



PERSONAL DETAILS

Name : Assoc. Prof. Ir. Ts. Dr. **Tan Chee Wei**
Gender : Male
Date of Birth : 28th January 1981
Nationality : Malaysian
Marital Status : Married
Permanent Address : No. 8, Jalan PI 3/3, Taman Pulai Indah, Kangkar Pulai, 81110 Johor Darul Takzim.

Correspondent Address : Department of Electrical Power Engineering, Faculty of Electrical Engineering, Universiti Teknologi Malaysia, 81310, UTM Skudai, Johor, Darul Takzim.

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Expertise : Alternative and renewable energy technology, maximum power point tracking for Photovoltaic and Wind energy systems, energy management system, energy economic assessment, migrogrid.

ACADEMIC QUALIFICATIONS

Year 2008 : Doctor of Philosophy (Ph.D.) in Electrical Engineering
Imperial College London, UK (University of London, UK)

Year 2003 : Bachelor of Electrical Engineering (with First Class Honors)
Universiti Teknologi Malaysia

AWARD AND HONORS RECEIVED

1. 20th July 2022 – Majlis Anugerah Kecermelangan & Penghargaan UTM 2022 (Citra Karisma 2020), Award on Indexed Journal Publication for year 2021.
2. December 2022 – Researcher listed as **World's Top 2% Scientists**, citation impact single year 2021 by Stanford University (single year achievement).
3. 25th January 2022 – Sijil Kecemerlangan Perkhidmatan, Majlis Anugerah Gemilang Fakulti Kejuruteraan 2021 (Faculty level).
4. Solar Energy, Highly Cited Article 2019 Awarded to Abba Lawan Bukar, Chee Wei Tan and Kwan Yiew Lau, Recognition for authoring a highly cited article "*Optimal sizing of an autonomous photovoltaic/wind/battery/diesel generator microgrid using grasshopper optimization algorithm*". This award has been given according to the highest cited research articles as of September 2021.
5. December 2021 – Researcher listed as **World's Top 2% Scientists**, citation impact single year 2020 by Stanford University.
6. Supervisor to the Best Postgraduate Student Award (BPGSA) in conjunction with UTM 64th Convocation, PhD Student – Abba Lawan Bukar, 5th December 2021.
7. 25th October 2021 – Best Paper Award, IEEE CENCON 2021, "Energy Management Strategy and Capacity Planning of an Autonomous Microgrid: A Comparative Study of Metaheuristic Optimization Searching Techniques".
8. 25th October 2021 – Best Paper Award, IEEE CENCON 2021, "Photovoltaic Emulator Using Particle Swarm Optimization".
9. 22nd September 2021 – Majlis Anugerah Kecermelangan & Penghargaan UTM 2021 (Citra Karisma 2020), Award on Indexed Journal Publication for year 2020 (faculty category).
10. 26th of August 2021 – Best Paper and Presentation award for the paper entitled "Academic Service-Learning Implementation to Promote STEM Interest Among Secondary School Students", by Shahrin Md Ayob, Chee Wei Tan, and Mohd Zaki Daud, 1st Symposium On Teaching and Learning Practices in Electrical Engineering.
11. 25th January 2021 – Best Project Award in the Electrical Engineering Capstone Showcase (EECS) 2020 showcase on P2G06: Piezoelectric Energy Harvesting Sports Shoes.
12. 21st December 2020 – Best Paper Award, 2nd International Conference on Emerging Electrical Energy, Electronics and Computing Technologies 2020, "Angle-Based Photovoltaic Curve Tracing using Boost Converter".
13. 7th December 2020 – Best Paper Award, IEEE International Conference on Power and Energy (PECon2020), "Buck Converter Design for Photovoltaic Emulator Application".
14. November 2020 – Award of Excellence on Active Blended Learning Course by UTM Lead (SKEE 4653 Photovoltaic and Wind Energy Systems) for semesters 1 -2019/2020 and 1 -2020/2021.
15. November 2020 – Award of Excellence on Active Blended Learning Course by UTM Lead (MKEP 1683 Alternative Energy Technology Systems) for semesters 1 -2019/2020 and 1 -2020/2021.
16. November 2020 – Award of Excellence on Active Blended Learning Course by UTM Lead (SEEU1002 Electrical Technologies) for semester 2 -2019/2020.
17. 24th August 2020 – Majlis Anugerah Kecermelangan & Penghargaan UTM 2020 (Citra Karisma 2020), Award on Indexed Journal Publication for year 2019 (faculty category).
18. 19th February 2020 – Awarded UTMSHine "Batch 5" program on research grant worth RM 40,000.00 in recognition of the excellent contribution in research and innovation, UTM.
19. October 2019 – Award of Excellence on Active Blended Learning Course by UTM Lead (SEEU1002 Electrical Technologies) for semester 2 -2018/2019.
20. 12th August 2019 – Majlis Anugerah Kecermelangan & Penghargaan UTM 2019 (Citra Karisma 2019), Award on Indexed Journal Publication for year 2018 (faculty category).

21. Supervisor to the Best Postgraduate Student Award (BPGSA) in conjunction with UTM 64th Convocation, PhD Student – Razman Bin Ayob, 28 April 2019
22. 30th April 2019 – Best of the Best Award, undergraduate final year project, in recognition of excellent performance in the Power Engineering Track, Electrical Engineering Student Symposium EESS 2019, by supervising Joenathan Ambross.
23. 28th November 2019 – Sijil Kecemerlangan Perkhidmatan, Majlis Anugerah Gemilang Fakulti Kejuruteraan 2019 (Faculty level).
24. 25th October 2018 – Malaysia's Research Star Award 2018 – High Impact Paper (Engineering and Technologies), awarded by the Ministry of Education Malaysia and SCOPUS.
25. 24th November 2018 – Gold Medal award in the International Engineering and Sciences Innovation Exhibition (I-ESIX2018), organized by Universiti Teknologi MARA, ParkRoyal Penang Resort, Malaysia.
26. 11th October 2018 – Gold Medal award in the International Innovation, Invention and Creation Exhibition (IIICE 2018), organized by Universiti Teknologi MARA, UiTM Puncak Alam Campus, Selangor.
27. 13th May 2018 – FKE Anugerah Sitasi (Research Publication Citation Award) for year 2017.
28. 13th May 2018 – FKE Anugerah Perkhidmatan Cemerlang (Faculty level) for year 2017.
29. October 2017 – Award of Excellence on Active Blended Learning Course by UTM Lead (SKEE 2413 Basic Power and Electrical Machines) for semester 2 -2016/2017.
30. 30th October 2017 – Best paper award in CENCON 2017 (2nd Prize) – “Phase-shifted Series Resonant DC-DC Converter for Wide Load Variations using Variable Frequency Control”, Mohamed Salem, Awang Jusoh, Nik Rumzi Nik Idris, Chee Wei Tan.
31. 6th October 2016 – Bronze Medal in the 18th Industrial Art & Technology Exhibition (INATEX), Dewan Sultan Iskandar, UTM Johor.
32. 2nd June 2016 – FKE Anugerah Perkhidmatan Cemerlang (Faculty level) for year 2015.
33. 31st May 2016 – UTM Anugerah Perkhidmatan Cemerlang for year 2015.
34. 20th May 2015 – Silver Award in Electrical Engineering Student Showcase (EESS2015), by FYP Student: Muhammad Fakhri Bin Mohd Noh (Supervisor Dr. Tan Chee Wei).
35. 5th November 2015 – Gold Medal in the 17th Industrial Art & Technology Exhibition (INATEX), Dewan Sultan Iskandar, UTM Johor.
36. 1st February 2015 – Awarded Certificate of Achievement by Energy Research Alliance, UTM for the contribution in High Impact Journal Publication (2014).
37. 19th November 2014 – Awarded Certificate of Achievement by Energy Research Alliance, UTM for the contribution in High Impact Journal Publication (2013).
38. 19th September 2013 – Awarded Certificate of Achievement by Energy Research Alliance, UTM for the contribution in High Impact Journal Publication (2012).
39. 5th July 2011 – UTM Anugerah Perkhidmatan Cemerlang (Excellent Service Awards)

PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION

1. 2th June 2003 – tutor at Faculty of Electrical Engineering, Universiti Teknologi Malaysia.
2. 2004 – 2007, worked as graduate teaching assistant and laboratory teaching assistant during my Ph.D study at Imperial College London.
3. 1st March 2012 to 28th Feb 2015 – Proton Academic Researcher for Proton Satellite Research Laboratory (PSRL).
4. 15th March 2013 – 15th March 2014, one-year industrial attachment at PROTON, HICOM Shah Alam, Selangor.
5. 1st July 2008 – 16th Feb. 2019, as a senior lecturer at Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Skudai Johor.
6. 17th Feb. 2019 – present, as an associate professor at the School of Electrical Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, Skudai Johor.

Professional Membership

1. Graduate Member, Board of Engineer Malaysia (BEM), No. 42386R, since 2004.
2. Senior Member (2017), Institute of Electrical and Electronics Engineer (IEEE), No. 91190813, IEEE member since 2011. Member of IEEE Power Electronics Society (PELS), since 2011.
3. The Institution of Engineering and Technology, IET, No. 1100294155, since 2013.
4. Chartered Engineer, Engineering Council, UK, No. 607569, since September 2013.
5. Malaysian Society for Engineering and Technology (MySET), member profile 2921, since 2013.
6. Graduate member of the Institution of Engineers Malaysia (IEM), No. 79301, since 2015.
7. Professional Engineer (Electrical) - Board of Engineers Malaysia, No. P118082, since 17th May 2017.
8. Professional Technologist (Electrical & Electronics Technology (EE)) – Malaysia Board of Technologies, No. PT20120282, since 15th December 2020.

Recognition

1. Senior Member elevation in recognition of professional standing by the Institute of Electrical and Electronics Engineer (IEEE), dated 7th September 2017.
2. Reviewers of various international journals including IEEE Transaction on Power Electronics, IEEE Transaction on Energy Conversion, Renewable and Sustainable Energy Reviews, Energy, Renewable Energy, Applied Energy, Solar Energy, International Journal of Hydrogen Energy, Journal of Power Technologies, Jurnal Teknologi, SciTechnol, IET Renewable Power Generation.
3. Reviewers of various conference papers including CENCON 2014/2015/2017, ICEECC 2016/2017, PECON2016, IC3E 2017, AFRICON17, The Clean Energy and Technology Conference (CEAT) 2018.
4. Associate Editor – in Sustainable Energy Systems and Policies (specialty section of Frontiers in Energy Research), since November 2021.

