

CURRICULUM VITAE



Prof. Dr. Norhisam Misron Jabatan Kejuruteraan Elektrik Dan Elektronik, Fakulti Kejuruteraan, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor

T: 03-8946 6299 F: 03-8768 6327

Education

- 1. B. Eng, Shinshu University, Japan (1998)
- 2. M. Eng, Shinshu University, Japan (2000)
- 3. Dr. Eng, Shinshu University, Japan (2003)

Areas of Interest

- 1. Applied Magnetic
- 2. Magnetic Sensor
- 3. Electrical Motor design
- 4. Electrical Generator design
- 5. Power Electronic

Professional Qualification/ Membership/ Affiliation

- 1. Member of IEEE
- 2. Member of IET
- 3. Member of IEEJ
- 4. Member of Magnetics Society of Japan
- 5. Member of Board of Engineers Malaysia (BEM)
- 6. Member of Institute Engineers Malaysia (IEM)
- 7. Member of Malaysian Society for Non-Destructive Testing

Appointments		
Position		Duration
1.	Tutor	2002 - 2003
2.	Lecturer	2003 – 2008
3.	Senior Lecturer	2008 – 2009
4.	Associate Professor	2009 - Present

Publications

Journals (80 recent journals)

- 58. K. Motoyama, T. Hanamoto, H. Yamada, F. M. Nashiren, **M. Norhisam**, Study of matrix converter based unified power flow controller applied PI-D controller, Journal of Engineering Science and Technology, Vol. 9, Special Issue on Applied Engineering and Sciences, pp. 32 41, 2014. (Scopus)
- 59. Saman Toosi, Norhisam Misron, Tsuyoshi Hanamoto, Ishak Bin Aris, Mohd Amran Mohd Radzi, Hiroaki Yamada, Novel Modulation Method for Multidirectional Matrix Converter, The Scientific World Journal, Volume 2014, Article ID 645734, pp. 1-12, 2014. (ISI, IF 1.320)
- 60. Mahdi Karami, Norman Mariun, Mohammad Rezazadeh Mehrjou, Mohd Zainal Abidin Ab Kadir, Norhisam Misron, Mohd Amran Mohd Radzi, Static Eccentricity Fault Recognition in Three-Phase Line Start Permanent Magnet Synchronous Motor Using Finite Element Method, Mathematical Problems in Engineering, Volume 2014, Article ID 132647, pp1-12, 2014. (ISI, IF: 1.082)



