

## UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## Kurikulum Vitae Curriculum Vitae



I.	Maklumat Peribadi:
	Personal Particulars

Nama: MOHD LUQMAN BIN MOHD JAMIL

Name:

No. Kad Pengenalan: 770523-14-5307

IC No.:

Fakulti/Pusat: Faculty/Centre

**FKE** 

Jawatan Sekarang: TIMBALAN DEKAN (AKADEMIK)

**Current Position:** 

Tetap / Sementara (Permanent/temporary) **PERMANENT** 

Gred Kumpulan: Gred position

DS52

Tarikh Pengemaskinian CV: 25/10/2016

Date of CV updated:

#### II. A. Kelulusan Akademik dan Profesional Academic and Professional Qualifications

Tahun Year	Kelulusan <i>Degre</i> e	Pengkhususan <i>Disciplin</i> e	Universiti <i>University</i>
2011	PhD.	Design of Electrical Machine	The University of Sheffield
2003	M.Sc.	Electrical Power Engineering	University of Newcastle upon Tyne
2000	B. Eng (Hons).	Electrical Power Engineering	Universiti Teknologi MARA
1998	Diploma	Electrical Power Engineering	Institut Teknologi MARA

## B. Tajuk tesis pascasiswazah Titles of postgraduate thesis written

- MSc thesis: Modelling Of Flux-Linkage Characteristics for 6/4 Switched Reluctance Machine Using MATLAB-SIMULINK
- 2. PhD thesis: Unbalanced Magnetic Force in Fractional-Slot Permanent Magnet Brushless Machines

#### III. Pengalaman Akademik Academic Experiences

Undergraduate subjects:

- 1. Final Year Project
- 2. Electrical Actuator and Drives
- 3. Electric Machines
- 4. Electromagnetic Theory
- 5. Electrical System6. Introduction to Power Engineering
- 7. Electrical Technology
- 8. Circuit Analysis
- 9. Electric Circuit
- 10. Analogue Electronics
- 11. Power Electronics & Drives Laboratory II

# Masters subjects:

1. Machine Design

#### IV. Bidang Penyelidikan Utama Main Areas of Research Interest

- 1. Design of Electric Machines
- 2. Control of Electric Drives

#### V. Projek Penyelidikan yang telah selesai/sedang dijalankan Completed/On-going research project

Year	Title	Fund	Role
2010	STUDY ON THE EFFECT OF STRUCTURE PARAMETERS TO THE MOVING COIL LINEAR DC MOTOR'S PERFORMANCE CHARACTERISTICS	FRGS/2010/FKE/TK03/2/ F00075	Principle Researcher
2012	DESIGN AND DEVELOPMENT OF SELF-POWERED OF FREE ENERGY PERMANENT MAGNET GENERATOR (FePMG)	MTUN/2012/UTEM-FKE/1 M00009	Principle Researcher
2012	DESIGN AND ANALYSIS OF FRACTIONAL-SLOT PM BRUSHLESS MACHINE FOR ELECTRIC VEHICLE APPLICATION	PJP/2012/FKE(53A)/S01060	Principle Researcher
2012	INVESTIGATION AND DEVELOPMENT OF HIGH TORQUE - LOW SPEED PM BRUSHLESS MOTOR FOR EXOSKELETON ROBOT - BIONIC ARM	PJP/2012/CERIA/Y00002	Principle Researcher
2013	PROTOTYPE DEVELOPMENT OF PORTABLE HAND HELD MOTOR SCRUBBER FOR HOME CLEANING APPLICATION	PJP/2013/FKE/PROTOTAIP/S01284	Principle Researcher
2013	INDEPENDANT CONTROL SCHEME FOR SUB-BEARING PERMANENT MAGNET AC MOTOR DRIVES	FRGS/2/2013/TK02/FKE/02/F00168	Co- Researcher
2014	MODELLING ON THE INFLUENCE OF SLOTTED ROTOR TO THE PERFORMANCE PARAMETER IN DOUBLE STATOR BRUSHLESS DC PERMANENT MAGNET MOTOR	FRGS/1/2014/TK03/FKE/02/F00208	Co- Researcher
2014	A NEW TECHNIQUE OF PMSM SENSORLESS VECTOR CONTROL PMSM THROUGH HIGH FREQUENCY INJECTION FOR ZERO AND LOW SPEED APPLICATION	FRGS/2/2014/TK03/FKE/03/F00239	Co- Researcher

