



CURRICULUM VITAE



Profesor Ir. Dr. Mohd Zainal Abidin Ab Kadir
Department of Electrical and Electronic Engineering,
Universiti Putra Malaysia,
43400 UPM Serdang, Selangor

T: +603-8946 4362
F: +603-8946 6327

Education

1. Ph.D. High Voltage Engineering, University of Manchester, United Kingdom, 2006
2. B. Eng. Electrical and Electronics Engineering, Universiti Putra Malaysia, 2001

Areas of Interest

High Voltage Engineering, Lightning Protection and EMC/EMI

Professional Qualification/ Membership/ Affiliation

1. Professional Engineer (PEng), Board of Engineers, since 2013
2. Chartered Engineer (CEng), Engineering Council, UK since 2011
3. Chair, IEEE Power & Energy Society Malaysia Chapter, 2013-2014
4. Excom, MNC-CIGRE since 2010
5. Senior Member, IEEE since 2007
6. Member, IET since 2010
7. Member, IEM since 2013

Appointments

Position	Duration
1. Head, Department of Electrical and Electronic Engineering, Faculty of Engineering, UPM	August 2011 to date
2. Head, Centre for Electromagnetic and Lightning Protection Research (CELP), UPM	Dec 2008– July 2011
3. Head of Programme, Institute of Advanced Technology (ITMA)-AREL	2010-2011
4. Research Coordinator, Department of Electrical and Electronic Engineering, Faculty of Engineering, UPM	2009-2011

Publications

Journals

1. M. T. Askari, **M. Z. A. Ab. Kadir**, H. Hizam, 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 and Sustainable Energy, Vol. 6, pp. 1-20, 2014.
2. Aminmohammad Saberian, H. Hizam, M.A.M. Radzi, **M.Z.A. Ab Kadir**, Maryam Mirzaei, "Modelling and prediction of photovoltaic power output using Artificial Neural Networks", International Journal of Photoenergy, **In-press** (2014)
3. C. Gomes, **Z. Kadir**, "Efficient Lightning Protection: Optimization of Economic, Env Safety Aspects", Environmental Engineering and Management Journal, **In-press**, 2014

4. Ng, NM Adam, O Inayatullah, **MZAA Kadir**, "Assessment of solar radiated surfaces and optimum tilts for solar absorbers in Malaysian tropical latitude", International Journal of Energy and Environmental Engineering, Vol. 5, No. 5, 2014.
5. M. Izadi, **M. Z. A. Ab. Kadir**, V.Coaray, M. Hajikhani, "Estimation of Lightning Current and Return Stroke Velocity Profile Using Measured Electromagnetic Fields", Electric Power Components and Systems, Vol.42, No. 2, pp. 103-111, 2014
6. M. Fadaeenejad, M. A. M. Radzi, H. Hizam, **M. Z. A. Ab Kadir** "Assessment of Hybrid Renewable Power Sources for Rural Electrification in Malaysia", Renewable and Sustainable Energy Reviews, Vol. 30, pp. 299-305, 2014.
7. M. Fadaeenejad, A. M. Saberian, Mohd. Fadaee, M. A. M. Radzi, H. Hizam, **M. Z. A. Ab Kadir**, "Present and Future of Smart Grid in Developing Countries", Renewable and Sustainable Energy Reviews, Vol. 29, pp. 828-834, 2014
8. M. T. 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, Vol. 1, No. 2, pp. 8-13, 2013.
9. Effendy Yaacob, Hashim Hizam, M. Amran M. Radzi, **Mohd Z. A. Ab. Kadir**, "Calculating PV Module Temperature For Three Types of Crystalline PV Generator System Installed in Malaysia", International Journal of Photoenergy, Vol. 2013, ID 502503, 2013.
10. S. Ahmad, S. Shafie, **M. Z. A. Ab Kadir**, " On The Effectiveness of Time and Date-Based Sun Positioning Solar Collector in Tropical Climate: A Case Study in Malaysia", Renewable and Sustainable Energy Reviews, Vol. 28, pp. 635-642, 2013
11. A. AL-Masri, **M. Z. A. Ab Kadir**, H. Hizam, N. Mariun, "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, Vol. 28, Issue. 3, pp. 2516 – 2525, 2013
12. M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Considering on the Ground Reflection Effect on the Electromagnetic Fields due to Lightning Channel," Journal of Electrical Engineering & Technology, Vol. 8, No. 4, pp. 824-831, 2013
13. S. C. Lim, C. Gomes, **M. Z. A Ab. Kadir**, "Characterizing of Bentonite with Chemical, Physical and Electrical Perspectives for Improvement of Electrical Grounding Systems", International Journal of Electrochemical Science, Vol. 8, pp. 11429 – 11447, 2013
14. S. Ahmad, S. Shafie, **M. Z. A Ab. Kadir**, "Power Feasibility of a Low Power Consumption Solar Tracker", Procedia Environmental Sciences, Vol. 17, pp. 494–502, 2013 (**SCOPUS**)
15. M. Izadi, **M. Z. A. Ab Kadir**, M.T.Askari, M. Hajikhani, " Evaluation of Lightning Current Using Inverse Procedure Algorithm", International Journal of Applied Electromagnetics and Mechanics (IJAEM), Vol. 41, No. 3, 267–278, 2013 (**ISI; JIF: 0.384**)
16. N.Rameli, **M. Z. A. Ab Kadir**, M. Izadi, C. Gomes, J. Jasni, "Evaluation of Lightning Induced Voltage due to the Effect of Design Parameters on Medium Voltage Distribution Line", Jurnal Teknologi, Vol. 64, No. 4, pp. 151-155, 2013(**SCOPUS**)
17. M. Izadi, **M.Z.A. Ab Kadir**, M. Hajikhani, N. Rameli, "Effects of Lightning Current and Ground Conductivity on the Values of Vertical Electric Fields", Jurnal Teknologi, Vol. 64, No. 4, pp. 33-36, 2013(**SCOPUS**)
18. M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Evaluation of Lightning Current and Ground Reflection Factor Using Measured Electromagnetic Field", Applied Computational Electromagnetics Society Journal, Vol. 135, 677–694, 2013