- 61. Noor Hasmiza Harun, **Norhisam Misron**, Roslina Mohd Sidek, Ishak Aris, Wakiwaka Hiroyuki, Tashiro Kunisiha, Dual resonant frequencies effects on the Inductive Based Oil Palm Fruit Sensor, Sensors, No. 14, Vol 11, pp. 21923-21940, 2014. (ISI, IF: 1.739)
- 62. **M. Norhisam**, Aravind C. V., S. Khodijah , N. F. Mailah, Unified Control Structure of Multi-Type Interior Permanent Magnet Motor, Journal of Engineering Science and Technology Vol. 10, No. 3 pp. 322 339, 2015. (**Scopus**)
- 63. M. Norhisam, R. N. Firdaus, N. F. Mailah, H. Yamada, T. Hanamoto, Power Mapping Characteristic of Double Stator Permanent Magnet Generator for Electrical Harvesting Machine, Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol. 23, No.3, pp. 76-81, 2015. (CiNii-Japan)
- 64. R. N. Firdaus, **M. Norhisam**, S. Farina, M. Nirei, H. Wakiwaka, Performance Comparison of Spoke and Hollow-Rotor Permanent Magnet Generator for Small Energy Harvesting Application, Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol. 23, No.3, pp. 82-86, 2015. (**CiNii-Japan**)
- 65. S. Imamoto, H. Yamada, T. Hanamoto, Y. Shirai, **M. Norhisam**, A battery Charging System for Intermittent Generation from Synchronous Generator with Novel Maximum Power Point Traking Control, Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol. 23, No.3, pp. 133-138, 2015. (**CiNii-Japan**)
- 66. T. Hanamoto, H. Yamada, S. Toosi, N. F. Mailah, M. Norhisam, DDPWM- Based Power Conversion System Using a Matrix Converter for an Isolated power Supply, Journal of The Japan Society of Applied Electromagnetics and Mechanics, Vol. 23, No.3, pp. 139-144, 2015. (CiNii-Japan)
- 67. Saman Toosi, **Norhisam Misron**, Tsuyoshi Hanamoto, Ishak Aris, Mohd Amran Mohd Radzi, and Hiroaki Yamada, The Study of Operation Modes and Control Strategies of a Multidirectional MC for Battery Based System, Mathematical Problems in Engineering, Volume 2015, Article ID 452740, pp1-12, 2015. (ISI, IF: 0.762)
- 68. C. V. Aravind, **M. Norhisam**, K. M. Suresh, G. P. Ramesh, Assessment on the harnessing of the energy from the back pressure chamber of palm oil mill, journal of engineering science and technology special issue on somche 2014 & rsce 2014 conference, Vol. 1, pp. 46 56, 2015.
- 69. Shehu M. Salihu, **Norhisam Misron**, Norman Mariun, Mohammad L. Othman, Tsuyoshi Hanamoto, A Novel Double-Stator Permanent Magnet Generator Integrated with a Magnetic Gear, Progress In Electromagnetics Research M, Vol. 49, pp. 69–80, 2016. **(Scopus)**
- 70. **Norhisam Misron**, Chockalingam Aravind Vaithilingam, Nashiren Farzilah Mailah, Kudo Masaya, Tsuyoshi Hanamoto, New Maximum Power Point Estimator Control Strategy to Maximize Output Power of the Double Stator Permanent Magnet Generator, Applied Sciences, Vol 6, No. 8, pp. 1-12, 2016. **(ISI, IF: 1.726)**
- 71. M. K. Roslan, **Norhisam M.**, Ishak A., M. Nizar H., K. Tashiro, Magnetic Imaging Concept Using Giant Magnetoresistance (GMR) Sensor, *International Journal of Computer Technology and Applications* IJCTA, Vol. No.5, pp. 2415-2421, 2016. **(Scopus)**
- 72. Mohammad Rezazadeh Mehrjou, Norman Mariun, **Norhisam Misron**, Mohd Amran Mohd Radzi, Suleiman Musa, Broken Rotor Bar Detection in LS-PMSM Based on Startup Current Analysis Using Wavelet Entropy Features, Appl. Sci. 2017, Vol. 7, Vol 8,pp. 845, **(ISI, IF:1.689)**
- 73. **Norhisam Misron**, Nor Aziana Aliteh, Noor Hasmiza Harun, Kunihisa Tashiro, Toshiro Sato, Hiroyuki Wakiwaka, Relative Estimation of Water Content for Flat-Type Inductive-Based Oil Palm Fruit Maturity Sensor, Sensors Vol. 17, No. 52, pp1-10, 2017. (ISI, IF: 2.033)
- 74. Shehu Salihu Mustafa, **Norhisam Misron**, Norman Mariun, Mohammad Lutfi Othman, Tsuyoshi Hanamoto, Torque Distribution Characteristics of a Novel Double-Stator Permanent Magnet Generator Integrated with a Magnetic Gear, Energies, Vol 10, No. 2, pp 1-12, 2017. **(ISI, IF:2.077)**
- 75. Shehu Salihu Mustafa, **Norhisam Misron**, Mohammad Lutfi Othman, Tsuyoshi Hanamoto, Power Characteristics Analysis of a Novel Double-Stator Magnetic Geared Permanent Magnet Generator, Energies, Vol 10, No. 12, pp 2048, 2017. **(ISI, IF:2.077)**
- 76. Shehu M. Salihu, **Norhisam Misron**, Mohammad L. Othman, and Tsuyoshi Hanamoto, Power Density Evaluation of a Novel Double-Stator Magnetic Geared Permanent Magnet Generator, Progress In Electromagnetics Research B, Vol. 80, pp. 19–36, 2018. **(Scopus)**
- 77. **Norhisam Misr**on, Umair Zanil, Shehu Salihu Mustafa, Ishak Aris, Noor Izzri Abdul Wahab, Effect of Dual Permanent Magnets on Low-speed Mover Having Different Pitch: Linear Oscillatory Actuator Integrated with Magnetic Gear, Journal of Engineering, Science and Technology, 2018, **(Scopus)**

Updated on.....



