
Curriculum Vitae

Name: Assoc. Prof Dr Abu Saleh Ahmed, SET (Mechanical Engineering)

List of Research:

External Grant

Research Title (Funder) – Jan 2017 – Dec 2021

1. Biofuel properties effects on diesel engine emission characteristics (RM 21000.00, funded by UNIMAS, 2016-2018, completed)
2. An Investigation on Biodiesel Production from Jatropha Oil using Newly Synthesized Heterogeneous Nano Catalyst, (RM 10000.00, funded by UNIMAS, 2015-2018, completed)
3. Polyvinyl Alcohol/Silica/Clay Nanocomposites: Effect of Clay on Surface Morphology and Thermo-mechanical Properties, (RM 10000.00, funded by UNIMAS, 2015-2018, completed)
4. Use of DVD writer drives for precision laser micro-drilling of non-metals, (RM 20000.00, funded by UNIMAS, 2017-2019, completed)
5. Investigation of three-dimensional (3D) precision laser cutting of non-metals using modified computer DVD writer drives, (RM 67500.00 funded by FRGS, 2017-2020, completed)
6. Experimental investigation of sago starch as green cutting/lubricating fluid in laser-assisted machining, (RM 54000.00 funded by Tun Openg Chair, Sago chair, 2018-2020, completed)
7. Development of Activated Cellulose filler Reinforced Composites for Biomedical Applications, (RM 21000.00, funded by UNIMAS, 2019-2021, In progress)

List of Publications: 2017-2021

1. **A.A. Saleh**, R. Rezaur and M. Khusairy, Review Based on Low-and High-Stream Global Carbon Capture and Storage (CCS) Technology and Implementation Strategy, *Journal of Applied Science & Process Engineering*, 8.1, 2021, pp. 722-737.
2. **A.A. Saleh**, A.S. Khan, A. N. R. Reddy and R. Rahman, Performance of Coconut Biodiesel Fueled Diesel Engine with Exhaust Gas Emission Analysis, *Materials Science Forum*, 1030, 2021, pp. 149-158.
3. P. Law, R. Rezaur Rahman and **A. A. Saleh**, Morphological and Thermal Properties of Composites Prepared with Poly (lactic acid), Poly (ethylene-alt-maleic anhydride), and Biochar from Microwave-pyrolyzed Jatropha Seeds, *BioResources*, 16.2, 2021, pp. 3171-3185.
4. A. Wahab, S. M. Sapuan, M. Harussani and **A. A. Saleh**, Conceptual Design of Glass/Renewable Natural Fibre-Reinforced Polymer Hybrid Composite Motorcycle Side Cover, *Journal of Renewable Materials*, 2021, DOI: 10.32604/jrm.2021.016221
5. **A. A. Saleh**, M.N. Mohiddin, A. N. R. Reddy, S. Hamdan, Turritella terebra shell synthesized calcium oxide catalyst for biodiesel production from chicken fat, *Journal of Materials Science Forum*, 997, 2020, pp. 93-101.
6. S. Kannan, B. Rajkumar, K. Dinesh, **A. A. Saleh**, N. Farid, Microwave assisted acid hydrolysis for bioethanol fuel production from sago pith waste, *Waste Management*, 86, 2019, pp. 80-86
7. **A. A. Saleh**, A. N. R. Reddy, S. Hamdan, Evaluation of Ubi Gajah for Fuel Bioethanol via Hydrolysis and Fermentation, *Malaysian Applied Biology Journal*, 48.5, 2019
8. A. Mahmood, S.M. Sapuan, K. Karmegam and **A. A. Saleh**, Design and development of kenaf fiber-reinforced polymer composite polytechnic chairs. *Future of Food: Journal on Food, Agriculture and Society*, 6, 2018, pp. 62-65.

9. **A. A. Saleh**, D. Harreh, A. N. R. Reddy, S. Hamdan Production of Karanja Methyl Ester from Crude Karanja Oil Using Meretrix Lyrata Synthesised Active CaO Catalyst, International Journal of Automotive and Mechanical Engineering, 15.3, 2018, pp. 5683-5694
10. **A. A. Saleh**, M.N. Mohiddin, A. N. R. Reddy, S. Hamdan, A Study on Chicken Fat as an Alternative Feedstock: Biodiesel Production, Fuel Characterisation, and Diesel Engine Performance Analysis, International Journal of Automotive and Mechanical Engineering, 15.3, 2018, pp. 5535-5546
11. **A. A. Saleh**, A. N. R. Reddy, S. Isam, S. Hamdan and H. H. Masjuki, Experimental evaluation of fatty acid composition influence on Jatropha biodiesel physicochemical properties, Journal of Renewable and Sustainable Energy, 10, 013103, 2018, pp. 1-20
12. **A. A. Saleh**, H. Dewi, A. N. R. Reddy, and S. Hamdan, An Experimental Investigation of Karanja Biodiesel Production in Sarawak, Malaysia, Journal of Engineering, 4174205, 2018, pp. 1-8
13. M. A. Maleque, W. Safina, **A.A. Saleh** and M.Y. Ali, Fe-C-Si ternary composite coating on CP-titanium and its tribological properties, Materials Science and Engineering, 184, 012013, 2017, pp. 1-6
14. **A. A. Saleh**, A. N. R. Reddy, S. Isam and S. Hamdan, Active Razor shell CaO Catalyst Synthesis for Jatropha Methyl Ester Production via Optimized Two-step Transesterification, Journal of Chemistry, 2017, pp. 1-20
15. **A. A. Saleh**, A. N. R. Reddy, S. Isam and S. Hamdan, Active Heterogeneous CaO Catalyst Synthesis from Anadara granosa (Kerang) Seashells for Jatropha Biodiesel Production, MATEC, 78, 02008, 2017, pp. 1-6
16. **A. A. Saleh**, A. N. R. Reddy, S. Isam and S. Hamdan, Optimization of Transesterification Parameters for Maximum Biodiesel Yield from Crude Jatropha Oil Using a Heterogeneous Catalyst Synthesized from Seashells, Journal of Engineering Science and Technology, 2017, 12.10, pp. 2723-2732

List of Awards:

1. **Best Paper Award** in recognition of the technical excellence of the paper 'Evaluation of Ubi Gajah for Fuel Bioethanol via Hydrolysis and Fermentation', Innovation Technology Expo (InTEX 18), July 17-18, 2018, Pullman Hotel, Kuching, Malaysia
2. **Academic award** for publishing the highest impact factor journal in Universiti Malaysia Sarawak from UNIMAS excellent award ceremony on March 28, 2017
3. **Bronze Medal** award for 'Synthesis and Characterization of Organoclay for its wide applications', Innovation Technology Expo InTEX17, UNIMAS, May 17-18, 2017, Malaysia.
4. **Silver Medal** award for 'Synthesis of a Highly Active and Green Nano-CaO from Seashells', Innovation Technology Expo InTEX17, UNIMAS, May 17-18, 2017, Malaysia.