahu. *Kapal*. 2014;11(3).
99. Wu Z, Zhang X, Guo X, Yan D. Emergy evaluation of ecological and economic value of water and soil resources in residential and industrial land based on energy analysis. *Ecol Indic* [Internet]. 2022;145(July):109692. Available from: <https://doi.org/10.1016/j.ecolind.2022.109692>
100. Pradana YS, Daniyanto, Hartono M, Prasakti L, Budiman A. Effect of calcium and magnesium catalyst on pyrolysis kinetic of Indonesian sugarcane bagasse for biofuel production. *Energy Procedia* [Internet]. 2019;158:431–9. Available from: <https://doi.org/10.1016/j.egypro.2019.01.128>