- 78. Shehu M Salihu, **M. Norhisam**, M Lutfi, U Zanil, T. Hanamoto, A parameterized Magnetic Geared Double-Stator Permanent Magnet Generator for Torque Improvement, Journal of Engineering, Science and Technology, 2018, **(Scopus)**
- 79. Nor Aziana Aliteh, **Norhisam Misron**, Ishak Aris, Roslina Mohd Sidek, Kunihisa Tashiro, Hiroyuki Wakiwaka, Triple Flat-Type Inductive-Based Oil Palm Fruit Maturity Sensor, Sensors Vol. 18, 2018. **(ISI, IF: 2.475)**
- 80. Juan C. Quiroz , Norman Mariun, Mohammad Rezazadeh Mehrjou, Mahdi Izadid, **Norhisam Misron**, Mohd Amran Mohd Radzib, Fault detection of broken rotor bar in LS-PMSM using random forests, Volume 116, , pp. 273-280, 2018. **(ISI, IF : 2.475)**

Conference Proceedings (101 recent Conference Proceedings)

- 90. Nashiren Farzilah Mailah, **M. Norhisam**, T. Hanamoto and H. Yamad, Auxiliary Route for Output Voltage Spike Reduction of Matrix Converter, Symposium on Applied Engineering and Sciences (SAES2013), UPM Serdang, Malaysia, p.68, 2013
- 91. Ishak Aris, Saber M. E. Fadul, Ishak Aris, **Norhisam Misron**, Izhal Abdul Halin and I. Parvez, Oscillatory Motion of Tubular Linear Permanent Magnet Motor in Spray Application, Symposium on Applied Engineering and Sciences (SAES2013), UPM Serdang, Malaysia, p.69, 2013.
- 92. Raja Nor Firdaus Raja Othman, **Norhisam Misron**, N. Mariun, Aris. I, H. Wakiwaka and M. Nirei, Improvement of Torque Density In Single Phase Brushless DC Motor, Symposium on Applied Engineering and Sciences (SAES2013), UPM Serdang, Malaysia, p 99, 2013.
- 93. Aravind CV, Raja Nor Firdaus Raja Othman, **Norhisam Misron**, M.R.Zare and M.Nirei, Air-gap Volume Improvement with Minimized Harmonic Distortion in Double Rotor Reluctance Structure, Symposium on Applied Engineering and Sciences (SAES2013), UPM Serdang, Malaysia, p 100, 2013
- 94. M R Zare, Raja Nor Firdaus Raja Othman, Aravind CV, **Norhisam Misron**, Thermal Analysis of High Density Transverse Flux Linear Motor, Symposium on Applied Engineering and Sciences (SAES2013), UPM Serdang, Malaysia, p. 101, 2013
- 95. **M. Norhisam**, R. N. Firdaus, N. F. Mailah, S. Imamoto, H. Yamada, T. Hanamoto, Power Mapping Characteristic of Double Stator Pemanent Magnet Generator, 8th Asian Pasific Symposium on Applied Electromagnetic and Mecanics (APSAEM2014), Taichung, Taiwan, pp. 74-75, 2014.
- 96. R. N. Firdaus, **M. Norhisam**, M. Nirei, H. Wakiwaka, Performance Comparison of Conventional Spoke and Hollow- Rotor permanent Magnet generator for Small Energy harvesting Application, 8th Asian Pasific Symposium on Applied Electromagnetic and Mecanics (APSAEM2014), Taichung, Taiwan, pp. 76-77, 2014.
- 97. S. Imamoto, H. Yamada, T. Hanamoto, Y. Shirai, **M. Norhisam**, A battery Charging System for Intermittent Generation from Synchronous Generator with Novel Maximum Power Point Traking Control, 8th Asian Pasific Symposium on Applied Electromagnetic and Mecanics (APSAEM2014), Taichung, Taiwan, pp. 116 117, 2014.
- 98. T. Hanamoto, H. Yamada, S. Toosi, N. F. Mailah, **M. Norhisam**, DDPWM- Based Power Conversion System Using a Matrix Converter for an Isolated power Supply, 8th Asian Pasific Symposium on Applied Electromagnetic and Mecanics (APSAEM2014), Taichung, Taiwan, pp. 118-119, 2014.
- 99. F. Azhar, **M. Norhisam**, H. Wakiwaka, K. Tashiro, M. Nirei, Structure Optimization of 6 Slot 8 Ploe Permanent magnet Linear Motor, The 7th IET International Conference on Power Electronic, Meachine and Drives, PEMD 2014, p. 39, 2014
- 100. T. Hanamoto, **M. Norhisam**, S. Toosi, DDPWM- Based Power Conversion System Using three to four phase Matrix Converter for stand alone Power system, Industrial Electronics Conference IECON 2015, Yokohama, Japan, pp. 4424-4429, 2015
- 101. Misron, N., Zanil, U., & Mustafa, S. S. (2017, September). Linear oscillatory actuator integrated with magnetic gear for E-cutter development. In *Linear Drives for Industry Applications (LDIA)*, 2017 11th International Symposium on (pp. 1-5). IEEE.

