

# **CURRICULUM VITAE**



Associate Professor Dr. Hashim Hizam Department of Electrical and Electronic Engineering, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Malaysia

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#### **Education**

- 1. PhD Electrical Engineering, 2004, Queen's University of Belfast, UK
- 2. M.Sc. Electrical Engineering, 1994, Polytechnic University, New York. USA
- 3. B. Sc. Electrical Engineering, 1993, Polytechnic University, New York. USA.

# **Areas of Interest**

1. Renewable Energy, Power System

# Professional Qualification/ Membership/ Affiliation

- 1. Member, Institute of Electrical and Electronics Engineers (IEEE)
- 2. Graduate Member, Board of Engineers Malaysia (BEM)

Appointments						
Position	Duration					
<ol> <li>Coordinator, Center of Advanced Power Research, UPM</li> </ol>	and Energy February 2017 to date					
<ol> <li>Deputy Dean Academic, Student Affair Community and Industry Relations, Fac Engineering, UPM</li> </ol>						
3. Head of Department, Department of El Electronic Engineering, Faculty of Engi						
4. Associate Professor, Department of Electronic Engineering, Faculty of Engi	ectrical and April 2011 to date					
5. Lecturer/ Senior Lecturer, Department Electronic Engineering, Faculty of Engi						
<ol> <li>Assistant Manager, Quality Assurance Hasu Industries Sdn Bhd, Kuala Teren</li> </ol>						

# Publications

#### Journals

- RZ Sabry, C Gomes, M Izadi, MZA Ab Kadir, H Hizam, J Jasni, "Experimental investigation on breakdown characteristics of sand, bentonite and their mixes", *Journal of Electrostatics*, 93, 2018, 79-84
- 2. W Warid, H Hizam, N Mariun, NIA Wahab, "A novel quasi-oppositional modified Jaya algorithm for multi-objective optimal power flow solution", *Applied Soft Computing*, 65, 2018, 360-373
- 3. Z Mohammed, H Hizam, C Gomes, "Lightning Strike Impacts on Hybrid Photovoltaic-Wind System", *Indonesian Journal of Electrical Engineering and Computer Science*, 8 (1), 2017, 115-121



- 4. EE Aker, ML Othman, I Aris, NIA Wahab, H Hizam, O Emmanuel, "Adverse Impact of STATCOM on the Performance Of Distance Relay", *Indonesian Journal of Electrical Engineering and Computer Science*, 6 (3), 2017
- 5. S Musa, MAM Radzi, H Hizam, NIA Wahab, Y Hoon, MAAM Zainuri, "Modified Synchronous Reference Frame Based Shunt Active Power Filter with Fuzzy Logic Control Pulse Width Modulation Inverter", *Energies*, 10 (6), 758,2, 2017
- 6. ML Sabo, N Mariun, H Hizam, MAM Radzi, A Zakaria, "Spatial matching of large-scale grid-connected photovoltaic power generation with utility demand in Peninsular Malaysia", *Applied Energy* 191, 1, 2017, 663-688
- 7. MMR Amran, ZG Peng, H Hashim, "Voltage Flicker Estimation Based on Pair of Inter-harmonics Analysis Method", *Pertanika Journal Of Science And Technology* 25, 2017, 1-10
- 8. SA Mousavi Maleki, H Hizam, C Gomes, "Estimation of hourly, daily and monthly global solar radiation on inclined surfaces: Models re-visited", *Energies* 10 (1), 134,5, 2017
- 9. ZP Goh, MAM Radzi, H Hizam, NIA Wahab, "Investigation of severity of voltage flicker caused by second harmonic", *IET Science, Measurement & Technology* 11 (3), 2017, 363-370
- 10. MF Akorede, H Hizam, I Aris, MZA Ab Kadir, M Hojabri, "User-friendly tool for power flow analysis and distributed generation optimisation in radial distribution networks", *Nigerian Journal of Technological Development* 14 (1), 2017, 23-33
- 11. M Mirzaei, J Jasni, H Hizam, NIA Wahab, E Moazami, "A Combined Analytical Method for Optimal Location and Sizing of Distributed Generation Considering Voltage Stability and Power Loss in a Power Distribution System", *Pertanika Journal of Science & Technology* 25 (1), 2017
- 12. ML Sabo, N Mariun, H Hizam, MAM Radzi, A Zakaria, "Spatial energy predictions from large-scale photovoltaic power plants located in optimal sites and connected to a smart grid in Peninsular Malaysia", *Renewable and Sustainable Energy Reviews* 66, 8, 2016, 79-94
- 13. NF Othman, ME Ya'acob, AS Abdul-Rahim, H Hizam, MF Ramlan, "Integration of solar dryer technologies in high value herbal crops production for Malaysia: pathway for a sustainable future", *International Food Research Journal*, 23, 2016
- 14. ZP Goh, MAM Radzi, H Hizam, NIA Wahab, "Critical Voltage Flicker Detection based on Pair of Inter-harmonics Analysis Method", *International Journal of Simulation--Systems, Science & Technology* 17 (41), 2016
- 15. W Warid, H Hizam, N Mariun, NI Abdul-Wahab, "A Sensitivity Based Methodology for Optimal Placement of Distributed Generation in Meshed Power Systems", *International Journal of Simulation--Systems, Science & Technology* 17 (41), 2016
- 16. L Mahmoud Sabo, L Mahmoud Sabo, N Mariun, N Mariun, H Hizam, "Estimation of solar radiation from digital elevation model in area of rough topography", *World Journal of Engineering* 13 (5), 2016, 453-460
- 17. W Warid, H Hizam, N Mariun, NI Abdul-Wahab, "Optimal Power Flow Using the Jaya Algorithm *Energies* 9 (9), 2016, 678
- 18. WS Warid, WS Warid, H Hizam, H Hizam, N Mariun, N Mariun, "Mapping of optimum placement of distributed generation in meshed power networks with appropriate technologies", *World Journal of Engineering* 13 (4), 2016, 317-325
- A Iessa, NIA Wahab, N Mariun, H Hizam, "Quantitative Frequency Security Assessment for Multi-Machine Power System based on COI frequency", *Indian Journal of Science and Technology* 9 (28), 2016