2015	MODELLING OF MAGNETIC CIRCUIT ARRANGEMENT FOR ATTAINING CONSTANT THRUST OF SINGLE PHASE SLOT-LESS ELECTRIC LINEAR ACTUATOR	FRGS/1/2015/TK04/FKE/02/F00260	Co- Researcher
2013	DEVELOPMENT OF PORTABLE ELECTRICAL MOULDING DEVICE FOR SAMPERIT AND TART COOKIES	PJP/2013/FKE(30B)/S01272	Co- Researcher
2014	UTEM RENEWABLE SHOWCASE	PJP/2014/FKE(18A)/S01370	Co- Researcher
2016	DESIGN OF THE ELECTRIC BICYCLE ACTUATOR	PJP/2016/FKE/HI5/S01478	Co- Researcher

#### VI. Senarai Penerbitan List of Publication

#### 2016

F. Azhar, R.N. Firdaus, **M.L. Mohd Jamil**, "Design of A Linear DC Motor For High Thrust Constants Characteristics" ARPN Journal of Engineering And Applied Sciences, Issue 14, vol 11, pp : 8764-8769

## 2015

- **M.L.M.** Jamil, S.M.S.A. Al-Habshi, M.N. Othman and T. Sutikno, "Performance of Fractional-Slot Winding PM Machines due to Un-even Coil Turns and Asymmetric Design of Stator Teeth", International Journal of Power Electronics and Drive Systems (IJPEDS), Vol. 6, No. 4, December 2015, pp. 853-859.
- **M. L. Mohd Jamil**, Z. Z. Zolkapli, A. Jidin and T. Sutikno, "*Performance of Fractional-Slot Winding PM Machines due to Un-even Coil Turns and Asymmetric Design of Stator Teeth*", International Journal of Power Electronics and Drive Systems (IJPEDS), Vol. 6, No. 4, December 2015, pp. 860-868.
- A. Jidin, T. Sutikno, **M.L.M. Jamil** and M.N. Othman, "Improved DTC Performances of Induction Motor Fed by Three Level Inverter using Hexagonal Flux Control", accepted for publication in International Journal of Power Electronics and Drive Systems (IJPEDS), December 2015
- R. N. Firdaus, S. Farina, R. Suhairi, K. A. Karim, **M.L.M. Jamil**, "Effect of Magnet Edge to Spoke Type BLDC Motor", The International Conference on Power, Energy, and Communication Systems (IPECS 2015) August 24-25, Perlis, Malaysia, pp. 1-6, 2015.
- K.A.Karim, N.A. Mohd Yusoff, A.Jidin, F. Patkar, R.N.F. Raja Othman, **M.L. Mohd Jamil**, "*Analysis of Five-Phase Induction Motor With Dynamic Load*", ARPN Journal of Engineering and Applied Sciences, vo. 10, no. 20, pp. 9830-9834.

#### 2014

- Z.Q. Zhu, L.J. Wu, **M.L. Mohd Jamil**, "Influence of Pole and Slot Number Combinations on Cogging Torque in Permanent-Magnet Machines With Static and Rotating Eccentricities", IEEE Transactions on Industry Applications, vol. 50, no. 5, pp. 3265 3277.
- S.M. Al-Habshi, **M.L. Mohd Jamil**, M.N. Othman, A. Jidin, K. Ab Karim, Z.Z. Zolkapli, "*Influence of Number of Turns Per Coil in Fractional-Slot PM Brushless Machines*", IEEE Conference on Energy Conversion, pp. 146-151
- Z.Z. Zolkapli, **M. L. Mohd Jamil**, S. M. Al-Habshi, A. Jidin, M. N. Othman, "*Torque Ripple Minimization Technique in Fractional-Slot PM Brushless Machines*" IEEE Conference on Energy Conversion, 117-121.
- MZRZ Ahmadi, A Jidin, MN Othman, **MLM Jamil**, T Sutikno, R Nair, "High efficiency of switching strategy utilizing cascaded H-bridge", IEEE Conference on Energy Conversion (CENCON), 2014, 287-292.
- K Rahim, A Jidin, F Patkar, **MLM Jamil**, MZRZ Ahmadi, KA Karim, "A dual mode DTC of open-end winding induction motor drive with reduced torque ripple" IEEE Conference on Energy Conversion (CENCON), 2014, 106-111.

- N Abdullah, KA Karim, **MLM Jamil**, MN Othman, "Design of Switched Reluctance Motor Using Empirical Method", International Journal of Energy and Power Engineering Research, pp. 6-10
- **M. L. Mohd Jamil**, Z. Z. Zolkapli, A. Jidin, S. M. Al-Habshi, M. N. Othman, "*Electromagnetic Performance of High-Torque and Low-Speed PM Brushless Machines*", IEEE 8th International Power Engineering and Optimization Conference, pp. 653-657.