ADMINISTRATIVE EXPERIENCE

Faculty Level

1.	15 th July 2019 – present	: Program Coordinator for Postgraduate Study (MKEP/MEEP – master taught course in Electrical Engineering)
2.	1 st February 2021 – 31 st December 2021	: Committee member in “Task Force for Self-Assessment Report, CoPPA Documentation Preparation – Postgraduate Taught Course MKEP Program”, SKE UTM.
3.	1 st August 2019 – 30 th July 2021	: Chair for EECS - Electrical Engineering Capstone Showcase, SKE UTM.
4.	15 th July 2019 – present	: Course Coordinator MKEP 1683 – Alternative Energy Technology Systems.
5.	15 th July 2019 – present	: Chair for the committee of Development of Professional Qualification under SKE UTM.
6.	1 st July 2019 – present	: Committee member in the committee of Promotion and External Relations.
7.	1 st July 2019 – present	: Committee member in Jawatankuasa Kerja Pengajian Pascasiswazah (JKKPS), postgraduate working committee.
8.	17 th February 2019 – 31 st December 2021	: Committee member in the committee of <i>Ahli Jawatankuasa Latihan Ikhtisas dan Kelayakan Profesional (JKLIKIP)</i> , UTMLead UTM.
9.	1 st May 2019 – present	: Sub Group Leader – Future Ready Educators (FREE), Faculty of Engineering UTM.
10.	1 st January 2018 – present	: Course Coordinator SKEE 4653 – Photovoltaic and Wind Energys systems
11.	15 th July 2018	: Committee member in “Task Force for APAR Documentation Preparation – Undergraduate Program”, SKE UTM
12.	6 th June 2017	: Committee member in ICEECC 2017, FKE conference
13.	5 th October 2017 – 4 th October 2019	: Committee member in Thesis Abstract Examiner, FKE UTM.
14.	1 st August 2017 – present	: Committee member in Continuous Quality Improvement (CQI) for SKEE program, FKE UTM.
15.	10 th May 2017 – present	: Committee member in Task force Self-Assessment Report, CoPPA for MKEP program, FKE UTM.
16.	15 th September 2015 – 14 September 2017	: Committee member in Faculty Seminar, FKE UTM. (Jawatankuasa Kerja Seminar)
17.	30 th March 2015 – 31 st March 2017	: Representative from POWER department in CQI, FKE UTM
18.	1 st January 2015 – 31 st December 2016	Course Coordinator SKEE 4653 – Photovoltaic and Wind Energys systems
19.	17 th December 2012	: Task Force Postgraduategraduate Self Assessment Report (SAR) Report .
20.	1 st September 2012 – 31 st Ogos 2014	: Course Coordinator SKEE/SKEE 3732 – Common 3 rd Year Laboratory, FKE UTM

21.	1 st July 2012 – 30 th June 2014	: Committee member and Facilitator for How To Get Yourself Employed (HTGYE), FKE UTM
22.	6 th March 2012	Ad-Hoc Committee of Academic Quality Award (AKA UTM) document preparation, FKE UTM.
23.	14 th Feb 2011 – 31 st December 2013	: Committee member and Facilitator of “Harvard Business School – Case Study” (HBS-CS), FKE UTM Also invited for “Train the Trainer Program”
24.	1 st December 2010 – present	: Course Coordinator MEP/MKEP 1683 – Alternative Energy Technology Systems, FKE UTM
25.	1 st June 2010 – 31 st December 2012	: Auditor for ISO 9001:2008 FKE UTM
26.	1 st October 2010 – 31 st March 2011	: Committee member in Task Force for Undergraduate Self Assessment Report
27.	6 th July 2010 – 5 th July 2014	: Committee member in How To Get Yourself Employed (HTGYE), FKE UTM.
28.	18 th March 2010	Committee member in Task Force ISO9001:2008 FKE UTM
29.	1 st July 2009 – 9 th September 2010	: Course Coordinator SKEE 3732 – Common 3rd Year Laboratory, FKE UTM
30.	25 th – 27 th June 2009	: Committee member in New Students Registration, session 2009/2010, FKE UTM.
31.	1 st February 2009	: Committee member in Task Force for Research University Secretariat
32.	28 th January 2009	: Committee member in ENCON Symposium
33.	7 th January 2009	: Committee member in <i>Ad Hoc</i> Vice Chancellor Quality Award (<i>Anugerah Kualiti Naib Canselor, AKNC</i>) FKE UTM.
34.	10 th – 11 th November 2008	: Committee member in Task Force for Undergraduate Self Assessment Report
35.	12 th March 2008 - present	: Committee member of the Faculty Staf Welfare Club (<i>Kelab Kebajikan FKE - KKSFK</i>)

University Level

1.	15 th February 2022 – 31 st December 2022	: Task Force <i>Latihan Ikhtisas Dan Kelayakan Profesional (TFLIKP)</i> – representative from School of Electrical Engineering, Universiti Teknologi Malaysia.
2.	1 st Sept. 2021 – 31 st August 2022	: Appointed as a High Impact Publication Coach by the Faculty of Engineering
3.	17 th Feb. 2019 – 31 st December 2021	: Professional Qualification Committee member representing SKE (<i>Ahli Jawatankuasa Latihan Ikhtisas dan Kelayakan Profesional (JKLIK)</i>)
4.	15 th March 2018	: Mentor Program Mentor Mentee for Professional Qualification, UTMLead.
5.	1 st May 2013 – 30 th April 2015	: Committee member in Technical Assessment of Research Management Centre (RMC) UTM.
6.	8 th March 2013 – 7 th March 2014	: Member for Task Force of MAIORA II (Through The Road Hybrid) Project, collaboration between PROTON and UTM.

OTHERS EXPERIENCE

NATIONAL COMMITTEE

1. Treasurer of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2023.
2. Excom. member of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2022.
3. Excom. member of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2021.
4. Excom. member of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2020.
5. Past Chair of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2019.
6. Chair of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2018.
7. Secretary of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2017.
8. Alternate Member, SIRIM Solar Photovoltaic System Working Group (2017 – present).
9. Secretary of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2016.
10. Secretary of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2015.
11. Secretary of the IEEE Power Electronics Society Malaysia Chapter (IEEE PELS) 2014.

INTERNATIONAL APPOINTMENT/COMMITTEE

1. Technical Programme Chair for IEEE CENCON 2023 Conference.
2. Technical Programme Chair for IEEE PECon 2022 Conference.
3. Technical Programme Chair for ICEECE 2021 Conference.
4. Technical Programme Chair for IEEE CENCON 2021 Conference.
5. Technical Programme Chair for IEEE PECon 2020 Conference.
6. Technical Programme Chair for ICEECE 2019 Conference.
7. General Chair for IEEE CENCON 2019 Conference.
8. Technical Programme Chair for ICEECE 2018 Conference.
9. General Co-Chair for IEEE PECon 2018 Conference.
10. Program Committee of SEES 2018 (International Conference on Sustainable Energy and Environment Sensing).
11. Technical Programme Chair for IEEE CENCON 2017 Conference.
12. Technical Programme Chair for ICEECE 2017 Conference.
13. Technical Programme Chair for IEEE PECon 2016 Conference.
14. Technical Programme Chair for ICEECE 2016 Conference.
15. Organizing Chair for IEEE CENCON 2015 Conference.
16. Organizing Chair for IEEE CENCON 2014 Conference.
17. Technical Programme Chair for IEEE PECon 2014 Conference.

RESEARCH ACTIVITIES

RESEARCH PROJECT UNDERTAKEN

1.	1 st March 2020 – 31 st August 2022	Project Leader "Energy Management and Sizing of an Autonomous Microgrid using Grasshopper Optimization Algorithm" UTMSHine Grant Q.J130000.2451.09G32 Budget approved RM 40,000.00
2.	1 st February 2018 – 31 st January 2019	Project Member "Modular Structured Multilevel Inverter With Reduction In Switching Components Count" UTM GUP Tier 2 Q.J130000.2623.15J40 Budget approved RM 20,000.00
3.	1 st February 2018 – 30 th April 2019	Project Member "Direct Torque Control For Induction Motor Fed By Multilevel Inverter" UTM GUP Tier 2 Q.J130000.2623.15J49 Budget approved RM 20,000.00
4.	1 st November 2016 – 31 st October 2018	Project Member "Sustainable Temperature Control for Broiler House In Malaysia" UTM GUP Tier 1 Q.J130000.2523.15H88 Budget approved RM 40,000.00
5.	1 st July 2014 – 31 st December 2016	Project Member "Battery Management System for e-ATV" UTM Flagship Grant Q.J130000.2423.02G09 Budget approved RM 70,000.00
6.	1 st April 2014 – 30 th June 2016	Project Member "Simulation of Emergency Medical Services Delivery with Actual Traffic Data" UTM GUP Tier 1 Q.J130000.2523.05H59 Budget approved RM 85,000.00
7.	1 st April 2013 – 31 st March 2014	Project Member "Implementation of A Wireless Charging System for Implantable Medical Devices" UTM Flagship Grant Q.J130000.2445.00G70

		Budget approved RM 30,000.00
8.	1 st December 2012 – 31 st December 2014	Project Member "Particle Swarm Optimization- Based Peak Wind Energy Tracking System" UTM GUP Tier 1 Q.J130000.2523.03H52 Budget approved RM 120,591.00
9.	1 st December 2012 – 30 th November 2014	Project Member "Development of MAIORA (Through The Road Hybrid) Vehicle" UTM Flagship Grant Q.J130000.2401.00G64 Budget approved RM 2,000,000.00
10.	1 st December 2012 – 31 st December 2014	Project Leader "Control of A Power Conditioning Converter to Interface Ultracapacitor with Renewable Energy Sources" RESEARCH UNIVERSITY GRANT SCHEME (GUP) Q.J130000.2523.03H53 Budget approved RM 80,394.00
11.	1 st May 2012 – 30 th April 2013	Project Leader "Control and Energy Management System for Multiple Energy Sources in Electric Vehicle" RESEARCH UNIVERSITY GRANT SCHEME (GUP) Q.J130000.2623.05J91 Budget approved RM 35,000.00
12.	1 st August 2011 – 31 st July 2014	Project Member "Smart Battery Management System" UTM Flagship Grant Q.J130000.2423.00G46 Budget approved RM 175,000.00
13.	1 st June 2011 – 30 th November 2011	Project Leader "Investigation of a Small Scale Wind Turbine Integrated with Power Conditioning Unit" RESEARCH UNIVERSITY GRANT SCHEME (GUP) Q.J13000.7123.00J15 Budget approved RM 40,000.00
14.	1 st April 2011 – 31 st March 2013	Project Member "A Multilevel Power Conditioner for Hybrid Energy Systems In Green Buildings" UTM GUP Tier 1 Q.J130000.2523.00H87 Budget approved RM 123,000.00

15.	16 th March 2009 – 15 th June 2010	Project Leader "Design and Development of a Modular Photovoltaic Maximum Power Point Tracking Converter " New Academic Staff (With PhD) Research and Development (R&D) Fund Vote No.: 77900 Budget approved RM 10,000.00
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FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS FUND)

1.	1 st December 2014 – 30 th June 2017.	Project Leader "A Study of A New Hybrid Anti-Islanding Detection Approach for Grid-Connected Photovoltaic Energy Systems" R.J130000.7823.4F596 Budget approved RM 91,000.00
2.	1 st August 2016 – 31 st July 2019	Project Member "Cascaded multilevel converters as energy recuperating converters in Light-Rail-Transit System" FRGS/1/2016/TK04/UNITEN/02/1 Budget approved RM 145,000.00
3.	1 st May 2012 – 30 th April 2014	Project Member "A New Design Framework for Sustainable Electricity Distribution System in Malaysia" FRGS/2012/FKE/TK02/02/1/F00121 Budget approved RM 56,000.00

Exploratory Research Grant Scheme (ERGS)

1.	1 st June 2013 – 31 st May 2016	Project Member "Development of A Real-Time Wind Turbine Generator Emulator for Low Wind Speed Regions" R.J130000.7823.4L117 Budget approved RM 108,000
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LONG TERM RESEARCH GRANT SCHEME (LRGS)

