

CURRICULUM VITAE**NURMALESSA MUHAMMAD @ ATAN****DR. NURMALESSA BINTI MUHAMMAD @ ATAN**

Senior Lecturer
 Department of Physics and Material Sciences,
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PERSONAL INFORMATION

Nationality : Malaysian
 Date of Birth : 26th October 1984
 Marital Status : Married

AREA OF INTEREST

Photovoltaic System, Physics, Renewable Energy

WORKING EXPERIENCE

1. Senior Lecturer, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam (October 2020 – present)
2. Senior Lecturer, Faculty of Applied Sciences, UiTM Cawangan Negeri Sembilan (September 2017 – October 2020)
3. Lecturer, Faculty of Applied, UiTM Cawangan Negeri Sembilan (October 2008 – September 2017)

EDUCATION

1. PhD in Photovoltaic Systems Universiti Teknologi MARA, 2020
 Title of thesis: FAILURE DETECTION ANALYSIS OF GRID-CONNECTED PHOTOVOLTAIC SYSTEMS IN TROPICAL CLIMATE REGION
2. Master of Science in Energy Technology, Universiti Kebangsaan Malaysia, 2011
3. Postgraduate Diploma in Renewable Energy System Technology, Loughborough University, United Kingdom, 2009
4. Bachelor in Science (Physics) (Hons), Universiti Teknologi MARA, 2006

ACHIVEMENT & RECOGNITION

1. Certificate of Competency – RENAC Malaysia Grid Connected Photovoltaic Systems Design Course (RENAC-SEDA)
2. IID 2017, UiTM, 1 Bronze Medals

SOFTWARE RELATED SKILLS

Microsoft Office, PV-System, Homer, Matlab

TEACHING SUBJECT

Mechanics I, Mechanics II, Electricity and Electromagnetism, Physics Final Year Project

PUBLICATION

Journal : 6
 Book : 1

CONSULTATION AND APPOINTMENT

1. Panel Pembangunan Kertas Soalan Peperiksaan Kursus Latihan Grid Connected Photovoltaic
 Appointment: 21 April 2012
 SEDA, Malaysia
1. Photovoltaic Monitoring Centre Committee
 Appointment: 30 Disember 2008
 Committee

RESEARCH GRANT

1. NUMERICAL MODELLING Of p,i,n TYPE CIGS LAYERS FOR APPLICATIONS IN GRADED BANDGAP MULTILAYER THIN FILM SOLAR CELLS
 DANA KECEMERLANGAN, UiTM NS
 July 2012-Jan 2014
 RM4000 , Principle Researcher

PUBLICATIONS**PUBLICATION**

PUBLISHED YEAR : **2017**

- [1] Nurmalessa Muhammad, Nor Zaini Zakaria, Sulaiman Shaari, Ahmad Maliki Omar "System Performance and Detectable Faults of A 10 Year Old 1.1KWp GCPV System in Malaysia' Science Letters Journal, FSG, UiTM (Volume 11, Issue 1 June 2017)
- [2] Nurmalessa Muhammad, Nor Zaini Zakaria, Sulaiman Shaari, Ahmad Maliki Omar "Prediction of Grid-Connected Power for Residential System in Malaysia using Mathematical Approach" Journal of Akademia UiTM Negeri Sembilan
- [3] Nurmalessa Muhammad, Nor Zaini Zakaria, Sulaiman Shaari, Ahmad Maliki Omar "System Performance of Residential Grid Connected Photovoltaic System in Malaysia" International Journal on Advanced Science, Engineering and Information Technology, Vol. 7 (2017) No. 4, pages 1275-1281. DOI:10.18517/ijaseit.7.4.2290

PUBLISHED YEAR : **2018**

- [4] Nurmalessa Muhammad, Nor Zaini Zakaria, Sulaiman Shaari, Ahmad Maliki Omar "Fault Detection Approach in Photovoltaic System Using Mathematical Method Diagnosis" Journal of Fundamental and Applied Sciences (Volume 10, Issue 5S June 2018)

PUBLISHED YEAR : **2019**

- [5] N.Muhammad, H.Zainuddin, E.Jaaper, Z.Idrus "An Early Fault Detection Approach in Grid-Connected Photovoltaic (GCPV) System" Indonesian Journal of Electrical Engineering and Computer Science (Volume 17, Issue 2, September 2019)

PUBLISHED YEAR : **2020**

- [6] Nurmalessa Muhammad, Nor Zaini Zakaria, Sulaiman Shaari, Ahmad Maliki Omar_Idrus "Threshold value of DC array current and DC string voltage for fault detection in grid-connected photovoltaic system" Scientific Research Journal [S.I.] (Volume 17, Issue 1, February 2020)

BOOK

PUBLISHED YEAR : **2012**

- [1] Nurmalessa Muhammad, Mardiana Ahmad, Suhaiza Hasan, Mohd Najib Harif, Laboratory Manual for Mechanics 1 (PHY110), UPENA. 2012

FINAL YEAR PROJECT SUPERVISED (DIPLOMA)

- [1] Wind Turbine Design Improvement, PHY360, 2014
 [2] Multipurpose Mini Solar Bag Charger, PHY360, 2014
 [3] A Preliminary Study of Salinity Gradient of Solarpond in UiTM NS, PHY360, 2014
 [4] A Study on Laboratory Safety Awareness of Students in UiTM NS, PHY360, 2014
 [5] Comparison Between Solar Cooker and Mini Gas Kitchen, PHY360, 2014
 [6] Heat Detection System for Biology Laboratory, PHY360, 2014
 [7] Intruder Detection Alarm, PHY360, 2014
 [8] Purification of Water, PHY360, 2014
 [9] Hi-Tech Toilet, PHY360, 2014
 [10] Demonstrating the Temperature Dependence of the Speed of Sound, PHY360, 2014
 [11] To Investigate and Compare of Radiation Between the Different Types of Television, PHY360, 2014
 [12] Effect of Fire in Selected Type of Gloves, PHY360, 2014
 [13] Dual Mode Automatic Night Lamp With Morning Alarm, PHY360, 2014
 [14] Measuring and Monitoring Radiations on Different Locations, PHY360, 2014
 [15] Motion Detection Sensor, PHY360, 2014
 [16] Detection of Raka'at in Solah, PHY360, 2014
 [17] Determination of Wavelength of Different Coloured Drinks, PHY360, 2014
 [18] An Alternative Electricity Supply Energy Using Copper, Aluminium and Salt Water, PHY360, 2014
 [19] Measuring the Speed of Light using Varieties of Foods, PHY360, 2014
 [20] Determination of Effective Method on Learning Laboratory Safety to Apply on Students, PHY360, 2014
 [21] Flood Sensor, PHY360, 2014
 [22] Determination of the Heat Capacity of Different Coins, PHY360, 2014
 [23] Power Output of a Solar Panel in Different Weather Conditions at UiTM NS, PHY360, 2014

FINAL YEAR PROJECT SUPERVISED (BACHELOR DEGREE)

- [24] Fault detection on polycrystalline grid-connected photovoltaics system of AC Power output
 [25] Fault detection on monocrystalline grid-connected photovoltaics system of AC Power output
 [26] Identification of degradation for crystalline photovoltaic modules in Malaysian climate via visual inspection and IV curve method

CO-SUPERVISED (MASTER DEGREE)

Name of Student: Fatin Azirah Binti Mohd Shukor

Student id: 2019657554

Project Title: Acceptance Ratio as Early Fault Indicator in Grid-Connected Photovoltaic (GCPV) System

Period of Supervised: October 2019