CURRICULAR VITAE



MUHAMMAD ARKAM B. CHE MUNAAIM

Adjunct Professor, PhD, PEPC, IntPE PhD (Energy Conservation), USM, MSc. (Building Tech), USM B. Elec. Eng (Hons), UTM; Dip. Elec. Eng. (Power), UTM

FIEM, MIET, MIEEE, MACEM, ASEAN Eng, APEC Eng, ACPE, EMF IntPE, SPANQP, MGBC, REEM (ST), MMWA, FMySET, MINDS, MEPA, DPIN (MOHR), CCPM (CIDB), CBuildE (UK), FCABE (UK), MCIOB (UK), CCPM Level 7 (OTHM, UK), FMS®, TTT (HRDCorp)

No 62 (First Floor) Bandar Puteri Jaya, Jalan BPJ 1/1 Seksyen 1, Sungai Petani, 08000, Kedah Darul Aman, MALAYSIA.

> No.14-1, Jalan Marikh CB U5/CB, Section U5, 40150 Shah Alam, Selangor Darul Ehsan, MALAYSIA

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Muhammad Arkam Bin Che Munaaim, the recipient of Outstanding Leadership Award by Education 2.0 Conference in Dubai (2024), Productivity Champion Certification Category: LEADER and TALENT by Malaysia Productivity Corporation, MPC (2023), listed as Successful People in Malaysia (2022, 2023) 4th Edition and 5th Edition *by* Britishpedia Encyclopedia (Malaysia), British Publishing House, London. Listed as the recipient of Malaysian Top SME CEO Award, 2022 by Dreamtalents Media, Malaysia, awarded as the Building Engineer of The Year (2022) in Built Environment Awards 2022 by the Chartered Association of Building Engineers (CABE), United Kingdom in November 2022.

EDUCATION

Doctor of Philosophy (Energy Conservation), University Science Malaysia, Penang, 2014. Dissertation Title: The Assessment of Fibre Optic Daylighting Application for Interior Illumination in Malaysia Skies. Keywords: Remote Sourced Daylight, Fiber Optic Daylight, Fibre Optic Daylighting Malaysia

MSc. Building Technology, University Science Malaysia, Penang, 2010. Bachelor in Engineering (Electrical) (Hons), University Technology Malaysia, 2000. Diploma Electrical Engineering (Power), University Technology Malaysia, 1998.

KEYWORDS

Education Consultant, Construction, Project Management, Building Services, Mechanical & Electrical, Energy, Sustainability, Facility Management, Training & Education, Engineering Education, Professional Certifications, Career Progression in Construction & Facility Management

AWARDS

- 1) Outstanding Leadership Award by Education 2.0 Conference in Dubai (2024)
- 2) Bumiputera Business Excellence Award 2023, BBEA2023, awarded by the Minister of Entrepreneur Development and Cooperatives, Malaysia (2023) (Associated with Mega Jati Academy Sdn Bhd)
- 3) **Productivity Champion Certification Category: LEADER and TALENT**, by Malaysia Productivity Corporation, MPC (2023)
- Successful People in Malaysia (2023) 5th Edition, Britishpedia Encyclopedia (Malaysia), Licensed by British Publishing House, London, United Kingdom.
- 5) Top SME CEO Award, 2022 by Dreamtalents Media, Malaysia.
- Building Engineer of The Year (2022) Award, Built Environment Awards 2022, by the Chartered Association of Building Engineers (CABE), United Kingdom.
- Successful People in Malaysia (2022) 4th Edition, Britishpedia Encyclopedia (Malaysia), Licensed by British Publishing House, London, United Kingdom.
- 8) **THE BEST TVET Training Provider in Construction & Facility Management**, Malaysia Education and TVET Awards 2022 and 2023 by Education TVET Malaysia (Associated with Mega Jati Academy Sdn Bhd)
- 9) **The BEST INTERNATIONAL TRAINING CENTRE** (Industrial Training), Made for the World Excellence Award 2022 by NIAGA TIMES, Kuala Lumpur (Associated with Mega Jati Academy Sdn Bhd)

COMPETENCIES CERTIFICATES:

- 1) Professional Engineer with Practising Certificate (**PEPC**) Board of Engineers Malaysia (BEM), since 2005 PEPC number: C112237 (Electrical)
- 2) Registered Electrical Energy Manager (**REEM**), Energy Commission of Malaysia (Suruhanjaya Tenaga Malaysia, ST), Since 2015. Registration Number PTE-0075-2015.
- 3) Qualified Person (Electrical, W3, W4), National Water Services Commission, **SPANQP** (Suruhanjaya Perkhidmatan Air Negara), Since 2008, Registration Number QP 285.
- Certified Construction Project Manager, CCPM, and Certified Construction Site Supervisor (CSS) Electrical & Mechanical, Construction Industry Development Board Malaysia, (CIDB).
- 5) National Industrial Experts Registration, **DPIN**, the Ministry of Human Resources Malaysia.
- 6) Train the Trainer (**TTT**), Human Resource Development Corporation (HRDCorp), the Ministry of Human Resources, Malaysia
- 7) Certified Construction Project Management (**CCPM**), Level 7 *European Qualification Frameworks (EQF)*, OTHM Qualifications United Kingdom, Learner's Registration Number (LRN): 201630034
- 8) Certified Facility Management Specialist (Water Services), **FMS**®, Level 5 *European Qualification Frameworks (EQF)*, OTHM Qualifications UK, Learner's Registration Number (LRN): 201630034
- 9) Chartered Building Engineer (**CBuildE**), Chartered Association of Building Engineers, UK. No: 69496957