- 20. MR Maghami, H Hizam, C Gomes, MA Radzi, MI Rezadad, "Power loss due to soiling on solar panel: A review", *Renewable and Sustainable Energy Reviews* 59, 38, 2016, 1307-1316
- 21. SEG Mohamed, J Jasni, MAM Radzi, H Hizam, "Power transistor-assisted Sen Transformer: a novel approach to power flow control", *Electric Power Systems Research* 133, 2016, 228-240
- 22. ZP Goh, MAM Radzi, Y Von Thien, H Hizam, NIA Wahab, "Hybrid FFT-ADALINE algorithm with fast estimation of harmonics in power system", *IET Signal Processing* 10 (8), 2016, 855-864
- 23. W Warid, H Hizam, N Mariun, NI Abdul-Wahab, "An efficacious multi-objective fuzzy linear programming approach for optimal power flow considering distributed generation", *PloS one* 11 (3), e0149589 1, 2016
- 24. S Zahurul, N Mariun, IV Grozescu, Hanamoto Tsuyoshi, Yasunori Mitani, ML Othman, **H Hizam**, IZ Abidin, "Future strategic plan analysis for integrating distributed renewable generation to smart grid through wireless sensor network: Malaysia prospect", *Renewable and Sustainable Energy Reviews*, 53 (C), 2016, pp 978-992 (**Q1 ISI Thompson IF=5.901**)
- 25. G Zai Peng, MAM Radzi, **H Hizam**, NI Abdul Wahab, "A Simple Predictive Method of Critical Flicker Detection for Human Healthy Precaution", *Mathematical Problems in Engineering*, Article ID 871826 2015 (Q3 ISI Thompson IF=0.798)
- 26. O Emmanuel, M Lutfi Othman, H Hizam, M Murtadha Othman, "Artificial Neural Network Application in Optimal Coordination of Directional Overcurrent Protective Relays in Electrical Mesh Distribution Network", Applied Mechanics and Materials, 785, 2015, pp 48-52
- 27. M Maghami, **H Hizam**, C Gomes, S Hajighorbani, N Rezaei, "Evaluation of the 2013 Southeast Asian Haze on Solar Generation Performance", *PloS one*, 10 (8), e0135118, 2015 (**Q1 ISI Thompson IF=3.234**)
- 28. ME Ya'acob, **H Hizam**, Y Hashimoto, B Adam, NF Othman, "Field evaluation of Five-level Heat Dissipation Models under PV Array structure installed in the Tropics", *Applied Mechanics & Materials*, Vol. 789-790, 2015, pp 416-421
- NF Othman, ME Ya'acob, AS Abdul-Rahim, Mohd Shahwahid Othman, MAM Radzi, H Hizam, YD Wang, AM Ya'acob, HZE Jaafar, "Embracing new agriculture commodity through integration of Java Tea as high Value Herbal crops in solar PV farms", *Journal of Cleaner Production*, 91, 2015, pp 71-77 (Q1 ISI Thompson, IF:3.844)
- 30. AN Al-Masri, MZA Ab Kadir, **H Hizam**, N Mariun, "Simulation of an adaptive artificial neural network for power system security enhancement including control action", *Applied Soft Computing*, 29, 2015, pp 1-11. (Q1 ISI Thompson IF=2.810)
- 31. Akorede, M.F., Pouresmaeil, E., **Hizam, H**., Aris, I., Ab-Kadir, M.Z., "Optimal placement of non-site specific DG for voltage profile improvement and energy savings in radial distribution networks", *Advances in Electrical and Electronic Engineering*, Volume 12, Issue 5, 2014, pp 392-406. **(Scopus)**
- 32. Ng, C.H, Salmiaton, A., **Hizam, H**. "Catalytic pyrolysis and a pyrolysis kinetic study of shredded printed circuit board for fuel recovery", *Bulletin of Chemical Reaction Engineering and Catalysis*, Volume 9, Issue 3, 2014, pp 224-240
- 33. Shirzadi, S., **Hizam, H**., Wahab, N.I.A, "Mismatch losses minimization in photovoltaic arrays by arranging modules applying a genetic algorithm", *Solar Energy*, 108, 2014, pp 467-478. **(Q1 ISI Thompson IF=3.469)**
- 34. Ya'Acob, M.E., **Hizam, H.**, Khatib, T., Radzi, M.A.M., Gomes, C., Bakri A., M.d, Marhaban, M.H., Elmenreich, W, "Modelling of photovoltaic array temperature in a tropical site using generalized extreme value distribution", *Journal of Renewable and Sustainable Energy*, Volume 6, Issue 3, 2014, Article number 033134 **(Q3 ISI Thompson IF=0.904)**



