



DR. MOHAMMAD BIN ISMAIL



Research interest in the field of materials science, particularly in the modification of solid-state hydrogen storage materials such as metal hydride (MgH_2 , TiH_2 , LiH , NaH), complex hydride ($LiAlH_4$, $NaAlH_4$, $LiBH_4$, $NaBH_4$) and chemical hydride (NH_3BH_3) for hydrogen-energy applications. Have become experienced with pressure-composition-isotherm (PCI), high speed ball milling, the operation of various microstructure characterizations such as Raman spectroscopy, Fourier transformation infrared (FTIR), X-ray photoelectron spectroscopy (XPS), X-ray diffraction (XRD) and morphological analysis using scanning electron microscope (SEM) and field emission scanning electron microscopy (FESEM). Able to use thermogravimetric analysis/differential scanning calorimetry (TGA/DSC) to perform thermodynamics analysis and can do mass spectroscopy (MS) for gas analysis.



Senior Lecturer
(DS51)



Ph.D (Wollongong,
Australia), B.Sc
(Hons) (Malaya)



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Expertise Area

Main Field : Physics
Sub Field : Advanced Materials
Specialization : Solid-state Hydrogen storage

Professional Membership

- American Chemical Society (ACS), Member, August 2014 – Present
- Royal Society of Chemistry, Member (RSC), May 2015 – Present
- Electroactive Materials Society (EMS), Life Member, September 2014 - Present

Networking & Collaboration

- University of Wollongong, Australia
- Fudan University, China
- University of Malaya, Malaysia
- Universiti Sains Malaysia, Malaysia

Publication Reference

- ResearcherID Link: <http://www.researcherid.com/rid/D-1716-2010>
- Scopus Link: <http://www.scopus.com/scopesprx.elsevier.com/author/detail.url?authorId=55323514100&origin=resultslist>
- Google Scholar Link: <http://scholar.google.com.my/citations?user=Uhby0uoAAAAJ&hl=en>
- Researchgate Link: https://www.researchgate.net/profile/Mohammad_Ismail