Updated on.....



Patent (18 recent patents)

- 1. Kazuya Tamura, Hisashi Yajima, Nobuhiro Fujiwara, Hiroyuki Wakiwaka, **Norhisam Misron**: Moving Magnet Type Actuator, No. 2000-153772, Japan Patent (2001) Kazuya Tamura, Hisashi Yajima, Nobuhiro Fujiwara, (SMC Corporation, Japan)
- 2. Toyama Kazuhisa, Sato Hiroyuki, İmai Toshiyuki, Wakiwaka Hiroyuki, **Norhisam Misron**: Small Power generating Device for Portable Apparatus and Electronics Watch Therewith, JP2002051515 (A) (2002), (Ricoh Elemex Corporation, Japan)
- 3. Kazuya Tamura, Hisashi Yajima, Nobuhiro Fujiwara, Hiroyuki Wakiwaka, **Norhisam Misron**: Moving Magnet Type Actuator, No. 2002-051531, Japan Patent (2003), (SMC Corporation, Japan)
- 4. Hisashi Yajima, Kazuya Tamura, Nobuhiro Fujiwara, Hiroyuki Wakiwaka, **Norhisam Misron**: Linear Motor, No. US 6,674,186 B2, United States Patent (6 Jan. 2004), (SMC Corporation, Japan)
- 5. Norhisam Misron: Sensor-less Linear Motors, No. Pl 20084251 (2008)
- 6. **Norhisam Misron**, Norafiza Masruni, Mohd Shafiq Azian, Abdul Razak Jelani: An Electricity Generating Means (KASS International Sdn. Bhd) (2009) No. PI 20091908, (Malaysian Palm Oil Board)
- 7. **Norhisam Misron**, Norafiza Masruni, Sia Chee Yap, Raja Nor Firdaus Kashfi Raja Othman: Double Stator Slot Type Permanent Magnet Generator: (Aetas Intellectual Property Solution Sdn Bhd) (2009) No. Pl20097008, (Malaysian Palm Oil Board)
- 8. **Norhisam Misron**, Norrimah Abdullah, Raja Nor Firdaus Kashfi Raja Othman: A Linear Displacement Sensor (2009) No. PI20097038
- 9. **Norhisam Misron**, Ami Nurul Nazifah, Raja Nor Firdaus Kashfi Raja Othman: In-Wheel Permanent Magnet Motor (2009) No. PI20097039
- 10. **Norhisam Misron**, Reza Zare, Raja Nor Firdaus Kashfi Raja Othman, A Hybrid Transverse Flux Linear Motor (Aetas Intellectual Property Solution Sdn Bhd), No. Pl2010700103 (2010)
- 11. **Norhisam Misron**, Ng Seng Shin, Raja Nor Firdaus Kashfi Raja Othman, Suhairi Rizuan, Abdul Razak Jelani: A Permanent Magnet Motor (Norunnuda Sdn Bhd), No. Pl2011700043 (2011)
- 12. **Norhisam Misron**, Raja Nor Firdaus Kashfi Raja Othman, Suhairi Rizuan, A Motorized Cutter, No. Pl2011003335 (2011), (Malaysian Palm Oil Board)
- 13. **Norhisam Misron**, Ng Wei Shin, Raja Nor Firdaus Kashfi Raja Othman A System for Evaluating Ferromagnetic Object and Method Therefore, No. PI 2012002705 (2012)
- 14. **Norhisam Misron**, Raja Nor Firdaus Kashfi Raja Othman, Abdul Razak Jelani, Fairul Azhar Abdul Shukor: A Moving Magnet of Linear Oscillatory, MY-145196-A (2012)
- 15. **Norhisam Misron**, Norman Mariun, Ng Wei Shin, Noor Hasmiza Harun : Wire Rope Sensor, MY-146698-A (2012)
- Norhisam Misron, Fairul Azhar Abdul Shukor, Raja Nor Firdaus Kashfi Raja Othman, Norafiza Masruni, Mohd Shafiq Azian, Abdul Razak Jelani, An Oil Palm Electrical Motorized Cutter, MY-146560-A (2012)
- 17. **Norhisam Misron**, Raja Nor Firdaus Kashfi Raja Othman: A permanent Magnet Motor with Rotor Flux Barrier, No. IP 2013001189 (2013)
- 18. **Norhisam Misron**, Aravind CV, Raja Nor Firdaus Kashfi Raja Othman: Multi-Rotor Reluctance Machine, No. IP 2013001190 (2013)

