

# Credentials (IOS Researcher)



## ROSNAH ZAKARIA

Bachelor Education (Hons) Physics, (UKM Malaysia)

MSc. Science Education, (UKM Malaysia)

PhD Advanced Materials, (UiTM, Malaysia)

### Current roles and responsibilities:

1. Leader, Electroactive Materials ( CoE) UiTM in tier 5
2. Senior Lecturer, Faculty of Applied Sciences, Basics Physics and Classical Mechanics
3. Member of Institute of Science, UiTM
4. Panel of academic (physics) for revised curriculum for Ministry of Higher education at matriculation level.

### Honors Awards & Showcase:

1. Bioinnovation Award / Biomalaysia) – 1 Silver
2. Invention, Innovation & Design Exposition (IIDEX) – 3 Gold
3. Scientific Research Invention & Innovation Competition (sriic2017) – 1 Bronze

## Selected Journals & Publications

- “Comparison of conductivity performance of dragon fruit dye extracted using water and ethanol for dye-sensitized solar cells”, International Journal of Engineering and Technology(UAE) (2018) 126-128
- “Studies of the absorbance peak on the N719 dye influence by combination between Cadmium Selenide (CdSe)QDs and Zinc Sulfide(ZnS)QDs”, (2018) 01040
- “Rheology behaviour of modified silicone-dammar as a natural resin coating, PHYSICS AND MATERIALS SYMPOSIUM: International Conference on Applied, 2016
- “X-Ray Diffraction and Infrared Studies on Plasticized Cellulose Acetate Complexed with Ammonium Iodide for Solid Polymer Electrolyte”, Materials Science Forum 846, 523-527, 2016
- “The performance of Modified Silicone-Dammar in Nanoindentation Test, International Journal of Advanced Science and Technology, Vol. 42, May, 2012
- “Adhesion and Hardness Evaluation of Modified Silicone-Dammar as Natural Coatings Materials”, American Journal of Applied Sciences 9(6): 890-893, 2012
- “The influence of Dammar Resin as a Natural Resin On Corrosion Protection In Silicone Coatings”, American Institute Of Physics (AIP. Con. Pro) Vol 1250, 2010

## Research Grant

- Interaction Mechanism of ZnS/CdSe Semiconducting Quantum Dot in Recombination Process of DSSC – **RM108,200.00**
- Electron Transport Mechanism of Graphene-Zinc Oxide Semiconductor in Electron Injection of Dye-sensitized solar cells - **RM108,200.00**
- Upconversion Mechanism of Rare-Earth Doped Gd<sub>2</sub>O<sub>3</sub>:M (M=Er<sup>3+</sup>, Yb<sup>3+</sup>) Dye-Sensitized Solar Cells - **RM79,000.00**
- Superionic conductor in Poly-Leucine-1,3-Diamino Propane (PLL) doped with NaI–Na<sub>3</sub>PO<sub>4</sub> salt - RM100,000.00
- (Development and Characterisation of Nano Paint Prepared From Bio Natural Compound) - **RM60,000.00**
- Studies of the natural Organic/Inorganic pigments on Silicone-Based Binder for High Temperature Application - **RM227,800.00**
- A New Conducting Ion Using Poly Amino Acid - **RM180,215.00**

## Consultancy

## Articles & Books