19. M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "The Analytical Field Expressions Associated with Lightning Channel in Presence of Grounding Reflection at Striking Point", International Journal of Applied Electromagnetics and Mechanics (IJAEM), Vol. 42 (2), pp. 303-317, 2013
20. M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Evaluation of Electromagnetic Fields Due To Inclined Lightning Channel In Presence of Ground Reflection", Progress In Electromagnetic Research (PIER), Vol. 135, pp. 677-694, 2013
21. S. C. Lim, C. Gomes, **M. Z. A. Ab. Kadir**, "Electrical Earthing in Troubled Environment", International Journal of Electrical Power and Energy System, Vol. 47, pp. 117-128, 2013
22. C. Gomes, V. Cooray, **M. Z. A. Ab. Kadir**, "Vertical Electric Fields and Field Change Parameters Due To Partly Inclined Lightning Leader Channels", Progress In Electromagnetic Research (PIER), Vol. 135, pp. 55-80, 2013
23. M. T. Askari, **M. Z. A. Ab. Kadir**, M. Izadi, "Implementation of Numerical Method for Calculating the HST of Distribution Transformer", Archive Des Sciences, Vol. 65, No. 10, pp. 209-222, 2012
24. M. T. Askari, **M. Z. A. Ab. Kadir**, M. Izadi, "On the Trend of Improvement of Thermal Model for Calculating the TOT and HST", Przeglad Elektrotechniczny (Electrical Review), R. 88, NR 12A/2012, pp. 297-301, 2012
25. M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, V. Cooray, J. Schoene, "Evaluation of Lightning Current and Velocity Profiles Along Lightning Channel Using Measured Magnetic Flux Density", Progress In Electromagnetic Research (PIER), Vol. 130, pp. 473-492, 2012
26. M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, V. Cooray, "Evaluation of Lightning Return Stroke Current Using Measured Electromagnetic Fields", Progress In Electromagnetic Research (PIER), Vol. 130, pp. 581-600, 2012
27. M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, M. T. Askari, "Evaluation of Lightning Return Stroke Parameters Using Measured Magnetic Flux Density and PSO Algorithm", Przeglad Elektrotechniczny (Electrical Review), R. 88, NR 10A/2012, pp. 201-204, 2012
28. M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, "The Behavior of Radiation Components of Lightning Electric Versus Current Time Front Changes", Przeglad Elektrotechniczny (Electrical Review), R. 88, NR 11A/2012, pp. 308-311, 2012
29. M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "Analytical Expressions for Electromagnetic Fields Associated With the Inclined Lightning Channels In the Time Domain", Electric Power Components and Systems, Vol. 40 (4), pp. 414-438, 2012.
30. Y. Rafeeu, **M. Z. A. Ab. Kadir**, "Thermal Performance of Parabolic Concentrators Under Malaysian Environment: A Case Study", Renewable and Sustainable Energy Reviews, Vol 16, Issue 6, pp. 3826-3835, 2012.
31. 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, Vol 16, Issue 5, pp. 2747-2761, 2012
32. A.D. Usman, W.F. Wan Ahmad, **M.Z.A. Ab Kadir**, M. Mokhtar, A. Rusnani, "The Effect of RF EMF Exposure on Hematological Parameters", World Applied Science Journal (WASJ), 16 (5), pp. 656-664, 2012
33. A. Che Soh, R.Z. Abdul Rahman, **M.Z.A. Ab. Kadir**, N.S. Mohd Shif, "Development of the Lightning Location Mapping System Using Fuzzy Logic Technique", International Review on Modelling and Simulations (IREMOS), Vol. 4, No. 6, Part C, 2011.

34. A. M. Ariffen, **M. Z. A. Ab Kadir**, W. F. Wan Ahmad, M. S. A. Ishak, "The Modelling of Hybrid Surge Protection Circuit with Effect of Adding a Filter", International Review on Modelling and Simulations (IREMOS), Vol. 4, No. 5, Part B, 2011
35. M. Karami, N. Mariun, **M. Z. A. Ab Kadir**, "On the Application of Heuristic Method and Saddle-Node Bifurcation for Optimal Placement of FACTS Devices in Power System", International Review of Electrical Engineering (IREE), Vol. 6, No. 7, Part B, 2011.
36. A.D. Usman, W.F. Wan Ahmad, **M.Z.A. Ab Kadir**, M. Mokhtar, A. Rusnani, "Microwave Effect of 0.9 GHz and 1.8 GHz CW Frequencies Exposed to Unrestrained Swiss Albino Mice", Progress In Electromagnetic Research (PIER), Vol. 36, pp. 69-87, 2012
37. C. Gomes, **M. Z. A. Ab. Kadir**, "Lightning Protection: Getting it Wrong", IEEE Technology and Society Magazine (Cover Article), Vol. 30, No. 2, SUMMER 2011.
38. M. Izadi, **M. Z. A. Ab. Kadir**, C. Gomes, "Evaluation of Electromagnetic Fields Associated With Inclined Lightning Channel Using Second Order FDTD-Hybrid Methods", Progress In Electromagnetic Research (PIER). Vol. 117, pp 209-236, 2011
39. C. Gomes, **M. Z. A. Ab. Kadir**, "Erratum: Lightning Protection: Getting it Wrong, IEEE Technology and Society Magazine, Vol. 30, No. 3, pp. 12, 2011.
40. C. Gomes, **Z. Kadir**, "A Theoretical Approach to Estimate the Annual Lightning Hazards on Human Beings", Atmospheric Research, Vol. 101, Issue 3, pp. 719-725, 2011
41. M. Izadi, **M.Z. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "The Analytical Field Expressions due to Inclined Lightning Channel", Przeglad Elektrotechniczny (Electrical Review), R.87, NR 11/2011, pp. 277-280, 2011
42. A.D. Usman, W.F. Wan Ahmad, **M.Z.A. Ab Kadir**, M. Mokhtar, "Thermographic Analysis of Wi-Fi Frequencies Exposed to Unrestrained Swiss Albino Mice", International Journal of Physical Sciences (IJPS), Vol. 6(36), pp. 8097 - 8104, 2011
43. Mohd Khair Hassan, Ribhan Zafira Abdul Rahman, Azura Che Soh, **Mohd Zainal Abidin Abdul Kadir**, "Lightning Strike Mapping For Peninsular Malaysia Using Artificial Intelligence Techniques", Journal of Theoretical and Applied Information Technology, Vol. 34, No. 2, pp. 202-214, 2011.
44. A.D. Usman, W.F. Wan Ahmad, **M.Z.A. Ab Kadir**, M. Mokhtar, "Electromagnetic Field Exposure Assessments of GSM Base Stations in Commercial Areas", International Review on Modelling and Simulations (IREMOS), **In-press**.
45. M. Izadi, **M.Z. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "Numerical Expressions In Time Domain For Electromagnetic Fields Due To Lightning Channels", International Journal of Applied Electromagnetics and Mechanics (IJAEM), Vol. 37, Issue. 4, pp. 275-289, 2011.
46. M. Mirzaei, **M.Z.A Ab Kadir**, H. Hizam, E. Moazami, "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, Vol. 39, Issue 16, pp. 1858-1871, 2011.
47. J. Jasni, **M.Z.A Ab Kadir**, "Static Power System Security Assessment via Artificial Neural Network", Journal of Theoretical and Applied Information Technology", Vol. 31 (2), pp. 119-128, 2011.
48. C. Gomes, **M. Z. A. Ab. Kadir**, "Protection of Naval Systems Against Electromagnetic Effects Due to Lightning", Progress In Electromagnetic Research (PIER), Vol. 113, pp 333-349, 2011