1.	30 th June 2016 - 31 st December 2017	Project Leader " Power Control System for Fuel Cell Vehicle " under the program entitled "Zero Emission Fuel Cell Vehicle Powered Hydrogen Energy" Led by Prof. Dato' Ir Wan Ramli Wan Daud (UKM) and Prof. Ir. Dr. Nasrudin Abd Rahim (UM) RMC UTM Cost centre: R.J130000.7823.4L818 Budget approved RM 256,250.00
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MINISTRY OF SCIENCE AND TECHNOLOGY (SCIENCEFUND)

1.	September 2009 – August 2011	Project Leader "Development of a High-Efficient Maximum Power Point Tracking Converter for Building Integrated Photovoltaic" RMC UTM Cost centre: R.J130000.7923.3S373 Budget approved RM 181,500.00
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PATENT FILED/DISCLOSURE

1. Copyright UTM – IP/CR/2019/0780, Current-Resistance Photovoltaic Model Computed using Binary Search Method, 2020.
2. Copyright UTM – IP/CR/2019/0779, Rapid Prototyping of Photovoltaic Emulator Using Buck Converter Based on Fast Convergence Resistance Feedback Method, 2020.
3. Copyright UTM - IP/CR/2016/0740, Dual-Axis Photovoltaic Tracker with Motorize Photovoltaic Panel Cleaning, 2016.
4. Patent Filed – PI 2010 005246 – A test rig and method to test MPPT converter for PV array, 2010.
5. Patent Filed – PI 2010 000962 – Method of control for converting power, 2010.
6. Copyright UTM – Battery Sizing and Economic Evaluation of BIPV Systems, 2010.
7. Copyright UTM – Method to formulate the gain factors in Perturb and Observe maximum power point tracking algorithm, 2010

TEACHING ACTIVITIES

Session	Sem.	Course Code	Course Name	Credit Hour	Total (Credit Hours)
2022/2023	1	MKEP 1683	Alternative Energy Technology Systems	3	103
2021/2022	2	SKEE 4433	Power Electronics and Drives	3	100
2021/2022	1	MKEP 1683	Alternative Energy Technology Systems	3	97
2021/2022	1	SKEE 4653	PV and Wind Energy System	3	94
2020/2021	2	SEEU 1002	Electrical Technology for Non Electrical Disciplines	2	91
2020/2021	1	SKEE 4653	PV and Wind Energy System	3	89
2020/2021	1	MKEP 1683	Alternative Energy Technology Systems	3	86
2019/2020	2	SKEU 1002	Electrical Technology for Non Electrical Disciplines	2	83
2019/2020	1	SKEE 4653	PV and Wind Energy System	3	81
		MKEP 1683	Alternative Energy Technology Systems	3	78
2018/2019	2	SKEU 1002	Electrical Technology for Non Electrical Disciplines	2	75
2018/2019	1	MKEP 1683	Alternative Energy Technology Systems	3	73
2017/2018	2	SKEE 4433	Power Electronics and Drives	3	70
2017/2018	1	MKEP 1683	Alternative Energy Technology Systems	3	67
		SKEE 4653	PV and Wind Energy System	3	64
2016/2017	2	SKEE 2413	Basic Power and Electric Machines	3	61
	1	MKEP 1683	Alternative Energy Technology Systems	3	58
		SKEE 4653	PV and Wind Energy System	3	55
2015/2016	2	SKEE 2413	Basic Power and Electric Machines	3	52
	1	MKEP 1683	Alternative Energy Technology Systems	3	49
		SKEE 4653	PV and Wind Energy System	3	46
2014/2015	2	SKEE 2413	Basic Power and Electric Machines	3	43
	1	MEP/MKEP 1683	Alternative Energy Technology Systems	3	40
2013/2014	2	SKEE 4433	Power Electronics and Drives	3	37

		SKEE 1043	Circuits and Systems	3	34
2012/2013	1	MEP 1683	Alternative Energy Technology Systems	3	31
2011/2012	2	SKEU 1002	Electrical Technology for Non Electrical Disciplines	2	28
	1	MEP 1683	Alternative Energy Technology Systems	3	26
2010/2011	2	SEE 1123	Instrumentation and Electronic Measurement	3	23
	1	SEE 4433	Power Electronics and Drives	3	20
2009/2010	2	SEE 1123	Instrumentation and Electronic Measurement	3	17
	1	SEU 2003	Electrical Technology	3	14
2008/2009	3	SEE 1023	Circuit Theory	3	11
	2	SEE 2052	Electrical Technology (Management)	2	8
		SEE 1023	Circuit Theory	3	6
	1	SEE 2063	Electronics Devices	3	3

* Part time studies (SPACE and PESISIR) are not included.

SUPERVISION

PhD Student

Year	No.	Name	Status	Title	Roles of Supervision
2019	1.	Abdulgader H. Abdulgader Alsharif	<i>Viva on 31st January 2023</i> <i>(6 months correction)</i>	Energy Management Strategy in Vehicle to Grid Integrated with Renewable Energy Sources	Main Supervisor
2017	2.	Ahmed Tijjani Dahiru	Graduated 2021	Nanogrid Sizing Using Nested Integer Linear Programming and Time-of-use Based Load Management	Main Supervisor
2017	3.	Abba Lawan Bukar	Graduated 2020	Optimized Energy Management for Off-Grid Hybrid Renewable Energy System in Remote Community	Main Supervisor

2015	4.	Razman Ayop	Graduated 2018	Control of Photovoltaic Emulator Based on Resistance Feedback Method	Main Supervisor
2015	5.	Normazlina Binti Mat Isa	Graduated 2020	Energy Management System for Alternative Energy Resources Implementing Hybrid Cogeneration in Malaysia Hospital Building	Main Supervisor
2014	6.	Go Ting Loong	Writing Thesis	Optimization of Emergency Medical Services Delivery in Johor Bahru, Kulai and Pontian	Co-Supervisor
2010	7.	Majid Abdullateef Abdullah	Graduated 2015	Control and Analysis of Energy Conversion In a Hybrid Wind and Ultracapacitor System	Co-Supervisor

Msc. Research Student

Year	No.	Name	Status	Title	Roles of Supervision
2016	1.	Himadry Shekhar Das	Graduated 2018	Energy Management of Fuel Cell and Ultracapacitor Hybrid System using Boost Inverter	Main Supervisor
2012	2.	Tie Siang Fui	Graduated 2014	Energy Management System on Battery/ Ultracapacitor/ Photovoltaic Energy Sources for Electric Vehicle	Main Supervisor
2012	3.	Teoh Wei Yee	Graduated 2014	Control and Analysis of Anti-Islanding Protection Techniques for Grid-Connected Photovoltaic Systems	Main Supervisor
2011	4.	Ngan Mei Shan	Graduated 2013	Multiple Peaks Tracking for Photovoltaic System using Particle Swarm Optimization with Artificial Neural Network Algorithm	Main Supervisor

MSc. Student (Taught Course)

Year	No.	Name	Status	Title	Roles of Supervision
2023	1.	Lim Phin Shen	On Going	Model Predictive Control Based Energy Management System for Fuel Cell Electric Vehicles	Main Supervisor
2023	2.	Nur Amirah Binti Ishak	On Going	Analysis of Energy Management System for Hybrid Photovoltaics - Wind And Energy Storage	Main Supervisor
2023	3.	Mazuwan Bin Mustaffa	On Going	Harmonic Elimination in PV-Wind-Battery Renewable Energy System using a Shunt Active Power Filter	Main Supervisor
2023	4.	Mohd Akmal Bin Jumadi	On Going	Mitigation of Reactive Power Using Interlink Converter with Power Management Method	Main Supervisor
2022	5.	Loh Poh Siong	Graduated	Investigation of the Second-Life Lithium-Ion Battery State-of-Health using Discharge Pulse Current Method	Main Supervisor
2022	6.	Siti Nur Murni Binti Yusob	Graduated	Improved Coulumb Counting Method for State of Charge Estimation of Lithium-Ion Battery with Temperature Consideration	Main Supervisor
2021	7.	Balakrishnan A/L Nadason	Graduated	Techno-Economic Analysis of a Hybrid Tidal and Diesel Generator Intergrated With Flywheel	Main Supervisor
2021	8.	Uthaya Kumaran Devaraj	Graduated	Analysis of Maximum Power Point Tracking for Small Scale Wind Energy Conversion System Using Direct Power Control	Main Supervisor
2021	9.	Wong Soo Theng	Graduated	Energy Management of a Standalone Photovoltaic-Fuel Cell Hybrid System Using Fuzzy Logic Control	Main Supervisor

2018	10.	Teng Cheng Reen	Graduated	Techno-Economic Analysis of Off-Grid Solar Hybrid System: A Case Study In Sarawak	Main Supervisor
2018	11.	Gabriel Anak Jatu	Graduated	Energy Management System In Fuel Cell Electric Vehicle Using Fuzzy Logic Controller	Main Supervisor
2018	12.	Wong Kung Ngie	Graduated	Control of A Photovoltaic Source Emulator Using Artificial Neural Network	Main Supervisor
2018	13.	Cassandra Darlene Ak Peter John Remek	Graduated	Transmission Line Fault Location Using Travelling Wave: An Investigation Study In Sarawak Grid	Main Supervisor
2018	14.	Janarthan A/I Krishna Moorthy	Graduated	Optimal Sizing of Hybrid Diesel Engine – Photovoltaic and Battery System for a Marine Vessel Application	Main Supervisor
2018	15.	Kasnilawazaidi Bin Abdul Kadir	Graduated	A Study of Residential and Commercial Building for Hybrid Photovoltaic and Battery System	Main Supervisor
2017	16.	Dalhatu Dalhatu Tijjani	Graduated	Controlled Two Dimensional Photovoltaic Tracker with Self Cleaning Facility	Main Supervisor
2017	17.	Lee Aun Sheng	Graduated	Control of Maximum Power Point Tracking for Doubly Fed Induction Generator Small Scale Wind Energy System	Main Supervisor
2017	18.	Khamaleshvarman A/I Ballasingam	Graduated	Control of a Small Scale Wind Energy System using Particle Swarm Optimization Maximum Power Point Tracking Algorithm	Main Supervisor
2016	19.	Nik Ahmad Faiz Bin Hj.nik Abdullah	Graduated	Energy Management of Multiple Alternative Energy Resources	Main Supervisor
2016	20.	Hayadi Bin Mustafa	Graduated	Control of A Photovoltaic Simulator using Buck Converter	Main Supervisor
2017	21.	Hazrina Binti Mohd Kamal	Graduated	Chopper Converter Controlling Speed of Dc Motor by using PI Controller	Main Supervisor

