

# Credentials (IOS Researcher)



#### **MOHD SUFRI MASTULI**

Diploma Science (UiTM, Malaysia) BSc. (Hons.) Applied Chemistry (UiTM, Malaysia)

MSc. Chemistry (University of Wollongong, Australia) PhD in Catalysis (UPM, Malaysia)

#### **Current roles and responsibilities:**

- Coordinator of Student Affairs, Faculty of Applied Sciences, UiTM Shah Alam, Malaysia.
- 2. Senior Lecturer, Faculty of Applied Sciences, UiTM Shah Alam, Malaysia.
- Fellow Researcher at Centre for Functional Materials & Nanotechnology, Institute of Science, UiTM Shah Alam, Malaysia.

# Selected Journals & Publications

- "Growth mechanisms of MgO nanocrystals via a sol-gel synthesis using different complexing agents", Nanoscale research letters 9 (2014) 134
- Structural and catalytic studies of Mg<sub>1-x</sub>Ni<sub>x</sub>O nanomaterials for gasification of biomass in supercritical water for H<sub>2</sub>-rich syngas production", International Journal of Hydrogen Energy (2020)
- Sulfonated SnO<sub>2</sub> nanocatalysts via a self-propagating combustion method fur esterification of palm fatty acid distillate", RSC Advances 10 (2020) 29187 – 29201
- Free-H<sub>2</sub> deoxygenation of Jatropha curcas oil into cleaner diesel-grade biofuel over coconut residue-derived activated carbon catalyst", Journal of Cleaner Production 249 (2020) 1193812
- Hemitate microcube decorated TiO2
  nanorods as heterojunction
  photocatalysts with in-situ carbon
  doping derived from polysaccharides
  bio-templates hydrothermal
  carbonization", Journal of Alloys and
  Compounds 820 (2020) 1531432

### **Research Grants**

- A novel adsorbent of nanostructured MgO for heavy metals removal from textile wastewater – € 25,000
- Preparation of curved structure of MgO via sol-gel method assisted cetyltrimethylammonium bromide: Thermal, phase and morphological studies – RM54,500
- Catalytic properties of CaO nanocatalysts in supercritical water gasification (SCWG) of oil palm empty fruit bunches (OPEFB) – RM69,000
- Highly active SnO<sub>2</sub> nanoparticles as superacid catalysts in esterification of lowcost palm fatty acid distillate (PFAD) feedstock into biodiesel – RM91,700
- Charge-discharge properties LiCo<sub>0.3</sub>Ni<sub>(0.7-x)</sub>Ti<sub>x</sub>O<sub>2</sub> cathode materials and their chemical configuration RM100,912
- Development of effective NiO-TMO (TMO = Ag, Fe, La, Cd, Mn, Mo) supported on activated carbon for pyrolytic deoxygenation of triglycerides into renewable biofuel RM174,200
- Structural parameters and atomic positions of nanostructured and substituted Al<sub>2</sub>O<sub>3</sub> -RM50,000
- Synthesis of ordered nanoparticles mesoporous alumina network assisted by biopolymer – RM65,000
- Transesterification of palm olein oil to fatty acid methyl ester using CaO-sugar cane bagasse ash as basic catalyst – RM51,200

### Honors Awards & Showcase

- UiTM Excellent Service Award 2012.
- Invention, Innovation and Design Expo IIDEX 2013 – 2 Gold & 1 Silver
- Innovation Design & Competition (IID Johor 2013) – Bronze
- Invention, Innovation and Design Expo IIDEX 2014 – Bronze
- Japan-Asia Youth Exchange Program in Science under SAKURA Exchange Program in Science sponsored by Japan Association for Chemical Innovation (JACI), 4 – 12 July 2015, Tokyo, Japan.
- Invention, Innovation and Design Expo IIDEX 2016 – Gold
- Invention, Innovation and Design Expo IIDEX 2017 – 1 Gold & 1 Bronze
- National e-Content Development Competition 2019 – Silver
- Invention, Innovation and Design Expo IIDEX 2019 – Gold
- UiTM Research Fiesta (URF) 2019 Gold
- National e-Content Development Competition 2020 – Silver