49. M. F. Akorede, H. Hizam, I. Aris, **M. Z. A. Ab Kadir**, M. Hojabri, "A Windows-based Tool for Power Flow Analysis and DG Optimisation In Radial Distribution Networks", Scientific Research and Essays, Vol. 6 (6), pp. 1285-1302, 2011.
50. 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, pp. 276-287, 2011
51. M. Izadi, **M.Z.A. Ab. Kadir** and F.A. Abd. Rahman, "On Comparison Between Rusck and Taylor Coupling Models for Evaluation of Lightning Induced Voltage on the Power Lines", Journal of the Japan Society of Applied Electromagnetics and Mechanics (JSAEM), Vol.19, pp. S131-S134, 2011.
52. Amizah Md Ariffen, **Mohd Zainal Abd Kadir**, Wan Fatinhamamah Wan Ahmad, "The Development of Hybrid Surge Protection Circuit with Effect of Adding a Filter", International Journal of Engineering & Technology IJET-IJENS, Vol. 11, No. 2, pp. 38-47, 2011.
53. M. Izadi, **M. Z. A. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "Evaluation Of Electromagnetic Fields Due To Lightning Channel With Respect To The Striking Angle", International Review of Electrical Engineering (IREE), Vol. 6, No. 2, Part B, pp. 1013-1023, 2011
54. S. Ahmad, **M. Z. A. Ab Kadir**, S. Shafie, "Current Perspective of the Renewable Energy Development in Malaysia", Renewable and Sustainable Energy Reviews, Vol. 15, No. 2, pp 897-904, 2011
55. M. F. Akorede, H. Hizam, I. Aris, **M. Z. A. Ab Kadir**, "A critical review of strategies for optimal allocation of distributed generation units in electric power systems", International Review of Electrical Engineering (IREE), Vol. 5, No. 2, pp 593-600, 2011.
56. M. Izadi, **M. Z. A. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "An Analytical Second-FDTD Method For Evaluation of Electric and Magnetic Fields at Intermediate Distances From Lightning Channel", Progress In Electromagnetic Research (PIER), Vol. 110, pp 329-352, 2010
57. **M. Z. A. Ab. Kadir**, Y. Rafeeu, "A Review on Factors for Maximizing Solar Fraction Under Wet Climate Environment in Malaysia", Renewable and Sustainable Energy Reviews, Vol. 14, No. 8, pp 2243-2248, 2010
58. **M. Z. A. Ab. Kadir**, Y. Rafeeu, N. Adam "Prospective scenarios for the full solar energy development in Malaysia", Renewable and Sustainable Energy Reviews, Vol. 14, No. 9, pp 3023-3031, 2010
59. M. F. Akorede, H. Hizam, I. Aris, **M. Z. A. Ab Kadir**, "A Review of Strategies for Optimal Placement of Distributed Generation in Power Distribution Systems", Research Journal of Applied Sciences, 5(2), pp. 137-145, 2010.
60. **M. Z. A. Ab. Kadir**, M. Izadi, "New Algorithm for Evaluation of Electric Fields due to Indirect Lightning Strike", Computer Modeling in Engineering Science (CMES), Vol. 67, No. 1, pp 1-12, 2010
61. **M.Z.A Ab Kadir**, I. Cotton, "Application of The Insulator Coordination Gap Models and Effect of Line Design To Backflashover Studies", International Journal of Electrical Power and Energy System, Vol. 32, No. 5, pp. 443-449, 2010
62. Zawati Mohd Nawati, Nor Ratna Misbah, **M.Z.A Ab. Kadir**, "A Critical Review on the Contamination Effect on Distribution Overhead Lines", International Review of Electrical Engineering (IREE), Vol. 5, No. 4, Part B, 2010

63. **M. Z. A. Ab Kadir**, Z. Mohd Nawawi, J. Sardi, "Numerical Modeling And Simulation In Electromagnetic Transient Program For Estimating Line Backflashover Performance" IAENG-Engineering Letters, Vol. 18, Issue 4, pp 351-356, 2010
64. M. Karami, N. Mariun, **M. Z. A. Ab Kadir**, "Genetic Algorithm-based Optimal Location of TCSC and SSSC in the Power System Network", International Review on Modelling and Simulations (IREMOS), Vol. 3, No. 6, pp 1492-1500, 2010
65. 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 (IREE), Vol. 5, No. 4, Part B, 2010.
66. 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, Vol. 1, No. 20, 2010
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 (IREE), Vol. 5 , Part B, 2010.
68. Y. Rafeeu, **M. Z. A Ab Kadir**, S. M. Abdullah, N. M. Adam,"Solar Radiation and Temperature Measurement of a Solar Dish Concentrator System", Journal of Energy and Power Engineering, Vol. No. 2, pp. 15-19, 2010.
69. 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): 2670-2676, 2009.
70. A.D. Usman, W.F. Wan Ahmad, **M.Z.A. Ab Kadir**, M. Mokhtar, "Wireless Phones Electromagnetic Field Radiation Exposure Assessment", American Journal of Engineering and Applied Sciences , 2(4): 771-774, 2009.
71. 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 Technology, Vol. 6, Issue 2, 2009
72. **M. Z. A. Ab Kadir**, M. Tolou Askari, " Modeling Ferroresonance Phenomena on Voltage Transformer (VT), Journal of Electrical Engineering (JEE), Vol. 9, Edition 1, pp 77-84, 2009.
73. **M. Z. A Ab Kadir**, M. H. Mohamed Ariff, A.M. Azmi, "Modelling 132 kV Substation for Surge Arrester Studies",International Journal of Emerging Electric Power Systems, Vol. 9, Issue 5 (6) pp 1-16, 2008.
74. **M. Z. A Ab Kadir**, M. H. Mohamed Ariff, J. Sardi, "Application of Substation Transient Modelling Technique for Surge Arrester Studies", International Review on Modelling and Simulations (IREMOS), Vol. 1, No. 2, pp 349-354, 2008.
75. S. A. Bashi, N. F. Mailah, M. Z. Kadir, K. H. Leong, "Generation of Triggering Signals for Multilevel Converter", European Journal of Scientific Research, Vol.24 No.4, pp.548-555, 2008.
76. **M. Z. A Ab Kadir**, W. F. Wan Ahmad, J. Jasni, H. Hizam, "The Importance of Corona Effect In Lightning Surge Propagation Studies", Journal of Applied Science, Vol. 8, No. 19, pp 3446-3452, 2008.

77. **M. Z. A Ab Kadir**, A. M. Azmi, "Impact of Lightning Surge Surge Arrester Placement in High Voltage Substation", Journal of Applied Science, Vol. 8, No. 18, pp 3298-3301, 2008.
78. J. Jasni, N. Azis, H. Hizam, **M. Z. A Ab Kadir**, N. Mariun, S.B.M Noor, S. Sobri, "An Efficient Generalized Minimized Residual Technique for Continuation Power Flow", Asian Journal of Applied Science, Vol. 1, No. 2, pp 136-146, 2008.
79. **M. Z. A Ab Kadir**, H. Ahmad, J. Jasni, "Effect of the non-standard lightning current and waveshape on lightning surge analysis", Asian Journal of Applied Science, Vol. 1, No. 2, pp 168-176, 2008.
80. I. Cotton, **M. Z. A Ab Kadir**, "A Randomised Leader Progression Model for Backflashover Studies", European Transaction on Electrical Power, Vol. 18, No. 7, pp 709-724, 2008.
81. **M. Z. A Ab Kadir**, M. H Ahmad, J. Jasni "Review of Insulation Coordination on EHV Lines", Global Journal of Engineering and Technology, Vol. 1, No. 3, pp 317-328, 2008.
82. J. Jasni, H. Hizam, **M. Z. A Ab Kadir**, N. Mariun, S. Bahari, "Steady-State Voltage Stability Analysis Using Continuation Power Flow: A Review", Journal of Industrial Technology, SIRIM Malaysia, Vol. 17, No. 1, pp 181-190, 2008.
83. **M. Z. A Ab Kadir**, M. H Ahmad, J. Jasni, W. F. Wan Ahmad, "Critical Review on the Need for Insulation Coordination Studies in Malaysia", Journal of Industrial Technology, SIRIM Malaysia, Vol. 17, No. 1, pp 129-141, 2008.
84. **M. Z. A Ab Kadir**, I. Cotton, "Effect of Corona Model on Different Conductors in Lightning Surge Propagation Studies", Engineering Transactions, Mahanakorn University of Technology, Vol. 10, No. 1(22), pp 38-45, January-June 2007.

Conference Proceedings

- 1 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Ground Reflection Effect On The Lightning Electromagnetic Fields", 22nd International Conference on Electricity Distribution-CIRED 2013, Paper No. 0449, Stockholm, 10-13 June 2013.
- 2 M. Izadi, **M. Z. A. Ab Kadir**, "On the Relation between Ground Resistivity and Lightning Induced Voltage Evaluation on the Distribution Lines", Innovations in Energy, Power and Electrical Machines-IEPEM 2013, Istanbul, Turkey, 5-7 Sept 2013.
- 3 N. Rameli, **M. Z. A. Ab Kadir**, M. Izadi, C. Gomes, J. Jasni, "Behaviour of Lightning Induced Voltage due to Inclined Lightning Channel," Innovations in Energy, Power and Electrical Machines-IEPEM 2013, Istanbul, Turkey, 5-7 Sept 2013.
- 4 Siow Chun Lim, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Preliminary Grounding Performance of Bentonite Mixed Concrete Encased Steel Cage under High Soil Resistivity Condition", 8th Asia Pacific International Conference on Lightning, Seoul Korea, 2013
- 5 Hasemi, J. Jasni, **M.Z.A Ab Kadir**, C. Gomez, M. Izadi, S.F. Mat Mazali, F.M. Abd Wahab, "Electric Field Measurement due to Atmospheric Discharges", 8th Asia Pacific International Conference on Lightning, Seoul Korea, 2013
- 6 Ghasem Nourirad, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Siow Chun Lim, "Risk of Side Flashes from Lightning Struck Objects to Human Body: A Quantitative Analysis", 8th Asia Pacific International Conference on Lightning, Seoul Korea, 2013
- 7 M. Izadi, **M. Z. A. Ab Kadir**, N. Rameli, M. Hajikhani, "On the Effect of Conductor Height on the Lightning Induced Voltage Evaluation in the Presence of Shielding Wire", 8th Asia Pacific International Conference on Lightning, Seoul Korea, 2013

- 8 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Considering on the Shielding Wire Effect on the Values of Lightning Induced Voltage in Distribution Lines", 8th Asia Pacific International Conference on Lightning, Seoul Korea, 2013
- 9 J. Sardi, **M. Z. A. Ab Kadir**, "Investigation on the effects of line parameters to the lightning performance of 132 kV Kuala Krai-Gua Musang transmission line", 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 10 Narjes Fallah, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Lightning Protection Techniques for Rooftop PV Systems", 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 11 Amin Mohammad Saberian, Payam Farzan, Mohsen Fadaee Nejad, Hashim Hizam, Chandima Gomes, Mohammad Lutfi Othman, Mohd Amran Mohd Radzi, **Mohd Zainal Abidin Ab Kadir**, "Role of FACTS Devices in Improving Penetration of Renewable Energy," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 12 Masoud Aminian, **Mohd Zainal Abidin Ab Kadir**, Salmiaton Ali, Wan Fatinhamamah Wan Ahmad, M Taufiq Ishak, Mahdi Izadi, "Correlation of Furfural and Moisture Content with Age of Transformers," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 13 Ehsan Moazami, **Mohd Zainal Abidin Ab Kadir**, Hashim Hizam, Maryam Mirzaei, "Optimal Penalty Method in Distribution Service Restoration Using Genetic Algorithm," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 14 Mohammad Tolou Askari, **Mohd Zainal Abidin Ab Kadir**, Hashim Hizam, Jasronita Jasni, "Evaluation of Uncertainty on Generation Expansion Planning," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013 (**SCOPUS**).
- 15 Siow Chun Lim, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Environmental Effects on the Performance of Electrical Grounding Systems," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 16 Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Maryam Hajikhani, "On the Behavior of Lightning Induced Voltage," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013 (**SCOPUS**).
- 17 Norhidayu Rameli, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, "Evaluation of Lightning Induced Over-Voltage Due to Variations of Channel Angle," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 18 Ahmad Rezaee Jordehi, Jasronita Jasni, Noor Izzri Abdul Wahab, **Mohd Zainal Abidin Ab Kadir**, "Particle Swarm Optimization Applications in FACTS Optimisation Problem," 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 19 Salih Gwami Mohammed, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, "Safety issues of Capacitor Banks in Medium Voltage Systems", 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 20 Ghasem Nourirad, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Corona Losses: Issues and Solutions", 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013

- 21 Mohsen Fadaee Nejad, AminMohammad Saberian, Hashim Hizam, Mohd Amran Mohd Radzi, **Mohd Zainal Abidin Ab Kadir**, "Application of Smart Power Grid in Developing Countries", 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOC02013), Langkawi, Malaysia, 2013
- 22 S. Ahmad, S. Shafie, **M. Z. A Ab. Kadir**, "Power Feasibility of a Low Power Consumption Solar Tracker, The 3rd International Conference on Sustainable Future for Human Security (SUSTAIN 2012), Kyoto, Japan, 2012.
- 23 M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, V. Cooray, "Analytical Fields Expressions due to Lightning Channel considering Variation of Return Stroke Velocities along the Lightning Channel", International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012
- 24 M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, V. Cooray, "Improved Algorithm for Evaluation of Lightning Current using Measured Field at Far Distances from Lightning Channel", International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012
- 25 V. Laverde, **M. Z. A Ab Kadir**, C. Gomes, "Performance of Backfill Materials Under Impulse and AC Testings", International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 26 N. Rameli, **M. Z. A. Ab Kadir**, M. Izadi, C. Gomes, J. Jasni, "On The Influence of Inclined Lightning Channel on Lightning Induced Voltage Evaluation", International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012
- 27 **M. Z. A. Ab Kadir**, N. R. Misbah, C. Gomes, J. Jasni, W. F. Wan Ahmad, M. K. Hassan, "Recent Statistics on Lightning Fatalities in Malaysia", International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012
- 28 Lee Weng Choun, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Wan Fatimahamamah Wan Ahmad, "Analysis of Earth Resistance of Electrodes and Soil Resistivity at Different Environments," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012. **(SCOPUS)**
- 29 Siow Chun Lim, **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes, Jasronita Jasni, "Ambiguity of Grounding Specifications: IEC 62305 Revisited," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 30 Sani Dahiru Buba, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Lightning Accidents in Nigeria: With Special Attention to Aviation Mishaps," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 31 Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Mary Ann Cooper, "Lightning Safety Scheme for Sheltering Structures in Low-income Societies and Problematic Environments," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 32 Foster Chileshe Lubasi, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Mary Ann Cooper, "Case Studies of Lightning Related Injuries and Property Damage in Zambia," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 33 Siow Chun Lim, **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes, Sani Dahiru Buba, "Preliminary Results of the Performance of Grounding Electrodes Encased in Bentonite-Mixed Concrete," International Conference on Lightning Protection (ICLP), Vienna, Austria, 2012.
- 34 M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, "On the Consideration of the Channel Angle Effects on the Electromagnetic Fields Associated with Inclined Lightning Channel," IEEE International Power Engineering and Optimization Conference (PEOC02012), Melaka, Malaysia, pp. 29-34, 2012.