2015	22.	Mohamad Azuan Bin Fauzuddin	Graduated	Control of Modular Multilevel Converter for Photovoltaic Power Systems	Main Supervisor
2016	23.	Abubakar Musa	Graduated	Tecno-Economic Analysis of Stand-Alone PV-Diesel-Battery System: A Case Study In Northern Nigeria	Main Supervisor
2015	24.	Muhammad Izkar Bin Ahmad Shobri	Graduated	Control and analysis of stand-alone PV system using Boost and Sepic converters with MPPT capabilities	Main Supervisor
2015	25.	Razman Bin Ayop	Graduated	Sizing of Energy Storage based on Loss of Load Probability of Stand-alone Photovoltaic Systems	Main Supervisor
2015	26.	Tan Wei Seong	Graduated	Assessment of office building energy efficiency using Green Building Index and Leadership in Energy and Environmental Design	Main Supervisor
2015	27.	Pang Tuck Seng	Graduated	Development of a modular PV maximum power point tracking converter	Main Supervisor
2017	28.	Thanikaikumaran A/I R.kuppusamy	Graduated	Dual axis rotation solar irradiance tracking system for photovoltaic array	Main Supervisor
2015	29.	Zulailah Zakaria	Graduated	Design and control of electric vehicle charger	Main Supervisor
2013	30.	Ghazali Bin Harun	Graduated	Techno-Economic Evaluation of PV and Wind Energy in Malaysia	Main Supervisor
2013	31.	Nur Atharah Binti Kamarzaman	Graduated	Simulation of a Modular Photovoltaic Multiple Peaks Detector	Main Supervisor
2014	32.	Ling Ju Loong	Graduated	Energy Management of Multiple Renewable Energies System	Main Supervisor
2013	33.	Azim Shukri Bin A Shukor	Graduated	Simulation of a Hybrid PV/Fuel Cell Energy System	Main Supervisor
2010	34.	Hadi Nabipour Afrouzi	Graduated	Sizing and Economic Evaluation of Building Integrated Photovoltaic in Malaysia	Main Supervisor
2010	35.	Chong Kiat Shiu	Graduated	Dynamic Modeling and Simulation of a Stand-alone	Main Supervisor

				Solid Oxide Fuel Cell Energy System	
2011	36.	Nurul Ain Binti Ab Rasid	Graduated	Simulation and Analysis of Maximum Power Point Tracking (MPPT) Algorithms for PV Applications	Main Supervisor
2010	37.	Akrem Mohamed Elrajoubi	Graduated	Simulation of a Hybrid Photovoltaic/Wind Energy System	Main Supervisor
2010	38.	Abdusalam Mohamed .b. Elayyat	Graduated	Modeling and Control of a Stand-Alone Wind Energy System	Main Supervisor
2010	39.	Noridayu Bt Zainal	Graduated	Analysis of Maximum Power Point Tracking Algorithm for The Integration of Photovoltaic Power Converters	Main Supervisor
2009	40.	Mohd Saifuzam Bin Jamri	Graduated	Modelling and Control of Photovoltaic Stand-alone System using State-space Averaging Method	Main Supervisor

Undergraduate Final Year Project

Year	No.	Name	Status	Title
2023	1.	Neu Jing Hui	On going	Performance Analysis of Photovoltaic Maximum Power Point Technique Algorithm using Dc-Dc Converters
2023	2.	Nur Aisyah Binti Ramli	On going	Analysis on the Impact of the Total Harmonic Distortion in Hybrid Photovoltaic Fuel Cell System
2023	3.	Nur Alimul Hakim Bin Nordin	On going	Control of Electrical Vehicle Bidirectional Charger Powered by Photovoltaic
2023	4.	Yang Jianyu	On going	Wireless Charger for Small Power Applications using Magnetic Inductive Coupling
2022	5.	Muhammad Adam Irsyad Bin Azmi	Graduated	Analysis of Cell Balancing Using Passive Cell Balancing Method and Capacitor Based Method
2022	6.	Muhammad Faris Bin Sulaiman	Graduated	Smart Room Control Through Energy Saving Automation System
2022	7.	Muhammad Ikhmal Bin Rasli	Graduated	Bidirectional Dc-Dc Converter Using PI Controller for PV Battery Charging Application

2022	8.	Sofia Aqillah Binti Ahmad Kamal	Graduated	Performance Analysis of State of Charge Estimation For Lithium-Ion Battery for Electric Vehicle
2021	9.	Hariz Hasri Bin Shaharimi	Graduated	Control and Monitoring of Irrigation system using Internet of Things with solar panel and battery
2021	10.	Tan En De	Graduated	Design and Performance Test of an Analog Dual-Axis Solar Tracker for PV System
2021	11.	Wilson Juan Anak Baie	Graduated	Development of Flower Design Solar Panel using Single Axis Solar Tracking Based on Solar Position Algorithm
2020	12.	Muhtasyam Azimudin Bin Ahmad	Graduated	Internet of Things Implementation for Indoor Agriculture Monitoring System
2020	13.	Mohammad Amsyar Bin Omar	Graduated	Smart Parking System and Reservation by Using Internet of Things
2020	14.	Muhammad Firdaus Bin Mamat	Graduated	Monitoring Quality of Water and Automatic Feeding System in Aquaculture Using Internet of Things
2019	15.	Afiqah Auni Binti Mohd Shafii	Graduated	LED Dimmer in Agriculture Control Using Internet of Things
2019	16.	Joenathan Ambross	Graduated	Control of Single Axis Photovoltaic Tracker Based On Solar Position Algorithm
2018	17.	Afiqah Auni Binti Mohd Shafii	Graduated	Led Criver Dimmer In Agriculture Control Using IoT
2018	18.	Ahmad Iskandar Zulkarnain Bin Kamaruzaman	Graduated	Development Of Maximum Power Point Tracking For Photovoltaic
2018	19.	Joenathan Ambross	Graduated	Photovoltaic Single Axis Tracker Based On Solar Position Algorithm
2018	20.	Muhammad Hafiz Zaman Bin Kamarul Zaman	Graduated	Apps Based Automatic Controlled Home System
2018	21.	Ahmad Saufi Bin Selamat	Graduated	Humidity Monitoring and Temperature Control System using IOT
2018	22.	Liyana Nasuha Binti Sarib	Graduated	Smart Parking System Using Internet of Things
2017	23.	Lee Chee Fan	Graduated	Portable ECG Monitoring Device with Android Based Analysis and Cloud Storage Facility
2017	24.	Muhamad Hazim Bin Ahmad Daud	Graduated	Small Scale Aquaculture Monitoring System using IOT
2017	25.	Chua Hai Siang	Graduated	Operational Performance Monitoring of Photovoltaic System using Internet of Things
2017	26.	Mohd Juwaidi Bin Johan	Graduated	Complex and Multiple Unsymmetrical Fault Analysis at Jimah Power Plant

2017	27.	Mohd Nor Hazwan Bin Jamaluddin	Graduated	Analysis of Fault Indicator for Emergency Stop At Jimah Power Plant Conveyor Belt
2017	28.	Ashira Binti Tarmizi	Graduated	Feasibility Study of Grid-Connected PV/Wind/Diesel System for Malaysian Hospitals
2016	29.	Nur Shahira Binti Azmi	Graduated	Implementation of Maximum Power Point Tracking Converter for Photovoltaic Applications
2016	30.	Muhammad Nurhanudin Bin Baharudin	Graduated	Dual-Axis Photovoltaic Tracker with Motorize Surface Panel Cleaning
2016	31.	Nur Asilah Binti Abdul Razif	Graduated	Harmonic Analysis for Installation of 132 kV Capacitor Bank
2016	32.	Muhammad Hasif Bin Yusoff	Graduated	Control of Trackless Automated Pallet Jack
2016	33.	Ili Shafiqah Binti Embong	Graduated	Monitoring and Tracking Device using Microcontroller with Android Smartphone
2015	34.	Syakir Bin Abd Salam	Graduated	Intelligent Door Locking System
2015	35.	Amirul Fikri Bin Jafri	Graduated	Phone Charger Powered by Wind Energy using Buck Converter
2015	36.	Mohamad Fakurrozi Bin Mohd Hanas	Graduated	Techno Economi Analysis of Cable Faults in TNB Kuala Lumpur
2015	37.	Baharudin Bin Md. Rashid	Graduated	Street Lighting Fault Detection using Short Message Service Communication
2015	38.	Ahmad Ridzuan Bin Mohamed @ Alias	Graduated	Impacts of Distributed Generation Interconnection to Distribution Networks Power Flow and Short Circuit Current Level
2015	39.	Mohamad Faizal Bin Rasid	Graduated	A Study of The Allowable Power Loss in Optical Transmission Line for Telekom Malaysia
2015	40.	Mohd Ezhar Bin Hj Mohd Jamin	Graduated	Spiral Waste Bin Motor Control using Microcontroller
2015	41.	Muhammad Fakhri Bin Mohd Noh	Graduated	Automatic Motorcycle Security Mechanism using ATMEGA328 Microcontroller Integrated with RFID
2015	42.	Mohamad Hafiz Bin Abdul Aziz	Graduated	Industrial Robot Arm Control using PIC Microcontroller
2013	43.	Nik Mohd Hambali Bin Hassan	Graduated	A Variable Frequency Device for Water Pump System
2013	44.	Mohd Rashid Bin Raduan	Graduated	Powering Pump in Sewerage Treatment Plant using Solar Energy
2013	45.	Syhaimi Bin Maksom	Graduated	Simulation of Solar Powered LED Streetlamp

2012	46.	Sheilla Malious	Graduated	Techno-Economic Analysis of Grid-Connected Photovoltaic-Fuel Cell Hybrid Energy System
2012	47.	Muhammad Shukri Mohamed Anuar	Graduated	Simulation of a Stand-Alone Photovoltaic System for Residential House
2011	48.	Mohd Azrulazizi B. Md Jamal-	Graduated	Development of a Simple 12 V DC Uninterruptible Power Supply
2010	49.	Harinathan A/L Lachmanan	Graduated	A Study On Double Conversion Uninterruptible Power Supply for Residential Application
2010	50.	Leong Woei Chyuan	Graduated	Design of Web Base Interface for Sizing and Costing of Building Integrated Photovoltaic
2010	51.	Saaszat Bin Safie	Graduated	A Simulation of Stand-Alone Hybrid Photovoltaic/Wind Energy System
2009	52.	Rosaid Bin Roslan	Graduated	A Maximum Power Point Tracking Converter for Photovoltaic Application
2009	53.	Mohd Hafiez Izzwan B. Saad	Graduated	A Battery Charger using Photovoltaic as a Source
2009	54.	Azri Bin Yunus	Graduated	Simulation of a Mini-Wind Energy System for Commercial Building Application

POSTGRADUATE INTERNAL EXAMINER

PhD and MSc by Research Internal Examiner

Date	No.	Name	Degree	Thesis Title
15 Feb. 2023	1.	Hanis Farhah Binti Jamahori	Ph.D. Viva	Optimal Location and Sizing of Photovoltaic and Battery Storage in Distribution System Considering Time-Varying Weather and Load Data
30 May 2022	2.	Muhammad Paend Bakht	Ph.D. Viva	Application of Hybrid Renewable Energy System to Mitigate the Effect of Load Shedding in Electrical Grid
27 Dec. 2022	3.	Mohamad Hashim Saleh Al Takrouri	Ph.D. Research Proposal	Energy Management Control Strategy for Hybrid Energy Storage System
27 Dec. 2022	4.	Babangida Modu	Ph.D. Research Proposal	Stand-Alone DC Microgrid Control Using a Combinatorial Reaching Law-Based Integral Sliding Mode Control Scheme
8 th July 2021	5.	Norazlan Bin Hashim	Ph.D. Viva	An Improved Maximum Power Point Tracking Controller for Photovoltaic Systems Using Evolutionary Programming Technique

