IRMAWATI RAMLI

Ph.D. (University of Manchester)

ASSOCIATE PROFESSOR DR.
Department of Chemistry
Faculty of Science
Tel-Office: 03 8946
Fax: 03 89435380
irmawati@upm.edu.my

EXPERTISE
Catalysis, Advanced Materials, Nanotechnology

Associate Professor Dr. Irmawati Ramli obtained her PhD from University of Manchester Institute of Science and Technology, England in 1999. She started her profession at Universiti Putra Malaysia in 2000 as a lecturer. She was later promoted to Associate Professor in 2005. She has held different positions in UPM. She was the former Deputy Director of the Promotional Division, a section under the Research Management Centre, UPM from 2007 to 2009 and the former Head of Chemistry Department, Faculty of Science from 2014 to 2017. Dr. Irmawati was the Director of the National Science Centre (NSC), Ministry of Science, Technology and Innovation from 2009 until 2014. During her tenure at the NSC she was responsible for the enculturation of science among the Malaysian public and has been responsible for the fun science programs nationwide. Dr. Irmawati has more than 60 publications in areas of metal oxides, oxidation catalysis, and advanced materials, 9 patents and 1 trademark.

CURRENT RESEARCH INTERESTS:

- **Design and Synthesis of Catalysts**
  Developing design and synthesis of catalytic materials with desired functions for application in various chemical processes. Among catalyst preparation methods used are impregnation, reflux, sol-gel, precipitation-deposition, sol-immobilisation and chemical vapour impregnation.

- **Gas into Liquid Catalytic Process**
  Conversion of propane into acrylic acid under a continuous flow in a fixed bed reactor at atmospheric pressure over multicomponent mixed metal oxides catalysts.

- **Biomass Transformation to Fuels, Fuel Additives and Fine Chemicals**
  Use of waste cooking oil and palm oil for biodiesel production using high efficient heterogeneous catalysts. Using glycerol, generated from biodiesel process to form acetins through acetylation and 1,2-propanediol through hydrogenolysis.

- **CNT and Graphenated CNT**
  Production of high quality CNT and graphenated CNT from waste oils using chemical vapour deposition methods.

LINK TO POSTGRADUATE FIELD OF STUDY:
Catalysis, Advanced Materials, Nanotechnology

ADDITIONAL INFORMATION: