

PROFESSOR Ir MOHD ZAINAL ABIDIN AB KADIR, PhD PEng CEng Ts
MIEM, SMIEEE, MIET

Centre for Electromagnetic and Lightning Protection Research (CELP)
Faculty of Engineering
Universiti Putra Malaysia (UPM)
43400 UPM Serdang, Selangor, MALAYSIA
Tel: 603- 89464362
Fax: 603- 89466327
email: mzk@upm.edu.my
website: <http://www.celp.upm.edu.my>
<http://orcid.org/0000-0001-7263-2953>



CENTRE for ELECTROMAGNETIC and LIGHTNING
PROTECTION RESEARCH (CELP)

1. Educational Background

2002 – 2006 : University of Manchester, United Kingdom.

PhD in High Voltage Engineering

(Areas of interest: High Voltage Engineering, Insulation Coordination Studies, Lightning Protection and Safety, Electromagnetic Compatibility, Power System Transients and Renewable Energy)

1997-2001 : Universiti Putra Malaysia

Degree in Electrical & Electronic Engineering

Majoring in Power

2. Professional Qualification

Since 2017 : Professional Technologist (PTech), Board of Technologists, Malaysia

Since 2013 : Professional Engineer (PEng), Board of Engineers, Malaysia

Since 2011 : Chartered Engineer (CEng), Engineering Council, UK.

3. Teaching and Supervision

a. Teaching Courses

Code	Course Name
ECC 3001	Engineering Mathematics
KEE 3011	Electrical & Electronic Tech.
KEE 3918	Industrial Training
KEE 4317/EEE 4310	High Voltage Engineering
KEE 3314/EEE 3304	Power System Analysis
ECC 3101	Principle of EE Engineering
EEE 4307	Electric Power Gen. and Utilization
EEE 3305	Power System Protection
EEE 5900	Insulation Coordination

b. Supervision of Students

In UPM:

Postgraduate students supervision	: PhD	- Graduated	: 17
		Ongoing	: 20
	: Master	- Graduated	: 35
		Ongoing	: 7

Postgraduate students examined	PhD	: 16
	Master	: 29

4. Research, Consultancy and Publication

a. Grant

No	Duration	Title	Funding	Amount (RM)	Designation
1	2009-2019 (10 years)	Global Lightning Network Sensor for Lightning Research	WSI Corporation USA	927,500 (USD 265,000)	PI
2	2016	Transfer Renewable Energy and Electrical Safety (TREES)	IEEE	19750 (USD 5000)	Project Director
3	2017-2019	Evaluation of the induced voltage and electromagnetic field effect on power line due to lightning strike to a tall structure	FRGS (MoHE)	103,032	PI
4	2018-2019	Assessment of the electromagnetic field and induced voltage on power line due to lightning strikes to nearby tall structure	PUTRA BERIMPAK	100,000	PI
5	2016-2017	Fundamental Aspects of Distribution Power Transformer Condition Assessment and Risk Management	FRGS	96,000	Co
6	01/2015-12/2016	SUPERTx: Investigation on The Performance Aspects of Power Transformer Under AC and Transient Conditions	PUTRA-IPB (UPM)	650,000	Program Leader

7	01/2015-12/2016	Lightning Surges on Distribution Line and Its Effect On Transformer Design And Protection	PUTRA-IPB (UPM)	146,700	PI
8	01/2015-12/2016	New Approach For Evaluating The Leakage Current And Ageing Of Polymer Insulators Under Polluted Weather Conditions	PUTRA-IPI (UPM)	90,000	PI
9	2015-2017	Development of a High Efficiency Portable Solar Generator utilizing Optimum Solar Panel Orientation for Flood Evacuation Centre	PRGS	80,000	Co
10	2015-2017	Investigation On The Applicability Of Aluminium For Lightning Protection Systems Under Various Environmental Conditions	FRGS (MoE)	73000	Co
11	2014-2016	Formulation of Maximum Power Point Tracking Algorithm Based on Artificial Intelligence under Shadowing Condition	FRGS (MoE)	116,000	Co
12	08/2013-09/2015	Novel Development of Lightning Detection System Network Utilizing Inverse Procedure Technique and Measured Electromagnetic Fields	Science Fund (MOSTI)	336,500	PI
13	12/2012-11/2015	The Study of Atmospheric Electric Field: Feasibility for Energy Harvesting	FRGS (MoE)	116,000	Co
14	11/2013-10/2015	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	GP-IBT (UPM)	198,000	Co
15	12/2013-11/2016	Investigation On The Electrical And Physical Characteristics Of Coconut Oil Used As Dielectric Insulating Liquid In A Transformer	FRGS (MoE)	83,000	Co
16	11/2013-10/2015	Investigation On The Electrical Performance Of Palm Oil As A Dielectric Insulating Liquid In A Transformer	GP-IPM (UPM)	50,000	Co
17	06//2013-06/2016	Effect of Down Conductor with Respect to Bending Angle in Lightning Protection System Installation	ERGS (MoE)	134,000	Co
18	01/2013-12/2014	Dynamic Vulnerability Assessment System for Electrical Power System Stability Enhancement	RUGS	57,200	Co

19	09/2012-08/2014	Enhancing the Technical Aspects of Lightning and Electromagnetics for Optimum Power System Design and Protection	RUGS	110,000	PI
20	02/2010-02/2012	Characterization And Determination of Lightning Induced Overvoltage For Sustainable Lightning Protection Systems In Tropical Climate	RUGS	130,000	PI
21	2011-2013	Development Of A High Efficiency Solar-Integrated Power System Utilizing Motorized System With Two-Axes Angle Controller	KeTTHA	240,000	PI
22	05/2012-04/2014	Investigation and Characterization of Active Solar Power System with Angle Controller Utilizing Date and Time-based Approach	FRGS (MOHE)	76,140	Co
23	04/2011-03/2013	Development of Concrete-based Conductivity Enhancement Materials for Electrical Grounding Systems	RUGS	100,000	Co
24	02/2010-02/2012	Fundamental Study On Prediction Model Of Chemical Enhancement Materials For Grounding Purposes	FRGS (MOHE)	44,000	Co
25	11/2009-11/2011	Characterization And Performance Study of Superconductor Application On Power Transmission System	RUGS	30,000	Co
26	02/2008 - 12/2009	A Randomised Leader Progression Model For Backflashover Studies And Evaluation of Lightning Performance on Transmission and Substation	Science Fund (MOSTI)	234,000	PI
27	02/2007 - 02/2008	Improved Coordination Gap Model For Insulation Coordination Studies	PLB (UPM)	10,000	PI
28	07/2007 - 07/2009	Impact of Non-standard Lightning Surge on Substation Insulation Coordination	RUGS	70,000	PI
29	11/2007 - 11/2009	A New Method of Prediction an Impact of the Lightning on Transmission and Substation Insulation Coordination	FRGS (MOHE)	100,000	PI
30	07/2008 - 07/2009	A Time Domain Study on Transient Responses of the Wind Turbine Tower in a Windfarm	RUGS	30,000	Co
31	07/2007 - 07/2008	Development of Power Quality Monitoring System For Malaysia Nuclear Agency	Malaysian Nuclear Agency	Facilities	PI

b. Fellowship / Travel Grant

No	Duration	Title	Funding	Type	Designation
1	16-29 Aug 2017	Short Attachment to The University of Manchester, UK	UPM	Fellowship	University's Reps
2	11-13 Aug 2015	International Symposium on Strategic Interventions to mitigate the Hazard of Lightning	NAM S&T	Fellowship	Country's Reps
3	8-13 June 2014	AAAS-TWAS Course on Science Diplomacy	TWAS	Fellowship	Invited Participant
4	2-8 Dec. 2013	An Open World: Science, Technology and Society in the Light of Niels Bohr's Thoughts	Copenhagen University, Denmark	Fellowship	Session Chair
5	21-23 May 2012	IEEE Region 10 Chapter Chair Meeting, Tianjin, China	IEEE Power & Energy Society	Fellowship	Chapter's Reps
6	24-30 Jan. 2009	Short Training on High Voltage Modular Set, TERCO HQ, Sweden	TERCO Sweden	Travel Grant	Invited Participant
7	16-20 Feb. 2009	E7-Short Course on Solar Thermal, RENAC, Schönhauser Allee 10-11, 10119 Berlin	Renewable Academy, Berlin	Fellowship	Invited Participant

c. Consultancy

No	Duration	Title	Funding	Designation
1	09/2015- 12/2015	Development and Preparation of the Lightning and Surge Protection Guideline for Photovoltaic System	Sustainable Energy Development Authority (SEDA)	Principal Consultant
2	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
3	2013	Power System Study Associated with FEED Works for Transmission Development of RAPID-PCP-TNB Interconnection	APS Malaysia	Expert Consultant
4	2012- 2013	Handbook on Lightning Protection System Installation for Buildings	Energy Commission of Malaysia	Author/ Project Leader
5	04/2011	Lightning Protection Concerns of Communication Tower Site, PETRONAS MLNG Bintulu Sarawak: Inspection Report	ALT/Petronas MLNG	Expert Consultant

6	06/2011-05/2012	Development of Improved Lightning Induced Overvoltages model for Overhead Line Lightning Performance Evaluation in TNB	TNBR (via UNITEN)	Expert Consultant
7	05/2008-05/2009	Development of Guideline in Insulation Coordination Practices for MV Overhead Distribution System	TNB Distribution (via UNITEN)	External Collaborator
8	06/2009	Joint Industry Study TNB-Petronas-TMRD (JIS): Towards Achieving Best Practices in Lightning Protection	Petronas/TMRD/TNBR	Keynote Speaker and Panelist
9	07/2009	Insulation Coordination Practices for MV Overhead Distribution System for TNB Distribution, Malaysia	TNB Research	Trainer

d. Patent/ Copyright/ Trademark

No	Detail	Registration No	Year
1	A Transformer Core	PI2017700144	2017
2	A Solar Tracking Sensor	UI2017700251	2017
3	A Solar Tracker and A Method For Controlling Thereof	PI2017700249	2017
4	MPP Charge Controller Circuit Diagram - Solar Home System Based on Integrated DC Matching Technique	201703230506	2017
5	Full DC-load Matching Circuit Diagram - Solar Home System Based on Integrated DC Matching Technique	201703230505	2017
6	DC-DC Management Circuit Diagram - Solar Home System Based on Integrated DC Matching Technique	201703230504	2017
7	One Time MPP Software for Calculating the Voltage at Which the Solar-battery Controller Operates	Copyrighted	2017
8	A Software for Energy Management and Monitoring for the Solar Powered Home System	Copyrighted	2017
9	A Solar Water Distiller	UI2015704631	2015
10	Lightning Severity Classification v1.0	Copyrighted	2014
11	Automatic Dual Axis Solar Tracking Apparatus, System and Method Thereof	PI2013101144	2013
12	Low Cost Surge Protective Device for Communication and Data Line Systems	PI 2011001775	2011

13	Surge Protective Device for Low Voltage Equipment	MY-157071-A	2016
14	A Vertical Grounding Apparatus	PI 2010003832	2010
15	Surge Protective Device for Transient Protection	PI 20083639	2008

e. Publications

SCOPUS ID: 25947297000

Book/Chapter in Book (Author/Editor)

- 1 Guideline on Lightning Protection for Photovoltaic (PV) Systems. Published by Sustainable Energy Development Authority (SEDA) Malaysia, July 2016. ISBN: 978-967-12390-5-6
- 2 **M. Z. A Ab Kadir**: Impact of Lighting in the Events of Severe Atmospheric Conditions, in book Lightning Science & Lightning Protection: Some Selected Topics, Published by NAM S&T, 2015.
- 3 Mohammad Tolou Askari, **Mohd Zainal Abidin Ab Kadir**, Saeidah Bolandifar: Loss of life of the mineral oil immersed transformer. Published by LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrucken, Deutschland. 109 pages, 2015. ISBN: 978-3-659-63006-4
- 4 Mohammad Rezazadeh Mehrjou, Norman Mariun, Mahdi Karami, Samsul Bahari Mohd. Noor, Sahar Zolfaghari, Norhisam Misron, **Mohd Zainal Abidin Ab. Kadir**, Mohd. Amran Mohd. Radzi and Mohammad Hamiruce Marhaban in Chapter 5: Wavelet-Based Analysis of MCSA for Fault Detection in Electrical Machine, in book Wavelet Transform and Some of Its Real-World Applications, edited by Dumitru Baleanu, Published by InTech, 2015. ISBN 978-953-51-2230-2.
- 5 Handbook on Lightning Protection System Installation for Buildings. Published by Energy Commission of Malaysia, 2014. ISBN: 978-967-12023-3-3
- 6 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
- 7 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
- 8 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, FEIC, 2007. ISBN 978-983-41705-6-1

Technical Report/Guidelines / Policy

- 1 **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.
- 2 **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
- 3 **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
- 4 Forensic Report on the Cause(s) of Collapse of Fin Shaped Column Atop of Menara UMNO in Georgetown, Pulau Pinang and Building Audit, 2013
- 5 Report on Power System Study Associated with FEED Works for Transmission Development of RAPID-PCP-TNB Interconnection, 2013
- 6 Report on Lightning Protection Concerns of Communication Tower Site, PETRONAS MLNG Bintulu Sarawak: Inspection Report, 2011
- 7 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).
- 8 **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.
- 9 **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.
- 10 **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
- 11 **Mohd Zainal Abidin Ab Kadir** (Co-Author), Guideline in Insulation Coordination Practices for MV Overhead Distribution Systemfor TNB Distribution, Malaysia, 2009.

Citation Index/ Refereed Journals

- 1 I. Mohamed Rawi, **M. Z. A. Ab-Kadir**, C. Gomes, N. Azis, "A case study on 500 kV line performance related to lightning in Malaysia", IEEE Transactions on Power Delivery, **In-press, 2018**.
- 2 Ahmad H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, "Field Data-Based Mathematical Modeling by Bode Equations and Vector Fitting Algorithm for Renewable Energy Applications", PLOS ONE, **In-press, 2018**.

- 3 N. I. Ahmad, **M. Z. A. Ab-Kadir**, M. Izadi, N. Azis, M. A. M. Radzi, N. H. Zaini, M. S. M. Nasir, "Lightning Protection on Photovoltaic Systems: A Review on Current and Recommended Practices", Renewable & Sustainable Energy Reviews (RSER), Vol. 82, pp. 1611-1619, 2018.
- 4 F. A. Jamaludin, **M. Z. A Ab-Kadir**, M. Izadi, N. Azis, M. S. Abd Rahman, "Effects of RTV Coating on the Electrical Performance of Polymer Insulator under Lightning Impulse Voltage Condition", PLOS ONE, Vol.12, No. 11, pp. 1-14, 2017.
- 5 S. F. M. Nor, N. Azis, J. Jasni, **M. Z. A. Ab Kadir**, R. Yunus and Z. Yaakub, "Investigation on the Electrical Properties of Palm Oil and Coconut Oil Based TiO₂ Nanofluids", IEEE Transactions on Dielectric and Electrical Insulation, In-press, 2017
- 6 N. H. Zaini, **M. Z. A. Ab Kadir**, M. A. Mohd Radzi, M. Izadi, N. Azis, N. I. Ahmad, M. S. M. Nasir, "Lightning Surge Analysis on a Large Scale Grid-Connected Solar PV System", Energies, In-press, 2017.
- 7 Yasir Alkubaisi, W. Z. Wan Hasan, S. B. Mohd Noor, **M. Z. A. Ab-Kadir**, A. H. Sabry, "Gravitational Electric Energy of a Multilevel Parking Buildings in Commercial and Residential Sectors Proof of Concept and Prototype Measurements", Journal of Computational and Theoretical Nanoscience, Vol. 14 (12), pp. 6030-6037, 2017
- 8 M. S. Yahaya, N. Azis, **M. Z. A. Ab. Kadir**, J. Jasni, M. H. Hairi and M. A. Talib, "Estimation of Transformers Health Index Based on the Markov Chain", Energies, Vol. 10, p. 1824, 2017
- 9 M. H. Roslan, N. Azis, **M. Z. A. Ab. Kadir**, J. Jasni, Z. Ibrahim and A. Ahmad, "A Simplified Top-Oil Temperature Model for Transformers Based on the Pathway of Energy Transfer Concept and the Thermal-Electrical Analogy", Energies, Vol. 10, p. 1843, 2017
- 10 Ahmad H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, "DC-based Smart PV-Powered Home Energy Management System Based on Voltage Matching and RF Module", PLOS ONE, Vol. 12, No. 9, pp. 1-22, 2017.
- 11 Nor Azreen Mohd Jamil, Chandima Gomes, Chan Pick Kuen, **Mohd Zainal Abidin Ab Kadir**, Ashen Gomes, "Electrical Stimulation For The Growth of Plants: With Special Attention To The Effects of Nearby Lightning on Mushrooms", Asian Journal of Microbiology, Biotechnology and Environmental Sciences, In-press, 2018.
- 12 M. Izadi, M. S. Abd Rahman, **M. Z. A Ab-Kadir**, C. Gomes, J. Jasni, M. Hajikhani, "The Influence of Lightning Induced Voltage on the Distribution Power Line Polymer Insulators", PLOS ONE, Vol.12, No. 2, pp. 1-22, 2017.
- 13 A. Azmi, J. Jasni, N. Azis, **M.Z.A. Ab. Kadir**, "Evolution of Transformer Health Index in the Form of Mathematical Equation", Renewable & Sustainable Energy Reviews (RSER), Vol. 76, pp. 687-700, 2017.
- 14 AH Sabry, WZ Hasan, **MZA Ab Kadir**, MA Radzi, S Shafie, "Photovoltaic-Powered Smart Home System with Direct Current-Environment", Journal of Computational and Theoretical Nanoscience, Vol. 14 (9), pp. 4158-4173, 2017
- 15 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, Vol. 14 (1), pp. 23-33, 2017.

- 16 K. T. Ho, **M. Z. A. Ab-Kadir**, M. Izadi, "EFVD along Porcelain Insulator using the FEM", Pertanika J. Sci. & Technol., Vol. 25 (S), pp. 189 - 196, 2017
- 17 I. Mohamed Rawi, **M. Z. A. Ab-Kadir**, M. Izadi, "Seasonal Variation of Transmission Line Outages in Peninsular Malaysia", Pertanika J. Sci. & Technol., Vol. 25 (S), pp. 213 - 220, 2017
- 18 Omar. SH. Alyozbaky, M. M. Isa, **M. Z. A. Ab-Kadir**, M. Izadi, "The Response of a High Voltage Transformer with Various Geometries of Core Joint Design", Pertanika J. Sci. & Technol., Vol. 25 (S), pp. 21 - 28, 2017
- 19 Azad Behnan Sabow, Kazeem Dauda Adeyemi, Zulkifli Idrus, Goh Yong Meng, **Mohd Zainal Abidin Ab Kadir**, Ubedullah Kaka, Zeiad Amjad Aghwan, Ahmed Abubakar Abubakar, Awis Qurni Sazili, "Carcase characteristics and meat quality assessments in goats subjected to slaughter without stunning and slaughter following different methods of electrical stunning", Italian Journal of Animal Science, Published online, pp. 1-15, 2017.
- 20 M. H. M. Sidek, N. Azis, W. Z. W. Hasan, **M. Z. A. Ab Kadir**, S. Shafie, M. A. M. Radzi, "Automated Positioning Dual-Axis Solar Tracking System with Precision Elevation and Azimuth Angle Control", Energy, Vol. 124, pp. 160-170, 2017
- 21 A.B. Sabow, Y.M. Goh, I. Zulkifli, A.Q. Sazili, **M.Z.A. Ab Kadir**, U. Kaka, N. Khadijah, K.D. Adeyemi, M. Ebrahimi, "Electroencephalographic responses to neck cut and exsanguination in minimally anaesthetized goats", South African Journal of Animal Science, Vol. 47 (No. 1), pp. 34-40, 2017.
- 22 SH Alwan, J Jasni, **MZA Ab Kadir**, N Aziz, "Factors Affecting Current Ratings for Underground and Air Cables," WASET International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering, Vol. 10, No. 11, pp. 1408-1414, 2017.
- 23 Shahrooz Hajighorbani, Mohd Amran Radzi, **Mohd Zainal Abidin Ab-Kadir**, Suhaidi Shafie, "DC-DC converter for photovoltaic powered battery charger", World Journal of Engineering (WJE), Vol. 13, Issue 6, pp. 516 - 523, 2016.
- 24 Y. V Thien, N. Azis, J. Jasni, **M. Z. A Ab Kadir**, R. Yunus, M. T Ishak, Z. Yaakub, "The effect of polarity on the lightning breakdown voltages of palm oil and coconut oil under a non-uniform field for transformers application", Industrial Crops and Products, Vol. 89, pp. 250-256, 2016
- 25 A. B. Sabow, Y. M. Goh, I. Zulkifli, A. Q. Sazili, U. Kaka, **M. Z. A. Ab Kadir**, K. Nakyinsige, K. Adeyemi, "Blood parameters and electroencephalographic responses of goats to slaughter without stunning", Meat Science, Vol.121, pp. 148-155, 2016
- 26 A. B. Sabow, A. Q. Sazili, I. Zulkifli, Y. M. Goh, **M. Z. A. Ab Kadir**, K. Nakyinsige, U. Kaka, Z. A. Aghwan, K. Adeyemi, A. A. Abubakar, "Bleeding Efficiency, Microbiological Quality and Oxidative Stability of Meat from Goats Subjected to Slaughter without Stunning in Comparison with Different Methods of Pre-Slaughter Electrical Stunning" PLOS ONE, Vol. 11(4), pp. 1-18, 2016.
- 27 R. J. Ahmed, C. Gomes, **Z. Kadir**, M. Izadi, "Voltage distribution of a wind turbine transformer under direct lightning strike: Effects of the grounding of cable shield", Advanced Science Letters, Vol. 22, No. 7, pp. 1800-1804, 2016.
- 28 S. D. Buba S, W. F. Wan Ahmad, **M. Z. A. Ab Kadir**, C. Gomes, J. Jasni, M. Osman, "Reduction of earth grid resistance by addition of earth rods to various grid configurations", ARPN Journal of Engineering and Applied Sciences, Vol. 11, No. 7,

pp. 4533-4538, 2016

- 29 N. A. Mohamad, N. Azis, J. Jasni, **M. Z. A. Ab-Kadir**, R. Yunus, M. T. Ishak, M. Z. Yaakub, "Investigation on the Dielectric, Physical and Chemical Properties of Palm Oil and Coconut Oil under Open Thermal Ageing Condition", Journal of Electrical Engineering and Technology, Vol. 11 (1), pp. 709-718, 2016.
- 30 S. C. Lim, C. Gomes, **M. Z. A. Ab Kadir**, "Behaviour of a New Material that Improves Ufer Grounding Practice", Journal of Electrical Systems, Vol. 12-2, pp. 291-300, 2016
- 31 Y. V. Thien, N. Azis, J. Jasni, **M. Z. A. Ab-Kadir**, R. Yunus, M. T. Ishak, M. Z. Yaakub, "Evaluation on the Lightning Breakdown Voltages of Palm Oil and Coconut Oil under Non-Uniform Field at Small Gap Distances" Journal of Electrical Engineering and Technology, Vol. 11 (1), pp. 184-191, 2016.
- 32 **M. Z. A. Ab-Kadir**, "Lightning severity in Malaysia and some parameters of interest for engineering applications", Thermal Science, Vol. 20, Suppl. 2, pp. S437-S450, 2016.
- 33 Shahrooz Hajighorbani, Mohd Amran Radzi, **Mohd Zainal Abidin Ab-Kadir**, Suhaidi Shafie, "Implementing a novel hybrid maximum power point tracking technique in DSP via Simulink/MATLAB under partially shaded conditions", Energies, Vol. 9, pp. 85, 2016.
- 34 A. B. Sabow, A. Sazili, Z. Idrus, G. Meng, **M. Z. A. Ab Kadir**, K. Adeyemi, "Electroencephalographic responses to neck cut and exsanguination in minimally anaesthetized goats", South African Journal of Animal Science, In-press, 2016.
- 35 A. B. Sabow, A. Q. Sazili, Z. A. Aghwan, I. Zulkifli, Y. M. Goh, **M. Z. A. Ab Kadir**, K. Nakyinsige, U. Kaka and K. D. Adeyemi, "Changes of microbial spoilage, lipid-protein oxidation and physicochemical properties during postmortem refrigerated storage of goat meat", Animal Science Journal, Vol. 87, Issue 6, pp. 816-826, 2016.
- 36 C. Gomes, **Z. Kadir**, "Efficient Lightning Protection: Optimization of Economic, Environmental and Safety Aspects", Environmental Engineering and Management Journal, Vol. 14, No. 8, pp. 1975-1985, 2015.
- 37 Omar Sh. Alyozbaky, **M. Z. A. Ab Kadir**, M. Izadi, C. Gomes, N. Azis, "The Behaviour Of Three Phase Three- Leg 11kV Transformer Core Type Design Under Sinusoidal and Non-Sinusoidal Operating Conditions For Different Core Materials", International Journal of Simulation Systems, Science & Technology, Vol. 17 (41), 2016
- 38 Shahrooz Hajighorbani, Mohd Amran Radzi, **Mohd Zainal Abidin Ab-Kadir**, Suhaidi Shafie, "Dual search maximum power point (DSMPP) algorithm based on mathematical analysis under shaded conditions", Energies, Vol. 8, pp. 12116-12146, 2015
- 39 S. G. Mohammad, C. Gomes, **M. Z. A. Ab. Kadir**, J. Jasni, M. Izadi, "Medium Voltage Capacitor Banks Characterization and Transients Generated", Engineering and Scientific International Journal (ESIJ), Vol. 2, No. 2, pp. 23-37, 2015.
- 40 H. Rusli, C. Gomes, **Z. Kadir**, Z. Abdul-Malek, "Surface arcing of insulators due to bentonite contamination", Journal of Electrostatics, Vol. 76, pp. 73-77, 2015.
- 41 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "On the Lightning Electromagnetic Fields Due to Channel With Variable Return Stroke Velocity", Mathematical Problems in Engineering, Volume 2015, Article ID 150756, pp. 1-9, 2015

- 42 S. C. Lim, C. Gomes, **M. Z. A. Ab Kadir**, G. Nourirad, Z. A. Malek, "Behaviour of backfill materials for electrical grounding systems under high voltage conditions", Journal of Engineering Science and Technology, Vol. 10(6), pp. 811-826, 2015
- 43 N. A. Mohamad, N. Azis, J. Jasni, **M. Z. A. Ab-Kadir**, R. Yunus, M. T. Ishak, Z. Yaakub, "A Study on the Dielectric Properties of RBDPO Olein under Low Temperature Thermal Ageing", Applied Mechanics and Materials, Vol. 793, pp. 14-18, 2015
- 44 Y. V. Thien, N. Azis, J. Jasni, **M. Z. A. Ab-Kadir**, R. Yunus, M. T. Ishak, N. R. Hamzah, "A Study on the Lightning Impulse Breakdown Voltages of Palm Oil and Coconut Oil by Different Methods", Applied Mechanics and Materials, Vol. 793, pp. 9-13, 2015
- 45 S. N. M. Arshad, **M. Z. A. Ab-Kadir**, M. Izadi, A. M. Ariffen, M. N. Hamzah, C. Gomes, J. Jasni, N. Rameli, "Characterization Preliminary Breakdown in the Measured Lightning Electric Fields on Malaysia Data", Applied Mechanics and Materials, Vol. 793, pp. 19-23, 2015
- 46 N. Rameli, **M. Z. A. Ab-Kadir**, M. Izadi, C. Gomes, N. Azis, S. N. M. Arshad, "Consideration of Lightning Current along a Tall Structure in the Presence of Horizontal Arrangement Grounding", Applied Mechanics and Materials, Vol. 793, pp. 34-38, 2015
- 47 M. Izadi, **M. Z. A. Ab-Kadir**, M. Hajikhani, "Considering on Electric Fields due to Transmission Line", Applied Mechanics and Materials, Vol. 793, pp. 84-38, 2015
- 48 S. S. Sinan, J. Jasni, N. Azis, **M. Z. A. Ab-Kadir**, M. N. Mohtar, "Effect of Particles on the AC Breakdown Voltage of Palm Oil and Coconut Oil", Applied Mechanics and Materials, Vol. 793, pp. 70-74, 2015
- 49 C. S. Chai, **M. Z. A. Ab-Kadir**, M. Izadi, "Evaluation of Gas Pipeline Induced Voltage Associated with Parallel Transmission Line", Applied Mechanics and Materials, Vol. 793, pp. 90-94, 2015
- 50 S. N. M. Arshad, **M. Z. A. Ab-Kadir**, M. Izadi, A. M. Ariffen, M. N. Hamzah, C. Gomes, J. Jasni, N. Rameli, "Review and Evaluation of Characterization First Return Stroke in the Measured Lightning Electric Fields on Malaysia Data", Applied Mechanics and Materials, Vol. 793, pp. 44-48, 2015
- 51 A. M. Ariffen, **M. Z. A. Ab-Kadir**, C. Gomes, J. Jasni, S. N. M. Arshad, "The Electric Field Effect on Angles of Copper-Type Down-Conductor", Applied Mechanics and Materials, Vol. 793, pp. 24-28, 2015
- 52 M. S. B. Abd Rahman, M. Izadi, **M. Z. A. Ab-Kadir**, "The Electrical Behaviour of Polymer Insulator under Different Weather Conditions", Applied Mechanics and Materials, Vol. 793, pp. 60-64, 2015
- 53 M. N. Hamzah, **M. Z. A. Ab-Kadir**, C. Gomes, S. N. M. Arshad, "Unique Stroke-Multiplicity of Positive Lightning in Malaysia", Applied Mechanics and Materials, Vol. 793, pp. 39-43, 2015
- 54 A. M. Ariffen, **M. Z. A. Ab Kadir**, C. Gomes, J. Jasni, "The influence of a curved on copper-type down conductor" Jurnal Teknologi, Vol. 72, No. 5, pp. 63-70, 2015.
- 55 A. Abd-Hamid, A. Q. Sazili, K. Nakyinsige, A. R. Alimon, **M. Z. A. Ab-Kadir**, S. A. Karsani, "Supranutritional vitamin D₃ does not affect blood and muscle calcium

level, and pre-rigor meat tenderization of spent chicken”, Livestock Research for Rural Development, Vol. 27 (5), pp. 1-7, 2015.

- 56 A. Sazili, A. Sabow, Z. Idrus, G. Meng, **M. Z. A. Ab Kadir**, K. Adeyemi, “A comparison of bleeding efficiency, microbiological quality and lipid oxidation in goats subjected to conscious halal slaughter and slaughter following minimal anaesthesia”, Meat Science, Vol. 104, Issue 6, pp. 78-84, 2015
- 57 A. H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, “Alternative Solar-Battery Charge Controller to Improve System Efficiency”, Applied Mechanics and Materials, Vol. 785, pp. 156-161, 2015.
- 58 A. H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, “DC Loads Matching Technique as an alternative to AC inverter in residential Solar System Application Evaluation and Comparison”, Applied Mechanics and Materials, Vol. 785, pp. 225-230, 2015.
- 59 N. I. A. Katim, M. T. Ishak, A. M. Ishak, **M. Z. A. Ab-Kadir**, “Behavior of Biodegradable Oil under Impulse Voltages”, Applied Mechanics and Materials, Vol. 785, pp. 320-324, 2015
- 60 A. Sazili, A. Sabow, Z. Idrus, G. Meng, **M.Z. A. Ab Kadir**, K. Adeyemi, “Physico-chemical characteristics of Longissimus lumborum muscle in goats subjected to halal slaughter and anesthesia (halothane) pre-slaughter”, Animal Science Journal, Vol. 86 (12), pp. 981-991, 2015.
- 61 N. Rameli, **M. Z. A. Ab Kadir**, M. Izadi, C. Gomes, N. Azis, “The Effect of the Grounding System on the Lightning Current Profile Along Tall Structure”, IET Science, Measurement & Technology, Vol. 9, Issue 6, pp. 717 - 727, 2015.
- 62 A. Rezaee Jordehi, J. Jasni, N. Abd Wahab, **M.Z. Kadir**, M.S. Javadi, “Enhanced leader PSO (ELPSO): A new algorithm for allocating distributed TCSC’s in power systems”, International Journal of Electrical Power and Energy System, Vol. 64, pp. 771-784, 2015
- 63 A. AL-Masri, **M. Z. A. Ab Kadir**, H. Hizam, N. Mariun, “Simulation of an Adaptive Artificial Neural Network for Power System Security Enhancement Including Control Action”, Applied Soft Computing, Vol. 29, pp. 1-11, 2015
- 64 C. Gomes, **M. Z. A. Ab Kadir**, C. L. Kottachchi, S. C. Lim, “Industrial wastes and natural substances for improving electrical earthing systems”, International Journal of Electrical Engineering, Vol. 21, No. 2, pp. 39-47, 2014.
- 65 M. F. Akorede, E. Pouresmaeil, H. Hizam, I. Aris, **M. Z. A. Ab Kadir**, “Optimal Placement of Non-Site Specific DG for Voltage Profile Improvement and Energy Savings in Radial Distribution Networks”, Advances in Electrical and Electronic Engineering, Vol 12, No. 5, pp. 392-406, 2014
- 66 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. 29 (1), pp. 107 - 115, 2014
- 67 Mahdi Izadi, **Mohd Zainal Abidin Ab-Kadir**, Maryam Hajikhani, “An Algorithm for Evaluation of Lightning Electromagnetic Fields at Difference Distances With Respect To Lightning Channel,” Mathematical Problems in Engineering, Volume 2014, Article ID 925463, pp. 1-10, 2014
- 68 Mahdi Karami, Norman Mariun, Mohammad Rezazadeh Mehrjou, **Mohd Zainal Abidin Ab Kadir**, N. Misron, Mohd Amran 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, pp. 1-12, 2014
- 69 Shahrooz Hajighorbani, Mohd Amran Radzi, **Mohd Zainal Abidin Ab-Kadir**, Suhaidi Shafie, Razieh Khanaki and Mohammad Reza Maghami, “Evaluation of Fuzzy Logic Subsets Effects on Maximum Power Point Tracking for Photovoltaic System”, International Journal of Photoenergy, Volume 2014, Article ID 719126, pp. 1-13, 2014
- 70 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, “Considering on lightning electric fields in presence of ground reflection at non-perfect ground,”Journal of Electrical Engineering, Vol. 65, No. 4, pp. 242-247, 2014.
- 71 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, “On the Lightning Induced Voltage Along Overhead Power Distribution Line”, Journal of Electrical Engineering and Technology, Vol. 9, No. 5, pp.1694-1703, 2014
- 72 M. Aminian, **M. Z. A Ab. Kadir**, S. Ali, W. F. Wan Ahmad, “Partitioning Behaviour of Furfural in Oil/Paper Electrical Insulation System”, Journal of Electrical Engineering and Technology, **In-press (2014)**
- 73 N. Azis, J. Jasni, **M. Z. A Ab. Kadir**, M. N. Mohtar, “Suitability of palm based oil as dielectric insulating fluid in transformers”, Journal of Electrical Engineering and Technology, vol. 9 (2), pp. 662 - 669, 2014.
- 74 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.
- 75 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, vol. 2014, pp. 1-10, 2014
- 76 KM Ng, NM Adam, O Inayatullah, **MZAA Kadir**, “Assessment of solar radiation on diversely oriented surfaces and optimum tilts for solar absorbers in Malaysian tropical latitude”, International Journal of Energy and Environmental Engineering, Vol. 5, No. 5, 2014.
- 77 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
- 78 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, Vol. 30, pp. 299-305, 2014.
- 79 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
- 80 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.
- 81 Effendy Yaacob, Hashim Hizam, M. Amran M. Radzi, **Mohd Z. A. Ab. Kadir**, “Field measurement of PV array temperature for tracking and concentrating 1 kW_p

- generators installed in Malaysia”, International Journal of Photoenergy, Vol. 2013, ID 502503, 2013.
- 82 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
- 83 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.
- 84 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 and Technology, Vol. 8, No. 4, pp. 824-831, 2013
- 85 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
- 86 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
- 87 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
- 88 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
- 89 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
- 90 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
- 91 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
- 92 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
- 93 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
- 94 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
- 95 M. T. Askari, **M. Z. A. Ab. Kadir**, M. Izadi, “On the Trend of Improvement of Thermal

- Model for Calculating the TOT and HST”, Przegląd Elektrotechniczny (Electrical Review), R. 88, NR 12A/2012, pp. 297-301, 2012
- 96 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
- 97 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
- 98 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”, Przegląd Elektrotechniczny (Electrical Review), R. 88, NR 10A/2012, pp. 201-204, 2012
- 99 M. Izadi, **M. Z. Ab. Kadir**, C. Gomes, “The Behavior of Radiation Components of Lightning Electric Versus Current Time Front Changes”, Przegląd Elektrotechniczny (Electrical Review), R. 88, NR 11A/2012, pp. 308-311, 2012
- 100 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.
- 101 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.
- 102 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
- 103 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
- 104 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.
- 105 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
- 106 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.
- 107 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
- 108 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.

- 109 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.
- 110 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.
- 111 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
- 112 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
- 113 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
- 114 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.
- 115 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**
- 116 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.
- 117 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.
- 118 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.
- 119 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
- 120 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.
- 121 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
- 122 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 Powe

r Lines”, Journal of the Japan Society of Applied Electromagnetics and Mechanics (JSAEM), Vol.19, pp. S131-S134, 2011.

- 123 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.
- 124 M. Izadi, **M. Z. A. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, “EvaluationOfElectromagnetic 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
- 125 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
- 126 M. F. Akorede, H. Hizam, I. Aris, **M. Z. A. Ab Kadir**, “A critical review of strategies for optimal allocationof distributed generation units in electric power systems”, International Review of Electrical Engineering (IREE), Vol. 5, No. 2, pp 593-600, 2011.
- 127 M. Izadi, **M. Z. A. Ab. Kadir**, C. Gomes, W. F. Wan Ahmad, “An Analytical Second-FDTD Method For Evaluationof Electric and Magnetic Fields at Intermediate Distances From Lightning Channel”, Progress In Electromagnetic Research (PIER), Vol. 110, pp 329-352, 2010
- 128 **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
- 129 **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
- 130 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.
- 131 **M. Z. A. Ab. Kadir**, M. Izadi, “New Algorithm for Evaluationof Electric Fields due to Indirect Lightning Strike”, Computer Modeling in Engineering Science (CMES), Vol. 67, No. 1, pp 1-12, 2010
- 132 **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
- 133 Zawati Mohd Nawawi, 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
- 134 **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

- 135 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
- 136 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.
- 137 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
- 138 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.
- 139 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.
- 140 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.
- 141 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.
- 142 Hashim Hizam, Jasronita Jasni, **Mohd Zainal Abidin Ab Kadir**, Wan Fatimahamamah 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
- 143 **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.
- 144 **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.
- 145 **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.
- 146 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.
- 147 **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.
- 148 **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.

- 149 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.
- 150 **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.
- 151 I. Cotton, **M. Z. A Ab Kadir**, "A Randomised Leader Progression Model for Backflashover Studies", European Transactionon Electrical Power, Vol. 18, No. 7, pp 709-724, 2008.
- 152 **M. Z. A Ab Kadir**, M. H Ahmad, J. Jasni "Review of Insulation Coordinationon EHV Lines", Global Journal of Engineering and Technology, Vol. 1, No. 3, pp 317-328, 2008.
- 153 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.
- 154 **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.
- 155 **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 I. Mohamed Rawi, M. S. A. Rahman, **M.Z.A. Ab. Kadir**, M. Izadi , "Wood and fiberglass crossarm performance against lightning strikes on transmission towers", International Conference on Power Systems Transient (IPST), Seoul, Republic of Korea, June 26-29, 2017.
- 2 M Izadi, N Mariun, MR Mehrjou, **MZA Ab Kadir**, N Misron, MAM Radzi, "Broken rotor bar fault detection in line start permanent magnet synchronous motor using transient current signal", IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS), Shah Alam, Malaysia, pp. 51-54, 2016
- 3 M Izadi, F Danafar, **MZA Ab Kadir**, "Natural rubber–Carbon nanotubes composites, recent advances and challenges for electrical applications", IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS), Shah Alam, Malaysia, pp. 61-65, 2016.
- 4 M. M. Isa, **M. Z. A. Ab-Kadir**, C. Gomes, N. Azis, M. Izadi, O. S. H. Alyozbaky, "Analysis on magnetic flux density and core loss for hexagonal and butt-lap core joint transformers", IEEE Annual Southern Power Electronics Conference (SPEC), Auckland New Zealand, 2016.
- 5 Muhammad Syahmi Abd Rahman, Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes, Jasronita Jasni, Farah Adillah Jamaludin, "Evaluation of electromagnetic fields on polluted polymer insulator under lightning impulse

- current,” International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
- 6 Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Maryam Hajikhani, Chandima Gomes, “Evaluation of lightning location and lightning current wave shape using measured lightning magnetic fields at two stations”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 7 Norhidayu Rameli, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Chandima Gomes, Norhafiz Azis, “Effect of soil resistivity on magnetic field in the case of lightning strike to a tall structure”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 8 Maryam Hajikhani, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Chandima Gomes, Jasronita Jasni, “A comparison of lightning human fatalities between Malaysia and United States”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 9 Maryam Hajikhani, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Jasronita Jasni, “Lightning fatalities and injuries in Malaysia from 2008 to 2015”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 10 Ashen Gomes, Chandima Gomes, **Zainal Kadir**, “Evaluation of lightning protection systems proposed for small structures by electromagnetic simulation”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 11 Norhidayu Rameli, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Chandima Gomes, Norhafiz Azis, “Variations in return stroke velocity and its effect on the return stroke current along lightning channel”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 12 Zulkifli Burhanuddin, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, Norhafiz Aziz, “Characteristics of fulgurite-like structures under HV conditions: Effects on electrical earthing system”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 13 Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Mohamad Syahmi Ab Rahman, Mohammad Rezazadeh Mehrjou, Maryam Hajikhani, “On the effect of insulator angle with respect to the cross-arm on the distribution of lightning electromagnetic fields”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 14 Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes; Muhammad Syahmi, Maryam Hajikhani, “Effects of air humidity on the performance of a polymer insulator under lightning induced voltage conditions”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 15 Farah Adilah Jamaludin, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Norhafiz Azis, Jasronita Jasni, Mohammad Syahmi Abd Rahman, “Considering the effects of a RTV Coating to improve electrical insulation against lightning”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 16 Nor Izzati Ahmad, **Mohd. Zainal Abidin Ab. Kadir**, Mahdi Izadi, Nur Hazirah Zaini, Mohd. Amran Mohd. Radzi, Norhafiz Azis, Wan Zuha Wan Hasan, “On the performance of a polycrystalline PV panel under different impulse voltages and temperatures”, International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
 - 17 Nur Hazirah Zaini, **Mohd. Zainal Abidin Ab. Kadir**, Mahdi Izadi, Nor Izzati Ahmad,