- 35. ME Ya'acob, **H Hizam**, AM Bakri, MAM Radzi, T Khatib, A Rahim, "Performance Test Conditions for Direct Temperature Elements of Multiple PV Array Configurations in Malaysia", *Energy Procedia*, 61, 2014, pp 2387-2390.
- 36. Saberian, A., **Hizam, H.**, Radzi, M.A.M., Ab Kadir, M.Z.A., Mirzaei, M., "Modelling and Prediction of Photovoltaic Power Output using Artificial Neural Networks", *International Journal of Photoenergy*, 2014, 469701 (**Q2 ISI Thompson IF=1.563**)
- 37. Maghami, M.R., **Hizam, H.**, Gomes, C., Ismail, A.G, "Characterization of Dust Materials on the Surface of Solar Panel", *Life Science Journal*, 11 (special issue 4), 2014, 387-390.
- 38. M. T. Askari, M. Z. A. Ab Kadir, **H. Hizam** and J. Jasni, "A New Comprehensive Model To Simulate The Restructured Power Market For Seasonal Price Signals By Considering On The Wind Resources", *Journal of Renewable Sustainable Energy*, 6, 023104, 2014, http://dx.doi.org/10.1063/1.4869141 (Q3 ISI Thompson IF=0.904)
- 39. S. Zahurul, N. Mariun, V. Grozescu, M. Lutfi, **H. Hashim**, M. Amran, Izham, "Development of a prototype for remote current measurements of PV panel using WSN", *International Journal of Smart Grid and Clean Energy*, vol. 3, no. 2, 2014 pp: 241-246.
- 40. M Fadaeenejad, M.A.M Radzi, M.Z.A Ab Kadir, **H. Hizam,** "Assessment of hybrid renewable power sources for rural electrification in Malaysia", *Renewable and Sustainable Energy Reviews*, Volume 30, 2014, pp 299-305 (**Q1 ISI Thompson IF=5.901**)
- 41. Effendy Ya'Acob, M., **Hizam, H.**, Khatib, T, Radzi, M.A.M., "A comparative study of three types of grid connected photovoltaic systems based on actual performance", *Energy Conversion and Management*, Volume 78, 2014, pp 8-13 (**Q1 ISI Thompson, IF:3.590**)
- 42. M Fadaeenejad, A.M. Saberian, M.A.M Radzi, **H. Hizam**, and M.Z.A.A Kadir, "The present and future of smart power grid in developing countries", *Renewable and Sustainable Energy Reviews*, Volume 29, 2014, pp. 828-834 (**Q1 ISI Thompson IF=5.901**)
- 43. M.E Ya'cob, **H. Hizam**, M.A.M Radzi, "Real Time Monitoring and Analysis of Tropical Impact on PV Performance Based on LabVIEW Architecture", *Journal of Automation and Control Engineering*, 2(2), 2014 pp 138-142.
- 44. Arash Toudeshki, Norman Mariun, **Hashim Hizam**, and Noor Izzri Abdul Wahab, "Development of a New Cascade Voltage-Doubler for Voltage Multiplication", *Chinese Journal of Engineering*, Volume 2014 (2014), Article ID 948586
- M.E. Yaacob, H. Hizam, M.A.M Radzi and M.Z.A.A Kadir, "Field Measurement of PV Array Temperature for Tracking and Concentrating 1 kWp Generators Installed in Malaysia", International Journal of Photoenergy, Volume 2013 (2013), Article ID 502503 (Q2 - ISI Thompson IF=1.563)
- 46. Effendy Ya'Acob, M., **Hizam, H**., Htay, M.T., Radzi, M.A.M., Khatib, T., Bakri A, M., "Calculating electrical and thermal characteristics of multiple PV array configurations installed in the tropics", *Energy Conversion and Management*, 75, 2013 pp. 418-424 (**Q1 ISI Thompson, IF:3.590**)
- 47. Al-Masri, A.N., Ab Kadir, M.Z.A., **Hizam, H.**, Mariun, N., "A Novel Implementation For Generator Rotor Angle Stability Prediction Using An Adaptive Artificial Neural Network Application For Dynamic Security Assessment", *IEEE Transactions on Power Systems*, 28 (3), art. no. 6472123, 2013 pp. 2516-2525 (**Q1 ISI Thompson, IF:3.530**)
- 48. Taghvaee, M.H., Radzi, M.A.M., Moosavain, S.M., **Hizam, H.**, Hamiruce Marhaban, M.,"A current and future study on non-isolated DC-DC converters for photovoltaic applications", *Renewable and Sustainable Energy Reviews*, 16, 2013, pp. 216-227 (Q1 ISI Thompson IF=5.901)



