Credentials (IOS Researcher)

OSKAR HASDINOR BIN HASSAN

B.Eng. (Hons) Materials Engineering, Universiti Sains Malaysia (USM)
MSc. Materials Engineering, Universiti Sains Malaysia (USM)
PhD (Advanced Design Manufacturing), Ruhr Universität Bochum (RUB), Germany

Current roles and responsibilities:

1. Fellow Researcher, Institute of Science
2. Professor Fakulti Seni Lukis & Seni Reka (FSSR),UiTM Shah Alam

Honors Awards & Showcase:

1. International Invention, Innovation & Technology Exhibition (ITEX) – 1 Gold

2. Invention, Innovation & Design Exposition (IIDEX UiTM) – 1 Grand Award, 1 Diamond, 7 Gold

Selected Journals & Publications

- Effect of nickel oxide-Modified BaCe0.54Zr0.36Y0.1O2.95 as composite anode on the performance of proton-conducting solid oxide fuel cell, International Journal of Hydrogen Energy,307, 143-148, 2020
- Electrochemical properties of pyrolysed graphene/activated carbon composite doped with FeTMPP-Cl as electrode materials, Ionics 26(6), 2825-2834,2020
- Enhanced mechanism of thermoelectric performance of Bi 2 Se 3 using density functional theory Materials for Renewable and Sustainable Energy 9(3),1-9, 2020
- First-principles study on XV 2 S 4 (X= Ni, Cr, and Mo)counter electrode for dye-sensitized solar cells Emergent Materials 3(2), 125-131,2020
- Phase analysis of cerate and zirconate ceramics powder prepared by supercritical ethanol using high temperature-high pressure batch wise reactor system Solid State Phenomena 307, 171-175, 2020
- Lithium-Ion Supercapacitor Using Vertically aligned Carbon Nanotubes from Direct Growth Technique, and its Electrochemical Characteristics, Portugaliae Electrochimica Acta 37 (3), 2019

Research Grant

- International Collaboration Fund (ICF), MOSTI 2019, RM300,000: Nanogenerator.
- Transdisciplinary Research Grant Scheme (Sub TRGS), MOHE 2016, RM100,000: Solid Oxide Fuel Cells (SOFC).
- Niche Research Grant Scheme (NRGS), MOHE-UiTM 2013, RM521,000: BaTiO3-BiFeO3 Nanoparticles.
- National Nanotechnology Directorate Fund, MOSTI 2012, RM249,000: Graphene Green Synthesis
- Fundamental Research Grant Scheme (FRGS) MOHE:
  - 2012, RM73,000: Nano-garnet Li7La3Zr2O12
  - 2013, RM83,000: DFT BiFeO3
  - 2015, RM109,000: Li2FeP2O7 Cathodes

Consultancy

- Battery Testing Services, Magna Value Sdn Bhd
- Judge IIDEX 2020, UiTM
- Panel Penilai Geran KTP, Kementerian Pengajian TInggi (KPT)

Intelectual Properties (IP)

1. Barium Titanate/Graphene Nanocomposite for Flexible Nanogenerator (LY2020004667)

2. Compositional Gradient Anode Functional Layer: A Study on Its Properties and Function for Proton Conducting Fuel Cell (CRLY00023115)

3. Efficiency Enhancement of Semiconductor Quantum DotsmPlasticized Cellulose Acetate Polymer Electrolytes In Dye Sensitized Solar Cells (CRLY00005149)

4. A Method of Preparing Graphene (PI 2015703341)