12 th November 2019	6.	Ahsanullah Memon	Ph.D. Research Proposal	Grey Wolf Optimization for Crowbar Performance of Brushless Double Fed Induction Generator During Fault Conditions
15 th July 2019	7.	Mohammed Mohiuddin	Ph.D. Research Proposal	Reduction of Harmonics in a Type-3 Doubly Fed Induction Generator Wind Energy Conversion System Connected to the Grid
22 nd November 2018	8.	Muhammad Paend Bakht PKE173021	Ph.D. Research Proposal	Optimization Of Hybrid Renewable Energy System To Mitigate The Effect Of Load Shedding
24 th April 2018	9.	Dobi Abdulhakeem Mohammed PKE163032	Ph.D. Research Proposal	Non-Isolated Low Circulating Current Variable Frequency LLC Resonant Converter
21 st November 2017	10.	Saifullah Khan MKE163045	Master Research Proposal	A Modified Symmetrical Switched Diode Cascaded Multilevel Inverter Topology with Reduced Switching Devices
24 th November 2016	11.	Nor Akmal Binti Rai PKE153020	Ph.D. Research Proposal	Lithium Ion Battery Charger using Bridgeless SEPIC Converter
3 rd November 2015	12.	Ratil Hasnat Ashique MKE143059	Master Research Proposal	Design and Development of A Non- Isolated Soft Switching Bidirectional DC-DC Converter For Future High Power DC Fast Charging Stations for Electric Vehicle
5 th November 2015	13.	Muhammad Akram Bhayo PE133064	Ph.D. Research Proposal	Design and Development of A Wind Turbine Emulator for Analysis of The Wind Energy Conversion System
8 th April 2015	14.	M Saad Bin Arif 201401M10012 PEEA3AJA	Ph.D. Research Proposal	Hierarchical Fuzzy-PID Control for Inverter Regulation
7 th April 2015	15.	Nur Naqibah Binti Baharudin (MEE)	Master Research Proposal	Motor Drive Control Using Single Input Fuzzy Pi Controller (SIFPIC)
29 th October 2014	16.	Chin Vun Jack (MEE)	Conversion from MEE to Ph.D.	An Improved Modelling Method for Photovoltaic (PV) Modules Based On The Two-Diode Model Using Differential Evolution (DE)
26 th November 2012	17.	Simon Theophylus Yusuf (MEE)	Master Research Proposal	Desing and Implementation of Rotating Magnet Machine for Energy Harvesting System
28 th June 2012	18.	Mohammad Faridun Naim Tajuddin PEEA3AJA	Ph.D. Research Proposal	MPPT based Z-Source Inverter
2 nd January 2012	19.	Majid Abdullateef Abdullah	Ph.D. Research Proposal	Modeling and Control of Wind Energy Conversion System

		(PEE)		
12 th October 2009	20.	Arief Hidayat (MEE)	Master Research Proposal	Photovoltaic System Performance Monitoring using Wireless System

MSc Taught Course Project Evaluation

Date	No.	Name	Thesis Title
7 th July 2020	1.	Mohd Hafizullah Bin Hasan Basri	Design of Wind Turbine Connected to Diesel Engine Generator Battery on Onboard-unmanned Oil/Gas Platform in Malaysia
10 th December 2019	2.	Mohd Faiz bin Ngah Nasir	High Load Demand Penalty Cost Reduction Using Photovoltaic System
11 th Dec. 2018	3.	Fazal Redza bin Abd Radzak	Current Mode Fuzzy Based Controller for Multilevel Inverter
11 th Dec. 2018	4.	Mohamad Zharif bin Mohamad Zani	Enhancement of the Extracted Maximum Power of PV Array During Partial Shading
11 th Dec. 2018	5.	Javed Ahmad	Power Conditioning for Hybrid Energy Systems in Green Buildings
15 th November 2018	6.	Nur Farhana Atiqah Amir Hafidz	Three Phase Shunt Active Power Filter with Proportional-Integral (PI) and Synchronous Reference Frame (SRF) Method Controller
3 rd May 2018	7.	Javed Ahmad	Power Conditioning for Hybrid Energy Systems in Green Buildings
3 rd May 201	8.	Mohannad Ali Khan	Energy Management for Stand Alone Hybrid Energy Systems
14 th December 2017	9.	Husna Zahira Abd Rashid	Impact of Penetration Level of Grid Connected Photovoltaic Systems on the Malaysia Low Voltage Distribution Network
14 th December 2017	10.	Hong Cheong Heng	Reduction of Harmonic Using PSO Technique For Grid Connected Photovoltaic System
16 th May 2017	11.	Immad Shams	PWM Based Multilevel Inverter With Reduced Number of Switching Components
25 th May 2015	12.	Abdullah Ali Abdullah Ajan	Direct Torque Control of Induction Motor with a Multilevel Hysteresis Controller for Torque Ripple Reduction at Low Speeds
25 th May 2015	13.	Wong Choon Keat	Stability of Multiple Sources Connected in DC

10 th December 2014	14.	Nor Akmal binti Rai	Analysis and Modelling of Ultracapacitor
10 th December 2014	15.	Alshammri, Fahad Shumran M	Fuzzy Sliding Mode Controller for Cascaded Multilevel Inverter
15 th May 2012	16.	Mohd Jundullah bin Halim	The Study on The Impact of constant Power Load To A DC Power System
7 th December 2011	17.	Sajjad Abdollahzadeh Anbaran	Simulation of The Hybrid Electric Vehicle using ADVISOR
5 th December 2011	18.	Shairul Wizmar Wahab	Feasibility Analysis on Capacitor bank Installed in TNB Substation
5 th December 2011	19.	Rusdee Azeem Mohamad Rusli	Power System Analysis
5 th December 2011	20.	Muhammad Faizul Idris	Fault Location for Transmission overhead Line using Phasor Measurement Unit
21 st April 2011	21.	Nur Huda Binti Ramlan	Hybrid Active Power Filteromg using Multilevel Inverter Topology
3 rd November 2010	22.	Felani Stefanzie Choe	Sigma Delta Modulation for Multilevel Inverter
30 th March 2010	23.	Abatcha Hussaini Geldam	Power Quality Analysis of a PEM Fuel Cell System
30 th March 2010	24.	Suliana Binti Ab Ghani	Power Electronics Converter for Liquid Food Sterilization
30 th March 2010	25.	Meiyappan Siva A/L Pandian	Efficiency and Economic of PEM Fuel Cells
3 rd March 2010	26.	Nur Huda Binti Ramlan	Hybrid Active Power Filteromg using Multilevel Inverter Topology
3 rd March 2010	27.	Felani Stefanzie Choe	Sigma Delta Modulation for Multilevel Inverter
23 rd October 2009	28.	Puteri Nor Ashikin Binti Megat Yunus	A Novel Passive Damping Filer for Single Phas Matrix Converter Operating as a Rectifier
23 rd October 2009	29.	Nor Aira Binti Zambri	Dynamic Modelling of Stand Alone PEM Fuel Cell Connected to Adjustable Speed Drive

29 th September 2009	30.	Fzel Taeed	Single Input Fuzzy Controller for Boost Converter with the Absent of A/D Converter
24 th March 2009	31.	Puteri Nor Ashikin Binti Megat Yunus	A Novel Passive Damping Filer for Single Phas Matrix Converter Operating as a Rectifier
24 th March 2009	32.	Nor Aira Binti Zambri	Dynamic Modelling of Stand Alone PEM Fuel Cell Connected to Adjustable Speed Drive

POSTGRADUATE EXAMINATION /VIVA

MSc by Research Internal Examiner

Date	No.	Name	Thesis Title
21 st February 2018	1.	Nur Naqibah Binti Baharudin	Brushless DC Motor Drive Control using Single-Input Fuzzy PI Controller

MSc by Research External Examiner

Date	No.	Name	University	Thesis Title
15 February 2023	1.	Noah Lee Zhi En	Multimedia University	Design of Embedded Control Battery-Supercapacitor Hybrid Energy Storage System
22th August 2022	2.	Nuraina Syahira Mohd Sharifuddin	Universiti Tenaga Nasional	Characterisation and Efficiency Improvement of Bidirectional Isolated Dc-Dc Converter (BIDC) via Enhanced Switching Strategy
9th September 2021	3.	Sara Ragab Mahmoud Farghaly	Universiti Teknikal Malaysia Melaka	Classification of Solar Variability for the Evaluation of Solar Photovoltaic Systems Performance in Utem

PUBLICATIONS

ResearcherID: H-5912-2011

SCOPUS Author ID: 35216732200

H INDEX (SCOPUS) : 30, Citations : 5027 (as of 14th February 2023)

<https://www.scopus.com/authid/detail.uri?authorId=35216732200>

H INDEX (Google Scholar) : 36, Citations : 7373 (as of 14th February 2023)

<https://scholar.google.com.my/citations?user=m4Pb1xcAAAAJ&hl=en>

JOURNAL

ISI Journal:

No.	Journal	Quartile / Impact Factor
1.	Dahiru, Ahmed Tijjani, Chee Wei Tan, Abba Lawan Bukar, and Kwan Yiew Lau. "Energy Cost Reduction in Residential Nanogrid under Constraints of Renewable Energy, Customer Demand Fitness and Binary Battery Operations." <i>Journal of Energy Storage</i> 39 (2021/07/01/ 2021): 102520.	Q2
2.	N. H. Rahim, K. Y. Lau, C. W. Tan, K. Y. Ching and A. S. Vaughan, "A Review of Engineering Dielectric Properties of Nanocomposites through Effectively Removed Interfacial Water," in <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , vol. 28, no. 2, pp. 448-459, April 2021	Q2
3.	Lau, Kwan Yiew, and C. Tan. "Performance Analysis of Photovoltaic, Hydrokinetic, and Hybrid Diesel Systems for Rural Electrification in Malaysian Borneo." <i>Environment, Development and Sustainability</i> 23 (04/01 2021).	Q3
4.	Ayop, Razman, Chee Wei Tan, Mohd Saiful Azimi Mahmud, S. N. Syed Nasir, Tawfik Al-Hadhrani, and Abba Lawan Bukar. "A Simplified and Fast Computing Photovoltaic Model for String Simulation under Partial Shading Condition." <i>Sustainable Energy Technologies and Assessments</i> 42 (2020/12/01/ 2020)	Q1
5.	Ayub, Sara, Shahrin Md. Ayob, Chee Wei Tan, Lubna Ayub, and Abba Lawan Bukar. "Optimal Residence Energy Management with Time and Device-Based Preferences Using an Enhanced Binary Grey Wolf Optimization Algorithm." <i>Sustainable Energy Technologies and Assessments</i> 41 (2020/10/01/ 2020).	Q1
6.	Bukar, Abba Lawan, Chee Wei Tan, Lau Kwan Yiew, Razman Ayop, and Wen-Shan Tan. "A Rule-Based Energy Management Scheme for Long-Term Optimal Capacity Planning of Grid-Independent Microgrid Optimized by Multi-Objective Grasshopper Optimization Algorithm." <i>Energy Conversion and Management</i> 221 (2020/10/01/ 2020).	Q1

7.	Kamarudin, Siti Noorhazirah, Kwan Yiew Lau, Chee Wei Tan, and Kuan Yong Ching. "The Role of Silicon-Based Nanofillers and Polymer Crystallization on the Breakdown Behaviors of Polyethylene Blend Nanocomposites." <i>Nano</i> 15, no. 08 (2020/08/01 2020)	Q3
8.	Lau, K.Y., Tan, C.W. Performance analysis of photovoltaic, hydrokinetic, and hybrid diesel systems for rural electrification in Malaysian Borneo. <i>Environ Dev Sustain</i> (2020).	Q3
9.	Ayop, Razman, Chee Wei Tan, and Abba Lawan Bukar. "Simple and Fast Computation Photovoltaic Emulator Using Shift Controller." <i>IET Renewable Power Generation</i> 14, no. 11. (2020): 2017-2026.	Q2
10.	Z Hashim, KY Lau, CW Tan, KY Ching, "Simulation of nanodielectrics: nanoparticle and interphase effects on electric field distributions," <i>IET Nanodielectrics</i> 3 (1), 1-9, 2020.	Q1
11.	AT Dahiru, CW Tan, "Optimal sizing and techno-economic analysis of grid-connected nanogrid for tropical climates of the Savannah," <i>Sustainable Cities and Society</i> , 52, 101824, 2020.	Q1
12.	HS Das, MM Rahman, S Li, CW Tan, "Electric vehicles standards, charging infrastructure, and impact on grid integration: A technological review," <i>Renewable and Sustainable Energy Reviews</i> 120, 109618, 2020.	Q1
13.	A. L. Bukar and C. W. Tan, "A review on stand-alone photovoltaic-wind energy system with fuel cell: System optimization and energy management strategy," <i>Journal of Cleaner Production</i> , vol. 221, pp. 73-88, 2019/06/01/ 2019.	Q1
14.	AL Bukar, CW Tan, KY Lau, "Optimal sizing of an autonomous photovoltaic/wind/battery/diesel generator microgrid using grasshopper optimization algorithm," <i>Solar Energy</i> 188, 685-696, 2019.	Q1
15.	NH Rahim, KY Lau, NA Muhamad, N Mohamad, CW Tan, AS Vaughan, "Structure and dielectric properties of polyethylene nanocomposites containing calcined zirconia," <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> 26 (5), 1541-154, 2019.	Q1
16.	HS Das, CW Tan, AHM Yatim, S Li, "Fuel cell and ultracapacitor energy system control using linear quadratic regulator proportional integral controller," <i>Electrical Engineering</i> 101 (2), 559-573, 2019.	Q3
17.	R. Ayop and C. W. Tan, "Rapid Prototyping of Photovoltaic Emulator Using Buck Converter Based On Fast Convergence Resistance Feedback Method," in <i>IEEE Transactions on Power Electronics</i> . doi: 10.1109/TPEL.2018.2886927	Q1
18.	Abdullah, Majid & Al-Hadhrami, Tawfik & Wei Tan, Chee & Yatim, Abdul Halim, "Towards Green Energy for Smart Cities: Particle Swarm Optimization Based MPPT Approach," <i>IEEE Access</i> . PP. 1-1. 10.1109/ACCESS.2018.2874525, 2018.	Q1
19.	R. Ayop, N. M. Isa, and C. W. Tan, "Components sizing of photovoltaic stand-alone system based on loss of power supply probability," <i>Renewable and Sustainable Energy Reviews</i> , vol. 81, pp. 2731-2743, 2018/01/01/ 2018.	Q1

20.	K. Y. Lau, C. W. Tan, and A. H. M. Yatim, "Effects of ambient temperatures, tilt angles, and orientations on hybrid photovoltaic/diesel systems under equatorial climates," <i>Renewable and Sustainable Energy Reviews</i> , vol. 81, pp. 2625-2636, 2018/01/01/ 2018.	Q1
21.	R. Ayop and C. W. Tan, "A novel photovoltaic emulator based on current-resistor model using binary search computation," <i>Solar Energy</i> , vol. 160, pp. 186-199, 2018/01/15/ 2018.	Q1
22.	R. Ayop and C. W. Tan, "Design of boost converter based on maximum power point resistance for photovoltaic applications," <i>Solar Energy</i> , vol. 160, pp. 322-335, 2018/01/15/ 2018.	Q1
23.	Aliyu, A.K., B. Modu, and C.W. Tan, "A review of renewable energy development in Africa: A focus in South Africa, Egypt and Nigeria", <i>Renewable and Sustainable Energy Reviews</i> , 81: p. 2502-2518, 2018.	Q1
24.	Normazlina Mat Isa, Chee Wei Tan, A.H.M. Yatim, "A comprehensive review of cogeneration system in a microgrid: A perspective from architecture and operating system", In <i>Renewable and Sustainable Energy Reviews</i> , Volume 81, Part 2, Pages 2236-2263, ISSN 1364-0321, 2018.	Q1
25.	Ayop, R. and C.W. Tan, "A comprehensive review on photovoltaic emulator", <i>Renewable and Sustainable Energy Reviews</i> , 80: p. 430-452, 2017.	Q1
26.	Ayop, R. and C.W. Tan, "Improved control strategy for photovoltaic emulator using resistance comparison method and binary search method", <i>Solar Energy</i> , 153: p. 83-95, 2017.	Q1
27.	H. S. Das, C. W. Tan, A. H. M. Yatim, and K. Y. Lau, "Feasibility analysis of hybrid photovoltaic/battery/fuel cell energy system for an indigenous residence in East Malaysia," <i>Renewable and Sustainable Energy Reviews</i> , vol. 76, pp. 1332-1347, 2017/09/01/ 2017.	Q1
28.	H. S. Das, C. W. Tan, and A. H. M. Yatim, "Fuel cell hybrid electric vehicles: A review on power conditioning units and topologies," <i>Renewable and Sustainable Energy Reviews</i> , vol. 76, pp. 268-291, 2017/09/01/ 2017.	Q1
29.	A. Ajlan, C. W. Tan, and A. M. Abdilahi, "Assessment of environmental and economic perspectives for renewable-based hybrid power system in Yemen," <i>Renewable and Sustainable Energy Reviews</i> , vol. 75, pp. 559-570, 2017/08/01/ 2017.	Q1
30.	N. M. Isa, H. S. Das, C. W. Tan, A. H. M. Yatim, and K. Y. Lau, "A techno-economic assessment of a combined heat and power photovoltaic/fuel cell/battery energy system in Malaysia hospital," <i>Energy</i> , vol. 112, pp. 75-90, 2016/10/01/ 2016.	Q1
31.	K. Y. Lau, N. A. Muhamad, Y. Z. Arief, C. W. Tan, and A. H. M. Yatim, "Grid-connected photovoltaic systems for Malaysian residential sector: Effects of component costs, feed-in tariffs, and carbon taxes," <i>Energy</i> , vol. 102, pp. 65-82, 2016/05/01/ 2016.	Q1
32.	H. S. Das, A. H. M. Yatim, C. W. Tan, and K. Y. Lau, "Proposition of a PV/tidal powered micro-hydro and diesel hybrid system: A southern Bangladesh focus," <i>Renewable and Sustainable Energy Reviews</i> , vol. 53, pp. 1137-1148, 2016/01/01/ 2016.	Q1
33.	K. Y. Lau, C. W. Tan, and A. H. M. Yatim, "Photovoltaic systems for Malaysian islands: Effects of interest rates, diesel prices and load sizes," <i>Energy</i> , vol. 83, pp. 204-216, 2015/04/01/ 2015.	Q1

34.	N. A. Kamarzaman and C. W. Tan, "A comprehensive review of maximum power point tracking algorithms for photovoltaic systems," <i>Renewable and Sustainable Energy Reviews</i> , vol. 37, pp. 585-598, 2014/09/01/ 2014.	I.F. 5.627
35.	H. O. Tijani, C. W. Tan, and N. Bashir, "Techno-economic analysis of hybrid photovoltaic/diesel/battery off-grid system in northern Nigeria," <i>Journal of Renewable and Sustainable Energy</i> , vol. 6, p. 033103, 2014.	I.F. 1.514
36.	S. F. Tie, C. W. Tan, " A review of energy sources and energy management system in electric vehicles," <i>Renewable and Sustainable Energy Reviews</i> , vol. 20, pp. 82-102, 2013.	I.F. 5.627
37.	M. A. Abdullah, A. H. M. Yatim, Tan CW, and R. Saidur, "A review of maximum power point tracking algorithms for wind energy systems," <i>Renewable and Sustainable Energy Reviews</i> , vol. 16, pp. 3220-3227, 2012.	I.F. 4.567
38.	Ngan MS, Tan CW, "Assessment of economic viability for PV/wind/diesel hybrid energy system in southern Malaysia," <i>Renewable and Sustainable Energy Reviews</i> 16 (2012) pp. 634-647	I.F. 4.567
39.	Tan C W, Tim C. Green, Carlos A. Hernandez-Aramburo, "A stochastic method for battery sizing with uninterruptible-power and demand shift capabilities in PV (photovoltaic) systems," <i>Energy</i> , vol. 35, pp. 5082-5092, 2010.	I.F. 2.952

SCOPUS Journal :

No.	Journal
1.	Abba Lawan Bukar; Chee Wei Tan; Lau, Kwan Yiew; Ahmed Tijjani Dahiru. <i>International Journal of Power Electronics and Drive Systems</i> ; Yogyakarta Vol. 11, Iss. 3, (Sep 2020): 1527-1535.
2.	R Ayop, CW Tan, KY Lau, "Computation of current-resistance photovoltaic model using reverse triangular number for photovoltaic emulator application," <i>Indonesian Journal of Electrical Engineering and Informatics (IJEI)</i> 7 (2019).
3.	Yeong Cherng Liew, Cheng Siong Lim, Michael Loong Peng Tan, Chee Wei Tan, "Hybrid of Multi-Car Elevator System And Double-Deck Elevator System, " <i>Journal of Theoretical & Applied Information Technology</i> , Vol 96, Issue 11, Pg. 3521 – 3540, 2018.
4.	Normazlina Mat Isa Chee Wei Tan AHM Yatim, "A Proposition of a Standalone Photovoltaic System For Educational Building In Malaysia," <i>International Journal of Renewable Energy Resources</i> , [S.I.], v. 8, n. 1, p. 1-6, dec. 2018. ISSN 2289-1846.
5.	R. Ayop, C. W. Tan, and C. S. Lim, "The resistance comparison method using integral controller for photovoltaic emulator," <i>International Journal of Power Electronics and Drive Systems</i> , vol. 9, pp. 820-828, 2018.
6.	Normazlina Mat Isa, Chee Wei Tan, A.H.M. Yatim, "Energy Management System for Hospital Building Using Genetic Algorithm", <i>Journal of Telecommunication, Electronic and Computer Engineering (JTEC)</i> 9, e-ISSN: 2289-8131, pg. 111- 118, 2017.
7.	Ayop, R., & Tan, C. W., "An adaptive controller for photovoltaic emulator using artificial neural network", <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , 5(3), 556-563. DOI: 10.11591/ijeecs.v5.i3.pp556-563, 2017.