- Mohd. Amran Mohd. Radzi, Norhafiz Azis, Wan Zuha Wan Hasan, "On the effect of lightning on a solar photovoltaic system", International Conference on Lightning Protection (ICLP), Estoril, Portugal, 2016
- 18 I. Mohamed Rawi, **M. Z. A. Ab Kadir**, "A case study and observation on cause of transmission line outages in Malaysia", CIGRE Paris Session, 2016
- 19 M. Izadi, **M. Z. A. Ab-Kadir**, M. S. Abd-Rahman, F. A. Jamaluddin, N. Azis, "Electrical performance of 10kV polymer insulator under lightning induced voltage condition", CIGRE Paris Session, 2016.
- 20 M. Izadi, **M. Z. A. Ab-Kadir**, S. C. Chia, J. Jasni, C. Gomes, "Effect of parallel 275kV transmission line with oil pipeline on electromagnetic field calculation", CIGRE Paris Session, 2016.
- 21 Alexander Keul, Bernhard Brunner, Melanie Korff, Sanjay Sharma, Partha Roy, John Allen, Katie A. Bowden, Aini Mat Said, Elistina Abu Bakar, **Mohd Zainal Abidin Ab Kadir**, Chandima Gomes, and Mateusz Taszarek, "Severe weather and psychology - Analysis of international survey data", 8th European Conference on Severe Storms, 14-18 September 2015, Wiener Neustadt, Austria.
- 22 I. Mohamed Rawi, **M. Z. A. Ab Kadir**, "Investigation on the 132kV overhead lines lightning-related flashovers in Malaysia" International Symposium on Lightning Protection (XIII SIPDA), Brazil, pp. 239-243, 2015.
- 23 A. B. Sabow, A. Sazili, Z. Idrus, G. Meng, **M. Z. A. Ab Kadir**, K. Adeyemi, "Meat quality assessment in goats subjected to conscious halal slaughter and slaughter following minimal anaesthesia", The 5th International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC 2015), October 27-30 2015, Pattaya, Thailand.
- 24 A. H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, "Power consumption and size minimization of a wireless sensor node in automation system application", IEEE Regional Symposium on Micro and Nanoelectronics (RSM), pp. 1-4, 2015.
- 25 A. H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, "Alternative Solar-Battery Charge Controller to Improve System Efficiency", 9th International Power Engineering and Optimization Conference (PEOCO), Malacca, Malaysia, 2015
- 26 A. H. Sabry, W. Z. Wan Hasan, **M. Z. A. Ab-Kadir**, M. A. Mohd Radzi, S. Shafie, "DC Loads Matching Technique as an alternative to AC inverter in residential Solar System Application Evaluation and Comparison", 9th International Power Engineering and Optimization Conference (PEOCO), Malacca, Malaysia, 2015.
- 27 N. I. A. Katim, M. T. Ishak, A. M. Ishak, **M. Z. A. Ab-Kadir**, "Behavior of Biodegradable Oil under Impulse Voltages", 9th International Power Engineering and Optimization Conference (PEOCO), Malacca, Malaysia, 2015
- 28 Thien Yee Von, Norhafiz Azis, **Mohd Zainal Abidin Ab Kadir**, Jasronita Jasni, Robiah Yunus, Mohd Taufiq Ishak, "Investigation on the Lightning Breakdown Voltage of Biodegradable Oil under Non-Uniform Field", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 29 Mohd Taufiq Ishak, Thien Yee Von, Norhafiz Azis, **Mohd Zainal Abidin Ab Kadir**, Nurul Akma, "Examination on the Lightning Breakdown Strength of Biodegradable Oil under Quasi-Uniform Field", IEEE International Conferences on Power Energy

(PECON 2014), Kuching Sarawak, Malaysia, 2014.

- 30 Soon Chai Chia, **Mohd Zainal Abidin Ab Kadir**, Mahdi Izadi, Jasronita Jasni, Chandima Gomes, "The Effect of Electromagnetic Fields Due to HV Line on the Parallel Pipeline", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 31 Mahdi Karami, Norman Mariun, Mohammad Rezazadeh Mehrjou, **Mohd Zainal Abidin Ab Kadir**, Misron Norhisam, Mohd Amran Mohd Radzi, "Diagnosis of Static Eccentricity Fault in Line Start Permanent Magnet Synchronous Motor", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 32 Nur Aqilah Binti Mohamad, Norhafiz Azis, **Mohd Zainal Abidin Ab Kadir**, Jasronita Jasni, Robiah Yunus, Mohd Taufiq Ishak, "A Study on the Dielectric Properties of Palm Oil and Coconut Oil", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 33 Muhammad Syahmi Bin Abd Rahman, Mahdi Izadi, **Mohd Zainal Abidin Ab Kadir**, "Influence of Air Humidity and Contamination on Electrical Field of Polymer Insulator", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 34 Wan Zuha Wan Hasan, Suhaidi Shafie, Mohammad Hamiruce Marhaban, Siti Anom Ahmad, **Mohd Zainal Abidin Ab Kadir**, Mohd Amran Mohd Radzi, Mohd Hasimi Mohd Sidek, "GPS Based Portable Dual-Axis Solar Tracking System Using Astronomical Equation", IEEE International Conferences on Power Energy (PECON 2014), Kuching Sarawak, Malaysia, 2014.
- 35 G. Nourirad, M. Izadi, C. Gomes, **M. Z. A Ab Kadir**, "Lightning Safety against Side Flashes: Influence of Floating Electrodes on Gap Breakdown ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 36 M.S. Aini, A. B. Elistina, **M. Z. A Ab Kadir**, C. Gomes, A. G. Keul, "The Influence of Socio Demographic Factors on Severe Weather Concern, Knowledge and Preparedness among Malaysians ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 37 I. Mohamed Rawi, M. P. Yahaya, **M. Z. A Ab Kadir**, N. Azis, "Experience and Long Term Performance of 132 kV Overhead Lines Gapless-Type Surge Arrester ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 38 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "The Evaluation of Lightning Return Stroke Current Using Measured Fields ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 39 M. N. Hamzah, **M. Z. A Ab Kadir**, C. Gomes, S. N. M. Arshad, N. Abdullah, N. M. Hatta, "Unusually Long Duration Lightning Electric Field Return Strokes in Malaysia", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 40 S. C. Lim, **M. Z. A. Ab Kadir**, C. Gomes, N. Azis, "Steady State Performance of Improvised Ufer Grounding Practice ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 41 C. A. Charalambous, N. Kokkinos, N. Christofides, **M. Z. A. Ab Kadir**, C. Gomes, "A Simulation Tool to Assess the Lightning Induced Overvoltages on DC Cables of Photovoltaic Installations ", International Conference on Lightning Protection

(ICLP), Shanghai, China, 2014

- 42 N. A. Abdul Rahman, A. M. Ahmad Marican, **M. Z. A. Ab. Kadir**, "Optimized Transmission Tower Earthing: Experience in Design and Operation ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 43 S. D. Buba, W. F. Wan Ahmad, **M. Z. A. Ab. Kadir**, C. Gomes, J. Jasni, M. Osman, "Impact of Split Factor Value on the Safe Design of Distribution Substation Earth Grid ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 44 I. Mohamed Rawi, **M. Z. A. Ab. Kadir**, N. Azis, "Lightning Study and Experience on the First 500kV Transmission Line Arrester in Malaysia ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 45 N. Rameli, **M.Z.A Ab Kadir**, M. Izadi, C. Gomes, N. Azis, "Effect of Soil Resistivity on the Lightning Current along Tall Towers ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 46 S. N. M. Arshad, **M. Z. A Ab Kadir**, M. Izadi, M. N. Hamzah, C. Gomes, J. Jasni, "Characterization of Measured Lightning Electric Fields Observed in Malaysia ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 47 N. Abdul Rahim, M. Izadi, **M. Z. A. Ab Kadir**, C. Gomes, J. Hasni, N. Rameli, "The Behaviour of Lightning Current and Charge Density in The Case of Tall Tower ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 48 I. Mohamed Rawi, **M. Z. A. Ab. Kadir**, N. Azis, "Continuous Monitoring on 132kV Line in Reducing Flashovers due to Lightning ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 49 M. Izadi, **M. Z. A. Ab Kadir**, "Effect of Soil Resistivity on the Value of Lightning Induced Voltage", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 50 M. Izadi, **M. Z. A. Ab Kadir**, "On The Behaviour of Lightning Current for the Case of Striking to Tall Structure ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 51 M. Izadi, **M. Z. A. Ab Kadir**, M. Hajikhani, "Effect of Lightning Induced Voltage on the Line Polymer Insulator in a Distribution Line ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 52 C. Gomes, M. Izadi, **M. Z. A. Ab. Kadir**, A. Gomes, "Lightning Current and Voltage Distribution of Large Axially Symmertic Buddhist Stupa in Sri Lanka", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 53 N. Rameli, **M.Z.A Ab Kadir**, M. Izadi, C. Gomes, N. Azis, "Effect of the Grounding System Arrangement on the Lightning Current along Tall Structures ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 54 A. M. Ariffen, **M. Z. A. Ab-Kadir**, C. Gomes, J. Jasni, M. Izadi, "On the Bending Effects of a Copper-type Down Conductor", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 55 N. Mohd Yusoff, J. Jasni, B. Manson, **M. Z. A. Ab Kadir**, "A Study in Lightning Protection System -The Effect of the Bending Degree of the Down Conductor ",

- International Conference on Lightning Protection (ICLP), Shanghai, China, 2014.
- 56 A. B. Elistina, M. S. Aini, **M.Z.A. Ab Kadir**, C. Gomes, A.G. Keul, "The Position of the Media as a Tool of Communication and Education on Severe Weather in Malaysia ", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014.
- 57 G. Nourirad, M. Izadi, C. Gomes, **M. Z. A Ab Kadir**, "Variation of Minimum Safety Separation for Non-Conducting Lightning Targets", International Conference on Lightning Protection (ICLP), Shanghai, China, 2014
- 58 S. C. Lim, C. Gomes, G. Nourirad, **M. Z. A. Ab Kadir**, "Significance of localized soil resistivity in designing a grounding system", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 59 S. D. Buba, W. F. Wan Ahmad, **M. Z. A. Ab Kadir**, C. Gomes, J. Jasni, M. Osman, "Design of distribution substation earth grid in high resistivity soil using CDEGS", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 60 I. M. Rawi, **M. Z. A. Ab Kadir**, "Procedures for evaluating the HV overhead lines lightning performance and methods for reducing the OHL trip rate in TNB transmission", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 61 M. Izadi, M. S. B. Abd Rahman, **M. Z. A. Ab Kadir**, "On the voltage and electric field distribution along polymer insulator", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 62 S. N. M. Arshad, M. Izadi, **M. Z. A. Ab Kadir**, M. A. Abd Bari, N. Rameli, N. Abdul Rahim, M. N. Hamzah, "Characterization preliminary breakdown in the measured lightning electric fields", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 63 G. Nourirad, C. Gomes, M. Izadi, S. C. Lim, **M. Z. A. Ab Kadir**, "Effects of the presence of insulated and non-insulated floating electrodes on side flashing", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 64 N. Abdul Rahim, M. Izadi, **M. Z. A. Ab Kadir**, N. Rameli, S. N. M. Arshad, "On the behavior of lightning return stroke current incidence to tall towers", 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 2014
- 65 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.
- 66 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.
- 67 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.

- 68 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
- 69 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
- 70 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
- 71 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
- 72 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
- 73 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 (PEOCO2013), Langkawi, Malaysia, 2013
- 74 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 (PEOCO2013), Langkawi, Malaysia, 2013
- 75 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 76 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 (PEOCO2013), Langkawi, Malaysia, 2013 .
- 77 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 78 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 79 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 80 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 81 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 82 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 (PEOCO2013), Langkawi, Malaysia, 2013 .
- 83 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 (PEOCO2013), Langkawi, Malaysia, 2013 .
- 84 Ghasem Nourirad, Chandima Gomes, **Mohd Zainal Abidin Ab Kadir**, “Corona Losses: Issues and Solutions”, 2013 IEEE 7th International Power Engineering and Optimization Conference (PEOCO2013), Langkawi, Malaysia, 2013 .
- 85 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 (PEOCO2013), Langkawi, Malaysia, 2013.
- 86 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.
- 87 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
- 88 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
- 89 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.
- 90 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
- 91 **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
- 92 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.

- 93 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.
- 94 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.
- 95 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.
- 96 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.
- 97 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.
- 98 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 (PEOCO2012), Melaka, Malaysia, pp. 29-34, 2012.
- 99 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 (PEOCO2012), Melaka, Malaysia, pp. 153-158, 2012
- 100 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.
- 101 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.
- 102 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.
- 103 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
- 104 Z. Mohd Nawi, **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.
- 105 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

- 106 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
- 107 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.
- 108 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.
- 109 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.
- 110 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.
- 111 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.
- 112 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.
- 113 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
- 114 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
- 115 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
- 116 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
- 117 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, 2 -5 August 2010, pp 39-46
- 118 Jasronita Jasni, Siow Lip Khai, **Mohd Zainal Ab. Kadir**, Wan Fatinhamamah Wan Ahmad, “Natural additive filler materials for grounding protection system”, International Conference on Lightning Protection (ICLP), Cagliari, Italy, 2010.
- 119 Wan Fatinhamamah 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.
- 120 **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.
- 121 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.
- 122 **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.
- 123 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
- 124 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
- 125 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
- 126 M. Izadi, **M. Z. A. Ab. Kadir**, “Comparison between TL and MTL 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.
- 127 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
- 128 Mahdi Izadi; **Mohd Zainal Abidin Ab. Kadir**; Wan Fatinhamamah Wan Ahmad; Zawati Mohd Nawwi; 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.
- 129 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.
- 130 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.
- 131 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.
- 132 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.
- 133 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.
- 134 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
- 135 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.
- 136 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.
- 137 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.
- 138 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", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 139 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", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 140 J. Jasni, H. Hizam, **M. Z. A Ab Kadir**, N. Mariun, S. Bahari, "Determination of Proximity to Static Voltage Collapse Using CPF-GMRES Method", 2nd IEEE International Power Energy Conferences, Johor Baharu, Malaysia, Dec. 2008.
- 141 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.
- 142 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.

- 143 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.
- 144 **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
- 145 **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.
- 146 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.
- 147 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.

Other Publications (Local/International News Coverage)

- 1 Weatherman: Be careful when outdoors **(The Stars, 15 March 2017)**
- 2 Malaysia to experience more lightning thunderstorms ahead in the inter-monsoon season, What to do if lightning strikes **(Malaysian Digest, 15 March 2017)**
- 3 We can't spare the rod **(The Stars, 19 June 2016)**
- 4 M'sia third highest in lightning strikes **(The Stars, 22 May 2016)**
- 5 Danger from the skies **(The Stars, 22 May 2016)**
- 6 When nature strikes: Safety not up to par **(The Stars, 17 December 2015)**
- 7 Tenaga solar lebih produktif **(Kosmo, 9 October 2015)**
- 8 Jumlah mangsa panahan petir tinggi **(Harian Metro, 29 August 2015)**
- 9 **M. Z. A. Ab Kadir**, "Lightning Parameters for Engineering Application", Buletin Jurutera, July 2015
- 10 Kilat: Malaysia 'dipanah' 190 hari setahun **(Berita Harian, 20 May 2015)**
- 11 34 scientists get top award **(theSundaily, 8 December 2014)**
- 12 Renewable Energy Development in Malaysia **(Interviewed by BERNAMA TV for BizTalk show, 7 March 2013)**
- 13 Growing Power Demand: Challenges **(Interviewed by BERNAMA TV for BizTalk**

- show, 31 January 2013)**
- 14 Ancaman 'bisa' petir **(Laporan Khas Utusan Malaysia, 22 September 2012)**
 - 15 Amukan petir pada Oktober, April **(Laporan Khas Utusan Malaysia, 22 September 2012)**
 - 16 Tepati piawaian ditetapkan **(Laporan Khas Utusan Malaysia, 22 September 2012)**
 - 17 Mangsa terdedah risiko gangguan personaliti **(Laporan Khas Utusan Malaysia, 22 September 2012)**
 - 18 Kesedaran individu perlindungan paling berkesan **(Laporan Khas Utusan Malaysia, 22 September 2012)**
 - 19 Invited Speaker to TV3/Media Prima: Talk on Lightning Safety and Injury Prevention **(21 June 2012 & 13 August 2012)**
 - 20 Invited Guest to Radio IKIMfm: English Section-Thunderstorm Safety **(28 April 2012, IKIMfm)**
 - 21 Gas kilang punca amukan petir **(Kosmo, 15 April 2012)**
 - 22 Buletin 1.30 **(TV3 Channel, 12 April 2012)**
 - 23 Ajar pendidikan keselamatan ribut petir di sekolah **(Kosmo, 12 April 2012)**
 - 24 Ribut petir: Pendidikan keselamatan perlu mula di sekolah **(Sinar Harian, 11 April 2012)**
 - 25 Pendidikan Keselamatan Ribut Petir Perlu Bermula Dari Sekolah - Pakar **(mStar Online, 11 April 2012)**
 - 26 Compulsory thunderstorm safety education proposed **(Borneo Post, 12 April 2012)**
 - 27 Thunderstorm safety education should be compulsory **(New Straits Time, 12 April 2012)**
 - 28 Experts to the lightning hotspot for investigation - Zink roof houses hold high risk of lightning strike, **(Sin Chew Daily -Negeri Sembilan Edition-Front Page, 22 Dec 2011)**
 - 29 Kilat cetus renjatan pemanas air **(Harian Metro, 27 November 2011)**
 - 30 Climate change worsens lightning threat **(NST, 28 Aug 2011)**
 - 31 80% premis terdedah kilat **(Special Report Berita Minggu, 10 Oct 2010)**
 - 32 Malaysia hadapi jumlah petir tertinggi **(Special Report Berita Minggu, 10 Oct 2010)**
 - 33 Nasty weather in peninsula, no thanks to La Nina **(The Star, 19 August 2010)**
 - 34 UPM pusat teknologi perlindungan kilat **(Utusan Malaysia, 18 March 2010)**
 - 35 WSI Corp and CELP UPM Collaborate to Provide Global Lightning Data for Southeast Asia **(Press Released, Andover USA, 31 August 2009)**

- 36 Press Conference in introducing CELP UPM (**UPM Press, 11 March 2010**)
- 37 Contractors using unsafe lightning rod (**The Sun, 11 May 2009**)

f. Recognition/Awards

- 1 IEEE Power & Energy Society Distinguished Lecturer, since 2015
- 2 Vice Chancellor Fellowship Award 2016 (Professional Services) - MGAP 2017
- 3 Recipient of Excellent in Service Award 2016 - MGP 2017
- 4 Anugerah Tokoh Anak Muda Kelantan (Anugerah Umar Al-Khattab), 2015
- 5 Nominee, APEC Science Prize for Innovation, Research and Education (ASPIRE Prize) 2015
- 6 Anugerah Tokoh Jasa Gemilang 2015, awarded by Sek. Men. Sains Raja Tun Azlan Shah (SERATAS) Taiping, Perak for outstanding contribution to the school's programs towards high performance and student development.
- 7 Top Research Scientist Malaysia (TRSM), 2014
- 8 Young Scientist Network-Academy of Sciences Malaysia (YSN-ASM) 2012
- 9 Vice Chancellor Fellowship Award 2011 (Young Researcher - Science and Technology Cluster) - MGAP 2012
- 10 Thompson Reuters-Web of Science: Highly Cited Author 2012
- 11 Recipient of Excellent in Service Award 2012- APC 2012
- 12 IEEE PES High Performance Chapter Award (Exec Comm)
- 13 IEEE GOLD Affinity Group Hall of Fame Award 2011
- 14 *Marquis Who's Who* in Science and Engineering for 2011, 2012
- 15 Silver Medal, INNOVA/EUREKA Brussels 2009 (Principal Investigator)
- 16 Bronze Medal for Malaysia Technology Expo 2009 (Principal Investigator)
- 17 Excellent Researcher Award for 2008 and 2010
- 18 Silver Medal for Invention, Research and Innovation Exhibition, Universiti Putra Malaysia, 2008 (Principal Investigator)
- 19 Recipient of Excellent in Service Award 2008- APC 2008
- 20 Excellent in Service Award for 2007, 2008 and 2009.
- 21 Excellent in Teaching for 2007, 2008, 2009 and 2010
- 22 3rd Place (National Level), Asia-Pacific Robot Event (ABU-ROBOCON 2008)-Manager
- 23 Silver Medal for Invention, Research and Innovation Exhibition, Universiti Putra Malaysia, 2007 (Principal Investigator)

g. National and International Linkages/ Collaborative Partners

Among the Collaborative Partners are:

No	Institution	Collaborative Area
1	Massachusetts Institute of Technology (MIT)	Lightning-generated Fields Profiling
2	Uppsala University, Sweden	Atmospheric Electricity/ HV Testing
3	Swiss Federal Institute of Technology (EPFL), Switzerland	Lightning Induced Voltage
4	African Centre for Lightning & Electromagnetic (ACLEnet)	Lightning Protection and Safety
5	Austrian Lightning Detection and Information System (ALDIS), Austria	Lightning Measurement Data
6	University of Florida, USA	Rocket-triggered Lightning
7	Chalmers University of Technology, Sweden	Surface Flashover
8	University of Bologna, Italy	Induced Voltage/ Lightning Performance
9	Tshinghua University, China	High Voltage Engineering
10	Chinese Academy of Science	Rocket-triggered Lightning
11	KTH, Sweden	Electromagnetic Compatibility/ Interference
12	University of Salzburg, Austria	Severe Weather
13	Illinois University at Chicago, USA	Keraunamedicine/ Lightning Safety
14	University of Manchester, UK	HV Engineering
15	Universidad Nacional de Colombia, Colombia	Lightning Characterization
16	University of Witwatersrand, South Africa	Lightning Safety and Education
17	Royal Melbourne Institute of Technology (RMIT), Australia	Surface Flashover and Field Radiation
18	National Lightning Safety Institute, USA	Lightning Protection and Education
19	Instituto De Investigaciones Electricas, Mexico	Lightning Protection and Characterization
20	WSI Corporation USA	Global Lightning Data
21	TARA, Bangladesh	Lightning Safety and Education

22	TNB/TNBR, Malaysia	Lightning Performance of Overhead Line
23	UiTM, Malaysia	Electromagnetic Interference
24	UTM, Malaysia	High Voltage Engineering and Testing
25	UNIMAP, Malaysia	Lightning Measurement
26	TMRND, Malaysia	Electromagnetic and Lightning Protection
27	UNITEN, Malaysia	Lightning and Earthing
28	UTHM, Malaysia	High Voltage and Transformer Studies
29	UPNM, Malaysia	Materials and Electromagnetic Interference
30	JKR, Malaysia	Lightning Protection
31	Royal Navy, Malaysia	Electromagnetic Interference and Defense Security
32	SIRIM Malaysia	Standard Development
33	Sustainable Energy Development Authority (SEDA)	Lightning Protection Guideline for PV Systems
34	Energy Commission of Malaysia	Standard and Policy

5. Professional Services and Administrative Duties

a. Professional Services

International

No	Detail	Designation	Duration
1	Centre for Electromagnetic and Lightning Protection Research (CELP), Universiti Putra Malaysia, Malaysia (http://www.celp.upm.edu.my)	Director	2008-Present
2	National Lightning Safety Institute (NLSI), USA (http://www.lightningsafety.com)	Board of Advisor (Engineering and Physics)	2010-Present
3	African Centres for Lightning and Electromagnetics Network (ACLEnet) (http://aclenet.org/research-advisors)	Research Advisor	2014-Present

4	IEEE PES Working Group on Lightning Performance of Overhead Lines	Working Group Committee	2008-Present
5	CIGRE SC C4: System Technical Performance	Reps for SC C4 Meeting	2014-Present
6	CIGRE SC C4.44: EMC for large PV systems	Technical Committee	2017-Present
7	CIGRE SC B5: Protection and Automation	Specialist	2016-Present
8	CIGRE SC D1: Materials and Emerging Test Techniques	Specialist	2016-Present
9	CIGRE SC D2: Information Systems and Telecommunication	Specialist	2016-Present
10	CIGRE SC C3: System Environmental Performance	Specialist	2016-Present
11	CIGRE SC C4.39: Effectiveness of line surge arresters for lightning protection of overhead transmission lines	Technical Committee	2016-Present
12	CIGRE SC C4.23: Guide to procedures for estimating the lightning performance of transmission lines	Technical Committee	2013-Present
13	International Journal of Electrical Engineering and Applied Sciences (IJEEAS)	Advisory Board Member	2017-Present
14	International Conference on Engineering and Technology (ICET 2015), Thailand	Keynote Speaker	June 2015
15	IEEE Power & Energy Conference	General Chair/ Tutorial Speaker/ Session Chair	Dec 2014
16	Australian International Academic Centre (AIAC)	Advisory Board Member	2013-Present
17	An Open World: Science, Technology and Society in the Light of Niels Bohr's Thoughts	Session Chair	Dec. 2013
18	IEEE International Power Engineering and Optimization Conference 2013 (PEOCO2013)	Keynote Speaker	June 2013
19	Asia-Pacific Lightning (APL)	Technical Program Committee	2011-2013
20	IEEE International Power Engineering and Optimization Conference 2013 (PEOCO2013)	Patron	2013 & 2014
21	International Symposium on Lightning Protection (ISLP), Nepal 2011	International Advisory Committee	Oct. 2011
22	International Association of Engineers (IAENG)	International Board of Reviewer for Engineering Letters	2010-Present
23	IEEE Power and Energy Conference (PECON) 2012	Technical Program Committee/ Track Chair	2-5 Dec 2012

24	International Conference on Lightning Protection (ICLP) 2012, Austria	Scientific Committee Members and Reviewers	Sept. 2012
25	International Conference on Lightning Protection (ICLP) 2012, Austria	Session Chairman (Session on Lightning Safety and Medicine)	Sept. 2012
26	International Conference on Lightning Protection (ICLP) 2010, Italy	Scientific Committee Members and Reviewers	Sept. 2010
27	International Conference on Lightning Protection (ICLP) 2010, Italy	Session Chairman (Session on Lightning Safety and Medicine)	16 Sept. 2010
28	World Academy of Science, Engineering and Technology (WASET)	Scientific and Technical Committees & Editorial Review Boards	2008-Present
29	Algerian Journal of Electrical Engineering (AJEE)	Editorial Board	2014-Present
30	International Journal of Electrical Components and Sustainable Energy (IJECSE)	Associate Editor	2013-Present
31	International Journal of Power and Energy Engineering (IJPE)	Editorial Board	2013-Present
32	International Journal of Electrical and Electronics Engineering Research (IJEEER)	Editorial Board	2011-Present
33	International Journal of Research and Reviews in Applied Sciences (IJRRAS)	Editorial Board	2010-Present
34	Advances in Natural Science (ANS)	Editorial Board	2010-Present
35	Journal of Emerging Trends in Engineering and Applied Sciences (JETEAS)	Editorial Board	2010-Present
36	IEEE International Conference on Adaptive Science and Technology (ICAST), Ghana	Technical Committee Member	2011
37	IEEE ICAST 2009 for South East Asia Region	Publicity Co-Chair	2011
38	IEEE Power and Energy Conference (PECON) 2010	Technical Program Committee/ Session Chair	Dec 2010
39	World Engineering Congress 2010, Sarawak	Vice Chair/ Technical Committee (CEET)	1-5 August 2010
40	IEEE Power and Energy Conference (PECON) 2010	Technical Program Committee/ Session Chair	Dec 2010
41	CIGRE Study Committee C4 on System Technical Performance: A Colloquium on Lightning and Power Systems	Invited Speaker	April 2010

42	International Conference on Advance Material (ATCi), Kuala Lumpur, 2009	Session Chairman	3-5 Nov. 2009
43	Tutorial on Lightning Protection, SCORed 2009	Speaker	16-18 Nov. 2009
44	CIGRE Study Committee C4 on System Technical Performance: A Colloquium on Lightning and Power Systems	Technical Committee	April 2010
45	World Engineering Congress 2007, Penang	Technical Committee	2007
46	World Engineering Congress 2007 (E&E), Penang	Technical Editor	2007
47	World Engineering Congress 2007 (E&E), Penang	Session Chairman	2007
48	PEOCO Shah Alam, Malaysia	Board of International Reviewer	2008-Present
49	IEEE International Conference on Adaptive Science and Technology (ICAST), Ghana	Technical Committee Member	2009
50	IEEE ICAST 2009 for South East Asia Region	Publicity Co-Chair	2009
51	Lightning Protection Symposium (co-located with IEEE International Conference on Adaptive Science and Technology (ICAST), Ghana)	Technical Committee	2009
52	Thunder Storm Electricity and Lightning Physics Session) for the Sixth Annual General Meeting, Asia Oceania Geosciences Society Singapore. (AOGS, 2009).	Co-Convener	2009
53	IEEE Student Conference on Research and Development (SCoReD)	Committee	2009

National

No	Detail	Designation	Duration
1	IEC TC 81 (Lightning Protection) - National Mirror Committee	Chairman	2015-Present
2	Malaysian High Voltage Network (MyHVnet)	Chair	2017-2018
3	Industry Standards Committee (ISC/E-Generation, Transmission and Distribution of Energy)	Technical Committee Member	2015-Present
4	Technical Working Group (TWG) on Research and Systematic Observation (RSO)	Member	2015-Present

5	IEEE Power Engineering Society (PES), Malaysia Chapter	Immediate Past Chair/ Excom	2015-2016
6	National Conference on Electrical Safety (NCES), 2015	Invited Speaker	9 Nov 2015
7	IEEE Power Engineering Society (PES), Malaysia Chapter	Chair	2013-2014
8	ASEAN Agreement on Disaster Management and Emergency Response (AADMER) - for MERCY Malaysia	Expert Panel/ Committee	2013-Present
9	Education for Sustainable Development (ESD)- Disaster Risk Reduction (DDR) - Ministry of Education Malaysia	Committee	2012-Present
10	Seminar on Protection Against Lightning by IEM	Invited Speaker/ Panellist	27 Nov 2014
11	Regional Training on Lightning Protection	Resource Person/ Speaker/ Chair	12-13 Nov 2014
12	National Science Challenge (NSC) 2013	Committee	2013
13	IEEE Power Engineering Society (PES) Malaysia Chapter	Vice Chair	2011-2012
14	Malaysian National Committee-CIGRE	Executive Committee	2010-2016
15	Working Group on Power Quality	Technical Committee/ Expert Member	2010-Present
16	Working Group on High Voltage and High Current Test Techniques (WG 2) - IEC TC 42	Expert Member	2010-Present
17	Technical Committee on Electromagnetic Comptability (EMC) - IEC	Technical Committee/ Expert Member	2010 - Present
18	Regional Training on Lightning Protection	Resource Person/ Speaker/ Chair	4-5 July 2012
19	Technical Talk on Lightning Safety & Injury Prevention @ Media Prima/TV3	Invited Speaker	21 June 2012
20	CELP/IEEE PES/ CIGRE Technical Talk on Fundamentalof Insulation Coordination Studies	Speaker	15 March 2012
21	IEEE PES/ CELP Technical Talk on Lightning Safety	Session Chair/ Chair of Org Committee	3-4 March 2011
22	TERCO/ CELP Seminar on High Voltage	Session Chair/ Chair of Org Committee	Oct 2011
23	Penggubal Soalan Peperiksaan Lukisan Kejuruteraan, Bahagian Matrikulasi, Kementerian Pelajaran Malaysia	Penggubal	2011
24	Lightning Protection for Building Housing	Invited Speaker	October 2010

Explosive Materials for Ministry of Defense,
Malaysia (STRIDE)

25	CELP/IEEE Educational Talk on Lightning & Its Potential Hazard	Invited Speaker	July 2010
26	IET: Lightning Protection Seminar	Speaker	19 June 2010
27	TERCO/ CELP Seminar on High Voltage	Session Chair/ Chair of Org Committee	July 2010
28	Joint Industry Study TNB-Petronas-TMRD (JIS): Towards Achieving Best Practices in Lightning Protection	Keynote Speaker/ Panelist	23-24 June 2009
29	Guideline in Insulation Coordination Practices for MV Overhead Distribution System for TNB Distribution	Trainer for TNB Distribution	1-2 July 2009
30	Pentaksir Soalan Peperiksaan Lukisan Kejuruteraan, Bahagian Matrikulasi, Kementerian Pelajaran Malaysia	Ketua Panel Pentaksir	21-24 Julai 2009
31	IEEE Malaysia Section	Executive Committee (Student Activities Counselor)	2008
32	IEEE Malaysia Section	Executive Committee (Educational Activities Counselor)	2009
33	IEEE Power Engineering Society (PES) Malaysia Chapter	Secretary	2009-2010
34	IEEE Malaysia GOLD	Committee	2009
35	International Advanced of Technology Congress (ATCi)	Committee	3-5 Nov. 2009
36	IEEE-Freescale Smartcar Competition	Secretary	Nov. 2008
37	IEEE Power Engineering Society (PES) Malaysia Chapter	Auditor	2008
38	Two-day Intensive Workshop on Lightning Protection, Malaysia	Program Coordinator /Chair of Organizing Committee	17-18 December 2008

University

No	Detail	Designation	Duration
1	Value Management	Committee	Sept 2017-Aug

			2019
2	Putra Global 200	Committee	Since 2016
3	Research Planning and Knowledge Management	Committee	Since 2016
4	Forum Academia Innovative, Academic Progressive	Panelist	26 Sept 2013
5	Academic Writing Workshop	Speaker	March 2013
6	Research University	Auditor	2011-2012
7	Lightning Protection System and Electrical Safety for Buildings and Equipments	Technical Advisor to UPM	2009-Present
8	Institute of Advanced Technology (ITMA)-AREL	Head of Renewable Energy Program	May 2010-May 2011
9	Mesyuarat Khas Penggunaan Alat ESE Sebagai Pelindung Kilat Bagi Projek-projek Pembangunan di UPM	Technical Advisor to UPM	2009
10	ROBOCON 2008, UPM	Team Manager	2008
11	Institute of Advanced Technology (ITMA)-AREL	Research Fellow	2008-Present
12	ROBOCON 2007, UPM	Team Manager	2007
13	EPSCOM '07 (UPM Team), UNITEN	Advisor	2007

b. Technical Reviewer (Selected)

No	Journal/Conference	Designation	Duration
1	International Journal of Electrical and Power Energy System	Reviewer	2012-Present
2	Journal of Atmospheric Research	Reviewer	2012-Present
3	IEEE Transaction on Power Delivery	Reviewer	2007-Present
4	Journal of Safety Science	Reviewer	2012-Present
5	Journal of Lightning Research	Reviewer	2011-Present
6	Scientia Iranica	Reviewer	2012-Present
7	IEEE PES General Meeting	Reviewer	2011
8	Proceeding of IEEE	Journal Reviewer	2010-Present
9	Renewable and Sustainable Energy Reviews	Journal Reviewer	2010-Present