- 49. Hedayati, M., Mariun, N., **Hizam, H.**, Bahari, S., "Design of Robust Controller for STATCOM Applied to Large Induction Motor Using Normalized Coprime Factorization Approach", *Arabian Journal for Science and Engineering*, 38 (10), 2013, pp. 2713-2723.
- 50. Sabo Mahmoud Lurwan, Norman Mariun, Mohd Amran Mohd Radzi, **Hashim Hizam**, "Solar Radiation Prediction Model for Solar Panel and Thermal Collectors in Malaysia", *International Journal of Electrical Components & Sustainable Energy*, 1(2), 2013, pp 21-27.
- 51. Mohammad Tolou Askari, M.Z.A. Ab Kadir, **H.Hizam**, J.Jasni, "A New Approach to Simulate the Wind Power Energy Based on the Probability Density Function", *International Journal of Electrical Components & Sustainable Energy*, 1(2), 2013, pp 8-13.
- 52. A Toudeshki, N Mariun, **H Hizam**, NIA Wahab, "Improved Charge Pump Circuit for High-Voltage and Energy Applications Using Superposition Theorem", *Majlesi Journal of Energy Management*, 2 (3), 2013.
- 53. Arash Toudeshki, Norman Mariun, Hashim Hizam, Noor Izzri Abdul Wahab, Mojgan Hojabri, Yunusa Ali Sai'd, Omidreza Saadatian, Muhammad Mansoor, Elham Saadatian, "Derivation of Load Peak Voltage, Power Consumption and Potential Energy Management in a Thyristor Controlled Marx Impulse Generator for Capacitor Discharge Application", Majlesi Journal of Energy Management, 2 (2), 2013.
- 54. Toudeshki, A., Mariun, N., Bashi, S.M., Hizam, H., Badran, S.M., Jamaludin, H., "Reducing Electromagnetic interference of high-power non-isolated DC-to-DC step-down converter based on total harmonic distortion of input current", *International Review on Modelling and Simulations*, 5 (1) , 2012, pp. 107-113 (SCOPUS)
- 55. M.F. Akorede, **H. Hizam**, M.Z.A. Ab Kadir, I. Aris, S.D. Buba, "Mitigating the anthropogenic global warming in the electric power industry", *Renewable and Sustainable Energy Reviews*,16 (1), 2012, pp. 2747-2761 (**Q1 ISI Thompson, IF:5.627**)
- 56. Mirzaei, M., Ab. Kadir, M.Z.A., Hizam, H., Moazami, E., "Comparative analysis of probabilistic neural network, radial basis function, and feed-forward neural network for fault classification in power distribution systems", *Electric Power Components and Systems*, 39 (16), 2011, pp. 1858-1871 (Q4 ISI Thompson, IF:0.40)
- 57. Mudathir F. Akorede, Hashim Hizam, Ishak Aris, Mohd-Zainal A. Ab Kadir, "Effective Method for Optimal Allocation of Distributed Generation Units in Meshed Electric Power Systems" *IET Generation, Transmission & Distribution*, Vol 5, Issue 2, 2011, pp 276-287 (Q2 - ISI Thompson, IF:1.152)
- 58. Mojgan Hojabri, **Hashim Hizam**, Norman Mariun, Ishak Aris, Mudathir Funsho Akorede, "Critical Lines Identification for ATC Assessment in Power System Planning", *International Review of Electrical Engineering*, Vol 6 N 4, 2011, pp 1776-1782.
- 59. Akorede, M.F., Hizam, H., Aris, I., Ab Kadir, M.Z.A., Hojabri, M., "A windows-based tool for power flow analysis and DG optimisation in radial distribution networks", *Scientific Research and Essays*, 6 (6), 2011, pp. 1285-1302 **(SCOPUS)**
- 60. Ramzia Salem, A.M., Al-Mansoori, M.H., Hizam, H., Mohd Noor, S.B., Abu Bakar, M.H., Mahdi, M.A., "Multiwavelength L-band fiber laser with bismuth-oxide EDF and photonic crystal fiber", *Applied Physics B: Lasers and Optics*, 103 (2), 2011, pp. 363-368
- 61. Ramzia Salem, A.M., Al-Mansoori, M.H., Hizam, H., Mohd Noor, S.B., Mahdi, M.A., "Broadly tunable multiwavelength fiber laser with bismuth-oxide EDF using large effective area fiber", *Laser Physics*, 21 (2), 2011, pp. 389-394
- 62. Akorede, M.F., **Hizam, H.**, Pouresmaeil, E.,"Distributed energy resources and benefits to the environment", *Renewable and Sustainable Energy Reviews*, 14 (2), 2010, pp. 724-734. (**Q1 ISI Thompson, IF:4.842**)