8.	HS Das, A Dey, CW Tan, AHM Yatim, "Feasibility analysis of standalone PV/wind/battery hybrid energy system for rural Bangladesh", International Journal of Renewable Energy Research (IJRER) 6 (2), 402-412, 2016.
9.	Y. C. Liew, C. S. Lim, M. L. Peng Tan, and C. W. Tan, "A review of multi-car elevator system," Jurnal Teknologi, vol. 73, pp. 81-87, 2015.
10.	Y. L. Ng, C. S. Lim, K. A. Danapalasingam, M. L. P. Tan, and C. W. Tan, "Automatic human guided shopping trolley with smart shopping system," Jurnal Teknologi, vol. 73, pp. 49-56, 2015.
11.	T. L. Go, C. S. Lim, K. A. Danapalasingam, M. L. P. Tan, and C. W. Tan, "A Review on Development and Optimization of Emergency Medical Services in Malaysia," Jurnal Teknologi, vol. 70, 2014.
12.	Chin Kim Gan, Wirun Al Prayun, Chee Wei Tan, Meysam Shamshiri, "Design of a Hybrid Diesel/PV/Wind/Battery System in Remote Areas," International Review of Electrical Engineering (IREE), [S.I.], v. 9, n. 2, p. 420-430, apr., ISSN 1827-6679, 2014.
13.	Malious Sheilla, Chee Wei Tan, Cheng Siong Lim, "Techno-Economic Analysis of a Photovoltaic-Fuel Cell Grid-Connected Hybrid Energy System," International Review on Modelling and Simulations (IREMOS), Vol 7, No 1, 2014.
14.	HS Das, CW Tan, AHM Yatim, NDB Muhamad, "Proton Exchange Membrane Fuel Cell Emulator Using PI Controlled Buck Converter", International Journal of Power Electronics and Drive Systems 8 (1), 462, 2012.

NON INDEXED Journal :

No.	Journal
1.	Chee Wei Tan, Mohd Zublie Muhammad Firdaus, Mohamed Kassim Mohamad Pauzi, "System Investigation of a Hybrid Solar and Generator Set Power Supply for Rural Area in Perak Malaysia," Advances in Energy Edinwilson Press, Vol 2, Issue 1, PP. 1-7, January 2014.
2.	Prayun Wirun, Chee Wei Tan, Cheng Siong Lim, Chin Kim Gan, Goh Joon Sern, Syahrul Hisham Mohamad, "Solar Technology and Implementations in Malaysia: A Review," Adv. in Nat. Appl. Sci., 7(5): 542-555, 2013. Available online 15 February 2014.
3.	M.A. Abdullah, A.H.M. Yatim and C.W. Tan, "Maximum Power Point Tracking Algorithms For Wind Energy System: A Review," International Journal of Renewable Energy Resources vol. 2, pp. 33-39, 2012.
4.	Majid Abdullateef Abdullah, Chee Wei Tan, Abdul Halim Yatim, M. R. Al-Mothafar, Saleh M. Radaideh, "Input Current Control of Boost Converters using Current-Mode Controller Integrated with Linear Quadratic Regulator," International Journal Of Renewable Energy Research , Vol.2, No.2, (Online ISSN: 1309-0127), 2012.
5.	W. Y. Teoh, S. Y. Khu, C. W. Tan, I. H. Hii, and K. W. Cheu, "Technoeconomic and Carbon Emission Analysis for a Grid-Connected Photovoltaic System in Malacca," ISRN Renewable Energy, vol. 2012, p. 8, 2012. (ISSN: 2090-746X (Online))
6.	Mohd Saifuzam Jamri, Tan Chee Wei, "Modeling and Control of a Photovoltaic Energy System Using the State-Space Averaging Technique," Journal of Applied Science, 7(5): ISBN 1546-9239, pp. 682 – 691, 2010.

PROCEEDINGS/CONFERENCE

No.	Conference
1.	KY Lau, CW Tan, KY Ching, NH Rahim, AS Vaughan, "Effects of Thermal Aging on Structure and Dielectric Properties of Polypropylene/Calcium Carbonate Nanocomposites," 2020 IEEE 3rd International Conference on Dielectrics (ICD), Valencia, Spain, 2020, pp. 126-129.
2.	A. Azmi, K. Y. Lau, N. A. Ahmad, Z. Abdul-Malek, C. W. Tan and R. Ayop, "Thermal and Dielectric Properties of Thermally Aged Polypropylene/Calcium Carbonate Nanocomposites," 2020 IEEE International Conference on Power and Energy (PECon), Penang, Malaysia, 2020, pp. 255-258, doi: 10.1109/PECon48942.2020.9314414.
3.	A. Azmi, K. Y. Lau, N. A. Ahmad, Z. Abdul-Malek, C. W. Tan and K. Y. Ching, "Aging Effects on Thermal and Dielectric Properties of Polypropylene/Magnesium Aluminate Nanocomposites," 2020 IEEE International Conference on Power and Energy (PECon), Penang, Malaysia, 2020, pp. 251-254, doi: 10.1109/PECon48942.2020.9314448.
4.	R. Ayop, C. W. Tan, S. N. Syed Nasir, K. Y. Lau and C. Ling Toh, "Buck Converter Design for Photovoltaic Emulator Application," 2020 IEEE International Conference on Power and Energy (PECon), Penang, Malaysia, 2020, pp. 293-298, doi: 10.1109/PECon48942.2020.9314582.
5.	M. Salem, A. Jusoh, N. R. N. Idris, C. W. Tan and I. Alhamrouni, "Phase-shifted series resonant DC-DC converter for wide load variations using variable frequency control," 2017 IEEE Conference on Energy Conversion (CENCON), Kuala Lumpur, 2017, pp. 329-333. doi: 10.1109/CENCON.2017.8262507
6.	R. Ayop and C. W. Tan, "A comparison study of interpolation and circuit based photovoltaic mathematical models," 2016 IEEE International Conference on Power and Energy (PECon), Melaka, 2016, pp. 626-631. doi: 10.1109/PECON.2016.7951636
7.	H. S. Das, C. W. Tan, A. H. M. Yatim and N. Din bin Muhamad, "Analysis and control of boost inverter for fuel cell applications," 2016 IEEE International Conference on Power and Energy (PECon), Melaka, 2016, pp. 455-460. doi: 10.1109/PECON.2016.7951605
8.	H. S. Das, C. W. Tan, A. H. M. Yatim and N. Din bin Muhamad, "Modeling and simulation of stand-alone fuel cell system for distributed generation application," 2016 3rd International Conference on Electrical Engineering and Information Communication Technology (ICEEICT), Dhaka, 2016, pp. 1-6.
9.	M. A. Abdullah, C. W. Tan and A. H. M. Yatim, "A simulation comparison of PI and Linear Quadratic Regulator controllers in DC-DC converter," 2015 IEEE Conference on Energy Conversion (CENCON), Johor Bahru, 2015, pp. 37-41.
10.	N. B. M. Isa, T. C. Wei and A. H. M. Yatim, "Smart grid technology: Communications, power electronics and control system," 2015 International Conference on Sustainable Energy Engineering and Application (ICSEEA), Bandung, 2015, pp. 10-14.
11.	M. A. Abdullah, C. W. Tan and A. H. M. Yatim, "A simulation study of hybrid wind-ultracapacitor energy conversion system," 2014 IEEE Conference on Energy Conversion (CENCON), Johor Bahru, 2014, pp. 265-270. doi: 10.1109/CENCON.2014.6967513

12.	M. A. Abdullah, A. H. M. Yatim and C. W. Tan, "An online optimum-relation-based maximum power point tracking algorithm for wind energy conversion system," 2014 Australasian Universities Power Engineering Conference (AUPEC), Perth, WA, 2014, pp. 1-6.
13.	Wei Yee Teoh, Chee Wei Tan, "A Comparative Study of Anti-islanding Control Techniques for Gridconnected Photovoltaic Systems," The 2013 World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE13), 25-28 August 2013, Seoul Korea, pp. 899-917.
14.	M. A. Abdullah, A. H. M. Yatim, C. W. Tan, and A. S. Samosir, "Control of a bidirectional converter to interface ultracapacitor with renewable energy sources," in Industrial Technology (ICIT), 2013 IEEE International Conference on, 2013, pp. 673-678.
15.	Siang Fui Tie, Chee Wei Tan, "A Review of Power and Energy Management Strategies in Electric Vehicles," 4 th International Conference on Intelligent & Advanced Systems (ICIAS2012), 12-14 th June 2012, pp .
16.	M. Shamshiri, G. Chin Kim, T. Chee Wei, "A review of recent development in smart grid and micro-grid laboratories," in Power Engineering and Optimization Conference (PEOCO), 2012 IEEE International, 2012, pp. 367-372.
17.	M. A. Abdullah, A. H. M. Yatim, C. W. Tan, and A. S. Samosir, "Particle swarm optimization-based maximum power point tracking algorithm for wind energy conversion system," in Power and Energy (PECon), 2012 IEEE International Conference on, 2012, pp. 65-70.
18.	Mei Shan Ngan, Chee Wei Tan, "A Study of Maximum Power Point Tracking Algorithms for Stand-alone Photovoltaic Systems, " The Ieee Applied Power Electronics Colloquium (IAPEC 2011) ISBN 978-1-4577-0006-4, pp. 22- 27, 18 – 19 April 2011.
19.	Majid A. Abdullah, A.H.M. Yatim, Chee Wei Tan, "A Study of Maximum Power Point Tracking Algorithms for Wind Energy System, " IEEE First Conference on Clean Energy and Technology (CET), pp. 321 – 326, 2011.
20.	Wei Yee Teoh, Chee Wei Tan, "An Overview of Islanding Detection Methods in Photovoltaic Systems," International Conference on Electrical, Computer, Electronics and Communication Engineering, 26 - 28 October 2011.
21.	Mei Shan Ngan, Chee Wei Tan, "Multiple Peaks Tracking Algorithm using Particle Swarm Optimization Incorporated with Artificial Neural Network," International Conference on Electrical, Computer, Electronics and Communication Engineering, 26 - 28 October 2011.
22.	Mohd Saifuzam Jamri, Tan Chee Wei, "Modeling and Control of Stand-Alone Photovoltaic System Using the State-Space Averaging Method," The 2nd International Conference On Engineering and ICT (ICEI2010), Holiday Inn Melaka, Malaysia, pp. 127-133, 18 – 20 February 2010.
23.	Tan Chee Wei, Makbul Anwari, Naziha Ahmad Azli, "A Variable Frequency Drive Problem Design and Implementation for an Electrical Engineering Problem Based Laboratory," the 3 rd Regional Conference on Engineering Education (RCEE 2010) and Research in Higher Education 2010 (RHed 2010), 7 - 9 June 2010.
24.	Naziha Ahmad Azli, Tan Chee Wei, Nik Rumzi Nik Idris, "Implementation Model of a Problem-Based Laboratory (Pblab) Established for a Bachelor of Engineering (Electrical) Program at Universiti Teknologi Malaysia," the 3 rd Regional Conference on Engineering Education (RCEE 2010) and Research in Higher Education 2010 (RHed 2010), 7 - 9 June 2010.
25.	C. W. Tan, T. C. Green, and C. A. Hernandez-Aramburo, "Analysis of Perturb and Observe Maximum Power Point Tracking Algorithm for Photovoltaic Applications," 2nd

	IEEE International Conference on Power and Energy (PECon 08), December 1-3, 2008.
26.	C. W. Tan, T. C. Green, and C. A. Hernandez-Aramburo, "A Current-Mode Controlled Maximum Power Point Tracking Converter for Building Integrated Photovoltaics", 12 th European Conference on Power Electronics and Applications (EPE '07), pp. 1 – 10, 2007.
27.	C. W. Tan, T. C. Green, and C. A. Hernandez-Aramburo, "A Stochastic Simulation of Battery Sizing for Demand Shifting and Uninterruptible Power Supply Facility", The 38 th Annual IEEE Power Electronics Specialists Conference (PESC '07), pp. 2607 - 2613, 2007.
28.	C. W. Tan, T. C. Green, and C. A. Hernandez-Aramburo, "Comparative Study of Perturbation Step-Size for Perturb and Observe Maximum Power Point Tracking Algorithm," 1st International Conference on Control, Instrumentation and Mechatronics (CIM '07), pp. 79-84.
29.	C. W. Tan, T. C. Green, and C. A. Hernandez-Aramburo, "An Improved Maximum Power Point Tracking Algorithm with Current-Mode Control for Photovoltaic Applications," Power Electronics and Drive Systems, Proceedings, 2005 6 th IEEE International Conference (PEDS '05), 2005, pp. 489 - 494.