10	Electrical Power Components and Systems	Journal Reviewer	2010-Present
11	Progress In Electromagnetic Research & JEMWA	Journal Reviewer	2009-Present
12	European Transactionon Electrical Power	Journal Reviewer	2007-Present
13	World Engineering Congress 2010, Sarawak	Technical Reviewer	2010
14	IEEE International Conference on Adaptive Science and Technology (ICAST), Ghana	Reviewer	2009-Present
15	World Scientific and Engineering Academy and Society (WSEAS)	Reviewer	2008-Present
16	2nd IEEE International Conference on Power and Energy (PECon)	Review Committee	2008
17	Journal of Technology, SIRIM	Technical Reviewer	2007
18	Intelligent Systems and InformationTechnology Symposium 2007 (ISITS'07)	Technical Reviewer	2007
19	Journal of IEM	Technical Reviewer	2008
20	Malaysian Research Group (MRG) Annual Conference, Manchester, United Kingdom	Technical Reviewer (Engineering)	2006
21	World Engineering Congress 2007, Penang	Technical Reviewer	2007

c. Visiting Post/ External Assessor/ Thesis Examiner/ Evaluator

Visiting Post

No	Institution	Duration
1	Visiting Professor to Universiti Teknikal Malaysia Melaka (UTeM)	2017-2019

External Assessor (UG Programme)

No	Institution	Duration
1	Universiti Teknologi MARA, Shah Alam	2017-2019

2	MAHSA University, Selangor	2017-2019
3	TATI University College (TATIUC), Terengganu	2015-2016
4	Universiti Malaysia Perlis (UniMAP)	2015-2016

Thesis Examination Committee

No	Student (Institution)	Degree	Designation	Duration
1	Harriezan Ahmad (UNITEN)	PhD	External Examiner	2017
2	Suleiman Musa (UPM)	PhD	Internal Examiner	2017
3	Hanafiah Kamarden@Kamarudin (UTM)	MSc	External Examiner	2017
4	Ali El Gayar (UTM)	PhD	External Examiner	2016
5	Emran Jawaid (UPM)	MSc	Internal Examiner	2016
6	Ahmed Raisan Hussein Al-Hrashawi (UTM)	PhD	External Examiner	2016
7	Mehrdad Mokhtari (UTM)	PhD	External Examiner	2016
8	Nordiana Azlin Othman (UTM)	PhD	External Examiner	2015
9	Behnam Salimi (UTM)	PhD	External Examiner	2015
10	Saman Toosi (UPM)	PhD	Internal Examiner	2015
11	Foo Yeun Yung (UPM)	MSc	Chairman	2015
12	Shakil Ahamed Khan (UM)	MPhil	External Examiner	2015
13	Wan Akmal 'Izzati Wan Mohd Zawawi (UTM)	MSc	External Examiner	2014
14	Nor Akmal Mohd Jamail	PhD	External Examiner	2014
15	Lee Jhee Fhong (UM)	MSc	External Examiner	2014
16	Aliyu Sabo (UPM)	MSc	Internal Examiner	2014
17	Kwong Qi Jie (UPM)	PhD	Internal Examiner	2014
18	Nor Asilah Abd Ghaffar (UTM)	MSc	External Examiner	2014
19	Sharifah Sakinah Tuan Othman (UPM)	MSc	Internal Examiner	2014
20	Hafizi Ahmad (UTM)	PhD	External Examiner	2013
21	Ramdan Emhemmed Rajab (Multimedia University)	PhD	External Examiner	2013
22	Farhana Mohamad Yusop (USM)	MSc	External Examiner	2013
23	Muhammad Mansoor (UPM)	PhD	Internal Examiner	2013

24	Arash Mohamed Toudeshki (UPM)	PhD	Internal Examiner	2013
25	Zetty Adibah binti Kamaruzzaman (UNITEN)	MSc	External Examiner	2013
26	Sani Mohammad Lawal (UPM)	MSc	Internal Examiner	2012
27	Omer Hikmat Mehdi (UPM)	MSc	Internal Examiner	2012
28	Fahteem Hamamy Anuwar (UiTM)	MSc	External Examiner	2012
29	Mouayad Abdulredha Sahib (UPM)	MSc	Chairman	2012
30	Zuraimy Adzis (UTM)	PhD	External Examiner	2012
31	Nuradlina Abdullah (UNITEN)	MSc	External Examiner	2011
32	Mohd Hafez Hilmi Harun (UiTM)	MSc	External Examiner	2011
33	Hemalan Nambier a/l Vijayan (UNITEN)	MSc	External Examiner	2011
34	Anastasia Rachman (UNITEN)	MSc	External Examiner	2011
35	Serene Chan Ee Huei (UNITEN)	MSc	External Examiner	2011
36	Mohammed Obaid Ali (UNITEN)	MSc	External Examiner	2011
37	Siti Khodijah Mazalan (UPM)	MSc	Internal Examiner	2011
38	Mohammad Lutfi Othman (UPM)	PhD	Internal Examiner	2011
39	Ami Nurul Nazifah Abdullah (UPM)	MSc	Chairman	2011
40	Mojgan Hojabri (UPM)	PhD	Internal Examiner	2011
41	Ng Kai Mun (UPM)	MSc	Internal Examiner	2011
42	Reza Khakpour (UPM)	MSc	Internal Examiner	2011
43	Ahmad Firdaus Ahmad Zaidi (IIUM)	MSc	External Examiner	2010
44	Soodeh Zahab Saniei (UPM)	MSc	Chairman	2010
45	Dalina Johari (UiTM)	MSc	External Examiner	2009
46	Azimah Omar (UPM)	MSc	Internal Examiner	2008

Evaluator/ Assessor (Academic/ Staff Promotion)

No	Detail	Designation	Duration
1	Academic Promotion, Universiti Malaysia Terengganu	External Assessor	2017-2019
2	Academic Promotion, Universiti Tun Hussein Onn Malaysia	External Assessor	2017

3	Promotion of Dr W. H. Siew of the University of Strathclyde, UK for the post of Professor	External Assessor	2017
4	Promotion of Dr. Ramizi bin Mohamed of Universiti Kebangsaan Malaysia (UKM) for the post of Associate Professor	External Assessor	2017
5	Promotion of Assoc Prof Dr Izham Zainal Abidin of Universiti Tenaga Nasional (UNITEN) for the post of Professor	External Assessor	2016
6	Promotion of Dr Mohd Azrul Mohd Ariffin of Universiti Tenaga Nasional (UNITEN) for the post of Associate Professor	External Assessor	2016
7	Promotion of Dr Nadia Tan of Universiti Tenaga Nasional (UNITEN) for the post of Associate Professor	External Assessor	2016
8	Promotion of Dr Muhammad Mansor of Universiti Tenaga Nasional (UNITEN) for the post of Associate Professor	External Assessor	2016
9	Promotion of Dr Mohd Taufiq Ishak of Universiti Pertahanan Nasional Malaysia for the post of Associate Professor	External Assessor	2014
10	Promotion of Ir Dr Perumal A/L Nallagownden of Universiti Teknologi Petronas for the post of Associate Professor	External Assessor	2014
11	Promotion of Dr. Hj Mohamad Kamarol bin Hj Mohd Jamil of Universiti Sains Malaysia for the post of Associate Professor	External Assessor	2014
12	Promotion of Ir Nuradlina Abdullah to the post of Technical Expert (Lightning Protection) of TNBR	Expert Panel	2013
13	COMSATS Institute of Information Technology (CIIT): Promotion of Dr. Saleem Akhtar to Assoc. Prof.	Technical Review Panel (TRP)	2011

Evaluator/ Assessor (Research Grants/ Competetion/ etc)

No	Detail	Designation	Duration
1	FRGS, TRGS	IPT Panel	2013-Present
2	Putra Research Grant- IPB, IPS, IPI, IPM	Head of Panel	2013-Present
3	Science Fund, FRGS, ERGS, PRGS, RUGS Grant Application	Head of Panel/ Evaluator (UPM)	2011-Present
4	Research Acculture Collaborative Effort (RACE)	Head of Panel	2013-Present
5	TWAS Grant Application	Evaluator	2013

6	Grant Application	External Evaluator Panel for Taylor University	2012
7	Power Quality Standards and Regulations in Malaysia – Book Publication	External Evaluator Panel for UTM	2011
8	School’s Innovation and Design Competition (in conjunction with UPM’s PRPI)	Judge	2011
9	Peperiksaan Tahap Kecekapan (PTK)	Evaluator	2010
10	Science Fund Grant Application	Evaluator (UPM)	2008
11	Science Fund Grant Application	External Evaluator Panel for UiTM	2007

d. Professional Affiliation

No	Detail	Designation	Duration
1	Board of Engineers, Malaysia	Professional Engineer (PEng/Ir.) - 15947	2013-Present
2	Board of Technologists, Malaysia	Professional Technologist (Ts)	2017-Present
3	Engineering Council, UK	Chartered Engineer (CEng) - 590173	Aug 2011-Present
4	Board of Technology, Malaysia	Professional Technologist (Ts)	2017-Present
5	Institution of Engineers Malaysia (IEM)	Corporate Member (59186)	April 2013-Present
6	Board of Engineers Malaysia (BEM)	Registered Engineer (39349R)	Since 2002
7	The International Council on Large Electric Systems (CIGRE)	Member (120110292)	2010-Present
8	Institute of Electrical and Electronics Engineers Inc. (IEEE, USA)	Member (80512360)	2007-Present
9	Institution of Engineering and Technology (IET), UK	Member (70728706)	2010-Present
10	International Association of Engineers (IAENG)	Member (101044)	2008-Present
11	IEEE Power Engineering Society	Member	2007-Present
12	IEEE Insulation and Dielectric Society	Member	2007-Present
13	The University of Manchester Alumni	Member (02013020/1)	2006-Present

Association

14	Persatuan Pegawai Akademik	Member (PPA-FKJ-A03057)	2007-Present
----	----------------------------	-------------------------	--------------

e. Administrative Duties

No	Detail	Designation	Duration
1	Faculty of Engineering, UPM	Deputy Dean (Research & Innovation)	Aug 2014-Aug 2017
2	Dept. of Electrical and Electronic Engineering UPM	Head	Aug 2011-July 2014
3	Centre for Electromagnetic and Lightning Protection Research (CELP)	Director of Scientific Committee	2008-Present
4	Institute of Advanced Technology (ITMA)-AREL	Head of Renewable Energy Program	May 2010-May 2011
5	Power System, Reliability and Quality Research Group	Head	2009-2011
6	Research Activities for Department	Coordinator	2009-2011
7	Power Group (Academic), Electrical and Electronic Engineering Dept., UPM.	Head	2007-2008
8	Pembentukan Program Master Kejuruteraan Elektrik Kuasa (Tanpa Tesis)	Committee	2008-Present
9	Industrial Training for EEE	Coordinator	2006-2008
10	High Voltage Laboratory	Head	2008

f. Student Activities

There were many activities held and conducted in the capacity as the Deputy Dean, Head of Department, IEEE PES Excom/ Distinguished Lecturer, CELP member and Lecturer.