- 35 M.T. Askari, **M. Z. A. Ab. Kadir**, J. Jasni, "A Numerical Method For Calculating the Loss of Life of Power Transformers," IEEE International Power Engineering and Optimization Conference (PEOC02012), Melaka, Malaysia, pp. 153-158, 2012
- 36 M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, "Channel Base Current Effects on the Magnetic Flux Density Waveshape Associated with Vertical Lightning Channel", Progress In Electromagnetics Research Symposium Proceedings, Kuala Lumpur, Malaysia, 2012.
- 37 C. Gomes, **M. Z. Ab. Kadir**, M. Izadi, "Arcing Effects of Lightning Induced Voltages in a Long Wire", Progress In Electromagnetics Research Symposium Proceedings, Kuala Lumpur, Malaysia, 2012.
- 38 H. Rusli, C. Gomes, **M. Z. Ab. Kadir**, "ARC-phobic and Other Characteristics of Surface Flashover", Progress In Electromagnetics Research Symposium Proceedings, Kuala Lumpur, Malaysia, 2012. **(SCOPUS)**
- 39 N. A. Abd. Rahman, N. Abdullah, A. M. Ahmad Marican, A. M. Davies, **M. Z. A Ab Kadir**, "A Practical Method for Optimised Earth Electrode Designs at Transmission Towers Exposed to Lightning", Asia-Pacific International Conference on Lightning (APL 2011), 1-4 Nov. 2011, Chengdu, China.
- 40 Z. Mohd Nawawi, **M. Z. A. Ab Kadir**, W. F. Wan Ahmad, "On the Placement of Line Arrester on Underbuilt Overhead Distribution Line", 4th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO), Kuala Lumpur, pp. 1-6, 2011.
- 41 N. R. Misbah, **M. Z. A. Ab Kadir**, C. Gomes, "Modelling and Analysis of Different Aspect of Mechanisms In Lightning Injury", 4th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO), Kuala Lumpur, pp. 1-5, 2011
- 42 A. D. Usman, W. F. Wan Ahmad, **M. Z. A. Ab Kadir**, M. Mokhtar and A. Rusnani, "Thermographic Analysis of Swiss Albino Mice Exposed to 1.8GHz GSM Frequency", Progress In Electromagnetics Research Symposium Proceedings, Marrakesh, Morocco, pp. 110-115, 2011
- 43 A. D. Usman, W. F. Wan Ahmad, **M. Z. A. Ab Kadir**, M. Mokhtar and M. A. Zainal Abidin, "Densitometry of Electromagnetic Field Exposure Due to Wi-Fi Frequency", Progress In Electromagnetics Research Symposium Proceedings, Marrakesh, Morocco, pp. 1385-1390, 2011.
- 44 M. Aminian, E. Moazami, M. Mirzaei, **M. Z. AAb Kadir**, "A Proposed Genetic Algorithm to Optimize Service Restoration in Electrical Networks With Respect to the Probability of Transformers Failure", IEEE International Conferences on Power Energy (PECON 2010), Kuala Lumpur, Malaysia, 2010.
- 45 A. N. AL-Masri, **M. Z. A Ab Kadir**, H. Hizam, N. Mariun, S. Yusof, "Control Action based on Steady-State Security Assessment using Artificial Neural Network," IEEE International Conferences on Power Energy (PECON 2010), Kuala Lumpur, Malaysia, 2010.
- 46 M. Izadi, **M. Z. A Ab Kadir**, "Considering on return stroke current wave shape for tall object cases", IEEE Student Conference on Research and Development (SCORED), Kuala Lumpur, pp. 471 – 474, 2010.
- 47 M. Izadi, **M. Z. AAb Kadir**, "On Consideration of Charge Density Along Return Stroke Lightning Channel," IEEE International Conferences on Power Energy (PECON 2010), Kuala Lumpur, Malaysia, 2010.

- 48 M. F. Akorede, H. Hizam, I. Aris, **M. Z. A Ab Kadir**, E. Pouresmaeil, "Economic Viability of Distributed Energy Resources Relative to Substation and Feeder Facilities Expansion," IEEE International Conferences on Power Energy (PECON 2010), Kuala Lumpur, Malaysia, 2010.
- 49 Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Farah Asyikin Abd Rahman, "Comparison Between Different Coupling Models for Evaluation of Lightning Induced Voltage on the Power Lines Due to Step Return Stroke Current", Conference on Electrical and Electronic Technology, World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, 2nd-5th August 2010, pp 562-569
- 50 Ehsan Moazami, **Mohd Zainal Abidin Ab Kadir**, Hashim Hizam, Maryam Mirzaei, "Optimal Service Restoration in Distribution Networks Using Genetic Algorithm", Conference on Electrical and Electronic Technology, World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, 2nd-5th August 2010, pp 475-480
- 51 Maryam Mirzaei, **Mohd Zainal Abidin Ab Kadir**, Hashim Hizam, Ehsan Moazami, "Fault Location and Diagnosis on Unbalanced Distribution Networks Using Probabilistic Neural Network and Generalised Regression Neural Network", Conference on Electrical and Electronic Technology, World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, 2nd-5th August 2010, pp 468-474
- 52 M. Aminian, **M. Z. A. Ab Kadir**, W. F. Wan Ahmad, S. Ali, M. A. Talib, "Transformer Insulation Assessment by Spectroscopic Methods: Possibility and Ability", Conference on Electrical and Electronic Technology, World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, 2nd-5th August 2010, pp 327-332
- 53 M. F. Akorede, H. Hizam, I. Aris, **M. Z. Ab. Kadir**, "Optimal Placement of Distributed Power Generation for Cost Minimisation and Voltage Profile Improvement in Power Systems", Conference on Electrical and Electronic Technology, World Engineering Congress 2010 (WEC 2010), Kuching, Sarawak, 2nd -5th August 2010, pp 39-46
- 54 Jasronita Jasni, Siow Lip Khai, **Mohd Zainal Ab. Kadir**, Wan Fatimahamamah Wan Ahmad, "Natural additive filler materials for grounding protection system", International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 55 Wan Fatimahamamah Wan Ahmad , Mohammad Syafiq Abdul Rahman , Jasronita Jasni , **Mohd Zainal Abidin Ab Kadir** , Hashim Hizam, "Chemical enhancement materials for grounding purposes", International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 56 **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, "New approach in time domain for evaluation of electric and magnetic fields near the lightning channel", International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 57 Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, "Challenges in the promotion of lightning protection know-how in developing world", International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 58 **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes, Mary Ann Cooper, "An overview of the world statistics on lightning fatalities", International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 59 Cooper MA, **Ab Kadir MZA**, "Lightning injury continues to be a public health threat internationally", International Lightning Meteorology Conference (ILMC), Orlando, Florida, USA, April 21-22 2010
- 60 N. Nik Pa, **M. Z. A. Ab. Kadir** and R. Mohd Shafie, "Development of Dynamic Database for Distribution System Automation", Asia Pacific Symposium of Applied Electromagnetics and Mechanics (APSAEM 2010), 28-30 July 2010, Kuala Lumpur, Malaysia

