

ERNEE NORYANA MUHAMAD
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SENIOR LECTURER (Dr.)

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Catalysis, Fuel Cell

Dr. Ernee Noryana Muhamad is a lecturer in the Department of Chemistry, Faculty of Science, UPM. She is also one of the principal researchers at the Centre of Excellence for Catalysis Science and Technology (PutraCAT). Her research interest is primarily focused on catalysis and fuel cell. Currently, she is working in the development of modified platinum and non-platinum electrocatalysts for Polymer Electrolyte Membrane Fuel Cell (PEMFC). In catalysis area, she worked together with other researchers in the development of solid heterogeneous catalysts for biodiesel production, glycerol conversion and mixed metal oxide catalysts for oxidation reactions. Her research work is sponsored by Research University Grant Scheme (RUGS) and Fundamental Research Grant Scheme (FRGS).

CURRENT RESEARCH INTERESTS :**Polymer Electrolyte Membrane Fuel Cells**

Research work focuses on Pt-free electrocatalysts and highly CO-tolerant anode electrocatalyst for PEM fuel cell application. The electrochemical properties and performance of metal oxide added anode catalysts based on platinum and palladium metal will be evaluated in single PEM fuel cell for power generation system.

Solid Heterogeneous Catalysts

Research is focused on production of biodiesel from edible and non edible oil catalyzed by solid heterogeneous catalysts. Waste materials were utilized and modified as solid catalysts that will be used in transesterification of oils into biodiesel.

LINK TO POSTGRADUATE FIELD OF STUDY:

Catalysis, Materials Science, Material Science

ADDITIONAL INFORMATION:https://www.researchgate.net/profile/Ernee_Muhamad