



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Kurikulum Vitae Curriculum Vitae



I. Maklumat Peribadi: Personal Particulars

Nama: DR. MAASPALIZA BINTI AZRI
Name: _____

No. Kad Pengenalan: 770618-04-5114
IC No.: _____

Fakulti/Pusat: FKE
Faculty/Centre _____

Jawatan : PENSYARAH KANAN
Current Position: _____

Tetap / Sementara/Kontrak TETAP
(Permanent/temporary)

Gred Kumpulan: DS 52 Tarikh Pengemaskinian CV : 26-10-2016
Gred position: _____ Date of CV updated: _____

II. A. Kelulusan Akademik dan Profesional (Sila senaraikan semua kelulusan akademik bermula daripada Ijazah Sarjana Muda mengikut susunan kronologi) Academic and Professional Qualifications (Please list all academic qualifications, from your first degree in chronological order)

Tahun Year	Kelulusan Degree	Pengkhususan Discipline	Universiti University
2001	• BEng(Hons)	• Electrical Engineering	• UiTM
2004	• MSc	• Electrical Engineering	• UPM
2014	• PhD	• Power Electronics	• UM

B. Tajuk tesis pascasiswazah (Sila senaraikan tajuk tesis bermula daripada peringkat Sarjana mengikut susunan kronologi) Titles of postgraduate thesis written (Please list all thesis written, from your Master Degree in chronological order)

- 1) Development of Software System for Detecting Defective Symbol On IC Chip Using MATROX Imaging Library (Master Degree).
- 2) Comparison of Single-Phase Transformer less Photovoltaic Grid-Connected Inverter Topologies With High Efficiency and Low Ground Leakage Current.

III. Bidang Penyelidikan Utama (Sila senaraikan tiga sahaja) Main Areas of Research Interest (Please list a maximum of three)

- Power Electronics
- PV Grid-Connected, Fuel Cell Modelling

IV. Projek Penyelidikan Yang dilaksanakan (Sila tulis tajuk, tajaan dan nombor rujukan projek sejak 2007) Completed/On-going research project since 2007 (Please write the title, funder and reference number)

- 1) Reduction of Leakage Ground Current using Optimal Modulation Technique for Single Phase PV Grid-Connected Transformer less Inverter System. (PJP/2013/FKE (28B) S01269.