- 63. Mudathir F. Akorede, **Hashim Hizam**, Ishak Aris, Mohd-Zainal A. Ab Kadir, "Re-Emergence Of Distributed Generation In Electric Power Systems: Incentives, Values And Issues", *Energy & Environment*, Volume 21 No. 2, 2010, pp: 75-92. (**SCOPUS**)
- 64. Mudathir F. Akorede, **Hashim Hizam**, Ishak Aris, Mohd-Zainal A. Ab Kadir, "Qualitative and Quantitative Analysis of System Stability and Power Quality in Networks with DG of Different Penetration Levels", *International Review of Electrical Engineering*, Vol 5 N 5, 2010, pp 2366-2377.
- 65. Mojgan Hojabri, **Hashim Hizam**, Norman Mariun and Senan Mahmud Abdullah, Edris Pouresmaeil, "Available Transfer Capability for Power System Planning using Krylov-Algebraic Method", *International Review of Electrical Engineering*, Vol 5 N 5, 2010, pp 2251-2261.
- 66. Akorede, M.F., **Hizam, H.**, Kadir, M.Z.A., Aris, I., "A Critical Review of Strategies for Optimal Allocation of Distributed Generation Units in Electric Power Systems", *International Review of Electrical Engineering*, Vol 5 N 2, 2010, pp 593-600.
- 67. A. AL-Masri, M. Z. A. Ab Kadir, **H. Hizam**, N. Mariun, A. Khairuddin and J. Jasni, "Enhancement in Static Security Assessment for a Power System Using an Optimal Artificial Neural Network," *International Review of Electrical Engineering*, Vol 5, N 3, 2010, pp 1095-1102.
- 68. Mojgan Hojabri, **Hashim Hizam**, Norman Mariun, Senan Mahmod, "Comparative Analysis of ATC Probabilistic Methods", *Journal of American Science*, Vol 6 (9), 2010, pp 1-4.
- 69. M. Hedayati, N. Mariun, H. Hizam, S. M. Bashi, "Investigating the Performance of Shunt FACTS for the Operation of Induction motors under Different Voltage Sag Conditions", *Journal of Applied Sciences*, Vol 10 (23), 2010, pp 3014-3020. (**SCOPUS**)
- 70. Akorede, M.F., **Hizam, H.,** "Wavelet transforms: Practical applications in power systems", Journal of Electrical Engineering and Technology, 4 (2), 2009, pp. 168-174. (ISI Thompson– Science Citation Index Expanded)
- 71. M. Mirzaei, M.Z. A Ab Kadir, E. Moazami, **H. Hizam**, "Review of Fault Location Methods for Distribution Power System", *Australian Journal of Basic and Applied Sciences*, 3(3), 2009, 2670-2676 (**SCOPUS**)
- 72. Mojgan Hojabri, **Hashim Hizam**, Norman Mariun and Senan Mahmud Abdullah, "Available Transfer Capability (ATC): A Review", *International Review on Modelling and Simulations*, v2(4), 2009, pp 351-355, (**Cambridge**)
- 73. Mojgan Hojabri, **Hashim Hizam**, Norman Mariun and Senan Mahmud Abdullah, "Linear Optimization Method by using a New Iterative Algorithm for Available Transfer Capability (ATC)", *International Review of Automatic Control*, Vol 2(5), 2009, pp512-516 (**Cambridge**)
- 74. M. Norhisam, F. Azhar, R.N. Firdaus, H. Hashim, M. Nirei, H. Wakiwaka, and A.Razak J., "Effect of Spring Constant and Thrust Constant Characteristics to Displacement of Slot Type Moving Magnet of LOA", Journal of the Japan Society of Applied Electromagnetics and Mechanics, v17(3), 2009, pp 437-440 (J Global)
- 75. M.Hedayati, S.M. Bashi, N. Mariun, **H.Hizam**, "A Short Review of Different Optimal H∞ Robust FACTS Controller Designs", *International Review of Automatic Control*, v2(1), 2009, pp 8-16 (**Cambridge**).
- 76. Ab Kadir, M.Z.A., Sardi, J., Wan Ahmad, W.F., Hizam, H., Jasni, J., "Evaluation of a 132 kV transmission line performance via transient modelling approach", *European Journal of Scientific Research* 29 (4), 2009, pp. 533-539.
- 77. J. Jasni, **H.Hizam**, M.Z.A Kadir, N. Mariun, S. Bahari, "Steady State Voltage Stability Analysis using Continuation Power Flow: A Review", *Journal of Industrial Technology*, 17(1), 2008, pp. 181-190.