#### 2013

- LJ. Wu, Z. Q. Zhu, **ML Mohd Jamil**, "Unbalanced magnetic force in permanent magnet machines having asymmetric windings and static/rotating eccentricities", International Conference on Electrical Machines and Systems (ICEMS), pp. 937-942
- Z.Q. Zhu, LJ. Wu, **M.L. Mohd Jamil**, "Influence of pole and slot number combinations on cogging torque in permanent magnet machines with static and rotating eccentricities", IEEE Energy Conversion Congress and Exposition (ECCE), pp. 2834-2841.
- Z.Q. Zhu, **M.L. Mohd Jamil**, LJ Wu, "Electromagnetic performance of interior permanent magnet machines with eccentricity", Ecological Vehicles and Renewable Energies (EVER), pp. 1-8
- Z.Q. Zhu, LJ Wu, **M.L. Mohd Jamil**, "Distortion of Back-EMF and Torque of PM Brushless Machines Due To Eccentricity", IEEE Transactions on Magnetics, vol. 49, no. 8, pp. 4927 4936.
- Z.Q. Zhu, **M.L. Mohd Jamil**, LJ Wu, "Influence of Slot and Pole Number Combinations on Unbalanced Magnetic Force in Permanent Magnet Machines with diametrically asymmetric windings", IEEE Transactions on Industry Applications, vol. 49, np. 1, pp. 19 30.

#### 2011

Z.Q. Zhu, **M.L. Mohd Jamil**, LJ Wu, "Influence of slot and pole number combinations on unbalanced magnetic force in permanent magnet machines", IEEE Energy Conversion Congress and Exposition (ECCE), pp. 3291-3298

PhD Thesis; "Unbalanced Magnetic Force in Fractional-Slot Permanent Magnet Brushless Machines", University of Sheffield, June 2011.

#### 2008

- Z.Q. Zhu, **M.M. Jamil**, D. Howe, "Comparative study of unbalanced magnetic force in fractional slot PM brushless machines", Ecological Vehicles and Renewable Energies (EVER)
- A. Rozali, K. Abdul Karim, **M.L. Mohd Jamil**, " Development and Analysis of Switching Technique for Modular Structured Multilevel Inverter (MSMI) in Power Conditioner Application", MUCET

#### VII. Penilai Jurnal dan Persidangan Reviewer for Journals and Conferences

Articles Reviewer for IEEE Transactions on Industrial Electronics

Articles Reviewer for IEEE Transactions on Industry Applications

Articles Reviewer for Journal of Engineering Science and Technology, Taylor's University

Paper Reviewer for 1st Power And Energy Conversion Symposium (PECS) 2012

Paper Reviewer for 2<sup>nd</sup> Power And Energy Conversion Symposium (PECS) 2014

Paper Reviewer for 5th International Power Engineering and Optimization Conference (PEOCO 2012)

Paper Reviewer for 6th International Power Engineering and Optimization Conference (PEOCO 2014)

Paper Reviewer for 6th International Conference on Power and Energy (PECON 2016)

Paper Reviewer for 4th IET International Conference on Clean Energy and Technology 2016 (CEAT 2016)

# VIII. Senarai Anugerah *List of award*s

Year	Event	Title	Award
2016	Malaysia Technology Expo (MTE)	High Torque-Power Density Permanent Magnet Machine	Gold
2016	The International Invention, Innovation & Technology Exhibition (ITEX)	Hexy-Ciency Drive	Gold
2015	UTEMEX	High Torque-Power Density Permanent Magnet Machine	Gold
2015	Majlis Anugerah Perkhidmatan Cemerlang & Anugerah Sanjungan Universiti	Anugerah Perkhidmatan Cemerlang	-
2013	Proton Green Mobility Challenge	EVeRGREEN UTeM – Proton Electric Car	Anugerah Akademik Universiti
2005	Majlis Hari Kualiti KUTKM	Anugerah Perkhidmatan Cemerlang	-

## IX. Inovasi Innovation

Year	Title	Туре
2015	A SPOKE TYPE PERMANENT MAGNET MOTOR	Patent File

# X. Membership / Profesional Body

- MIET, Chartered Engineer UK
   MQA, Reviewer

## XI. Senarai Penyeliaan Pelajar PascaSiswazah Supervisor for postgraduate students

Year	Degree	Name	Research Title	Role
2016 (Completed)	MSc	Syed Muhammad Bin Syed Abdullah Al Habshi	Influence of Non- Uniform Number of Turn per Coil And Stator Geometry On Unbalanced Magnetic Force in Brushless Permanent Magnet Machines	Main Supervisor
2016 (Completed)	MSc	Zulfikri Zaki Bin Zolkali	Influence of Tooth Designs on Electromagnetic Characteristics in Fractional-Slot Permanent Magnet Brushless Machines	Main Supervisor