- 61 M. Izadi, **M. Z. A. Ab. Kadir** and F. A. Abd Rahman, "On Comparison Between Rusck And Taylor Coupling Models For Evaluation Of Lightning Induced Voltage On The Power Lines", Asia Pacific Symposium of Applied Electromagnetics and Mechanics (APSAEM 2010), 28-30 July 2010, Kuala Lumpur, Malaysia
- 62 M. Izadi, **M. Z. A. Ab. Kadir**, "Comparison between TL and MTLE models on the electric and magnetic fields in the far distance from lightning channel", CIGRE: A Colloquium on Lightning and Power Systems, 15-18 May 2010, Kuala Lumpur.
- 63 W. F., Wan Ahmad, D. W. P., Thomas, C., Christopoulos, M. S., Mohamad Hashim, J., Jasni, **M. Z. A., Ab Kadir** and H., Hizam, "Effective Length of a Single Long Horizontal Ground Conductor Buried in Homogeneous Soil", IEEE Power Systems Conference and Exposition, pp 1-5. DOI: 10.1109/PSCE.2009.4840161
- 64 Mahdi Izadi; **Mohd Zainal Abidin Ab. Kadir**; Wan Fatinhamamah Wan Ahmad; Zawati Mohd Naw; Mohammad Tolou Askari, "On comparison between Cooray-Rubinstein and FDTD methods for ground conductivity effect on horizontal electric field evaluation in time domain", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 65 Mudathir F. Akorede; Hashim Hizam; Ishak Aris; **Mohd Zainal Abidin Ab Kadir**, "Contingency Evaluation for Voltage Security Assessment of Power Systems", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 66 Masoud Aminian; **Mohd Zainal Abidin Ab. Kadir**; Wan Fatinhamamah Wan Ahmad; Senan Mahmood, "Investigation of Paper Aging Assessment by Furan Concentration Monitoring", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 67 Mohammad Tolou Askari; **Mohd Zainal Abidin Ab. Kadir**; Wan Fatinhamamah Wan Ahmad; Mehdi Izadi, "Investigate the Effect of Variations of Ambient Temperature on HST of Transformer", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 68 Ahmed AL-Masri, **Mohd Zainal Abidin Ab Kadir**, Hashim Hizam, Jasronita Jasni, Norman Mariun, "Transient Security Assessment for Power System Stability: A Review on Artificial Intelligence Approach", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 69 Mahdi Karami; Norman Mariun; **Mohd Zainal Abidin Ab Kadir**, "On Basic Definition of Optimal Allocation of FACTS Devices in Power System", IEEE Student Conference on Research and Development (SCOREd), Kuala Lumpur, 2009.
- 70 Yaaseen Rafeeu, **Mohd Zainal Abidin Ab Kadir**, Senan Mohamed Abdulla, Nor Mariah Adam, "Theoretical Modeling of Solar Dish Concentrator", International Advanced of Technology Congress (ATCi), PWTC, Malaysia. November 3-5, 2009
- 71 M. H. Mohamed Ariff, **M. Z. A Ab Kadir**, J. Jasni, R. Mesron, M. T Salahuddin, J. Lamsi, "Evaluation And Assessment Of Transformer Failure on 132kV Substation", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 72 J. Sardi, **M. Z. A Ab Kadir**, H. Hizam, W. F. Wan Ahmad, I. Mohamed Rawi, A. Ahmad, "Backflashover Analysis For 132 kV Kuala Krai-Gua Musang Transmission Lines", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 73 W. F., Wan Ahmad, D. W. P., Thomas, C., Christopoulos, M. A., Drahman, J., Jasni, **M. Z. A., Ab Kadir** and H., Hizam, "Study on Various Excitation Voltage Effects to the Transient Responses of a Single Long Horizontal Ground Conductor", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.

- 74 W. F., Wan Ahmad, D. W. P., Thomas, C., Christopoulos, K. A., Mohd Sharim, J., Jasni, **M. Z. A., Ab Kadir** and H., Hizam, "Transient Responses due to Various Burial Depths on a Single Long Horizontal Ground Conductor", 2ndIEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 75 W. F., Wan Ahmad, D. W. P., Thomas, C., Christopoulos, M. S., Mohamad Hashim, J., Jasni, **M. Z. A., Ab Kadir** and H., Hizam, "Effects of Homogenous Soil Characteristics to the Transient Responses of a Single Long Horizontal Ground Conductor Model", 2ndIEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 76 J. Jasni, H. Hizam, **M. Z. A. Ab Kadir**, N. Mariun, S. Bahari, "Determination of Proximity to Static Voltage Collapse Using CPF-GMRES Method", 2ndIEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 77 A. N. A. Al-Masri, **M. Z. A., Ab Kadir**, A. Khairuddin, "Power System Static Security Assessment Under Contingencies and Load Increases Using Artificial Neural Network", IEEE Student Conference on Research and Development (SCORED), Johor Baharu, 26-27 Nov. 2008.
- 78 A. D., Usman, W. F., Wan Ahmad, **M. Z. A., Ab Kadir** and M., Mokhtar, "Non-Ionizing Radiation: the Benefit and the Concern", Malaysian Science and Technology Congress 2008, 16-17 December 2008, Kuala Lumpur, Malaysia.
- 79 H., Hizam, J., Jasni, **M. Z. A., Ab Kadir** and W. F., Wan Ahmad, "Fault Detection, Classification and Location on an Underground Cable Network using Wavelet Transform", Conference on Science, Engineering and Technology 2008, 15-17 December 2008, Kuching, Malaysia.
- 80 **M.Z.A. Ab Kadir**, N. Zakaria, J. Jasni, H. Ahmad, W.F. Wan Ahmad, H. Hizam, "Insulation Coordination Study For Transformer Protection", World Engineering Congress 2007, Penang
- 81 **M. Z. A. Ab Kadir**, I. Cotton, "Estimating The Probability of Transformer Damage and Backflashover Rate Using Randomised Leader Progression Model", World Engineering Congress 2007, Penang.
- 82 W. F. Wan Ahmad, D. W. P. Thomas, C. Christopoulos, J. Jasni, **M. Z. A. Ab Kadir**, H. Hizam, "Modelling Of A Ground Wire Using TLM", World Engineering Congress 2007, Penang.
- 83 H. Hizam, J. Jasni, N. Azis, **M. Z. A. Ab Kadir** and W. F. Wan Ahmad, "Determination of Proximity To Static Voltage Collapse Using Continuation Power Flow Method", World Engineering Congress 2007, Penang.