- 78. **Hashim Hizam**, P.A. Crossley, "Fault Location On A Distribution Feeder Using Fault Generated High Frequency Current Signatures", *Asean Journal on Science and Technology for Development*, Vol 25, Issue 2, 2008, pp 191-203.
- 79. J.Jasni, N.Azis, **H.Hizam**, M.Z.A. Kadir, M.N. Mariun, S.B.M. Noor and S. Sobri, "An Efficient Generalized Minimized Residual Simulation Technique for Continuation Power Flow Studies", *Asian Journal of Applied Sciences*, v1(2), 2008, pp 136-146. (**SCOPUS**)
- 80. Ab Kadir, M.Z.A., Wan Ahmad, W.F., Jasni, J., **Hizam, H.**, "The importance of corona effect in lightning surge propagation studies", *Journal of Applied Sciences*, 8 (19), 2008, pp. 3446-3452 (**SCOPUS**)
- 81. Jasni, J., Bahari, S., Mariun, N., Kadir, M.Z.A., Hizam, H., "State of the art for voltage collapse point approximation using continuation power flow", *European Journal of Scientific Research* 22 (1), 2008, pp. 98-105.
- 82. **Hizam, H.**, Crossley, P.A., "Estimation of fault location on a radial distribution network using fault generated travelling waves signals", *Journal of Applied Sciences* 7 (23), 2007, pp. 3736-3742 (**SCOPUS**)
- 83. **H. Hizam** and P. A. Crossley, "Single-Ended Fault Location Technique On A Radial Distribution Network Using Fault Generated Current Signals", *International Journal of Engineering and Technology*, Volume 3, No. 2, 2006, pp. 148-158.
- 84. **Hashim Hizam**, Jasronita Jasni, Mohd Zainal Abidin Ab Kadir, Wan Fatinhamamah Wan Ahmad, "Fault Detection, Classification And Location On An Underground Cable Network Using Wavelet Transform", *International Journal of Engineering and Technology*, Volume 6, No. 2, 2006, pp: 90-9.
- 85. Norman Mariun, Samsul Aizam, **Hashim Hizam**, Noor Izzri Abd Wahab, "Design and Simulation of Pole Placement Controller for D-STATCOM in Power Quality Problems Mitigation", *WSEAS Transactions on Circuits and Systems*, (8), 2005, pp. 1298-1305. (**SCOPUS**)
- 86. **Hashim Hizam**, Peter A. Crossley and Phillip F. Gale, "An Alternative Simulation Technique For Fault Location Studies Based On Travelling Waves", *Engineering Transactions*, Vol. 7, No. 2(17), 2004, pp 83-89.

# **Conference Proceedings**

- 1. NF Othman, ME Ya'acob, AS Abdul-Rahim, H Hizam, MM Farid, "Inculcating herbal plots as effective cooling mechanism in urban planning", III International Conference on Agricultural and Food Engineering 2016, 1152, 235-242
- N Fauzan, ME Ya' acob, MN Mokhtar, H Hizam, "Development of coconut-based floating structure for stand-alone solar PV system in the tropics", III International Conference on Agricultural and Food Engineering 2016, 1152, 95-100
- 3. S Shirzadi, H Hizam, NIA Wahab, MR Maghami, S MacAlpine, "Increasing energy harvest of photovoltaic arrays under uniform illumination: A case study on photovoltaic arrays in boulder CO and Tucson AZ", Power and Energy (PECon), 2016 IEEE International Conference on, 23-27
- 4. Mohammad Reza Maghami, Alireza Maghoul, Samad Shirzadi Dehkohneh, Chandima Gomes, Hashim Hizam, Mohammad Lutfi B Othman, "Hybrid renewable energy as power supply for shelter during natural disasters", IEEE International on Automatic Control and Intelligent Systems (I2CACIS), 2016, 34-39
- 5. Lurwan, S.M., Mariun, N., **Hizam, H.**, Mohd Radzi, M.A., Zakaria, A., "Predicting power output of photovoltaic systems with solar radiation model", Conference Proceeding 2014 IEEE