THESIS

1. Tan Chee Wei, Analysis and Control of Building Integrated Photovoltaic Systems Incorporating Storage, Ph.D Thesis, Imperial College London, UK (2008).
2. Tan Chee Wei, Measurement of Two-Phase Imaging (Water/Gas Bubbles) using Electrical Capacitance Tomography (ECT)), B.ENG Undergraduate Thesis, Universiti Teknologi Malaysia (2003).

RESEARCH MONOGRAPH

1. C. W. Tan, "Measurement of two-phase imaging (water/ gas bubbles) by using electrical capacitance tomography", UTM 2007, ISBN: 978-967-353-730-3.

BOOK CHAPTER

1. Das, H. S., Chowdhury, M. F. F., Li, S., & Tan, C. W. , "Fuel cell and hydrogen power plants. In E. Kabalci (Ed.), Hybrid Renewable Energy Systems and Microgrids," (pp. 313-349): Academic Press, 2021.
2. W. Y. Teoh, C. W. Tan, and M. S. Ngan, "A Study of Islanding Mode Control in Grid-Connected Photovoltaic Systems," in Advances in Solar Photovoltaic Power Plants, ed: Springer Berlin Heidelberg, 2016, pp. 169-214.

3. M. S. Ngan and C. W. Tan, "Photovoltaic Multiple Peaks Power Tracking using Particle Swarm Optimization with Artificial Neural Network Algorithm," in Advances in Solar Photovoltaic Power Plants, ed: Springer Berlin Heidelberg, 2016, pp. 107-138.
4. Ngan Mei Shan and Tan Chee Wei, "A Review of Maximum Power Point Tracking for PV Applications", Recent Advances In Power Electronics. Series I, First Edition 2015, Penerbit UTM Press, ISBN 978-983-52-1081-5.
5. Tan Chee Wei, Tim C. Green and Carlos A. Hernandez-Aramburo, "Design and Development of a Maximum Power Point Tracking Converter for Building Integrated Photovoltaics," Recent trends in renewable energy and power electronics research, ISBN 978-983-52-0639-9, UTM 2008.
6. Tan Chee Wei, Tim C. Green and Carlos A. Hernandez-Aramburo, "Analysis of Perturbation Step Size for Perturb and Observe Photovoltaic Maximum Power Point Tracking Algorithm," Recent trends in renewable energy and power electronics research, ISBN 978-983-52-0639-9, UTM 2008.

Memorandum of Understanding (MoU)

1.

Date: 11th October 2020

Memorandum of Understanding (MoU) Between NanoMalaysia Berhad and Universiti Teknologi Malaysia (UTM).

2.

Date: 20th April 2013

Memorandum of Understanding (MoU) Between I-Stone Technology Sdn. Bhd. and Universiti Teknologi Malaysia (UTM)

I-Stone Technology Sdn. Bhd. and Universiti Teknologi Malaysia agree to promote cooperation between the two institutions in fields of mutual interest as follows:

1. consultation project
2. joint research
3. joint publication
4. teaching and training
5. student and staff attachment
6. power electronics converter design

INVITED/GUEST SPEAKER

1. Keynote speaker, National Technology Research in Engineering, Design and Social Science Conference 2022 (NTRENDS'22), 5-6 October 2022.
2. Invited Speaker by IEEE PELS Malaysia Chapter, on IEEE Senior Member elevation talk, 20th June 2021 (online Cisco Webex).
3. Invited Speaker by IEEE PELS Malaysia Chapter, on IEEE Senior Member elevation talk, 20th June 2020 (online Cisco Webex).
4. Invited Speaker by IEEE Student Branch UTM, School of Electrical Engineering, Faculty of Engineering, "Renewable Energy: A Focus on Photovoltaic and Wind Energy", dated 4th December 2018.
5. Invited Speaker for "How To Become A Professional Engineer Via Route 3", by FKE UTM, 12th December 2017.
6. Invited Session Chair, ICEECC 2017, UTM Kuala Lumpur.
7. Invited Session Chair, IEEE CENCON 2017 Conference, UTM Kuala Lumpur.
8. Invited Session Chair, ICEECC 2016, FKE UTM Skudai Johor.
9. Invited Session Chair, the 4th IEEE PECon 2016 Conference, Hatten Hotel, Melaka.
10. Invited Session Chair, IEEE CENCON 2015 Conference, Berjaya Waterfront Hotel, Johor Bahru.
11. Invited Session Chair, IEEE CENCON 2014 Conference, KSL Hotel, Johor Bahru.
12. Invited Speaker for "How to Get Yourself Employed 2014/2015", entitled "How to make a positive First Impression", dated 10th October 2014.
13. Invited Speaker for "How to Get Yourself Employed 2012/2013", entitled "Resume and Cover Letter", dated 18th January 2013.
14. Interviewer for "How to Get Yourself Employed" program, from 2012 – 2015, FKE UTM.

OTHER ACTIVITIES

1. Invited Speaker for Geran Komuniti Iskandar Puteri, SJK(C) Pei Hwa – "Photovoltaic Systems – The Fundamentals and Applications", Perling Johor, 13 February 2023.
2. Appointed as the facilitator for the workshop of High Impact Journal Writing, Dewan Banquet, UTM, 14th – 15th January 2019.
3. Appointed as "Test" and "Final Exam moderator" for both Undergraduate and Postgraduate Taught Course, SKE UTM, 2018 – 2019.
4. Participated in "Academic Advisory Workshop for First Year – 1st Series", School of Electrical Engineering, Faculty of Engineering, UTMLead, UTM, 14th August 2018.
5. Participated in "Preparation of Undergraduate Program APAR Documentation 2017", SKE UTM, dated 19th July 2018.
6. Attended the "Leadership Talk Series - Visionary, Strategic and Transformational Leadership", UTM, dated 18th July 2018.
7. Participated in "2nd Session on Massive Open Online Course (MOOC) Development Workshop", UTMLead UTM, Johor, 14th May 2018.
8. Participated in "Massive Open Online Course (MOOC) Development Workshop", UTMLead UTM, Johor, 24th January 2018.

9. Participated in “2017 FKE Strategic Planning Workshop”, IOI Palm Villa, Kulai, 9th January 2018.
10. Participated in “How to Win FRGS & PRGS Grant Proposal” workshop, 10th January 2017.
11. Participated in “Integrated-CGPA (i-CGPA) Phase II”, SPS UTM, Johor, 5th April 2017.
12. Participated in “Townhall DCP With Academic Staff, UTM Johor Bahru”, 29th August 2016.
13. Participated in “Improving Basic Machine Teaching Laboratory Experiment Sheet”, Department of POWER FKE, 28th August 2016.
14. Participated in “Capstone Project Preparation” workshop, Department of POWER FKE, 26th July 2016.
15. Participated in “IEEE Smart Grid: Smart Grid and its Related Issues: Malaysian Perspective”, Webinar Course by IEEE, 25th August 2016.
16. Participated in “UTM Laboratory Value Management – LO for Teaching and Learning Equipment”, RMK-11 (RP1), 14th – 18th March 2016.
17. Participated in the workshop on “OBE analysis for CAR report- Master Taught Course” 28th December 2015.
18. Participated in “Capstone Project Preparation” workshop, Department of POWER FKE, 10th – 11th August 2015.
19. Participated in “Development of Short Course Modules for TLDM-UTM Workshop”, KD Pelandok TLDM Lumut, Perak, 27th – 28th January 2015.
20. Participated in the workshop on “Nurturing Top Research Talent UTM”, 28th – 29th December 2014.
21. Participated in “Town Hall Meeting/Dialogue Session: Global Plan Strategy UTM 2012 – 2020”, Dewan Sultan Iskandar, UTM Johor, 8th September 2014.
22. Participated in the seminar on “Introduction to LabVIEW and Data Acquisition”, 27th August 2014.
23. Participated in the workshop “Solidworks 3D Simulation Software and 3D Printing”, 29th April 2014.
24. Participated in “Majlis Amanat Tahun Baru”, UTM, 6th January 2014.
25. Participated in "IEEE Technical Workshop on Implementation Issues of Green Technologies," 17th October, 2013, MMU Cyberjaya (BEM 8 CPD).
26. Participated in "BEM Mandatory Course - Code of Ethics", 12th -13th September 2013.
27. Participated in the seminar on “Electric Motor Drives and Power Electronics for More Electric Transportation”, 6th December 2012.
28. Participated in the workshop on “Professional Engineer and Chartered Engineer” 12th November 2012.
29. Participated in the “Harvard Business School 2012/2013 Training Session”, 24th October 2012.
30. Participated in the workshop on “Improving Documentation of Undergraduate ISO Standards – Part II”, FKE UTM, 5th October 2012.
31. Participated in the workshop on “Improving Documentation of Undergraduate ISO Standards – Part I”, FKE UTM, 24th September 2012.
32. Participated in the workshop on “4th Year Problem Based Laboratory Preparation”, Department of POWER FKE, 5th – 6th September 2012.

33. Participated in the workshop on “2012 Department of ENCON Strategic Planning”, FKE UTM, 6th – 8th June 2012.
34. Participated in “2012 FKE Strategic Planning Workshop”, Renaissance Hotel, Melaka, 28th – 30th May 2012.
35. Participated in workshop on “Journal Publication Seminar”, UTM Research Alliance, 15th May 2012.
36. Participated in the workshop on “Improving FKE Postgraduate Evaluation Rubrics”, 19th April 2012.
37. Workshop on “Towards CIF 50 for PEDG in 2012”, Research group FKE, UTM, 25th – 27th December 2011.
38. Participated in the workshop on “Training of Trainers for Facilitator - How to Get Yourself Employed (HTGYE)”, 9th November 2011.
39. Participated in the workshop on “Professional Engineer”, UTM, 29th September 2011.
40. Participated in "Energy Management Course for Decision Makers," conducted by Iskandar Regional Development Authority (IRDA), The Puteri Pan Pacific Hotel Johor Bahru, 14th – 15th September 2011.
41. Participated in the workshop on “GSMS (Graduate Studies Management System)”, 17th August 2011.
42. Participated in the workshop on “How to Get Yourself Employed (HTGYE)” FKE, 28th July 2011.
43. Participated in “2011 FKE Strategic Planning Workshop”, Tiara Beach Resort, Port Dickson, Negeri Sembilan, 15th – 17th July 2011.
44. Participated in the workshop on “Teaching by the Case Methods”, Ancasa Hotel, Kuala Lumpur, 7th – 10th July 2011.
45. Participated in “Journal Writing Workshop”, Energy Research Alliance, UTM, 14th – 15th June 2011.
46. Participated in Harvard Business School – Case Study (HBS-CS) Train the Trainer Program, UTM Training Centre, 14th February 2011.
47. Participated in the workshop of upgrading ISO 9000:2008, FKE UTM, 15th – 16th April 2010.
48. Participated in Southeast Asia International Training and Research Program for Advanced Drinking Water Technologies and Advanced Renewable Energy Technologies, October 18th to 24th, 2009, Taipei, Taiwan.