Research Grants (25 Research Grants, Total 2.4 M)

No. Project Title Amount (RM) Year Source of Fund
Main Researcher

- 1. Fundamental research, Development of High Thrust density Linear Synchronous Motor 2003 2004, RM 50,000.
- 2. STRIDE. Malaysia, Development of Linear Oscillatory Actuator for Cooling jacket, (RM 65,000, Research Equipments), Jun 2005- Jun 2006
- 3. Malaysian Palm oil Board, Development of mechanical cutter, (RM 110,000), 2006-2007
- 4. Fundamental research, techniques of Design Mobile Generator for Palms Motorized cutter, 07-10-07-418FR, 2007–2008, RM 30,000.



- 5. Fundamental research, Effect of Meander Coil Pattern on Linear Displacement Sensor, 02-10-07-300FR, 2007 2009, RM 86,000
- 6. FRGS,KPT, Study and Modelling the Effect of Magnetic Circuit on Torque and Size of Permenant Magnet Motor Using Permeance Analysis Method, 2010, RM 85,000
- 7. Research University, Development of High Torque Brushless DC motor and Driving System For Agriculture Application, 05-04-08-0561RU, 2009-2011, RM130,000
- 8. Malaysian Palm oil Board, Development of mechanical cutter, (RM 80,000), 2nd phase, 2011-2012
- 9. Research University Grant, Development of mechanical cutter for Agriculture Application, 2011-2013. RM110.000
- 10. MOSTI research grant, Development of micro hydro generator using Double Stator Generator for rural area, 2012-2014, RM125, 000.
- 11. Research University Grant (special funding), 2012, RM115,000
- 12. UPM-Kyutech Lab. Equipments, Provided by Kyushu Institute of Technology, 2013, RM198,000.00
- 13. PRGS, KPM, Field Testing of Oil Palm Electrical Cutter Prototype for Severl Oil Palm Plantation in Malaysia, 2013-2015, RM200,000
- 14. Putra Grant UPM, Development Modular Electric Motor For Electric Vehicles, 2014-2016, RM193,000
- 15. RACE, Study and Experimental Verification of Motor-Generator Mode In Double Stator Slotted Rotor Permanent magnet Machine, 2015-2017, RM 20,000.
- 16. MOSTI ScienceFund, Development of Double-Stator Geared Permanent Magnet Generator for Low Wind Application, 2015-2017, RM 199,000.
- 17. KPT Transional Research Grant, Field Testing for E-Cutter in Oil Palm Plantation2017-2019. RM 250.000.00
- 18. UPM-Shinshu Universiti Joint Research Grant, 2018 2020, RM 70,000.