- International Conference on Power and Energy, PECon 2014, 1-3 December 2014, Kuching , Sarawak, Malaysia, pp 304-308
- Rezaei, N., Othman, M.L., Wahab, N.I.A., Hizam, H., "Coordination of overcurrent relays protection systems for wind power plants", Conference Proceeding - 2014 IEEE International Conference on Power and Energy, PECon 2014, 1-3 December 2014, Kuching, Sarawak, Malaysia, pp 394-399
- 7. Mirzaei, M., Jasni, J., **Hizam, H**., Wahab, N.I.A., Mohamed, S.E.G., "An analytical method for optimal sizing of different types of DG in a power distribution system", Conference Proceeding 2014 IEEE International Conference on Power and Energy, PECon 2014, 1-3 December 2014, Kuching, Sarawak, Malaysia, pp 309-314
- 8. Maghami, M., **Hizam, H.**, Gomes, C., "Impact of dust on solar energy generation based on actual performance", Conference Proceeding 2014 IEEE International Conference on Power and Energy, PECon 2014, 1-3 December 2014, Kuching, Sarawak, Malaysia, pp 388-393
- 9. Muhamad, M.I., Radzi, M.A.M., Wahab, N.I.A., **Hizam, H.**, Mahmood, M.F., "Optimal design of hybrid renewable energy system based on solar and biomass for halal products research institute, UPM", 2014 IEEE Innovative Smart Grid Technologies Asia, ISGT ASIA 2014, 20-23 May 2014, Kuala Lumpur, Malaysia, pp 692-696
- 10. Ya'Acob, M.E., **Hizam, H**., Bakri, M.A., Khatib, T., Rahim, A.H.M.A., "Performance test conditions for direct temperature elements of multiple PV array configurations in Malaysia", Energy Procedia, 30 May 2 June 2014, Taipei, Taiwan, pp 2387-2390.
- 11. Askari, M.T., Ab Kadir, M.Z.A., **Hizam, H.**, Jasni, J, "On the selection of wind turbine generator based on ARMA time series", 2013 IEEE Conference on Sustainable Utilization and Development in Engineering and Technology, IEEE CSUDET 2013; Selangor; Malaysia; 30-31 May 2013
- 12. Nejad, M.F., Saberian, A., **Hizam, H.**, Mohd Radzi, M.A., Ab Kadir, M.Z.A, "Application of smart power grid in developing countries", 2013 IEEE 7th International Power Engineering and Optimization Conference, PEOCO 2013, Langkawi, Malaysia, 3-4 June 2013
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# Books (If any)

### Chapter in Books (If any)

1. "Available Transfer Capability Calculation", Applications of MATLAB in Science and Engineering, InTech, ISBN 978-953-307-708-6

#### Research Grants (Principal Investigator) **Amount** Source of No Project Title Year (RM) **Fund** Voltage Collapse Point Determination Technique 138000 2006-2009 1. E-Using Fuzzy-Based Formulation Sciencefund 2. Determination of available transmission capability 70,000 2009-2011 **RUGS** using krylov subspace power flow 3. Performance and Suitability Assessment Study of 103000 2011-2013 **FRGS** CPV systems in Tropical Climate Conditions 4. Evaluation of Concentrated Photovoltaic (CPV) 67000 2011 Matching Systems (1) Grant UPM (1)



5.	Evaluation of Concentrated Photovoltaic (CPV) Systems (2)	100000	2012	Matching
6.	Formulation of a Mathematical Model for Optimum Generation of PV System Based on	114000	2012-2014	Grant UPM (2)
	Environmental Impact Analysis			ERGS
7.	Efficiency Of Energy Conversion Due To Accumulation Of Dust On Solar Photovoltaic In	133000	2013-2015	
	Malaysia			GP-IBT
8.	Evaluation of Mismatch Power Losses due to Photovoltaic modules I-V characteristic variation	99000	2015-2017	
	in tropical climate condition			FRGS
9.	Effect of lightning induced transient on hybrid PV-Wind System	20000	217-2018	GP-IPS

	Awards/Recognition (Current)				
No	Name of awards	Title	Award Authority	Award Type	Year
1.	MALAYSIA INNOVATIVE PRODUCT AWARD	Ohmic Heated Pasteurizer	MTE	National	2008
2.	Gold Medal	Ohmic Heated Pasteurizer	IENA	International	2008