Books (Author/Editor)/ Technical Report/ Guidelines/ Policy

- 1 Handbook on Lightning Protection System Installation for Buildings. To be published by Energy Commission of Malaysia, 2013
- 2 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60243-1: 2014 – Electrical strength of insulating materials – test methods – Part 1: Test at power frequencies, Department of Standards Malaysia
- 3 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60243-1: 2014 – Electrical strength of insulating materials – Test methods – Part 2: Additional requirements for test using direct voltage, Department of Standards Malaysia
- 4 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60243-1: 2014 – Electrical strength of insulating materials – Test methods – Part 3: Additional requirements for 1.2/50µs impulse test, Department of Standards Malaysia

- 5 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60099-8: 2013 - Surge arresters- Part 8: Metal-oxide surge arresters with external series gap (EGLA) for overhead transmission and distribution lines of a. c. systems above 1 kV, Department of Standards Malaysia.
- 6 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60383-1: 2013 – Insulators for overhead lines with a nominal voltage above 1000V – Part 1: Ceramic or glass insulator units for a. c. systems – Definitions, test methods and acceptance criteria, Department of Standards Malaysia.
- 7 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60383-2: 2013 – Insulators for overhead lines with a nominal voltage above 1000V – Part 2: Insulator strings and insulator sets for a. c. systems – Definitions, test methods and acceptance criteria, Department of Standards Malaysia.
- 8 Forensic Report on the Cause(s) of Collapse of Fin Shaped Column Atop of Menara UMNO in Georgetown, Pulau Pinang and Building Audit
- 9 Report on Power System Study Associated with FEED Works for Transmission Development of RAPID-PCP-TNB Interconnection
- 10 Mahdi Karami, Norman Mariun, **Mohd Zainal Abidin Ab Kadir**: Placement of FACTS-Employing Genetic Algorithm, Published by LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrucken, Deutschland. 225 pages, 2012. ISBN: 978-3-659-12309-2
- 11 Pekeliling Bil. 03/2011: Penetapan Kaedah Pemasangan Sistem Perlindungan Kilat di Bangunan-Bangunan (*Designation of Lightning Protection Systems Installation Methods for Buildings*), ST (IP/JKE)PE/16/04/1(3).
- 12 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60071-4: 2012 - Insulation Coordination-Computational guide to insulation co-ordination and modelling of electrical networks, Department of Standards Malaysia.
- 13 **Mohd Zainal Abidin Ab Kadir** (Contributor), MS IEC 60071-5: 2012 - Insulation Coordination - Procedures for high-voltage direct current (HVDC) converter stations, Department of Standards Malaysia.
- 14 **Mohd Zainal Abidin Ab Kadir** (Co-Author), IEEE Standard 1410-2010: Guide for Improving the Lightning Performance of Electric Power Overhead Distribution Lines, IEEE USA, pp. 1-73, 2011. ISBN 978-0-7381-6488-5
- 15 **Mohd Zainal Abidin Ab Kadir** (Co-Author), Guideline in Insulation Coordination Practices for MV Overhead Distribution System for TNB Distribution, Malaysia, 2009.
- 16 Hashim Hizam, Rahman Wagiran, Raja Mohd Kamil Raja Ahmad, Izhal Abdul Halin, Mohd Nizar Hamidon, Maryam Mohd Isa, **Mohd Zainal Abidin Ab Kadir**, Jasronita Jasni (editors), Proceedings of World Engineering Congress 2007: Electrical and Electronic Engineering, FEIIC, 2007. ISBN 978-983-41705-6-1

Chapter in Books

- 1 MA Cooper, **MZA Ab Kadir** and C Gomes in Chapter: Electrical and Lightning Injuries for Textbook of Emergency Medicine. Wolters Kluwer Health (Lippincott, Williams and Wilkins), Delhi India, 2011. ISBN: 9788184732023

Research Grants				
No	Project Title	Amount (RM)	Duration	Source of Fund
1	Global Lightning Network Sensor for Lightning Research	927,500(USD 265,000)	2009-2019 (10 years)	WSI Corporation USA
2	Novel Development of Lightning Detection System Network Utilizing Inverse Procedure Technique and Measured Electromagnetic Fields	336,500	08/2013-09/2015	Science Fund (MOSTI)
3	The Study of Atmospheric Electric Field: Feasibility for Energy Harvesting	116,000	12/2012-11/2015	FRGS
4	Welfare, Physiological Responses, Carcass Characteristics And Meat Quality Assessments In Goats Subjected To Different Methods Of Electrical Stunning In Comparison With The Conventional Halal Slaughtering Method	198,000	11/2013-10/2015	GP-IBT (UPM)
5	Investigation On The Electrical And Physical Characteristics Of Coconut Oil Used As Dielectric Insulating Liquid In A Transformer	83,000	12/2013-11/2016	FRGS
6	Investigation On The Electrical Performance Of Palm Oil As A Dielectric Insulating Liquid In A Transformer	50,000	11/2013-10/2015	GP-IPM (UPM)
7	Effect of Down Conductor with Respect to Bending Angle in Lightning Protection System Installation	134,000	06//2013-06/2016	ERGS
8	Dynamic Vulnerability Assessment System for Electrical Power System Stability Enhancement	57,200	01/2013-12/2014	RUGS
9	Enhancing the Technical Aspects of Lightning and Electromagnetics for Optimum Power System Design and Protection	110,000	09/2012-08/2014	RUGS
10	Characterization And Determination of Lightning Induced Overvoltage For Sustainable Lightning Protection Systems In Tropical Climate	130,000	02/2010-02/2012	RUGS
11	Development Of A High Efficiency Solar-Integrated Power System Utilizing Motorized System With Two-Axes Angle Controller	240,000	2011-2013	KeTTHA
12	Investigation and Characterization of Active Solar Power System with Angle Controller Utilizing Date and Time-based Approach	76,140	05/2012-04/2014	FRGS (MOHE)
13	Development of Concrete-based Conductivity Enhancement Materials for Electrical Grounding Systems	100,000	04/2011-03/2013	RUGS
14	Fundamental Study On Prediction Model Of Chemical Enhancement Materials For Grounding Purposes	44,000	02/2010-02/2012	FRGS (MOHE)
15	Characterization And Performance Study of Superconductor Application On Power Transmission System	30,000	11/2009-11/2011	RUGS
16	A Randomised Leader Progression Model For Backflashover Studies and Evaluation of Lightning Performance on Transmission and Substation	234,000	02/2008 – 12/2009	Science Fund (MOSTI)
17	Improved Coordination Gap Model For Insulation Coordination Studies	10,000	02/2007 - 02/2008	PLB (UPM)
18	Impact of Non-standard Lightning Surge on Substation Insulation Coordination	70,000	07/2007 – 07/2009	RUGS
19	A New Method of Prediction an Impact of the Lightning on Transmission and Substation Insulation Coordination	100,000	11/2007 – 11/2009	FRGS (MOHE)
20	A Time Domain Study on Transient Responses of	30,000	07/2008 -	RUGS

	the Wind Turbine Tower in a Windfarm		07/2009	
21	Development of Online Power Quality Monitoring System For Malaysia Nuclear Agency	Facilities	07/2007 – 07/2008	Malaysian Nuclear Agency
22	AAAS-TWAS Course on Science Diplomacy	Fellowship	8-13 June 2014	TWAS
23	An Open World: Science, Technology and Society in the Light of Niels Bohr's Thoughts	Fellowship	2-8 Dec. 2013	Copenhagen University, Denmark
24	Short Training on High Voltage Modular Set, TERCO HQ, Sweden	Travel Grant	24-30 Jan. 2009	TERCO Sweden
25	E7-Short Course on Solar Thermal, RENAC, Schönhauser Allee 10-11, 10119 Berlin	Travel Grant	16-20 Feb. 2009	Renewable Academy, Berlin

