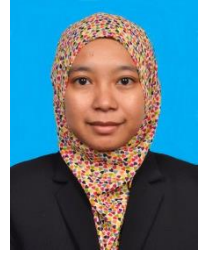


## EXPERT PROFILE

### DR. AFIDA JEMAT



- Position: Postdoctoral Researcher, Institute of Computing & Informatics UNITEN
- Years of professional experience: 6 years
- Research Centre: Institute of Informatics and Computing in Energy (IICE)
- **Research Forte:** Mechanical & Materials Engineering, Green energy, IoT and Energy efficiency

## EDUCATIONAL BACKGROUND

- PhD in Mechanical & Materials Engineering @ Universiti Kebangsaan Malaysia (UKM, Malaysia)
- MSc. (Industrial Science) @ Universiti Tenaga Nasional (UNITEN, Malaysia)
- B.Eng. (Hons) Mechanical Engineering – Materials @ Universiti Teknologi Malaysia (UTM, Malaysia)

## PROFESSIONAL EXPERIENCE

Currently, Afida is a postdoctoral researcher at the Institute of Informatics and Computing in Energy (IICE), Universiti Tenaga Nasional. Her main expertise is in materials selection particularly in ceramics for various applications. However, she has a wide range of research interest, which includes green energy, Internet of Things (IoT), data analytics and energy informatics. Her current interest is in energy efficiency and focusing on the project of twin virtual building. At present, she worked under project “Cost-effective Large-scale IoT Solutions for Energy Efficient medium- and large-sized buildings: A System Integration Approach To Improve The Energy Efficiency Of Buildings” advised by Prof. Ts. Dr. Salman Yussof in collaboration with Center for Energy Informatics, The Maersk Mc-Kinney Moller Institute, University of Southern Denmark. As one of the researcher in this project, Afida has been involved in managing data selection, 3D modeling and simulation (EnergyPlus 9.3 & OpenStudio 3.1) of retrofit smart building for energy saving.

Apart from the above, she has been involved in writing scientific journals, research report and was appointed as a committee member for the conference (International Visual Informatics Conference 2021 - IVIC'21) organized by IICE, UNITEN.

## KEY PROJECT HIGHLIGHTS:

- Cost-effective Large-scale IoT Solutions for Energy Efficient medium and large-sized buildings: A System Integration Approach To Improve The Energy Efficiency Of Buildings (2021) - Energy Technology Development and Demonstration Program (EUDP), a grant under the Danish Energy Agency
- Mechanical And Biocompatibility Characteristics Of Plasma Sprayed YZP/TiO<sub>2</sub> Coated Titanium Alloys For Dental Implants – PhD Thesis (2017) Synopsis: The development of YZP coating reinforced with titania (TiO<sub>2</sub>) was successfully fabricated to enhance and correlate the mechanical, biocompatibility and bioactivity properties of YZP coatings for dental implant application
- Nano Bio Ceramics, Nagaoka (2016) – Study Group Cell Function Technology Symposium by the Ceramic Society of Japan