2) A Novel Switching Strategy for Torque Ripple Reduction and High Reliability of Direct Torque Control of Brushless DC Motor. (PJP/2013/FKE(22B)/S01241). 3) Development of Silicon – On – Insulator (SOI) Trapezoidal Waveguide for Planar Lightwave Circuits (PLC). (PJP/2013/FKEKK/(44C)/S01261). 4) A Novel Switching Strategy for Torque Ripple Reduction and High Reliability of Direct Torque Control of Brushless DC Motor. (PJP/2013/FKE(22B)/S01241). 5) A Selective Harmonic Elimination Technique for Cascaded H-Bridge Multilevel Inverter. (PJP/2014/FKE(3B)/S01308). 6) Development of Self Tuning Fuzzy Logic Speed Controller for Induction Motor Drive. (PJP/2015/FKE(6B)/S01308). 7) Investigation of Quasi – Z –Source Inverter with Hybrid Energy Stored for electrical Motor Drive System (PJP/2015/FKE(10B)/S01447). 8) Low Switching Frequency Modulation Method for Optimal Minimization of the Total harmonic Distortion in Multilevel Inverter. (FRGS /1/2015 /TK04/FKE/03/F00256). 9) Voltage and Frequency Control for PV –Based Microgrid by Utilizing Bidirectional Converter with Energy Storage. RAGS/1/2015/TK03/FKE/03/B00096).
V. Senarai Anugerah Penyelidikan yang diperolehi (<i>Senarai perolehan anugerah penyelidikan sejak 2007</i>) List of awards(<i>Please list research awards received since 2007</i>) 1) Silver Award for innovation of “OPTIMA POWER INVERTER”, UTeM Research and Innovation Expo 2015, 27 -28 October 2015, Dewan Besar UTeM. 2) Gold Award for innovation of “DEVELOPMENT OF LOW COST THREE PHASE NINE LEVEL CASCADED H-BRIDGE MULTILEVEL INVERTER USING BIPOLAR AND UNIPOLAR SWITCHING SCHEMES FOR SOLAR APPLICATION”, 25 Ogos 2016, Kampus Teknologi, UTeM. 3) Silver Award for innovation of “DEVELOPMENT OF HARMONICS REDUCTION USING IMPROVEMENT REVERSE VOLTAGE TOPOLOGY SINGLE PHASE MULTILEVEL INVERTER FOR SOLAR APPLICATION”, 25 Ogos 2016, Kampus Teknologi, UTeM.
VI. Bilangan dan no. pendaftaran Harta Intelek yang dihasilkan Quantity and registration number of Intellectual Property Nil
VII. Bilangan sitasi dan nama jurnal Number of citation and name of journals 1) 5 – Design Analysis of Low-pass LC passive Filter in Single-Phase Grid-Connected Transformerless Inverter, M Azri, NA Rahim - International Journal of Renewable Energy Resources, 2014. 2) 3 - Virtual instrument-based synchronisation system, CK Gan, AA Rahim, A Maaspaliza, M Zharif - Research and Development, 2006.SCORed 2006. 4th, 2006. 3) 4- Selective harmonic elimination for a single-phase 13-level TCHB based cascaded multilevel inverter using FPGA, WA Halim, NA Rahim, M Azri, Journal of Power Electronics 14 (3), 488-498. 4) 1- Improved Torque Control Performance in Direct Torque Control using Optimal Switching Vectors, MZR Zuber, A Jidin, M Azri, K Rahim, T Sutikno, International Journal of Power Electronics and Drive Systems 5 (3), 441. 5) 1 - Transformerless DC/AC Converter for Grid-Connected PV Power Generation System, M Azri, NA Rahim, MFM Elias, Arabian Journal for Science and Engineering 39 (11), 7945-7956
VIII. Bilangan penerbitan dalam Jurnal Berimpak Number of publication in high index journals 1) Wahidah Abd.Halim, Nasrudin Abd. Rahim and Maaspaliza Azri, "Selective Harmonic Elimination for a Single-Phase 13-level TCHB Based Cascaded Multilevel Inverter Using FPGA";JPE,vol.14,no 3., pp.488-498, 2014. 2) A Highly Efficient Single-phase Transformerless H-bridge Inverter for Reducing Leakage Ground Current in Photovoltaic Grid-connected System, M Azri, NA Rahim, WA Halim Electric Power Components and Systems 43 (8-10), 928-93, 2015 3) M.Azri, N.A. Rahim and M.Fathi,"Transformerless DC/AC Converter for Grid-Connected PV Power Generation System" Arabian Journal Science Engineering, Feb 2014. 4) Generalized Selective Harmonic Elimination Modulation for Transistor-Clamped H-Bridge Multilevel Inverter,WA Halim, NA Rahim, M Azri, Journal of Power Electronics 15 (4), 964-973. 5) AN EXPERT SYSTEM BASED SOFTWARE FOR REDUCTION OF SEQUENCE NETWORKS, ZMAT ISA, M SULAIMAN, MF MOHAMMED, NFA HAMID, M AZRI, Journal of Theoretical & Applied Information Technology 46 (2). 6) Improved Torque Control Performance in Direct Torque Control using Optimal Switching Vectors MZRZ Ahmadi, A Jidin, M Azri, K Rahim, T Sutikno , International Journal of Power Electronics and Drive Systems (IJPEDS) 5, 2015.

- 7) Mathematical Modelling for Proton Exchange Membrane Fuel Cell (PEMFC), SRSR MAASPALIZA AZRI, AYU NURFATIKA ABDUL MUBIN, ZULKIFILIE IBRAHIM, NASRUDIN, Journal of Theoretical and Applied Information Technology 86 (3), 409-419.
- 8) Present Status of Solar Photovoltaic Cells in Asia, SAA Tarusan, M Hasanuzzaman, M Azri, NA Rahim, International Journal of Renewable Energy Resources.

