### DR. FAUZANI MD SALLEH

Ph.D. Universiti Malaya, 2014 MSc. (Polymer Blending, Chemistry), UKM 2007 BSc. (Hons) (Chemical Technology, Chemistry), UKM 2003 alya5288@um.edu.my 0379675934



### Major Recognition:

- 2<sup>nd</sup> Placed Winner of ACA Championship Malaysia 2021. (Role: Advisor)
- Bronze Award for Teaching & Learning Research Project. UMLITER, University of Malaya, 2019.
- Certificate of Outstanding Contribution in Reviewing, Elsevier, Amsterdam, The Netherland, 2018.
- Certificate of Award as Best Poster Presenter, 3rd Advanced Materials Conference (AMC) 2016.

#### **Research Interest**

Polymeric Materials, Natural Polymer, Composite Materials, Ceramic Materials, Natural fiber, Polymer Electrolytes, Electrochemical Devices

# **Research Highlight**

Current research focuses on studies related to the development of low cost and safer solid electrolytes materials are limited. Investigations on magnesium ion conducting solid electrolytes are interesting in comparison with conventional lithium electrolytes which magnesium provides more safer, environmentally benign and cheaper due to their high natural abundant elements. New magnesium ion conducting materials may contribute knowledge on this NASICON-structured solid ceramic electrolytes which aspires for research and innovation that can build networking between academic and industry to collaborate towards expanding science, technology and engineering field by the application of knowledge and ideas.

### Representative (featured) Publications:

- 1. Araga R.A.L, Hassan A, Yahya R, Rahman NA, Salleh F.M, Adebayo G.O (2020). Effects of wood flour content and heat treatment on the dynamic mechanical and impact properties of LDPE/red balau (Shorea Dipterocarpaceae) composites, Polymer Bulletin, 26 September 2020. (ISI-Indexed)
- 2. M. Mustafa, M. S. A. Rani, S. B. R. S. Adnan, F. M. Salleh, N. S. Mohamed, Characteristics of new Mg<sub>0.5</sub>(Zr<sub>1-x</sub>Sn<sub>x</sub>)<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> NASICON structured compound as solid electrolytes, Ceramics International, Volume 46, Issue 18, Part A, 15 December 2020, Pages 28145-28155. (ISI-Indexed)
- **3.** Abu Bakar et. al. (2019). Fuzzy risk analysis under influence of non-homogeneous preferences elicitation in fiber industry. Applied Intelligence, pp (1-12). (ISI-Indexed)
- **4.** Salleh, FM., Hassan, A., Yahya, R., Isa, MRM & Araga RAL. (2018). Physico-thermal properties of kenaf fiber/high-density polyethylene/maleic anhydride compatibilized composites. High Performance Polymers, 30(8), 900-910. (ISI-Indexed)
- **5.** Lafia-Araga, R., Hassan, A., Yahya, Rosiyah., Rahman NA., Salleh FM. (2018). Water absorption behaviour of heat treated and untreated Red Balau saw dust/LDPE composites: Its kinetics and effects on mechanical properties." Journal of Thermoplastic Composite Materials, 1-19 (ISI-Indexed)
- 6. Aziz Hassan, MR Mohd Isa, ZA Mohd Ishak, NA Ishak, Normasmira A Rahman, Fauzani Md Salleh, Characterization of sodium hydroxide-treated kenaf fibres for biodegradable composite applicat ion, High Performance Polymers, 30(8), 890-899. DOI: 10.1177/0954008318784997 (ISI-Indexed)
- 7. Abd. Hamid, F., Salleh, F.M., Mohamed, N.S and Syed Adnan, S.B.R. (2017). The Effect of Graphene Content on The Structure and Conductivity of Cellulose/Graphene Composite. Sains Malaysiana, 46 (7), 1025-1031 (ISI-Indexed)

# **Professional Activities:**

Institut Kimia Malaysia, Member, 2016 to 2021 (National)
Persatuan STEM Kebangsaan NSA, Member, 2021 (National)
Materials Research Society, Membership, 2016 to 2021 (International)

#### Website:

WOS/Publon: http://www.researcherid.com/rid/J-6603-2015