Awards/Recognition (Current)

No	Name of awards	Award Authority	Award Type	Year
1	Young Scientist Network-Academy of Sciences Malaysia (YSN-ASM)	ASM	National	2012
2	Vice Chancellor Fellowship Award (Young Researcher – Science and Technology Cluster)	UPM	National	2012
3	Highly Cited Author	Thompson Reuters-Web of Science	International	2012
4	Recipient of Excellent in Service Award 2012-APC 2012	UPM	University	2012
5	IEEE PES High Performance Chapter Award (Exec Comm)	IEEE PES	International	2012
6	IEEE GOLD Affinity Group Hall of Fame Award 2011	IEEE	International	2011
7	<i>Marquis</i> Who's Who in Science and Engineering for 2011, 2012	MARQUIS	International	2012
8	Silver Medal, INNOVA/EUREKA Brussels 2009 (Principal Investigator)	EUREKA	International	2009
9	Bronze Medal for Malaysia Technology Expo 2009 (Principal Investigator)	MTE	National	2009
10	Excellent Researcher Award for 2008 and 2010	ENG	University	2008, 2010
11	Silver Medal for Invention, Research and Innovation Exhibition, Universiti Putra Malaysia, 2008 (Principal Investigator)	UPM	University	2008
12	Recipient of Excellent in Service Award 2008-APC 2008	UPM	University	2008
13	Excellent in Service Award for 2007, 2008 and 2009.	UPM	University	2009
14	Excellent in Teaching for 2007, 2008, 2009 and 2010	UPM	University	2010
15	3 rd Place (National Level), Asia-Pasific Robot Event (ABU-ROBOCON 2008)- Manager	ABU	International	2008
16	Silver Medal for Invention, Research and Innovation Exhibition, Universiti Putra Malaysia, 2007 (Principal Investigator)	UPM	University	2007

Professional Services/Consultation

No	Duration	Title	Funding	Designation
1	2013	Investigation into the Cause(s) of Collapse of Fin Shaped Column Atop of Menara UMNO in Georgetown, Pulau Pinang and Building Audit	IKRAM	Expert Consultant
2	2013	Power System Study Associated with FEED Works for Transmission Development of RAPID-PCP-TNB Interconnection	APS Malaysia	Expert Consultant
3	2012-2013	Handbook on Lightning Protection System Installation for Buildings	Energy Commission of Malaysia	Author/Project Leader
4	06/2011-05/2012	Development of Improved Lightning Induced Overvoltages model for Overhead Line Lightning Performance Evaluation in TNB	TNBR (via UNITEN)	Expert Consultant
5	05/2008-05/2009	Development of Guideline in Insulation Coordination Practices for MV Overhead Distribution System	TNB Distribution (via UNITEN)	External Collaborator
6	06/2009	Joint Industry Study TNB-Petronas-TMRD (JIS): Towards Achieving Best Practices in Lightning Protection	Petronas/TMRD/TNBR	Keynote Speaker and Panelist
7	07/2009	Guideline in Insulation Coordination Practices for MV Overhead Distribution System for TNB Distribution, Malaysia	TNB Research	Trainer

Student Supervision

PhD/ MSc Supervision

No.	Programme	Category	Matric No.	Name
1	PhD	Chairman	GS22708	Masoud Aminian
2	PhD	Chairman	GS38680	Omar Sharaf Al-Deen Yehya
3	PhD	Chairman	GS31000	Mohammad Tolou Askari Sedehi Esfahani
4	PhD	Chairman	GS32392	Amizah Md. Ariffen
5	PhD	Chairman	GS34304	Syahrun Nizam bin Md Arshad @ Hashim
6	PhD	Chairman	GS37114	Iryani binti Mohamed Rawi
7	PhD	Chairman	GS37846	Norhidayu binti Rameli
8	PhD	Member	GS29722	Ahmad Rezaee Jordehi
9	PhD	Member	GS30477	Siow Chun Lim
10	PhD	Member	GS33329	Mahdi Karami
11	PhD	Member	GS34084	Buba Sani Dahiru
12	PhD	Member	GS34296	Azad Behnan Sabow
13	PhD	Member	GS35164	Salih Gwami Mohammed Hamad
14	PhD	Member	GS35666	Ng Khai Mun
15	PhD	Member	GS36148	Shahrooz Hajighorbani

No.	Programme	Category	Matric No.	Name
16	PhD	Member	GS38161	Wan Nordiyawati binti Wan Omar
17	Master	Chairman	GS26147	Nurul Azlina Abd. Rahman
18	Master	Chairman	GS30863	Muhammad Noh bin Hamzah
19	Master	Chairman	GS31548	Soheil Roknideilami
20	Master	Chairman	GS35517	Nasyrah bt Abdul Rahim
21	Master	Member	GS26731	Roslin binti Mohd Shafie
22	Master	Member	GS29019	Ali Basim Mahdi
23	Master	Member	GS31021	Halimatusaadiah binti Rusli
24	Master	Member	GS31403	Payam Farzan
25	Master	Member	GS31792	Rebaz J. Ahmed
26	Master	Member	GS31864	Seyedeh Narjes Fallah
27	Master	Member	GS32225	Muhammad Azhar bin Omar
28	Master	Member	GS33237	Ali Driver
29	Master	Member	GS33542	Norpisah Mohd Yusoff
30	Master	Member	GS33662	Zahid Rasool
31	Master	Member	GS35125	Muhammad Jabir
32	Master	Member	GS36225	Atiqah binti Abd Hamid
33	Master	Member	GS35125	Muhammad Jabir

PhD/ MSc Graduated/ Completed

No.	Programme	Category	Matric No.	Name
1	PhD	Chairman	GS22705	Ahmed Naufal A. Al-Masri
2	PhD	Chairman	GS26883	Mahdi Izadi
3	PhD	Member	GS21250	Aliyu Danjuma Usman
4	PhD	Member	GS22664	Mudathir Funsho Akorede
5	Master	Chairman	GS22204	Ehsan Moazami
6	Master	Chairman	GS22214	Zawati binti Mohd Nawi
7	Master	Chairman	GS23629	Vanessa Carolina Laverde Mileo
8	Master	Chairman	GS17986	Mohd Hatta bin Mohammed Ariff
9	Master	Chairman	GS20559	Yaaseen Rafeeu
10	Master	Chairman	GS18207	Junainah binti Sardi
11	Master	Chairman	GS22637	Maryam Mirzaei
12	Master	Chairman	GS23266	Amizah Md. Ariffen
13	Master	Chairman	GS22202	Mohammad Tolou Askari Sedehi Esfahani
14	Master	Chairman	GS29398	Norhidayu binti Rameli
15	Master	Chairman	GS21573	Mahdi Izadi



No.	Programme	Category	Matric No.	Name
16	Master	Member	GS21932	Mahdi Karami
17	Master	Member	GS24699	Salsabila binti Ahmad
18	Master	Member	GS29773	Ghasem Nourirad
19	Master	Member	GS31959	Aminmohammad Saberian
20	Master	Member	GS32083	Mohsen Fadaee Nejad
21	Master	Member	GS21469	Mohammed Hassan Izzaldeen Jawad