O	Year	Title	Authority	Amount
-	2008	Electrical and Temperature Testing of AFS2020	Global Technology Manufacturing Sdn Bhd	RM3,000
	2008	Curriculum Development Panel for Matriculation program in Electrical and Electronic Engineering	Ministry of Higher Education, Malaysia	-
3.	2006	Coordination and Preparation for practical course for Electrical and Electronic Engineering students of OUM	Open University Malaysia	RM2000

	Student Supervision				
PhD (Main Supervisor)					
No.	Name	Title	Status		
1.	Jasronita Jasni (GS16546)	Voltage Collapse Point Determination using CPF-Krylov Subspace Methods	Graduated (2010)		
2.	Mojgan Hojabri (GS20895)	ATC calculation using Kyrov Subspace Method	Graduated (2011)		



# **Student Supervision**

PhD (Main Supervisor)

No.	Name	Title	Status
3.	Akorede Mudathir (GS22664)	Optimal Location of Distributed Generators using Genetic Algorithm	Graduated (2011)
4.	Ir Mohd Effendy Ya'acob (GS28611)	Temperature Effect on PV Performance in Tropics	Graduated (2014)
5.	Warid Sayel Warid (GS38882)	Distributed Generation Optimization	Graduated (2017)
6.	Masoud Ahmadipour (GS47465)	Islanding Detection in Microgrids	On going
7.	Nwagbara Samuel Onuabuchi (GS47934)	Power Transformer Protection	On going

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Normisahili Miswan (GS16072)	Thermal Performance Analysis of Ferrule Designs	Graduated (2010)
2.	Sani Mohammed Lawal (GS25604)	Distributed Generation As A Supplement Source Of Electrical Energy For Universiti Putra Malaysia	Graduated (2012)
3.	Usman Hamisu (GS29336)	Development of Active Filter for Harmonic Mitigation	Graduated (2013)
4.	Aminmohammad Saberian (GS31959)	Prediction of PV Power Output based on ANN	Graduated (2014)
5.	Samad Shirzadi (GS34292)	Minimization of Mismatch Losses of PV array	Graduated (2015)
6.	Mohamadreza Maghami (GS34615)	Dust Effect on the Surface of PV Panel	Graduated (2015)
7.	Seyed Abbas Mousavi Maleki (GS36645)	Development Of A Power Management For A Stand-Alone Micro Hydro/Photovoltaic/Fuel Cell Energy System	Graduated (2016)
8.	Ahmed Ameen Sarhan Abdullah (GS44877)	Tilt Angles Optimization of PV Panels in Yemen	On going
9.	Zmnako Mohammed Khurshid Abda (GS45919)	Lightning Protection for Hybrid PV–Wind Systems	On going



# **Academic Contribution and other Professional Services**

- 1. Member of MCED (Malaysian Council of Engineering Deans)
- 2. MCED (Malaysian Council of Engineering Deans) Panel for Electrical and Electronic Engineering
- 3. MQA (Malaysian Qualification Agency) Panel and Head Panel, Academic Program Evaluator
- **4.** Curriculum Development Panel for Matriculation program in Electrical and Electronic Engineering, Ministry of Higher Education, Malaysia
- **5.** Chief Panel for Technical Matriculation Examination Paper Evaluation for Electrical and Electronic Engineering Subjects, Ministry of Higher Education, Malaysia
- **6.** Reviewer for Journal of Industrial Technology
- 7. Reviewer for Pertanika Journal of Science and Technology
- **8.** Reviewer for Elektrika
- **9.** Reviewer for International Journal of Engineering and Technology
- **10.** Reviewer for AUPEC 07,08 and 09 (Australasian Universities Power Engineering Conference), Australia
- 11. Reviewer for PECon, SCORED, WEC, TENCON and APPSAEM
- **12.** External examiner for MSc student, Universiti Teknologi Malaysia
- 13. External Examiner for MSc student, Universiti Kebangsaan Malaysia
- **14.** Reviewer for International Journal of Circuit Theory
- **15.** Reviewer for Electric Power Components and Systems
- 16. Reviewer for Electrical Engineering
- **17.** Track chair for Electrical Power Engineering for PECON 2012.
- 18. Panel of External Examiner for PhD candidate at Sathyabama University Chennai, India
- **19.** External Examiner for PhD candidate at Government College of Technology, Coimbatore, India
- **20.** Academic Promotion Referee for an associate professor at COMSATS Institute of Information Technology, Pakistan
- 21. External Examiner for MSc student, UNITEN
- 22. Internal examiner for MSc and PhD candidates (UPM)
- 23. Panel evaluator for research grant proposal, UPM
- 24. Panel evaluator for research grant proposal, Ministry of Higher Education Malaysia
- **25.** Academic Promotion Referee for an associate professor at Universiti Tun Hussein Onn Malaysia (UTHM)
- **26.** Reviewer for Cleaner Energy Production