Co-Researcher

- 19. Design and Fabrication of Environmental Gas Sensor Using Screen printing Techniques (RM 110,998, E-since Fund, 04-01-04-510608, 2006-2008)
- 20. Fundamental research, Development Of A Remote Controlled High Clearance Buoyant Tool Carrier For Flood Rice Fields, 10-07-435FR, 2007 2009, RM 100,000
- 21. RUGS,UPM,Automation System of Direct mEasurement Device Based on Nanogap Capacitor and Asatble Operation of Biosensor Development to Measure Histamine in Solution, 2009, RM 30,000
- 22. RUGS,UPM, Investigation of 3 Level Neutral –Point-Clamped Inverters Perfomance Using New Techniques of Space Vector Modulation, 2009, RM 30,000
- 23. Research University Grant Scheme, Furtherwork on the Design and Development of a Remotely Controlled High Clearance Buoyant Tool Carrier for Flooded Rice Field, RM 153,000
- 24. MOSTI Research Grant, Hybrid Photovoltic /Thermal system for Suistanable Tourism Development in Malaysia, RM 150,000
- 25. RAGS, KPT, Investigation of Torque Performance in 3 Phase Permanent Magnet Motor for Independent Coil Excitation, RM 38,302
- 26. FRGS, KPM, Modeling on the influence slotted rotor to the performance parameter in double stator DC permanent magnet motor, 2014-2016, RM103,400.
- 27. Look East Policy 2 Research Grant, Development of Force Feedback Electromyographic Control Prosthetic Hand, 2015-2017, RM 213,000.

Awards/Recognition (Current)

Num Name of awards TitleAward Authority Award Type Year

International

- 1. Application of Electromagnetic on Electrical Machine and Sensor, British invention shows (BIS), 2005, UK. (Gold Medal)
- 2. Application of Electromagnetic on Electrrical Machine and Sensor, 16th International Invention



- Innovation Industrial Design & Technology Exhibition 2005,(ITEX 2005), Kuala Lumpur, Malaysia. (Silver Medal)
- 3. Development of Wire Rope Sensor, IENA, German, 2007 (Silver Medal)
- 4. British Invention Show (BIS2009) Sensor-less linear Motor, Gold medal
- 5. British Invention Show (BIS2009) Sensor-less linear Motor, Special Award (Double Gold)
- 6. ERUKA 2009, Linear Displacement Sensor Using Meander Coil and Pattern Guide, Gold Medal
- 7. ERUKA 2009, Linear Displacement Sensor Using Meander Coil and Pattern Guide, Special award (Gold medal with mention)
- 8. Appreciation as Organizing Chairman for APSAEM 2010 from Japan Society of Applied Electromagnetics and Mechanics
- 9. Scholarship Of Invatitation ASIAN Biomass Programme, Japan, 2011
- 10. Research Collaborative Professor, Shinshu University, Japan 2017

National.

- Application of Electromagnetic on Electyrical Machine and Sensor, 16th International Invention Innovation Industrial Design & Technology Exhibition (ITEX), Kuala Lumpur, Malaysia, 2005 (Silver Medal)
- 2. Development of Wire Rope Sensor, Malaysia Technology Expo (MTE), Malaysia, 2007 (Bronze Medal)
- 3. Linear Displacement Sensor Using Meander Coil and Pattern Guide, Malaysia Technology Expo (MTE), Malaysia, 2009 (Bronze Medal)
- 4. Sensor-Less Positioning System for Linear DC Motor, Malaysia Technology Expo (MTE), Malaysia, 2009 (Bronze Medal)
- 5. Mobile Electric Generator, Malaysia Technology Expo (MTE), Malaysia, 2011 (Silver Medal)
- 6. High Torque Motor for Oil Palm Electrical Cutter Application, Pacipte, 2013 (Gold Medal)
- 7. Novel High Thrust Density Transverse Flux Linear Motor, MTE, 2014 (Silver Medal)

