DR. SITI NOR FARHANA YUSUF
Ph.D. Universiti Malaya, 2017
MSc. (Polymer Chemistry), 2011
BSc. (Hons) (Applied Chemistry), 2008
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Major Recognition (if any):

- GOLD Award – MOF on the Move; Towards High Voltage Battery – Supercapacitors Hybrid Energy System at UNIMAS Innovation & Technology Exposition 2019 (InTEX19)
- SILVER Award – Efficient Dye-Sensitized Solar Cells with Biopolymer Gel Electrolyte at International Engineering Invention & Innovation Exhibition 2014 (i-ENVEX)
- SILVER Award – Efficient Dye-Sensitized Solar Cell Based on Ruthenium Dye and Phthaloylchitosan Gel Polymer Electrolyte at International Invention, Innovation & Design 2014

Research Interest

Polymer Electrolytes, Polymeric Materials, Natural Polymer, Dye-sensitized Solar Cell, Supercapacitor, Metal-Organic Framework (MOF).

Research Highlight

- Biopolymer (modified chitosan) electrolyte for dye-sensitized solar cell.
- Metal-organic frameworks for electrode in supercapacitor.

Figure: N-phthaloylchitosan based gel polymer electrolytes

Representative (featured) Publications:

1. S.N.F. Yusuf, A.D. Azzahari, R. Yahya, S. R. Majid, M.A. Careem and A.K. Arof. From crab shell to solar cell: A gel polymer electrolyte based on N-phthaloylchitosan and its application in dye-sensitized solar cells. RSC Advances 6 (2016) 27714 – 27724
2. S.N.F. Yusuf, A.D. Azzahari, V. Selvanathan, R. Yahya, M.A. Careem, A.K. Arof. Improvement of N-phthaloylchitosan based gel polymer electrolyte in dye-sensitized solar cells using a binary salt system. Carbohydrate Polymers 157 (2017) 938–944
3. S.N.F Yusuf, S.R. Majid, R. Yahya. Addition of 1-butyl-3-methylimidazolium iodide to the N-phthaloylchitosan based gel polymer electrolyte. Materials Today: Proceedings 17 (2019) 416–423.
4. S.N.F. Yusuf and A.K. Arof. (2020) “Polymer Electrolyte Application in Electrochemical Devices”. In: Tan Winie, A.K. Arof and S. Thomas (Eds.), Polymer Electrolytes (pp. 137-175). Wiley-VCH Verlag GmbH & Co. KGaA. ISBN: 978-3-527-34200-6
5. F.J. Juni, S.N.F. Yusuf, S.R. Majid, Z. Osman. Electrochemical characteristics of $Cu/Cu_2O/C$ composite electrode for supercapacitor application, Microchemical Journal (2021).

Professional Activities:

Centre for Ionics University of Malaya (CIUM), Member

Website:

Publons: https://publons.com/researcher/3326211/siti-nor-farhana-yusuf/
Scopus: http://www.scopus.com/authid/detail.url?authorId=57201837528
ResearchGate: https://www.researchgate.net/profile/Siti-Yusuf