IX. SENARAI UTAMA PENERBITAN (*penerbitanjurnal/prosiding/bukusejak2007nyatakanimpakfaktor*)
List of Major Publication (*Please list publication since 2007- state the impact factor*) – Please use Font Arial 9

- 1) Ishak Aris, Maaspaliza Azri, Zainab Hassan, M.K. Hassan, M.Khalid, S.M.Amin, H.A. Cyril."Development of Software System for Defective Symbol on Integrated Circuit Chip with Adjustable Readability Level". ICMT 2007 – International Conference for Mechatronic Technology, 5-8 Dis 2007
- 2) Maaspaliza Azri, A.Abdul Rahim, Intelligence Barcode System ".Reach 07 , 18 -20 Jan 2008.UteM,Malacca,Malaysia"
- 3) Azri,M.;Rahim,N.A., "Leakage Current Reduction in Single-Phase Grid-Connected Transformerless Inverter", 2nd UMPEDAC postgraduate students renewable energy symposium, 28 May 2011.
- 4) Azri,M.;Rahim,N.A., "Comparison of Single-Phase Photovoltaic Transformerless Inverters". Power and Energy Conversion Symposium (PECS 2012) Melaka, Malaysia 17 Dec 2012.
- 5) Azri,M.;Rahim,N.A., "Leakage Current Reduction in Single-Phase Grid-Connected Transformerless Inverter", 2nd UMPEDAC postgraduate students renewable energy symposium, 28 May 2011.
- 6) Azri,M.;Rahim,N.A., "Design Analysis of Low-Pass Passive Filter in Single-Phase Grid-Connected Transformerless Inverter", THE 8th SUSTAINABLE ENERGY AND ENVIRONMENT (SEE) FORUM MEETING, 27-29 June 2011.
- 7) M.Azri and N.A.Rahim., "Design Analysis of Low-Pass Passive Filter in Single-Phase Grid-Connected Transformerless Inverter", International Journal of Renewable Energy Research, Vol.1, No.1 (June) 2011.
- 8) M.Azri and N.A.Rahim., "Comparison of Single-Phase Photovoltaic Transformerless Inverters", PECS2012, Power and Energy Conversion Symposium, 17Dec.2012.
- 9) M.Azri and N.A.Rahim., "Investigating the Power Losses of Various Transformerless Inverter Topologies", Sustainable Future Energy 2012 and 10th SEE Forum Innovations for Sustainable and Secure Energy , 21-23 November 2012, Brunei Darussalam.
- 10) Transformerless power converter for grid-connected PV system with no-ripple input current and low ground-leakage current, M Azri, NA Rahim, Clean Energy and Technology (CEAT) 2014, 3rd IET International Conference on .
- 11) A Simulation Model for Proton Exchange Membrane Fuel Cell (PEMFC) Using Matlab / Simulink, Maaspaliza Azri, Ayu Nurfatika, Zulkiflie and Nasrudin, International Conference on Power, Energy and Communication system (IPECS) 2015,
- 12) Bidirectional DC-DC Converter for Fuel Cell Applications, Maaspaliza Azri, Nur Hidayah, Zulkiflie and Nasrudin, International Conference on Power, Energy and Communication system (IPECS) 2015

X. Senarai Penyeliaan Pelajar Pasca Siswazah (*Sila senaraikan nama pelajar, tajuk dan peringkat pengajian semenjak 2007*)

Supervisor for postgraduate students since 2007 (*Please list their names, project title and status*)

- 1) Ayu Nurfatika binti Abdul Mubin (Master by research) – Analysis of Proton Exchange Membrane Fuel Cell : Main (On-going).
- 2) SV: Nur Hidayah binti Abu Khanipah (Master by research) – DC- DC Converter for Fuel Cell and Super-capacitor Application. : Main (On-going).
- 3) Sakthivel A /L Ganeson (Master by research) – A Selective Harmonic Elimination Technique for Cascaded H-Bridge Multilevel Inverter. : Main (On-going).

Master Thesis Examination

- 1) Md. Liton Hossain (UTeM 2015) – Internal Examiner

XI. CONTRIBUTIONS TO PROFESSIONAL BODIES AND SOCIETIES

- 1) Reviewer for 6th International Conference Power & Energy (PECON2016)
- 2) Reviewer for 4th International Conference on Clean Energy and Technology (CEAT2016)
- 3) Reviewer for Electric Power Components and System Journal 2014, 2015 and 2016
- 4) Reviewer for 4th international Conference on Engineering and ICT (ICEI 2016)
- 5) Technical committee for the 4th International Conference on Clean Energy and Technology
- 6) Committee for the 6th International Conference Power & Energy (PECON2016)
- 7) Committee for the 4th international Conference on Engineering and ICT (ICEI 2016)