University

- 1. Development of Linear Synchronous Motor, Pameran Reka Cipta, Penyelidikan & Inovasi UPM 2005, UPM (Bronze Medal)
- 2. Development of Linear Soscillatory Actuator, Pameran Reka Cipta, Penyelidikan & Inovasi UPM 2005, UPM. (Bronze Medal)
- 3. Development of Handrail Rope Sensor, Pameran Reka Cipta, Penyelidikan & Inovasi UPM 2005, UPM. (Bronze Medal)
- 4. Development of Wire Rope Sensor, Pameran Reka Cipta, Penyelidikan & Inovasi, Fakulti Kejuruteraan UPM 2006, UPM. (Gold Medal)
- 5. Sensor-less Positioning System for Linear DC Motor, PRPI, UPM, 2008 (Gold Medal)
- 6. Linear Displacement sensor using Meander Coil and pattern guide, PRPI, UPM, 2008 (Silver Medal)
- 7. PRPI 2010, Investigation of Switching Duration for 3-Level Neutal Point Clamped Inverter, Silver Medal
- 8. PRPI 2010, Portable Heavy Metal Detector, Silver Medal
- 9. PRPI 2010, Mobile Electric Generator, Gold Medal
- 10. PRPI 2012, High Torque Density Brushless Dc Permanent Magnet Motor For Oil Palm Electrical Cutter Application, Gold Medal
- 11. PRPI 2012, A Novel High Thrust Density Transverse Flux Linear Motor, Silver Medal.



Professional Services/Consultation

No Year Title Authority

- 1. Tamagawa Sekki Ltd. Japan (Mac 2003 Mac 2004) The simulation of TFIP-LPM to reduce the cogging force
- 2. Hirama Nondestructive Office, Japan (May 2004 May 2005) Development of Wire Rope Tester (RM 20,000, Research equipments)
- 3. STRIDE. Malaysia (Jun 2005 Jun 2006) Development of Linear Oscillatory Actuator for Cooling jacket,
- 4. Malaysian Palm oil Board (May 2006 May 2007) Development of mechanical cutter
- 5. Malaysian Palm oil Board, Development of mechanical cutter, 2nd phase, 2011-2012
- 6. Asmara Aerospace Sdn. Bhd and King Abdul Aziz science and Technology, ITMA Short Course on UAV (13 Nov 2009)
- 7. Asmara Aerospace Sdn. Bhd and King Abdul Aziz science and Technology ,UAV CAD Design Using Solidworks and Rapid Phototyping (15-26 June 2009)
- 8. Asmara Aerospace Sdn. Bhd and King Abdul Aziz science and Technology ,UAV CAD Design Using Solidworks and Rapid Phototyping (6-17 July 2009)
- 9. CCP Japan (Challenge Community Partner Co. Ltd.) Consultancy, Malaysia Training Program. (2-7 September 2015)
- 10. Sharp Electronic Sdn Bhd Consultancy and research project, Oil Palm Fresh Fruit Bunch Using the Camera for Acquire Sample Data and The Development Algorithm for Oil Palm Fresh Fruit Bunch Ripeness Discrimination. (25 Feb.- 25 Aug. 2016)
- 11. CCP Japan (Challenge Community Partner Co. Ltd.) Consultancy, Malaysia Training Program. (5 21 September 2016)
- 12. Sharp Electronic (Malaysia)Sdn Bhd, Take Photograph Of Oil Palm Fresh Fruit Bunch Using The Camera For The Experiment and Acquire Sample Data and Demonstrate The Development Algorithm For Oil Palm Fresh Fruit Bunch Ripeness Discrimination Take Photograph Of Oil Palm Fresh Fruit Bunch Using The Camera For The Experiment and Acquire Sample Data and Demonstrate The Development Algorithm For Oil Palm Fresh Fruit Bunch Ripeness Discrimination, (1 Jan.- 30 March. 2017)
- 13. Smart Force Counsultan, Japan, Malaysia Training and Practical Program (20 Aug.-10 Sept. 2017)
- 14. Fujitsu Telecommunication Asia Sdn. Bhd, Testing and evaluation of Oil Palm plantation Robot (1 Aug. 30 Nov. 2018)
- 15. Smart Force Counsultan, Japan, Malaysia Training and Practical Program (20 Aug. 4 Sept. 2018)

Student Supervision

Postgraduate Supervision (PhD) Chairman of supervisory committee

- 1. Mohammad Reza Zare (Graduated 2012)
- 2. Chokalingam Aravind (Graduated 2013)
- 3. Raja Nor Firdaus Kashfi Raja Othman (Graduated 2013)
- 4. Noor Hasmiza Harun (Graduate 2015)
- 5. Saman Toosi (Graduate 2015)
- 6. Shehu Mustafa (Graduate 2018)
- 7. Siti Nor Umaira Zakariah (On going)

Postgraduate Supervision (MSc.) Chairman of supervisory committee

- 1. Noor azita Bt. Awaludin (Graduated 2005)
- 2. Alias B. Khamis (Graduated 2006)
- 3. Ezril Hisham B. Mat Saad (Graduated 2006)
- 4. Noor Hasmiza Bt. Harun (Graduated 2007)
- 5. Norimah Bt. Abdullah (Graduated 2008)
- 6. Fairul Azhar B. Abdul Shukor (Graduated 2009)
- 7. Raja Nor Firdaus Kashfi B. Raja Othman (Graduated 2009)
- 8. Norhafizah Bt. Masruni (Graduated 2010)
- 9. Ami Nurul Nazifah Abdullah (Graduated 2011)



- 10. Ng Wei Shin (Graduated 2012)
- 11. Ali Saadon Al-Ogali (Graduated 2012)
- 12. Siti Khodijah Mazalan (Graduated 2012)
- 13. Suhairi Rizuan Che Ahmad (Graduated 2012)
- 14. Ng Seng Shin (Graduated 2013)
- 15. Imamoto Sho (Graduated 2015, UPM-Kyutech Student)
- 16. Muhammad Kamel Roslan (Graduate 2017)
- 17. Nor Aziana Bt Aliteh (Graduate 2018)
- 18. Umair Zanil (On going)
- 19. Nisa Shakira (On going)

Kyushu Institute of Technology Staff/Student Advisor

- 1. Yamada Hiroaki (Assistance Profesor, 2014)
- 2. Okamoto Kohei (Master 2nd year, Graduated 2014)
- 3. Motoyama Kaichi (Master 2nd year, 2014)
- 4. Setsu yugo (Master 2nd year, 2014)
- 5. Nagaoka Hidenori (Master 1st year, 2014)
- 6. Kudo Masaya (Master 1st year, 2015)
- 7. Yoshino Kento (Master 1st year, 2015)
- 8. Maeda Kenta (Master 1st year, 2015)

Shinshu University Staff/Student Advisor

1. Karasawa daiichi (PhD 2nd year, 2016)

Postgraduate Supervision (PhD) Member of advisory committee

- 1. Parvez Igbal (Graduated 2011)
- 2. Shahrokh (Graduated 2010)
- 3. Mehdi Karami (Graduated 2015)
- 4. Mohamad Reza Zadeh Mehrjou (Graduate 2016)
- 5. Norramlee Mohd Noor (On going)
- 6. Saber Mohammed (On going)

Postgraduate Supervision (MSc) Member of advisory committee

- 1. Mohd Rezal B. Mohamed (Graduated 2007)
- 2. Rohaizad Ishak (Graduated 2006)
- 3. Mohd Razali Daud (Graduated 2006)
- 4. Khairul Hamzani Hamid (Graduated 2006)
- 5. Jasman Jaafar (Graduated 2008)
- 6. Syed Mohamad Munee (Graduated 2016)
- 7. Fuad (On going)