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1) Certified Facility Management Project Manager FMP® : CRLY2021E03322 2) Certified Facility Management Specialist FMS®– Healthcare Services : CRLY2021E03307 3) Certified Facility Management Specialist FMS®– Water Services : CRLY2021E03309 4) Certified Facility Management Specialist FMS®- Road & Highway : CRLY2021E03306 5) Certified Facility Management Specialist FMS®- Railway Assets Management : CRLY2021E03323 6) Certified Facility Management Specialist FMS®– Energy, Oil & Gas : CRLY2021E03319 7) Certified Facility Management Specialist FMS®- Airport & Ground Services : CRLY2021E03325 8) Certified Facility Management Specialist FMS®- Port & Harbour : CRLY2021E03308 9) Certified Facility Management Specialist FMS®– General Buildings : CRLY2023P01192 10) Certified Facility Management Specialist FMS®– Power & Telecommunication : CRLY2023P01203 11) Certified Facility Management Specialist FMS®– Estate & Plantation : CRLY2023P01202 12) Certified Healthcare Facility Manager (CHFM) - Level 5 : CRLY2023P04982

PROFESSIONAL REGISTRATIONS / AFFILIATIONS / MEMBERSHIPS:

1) 2) 3) 4) 5) 6)	Board of Engineers Malaysia (BEM) Institution of Engineers Malaysia (IEM) National Industrial Experts Registration (MOHR) Institution Electrical & Electronics Engineers, IEE, USA Institution of Engineering and Technology, IET, UK ASEAN Engineers Register, ASEAN Eng	: C1-12237 (PEPC-Electrical) : 21559-Electrical (Fellow) : DPIN-771224075147 : 80261030 : 92052612 : 2292
7)	ASEAN Chartered Professional Engineer, ACPE	: 00068MY.
8)	Asia-Pacific Economic Cooperation Engineer, APEC Eng	: MY E 00225
9)́	EMF International Professional Engineer, IntPE	: MY E 00225
10)	Malaysia Green Building Confederation, MGBC	: Professional Member, P0331.
11)	Malaysian Water Association, MWA	: OM 2137
12)	Malaysian Society for Engineering & Technology, MySET	: 01473
13)	Malaysian Invention & Design Society, MINDS	: 2108
14)	Malaysian Energy Professional Association, MEPA	: 365 ID
15)	Members of Association of Consulting Engineers Malaysia, ACEM	: M 1476
16)	Chartered Association of Building Engineers, UK (CABE)	: 69496957 (Fellow)
17)	Member, Chartered Institute of Building (CIOB), UK	: 2084857
18)	Member, International Facility Management Association (IFMA)	: 1208147

ADVISORY APPOINTMENTS:

- 1. Adjunct Professor, Universiti Malaysia Sarawak (UNIMAS), Engineering Faculty, (15 November 2023 14 November 2024)
- 2. **Professor of Engineering** (Building Technology), Jesselton University College (JUC), Kota Kinabalu, Sabah, Malaysia (2022-2024)
- 3. Industrial Fellow, School of Civil Engineering, Universiti Sains Malaysia (USM), Aug 2022- July 2023.
- 4. **Committee Member**, Board of Study BOS, Bachelor in Electrical Engineering, Faculty of Electrical Engineering, Universiti Teknikal Malaysia Melaka (UTeM), 2023.
- 5. Member, Board of Governance, Jesselton University College (JUC), Kota Kinabalu, Sabah (Since 2022)
- 6. Member, Board of Governance, Twintech University College (TUC), Georgetown, Penang (Since 2022)
- 7. Industrial Advisory Panel (IAP), University Teknologi Malaysia (UTM) Skudai, Johor, Electrical & Electronic Program, Malaysia (2020-2022) (2023-2024)

- 8. Industrial Advisory Panel (IAP), University Teknologi MARA (UiTM) Pulau Pinang, Electrical & Electronic Program, Malaysia (2020-2022) (2023-2024)
- 9. Advisory Panel, Arau Vocational College, Perlis (Electronic Technology).
- 10. **Program Advisor**, Diploma in Engineering (Building Services), Politeknik Sultan Abdul Halim Mu'adzam Shah, Kedah (Mac 2023 Dec 2024).
- 11. **Industrial Advisory Panel (IAP),** University Malaysia of Computer Science and Engineering (UniMY), Putrajaya, Malaysia (2020-2022)
- 12. **Industrial Advisory Panel (IAP)** Member, School of Electrical and Electronics, Universiti Malaysia Pahang, Pekan, Pahang (2017-2022)
- Committee Member, Board of Study BOS, Bachelor in Electrical and Electronics Engineering, Collaboration with Universiti Malaysia Pahang (UMP) and Karlsruhe University of Applied Sciences, Germany (2020-2022)
- 14. Adjunct Professor, School of Engineering, Faculty of Science and Technology, Quest International University Perak (QUIP), August 2019-July 2021.
- 15. **Research Expert Panel** for PhD Research, Faculty of Technical Education and Vocational, Universiti Tun Hussein Onn Malaysia (UTHM) (2016)
- 16. Industrial Advisory Panel (IAP), University Sains Malaysia (USM) Pulau Pinang, Electrical & Electronic Program, Malaysia (2016-2018).
- 17. **Technical Advisory Committee (TAC)** and Advisory Panel **(AP)** for Industrial Electronics, National Skills Youth Institute, the Ministry of Youths and Sports Malaysia Since 2003

COMMITTEE MEMBERS:

- 1. **Committee Member**, Examination & Qualification (E&Q), the Board of Engineers Malaysia (BEM) Session 2023-2024
- 2. **Committee Member**, Training & Education (T&E), the Board of Engineers Malaysia (BEM) Session 2023-2024
- 3. Council Member, The Association of Consulting Engineers Malaysia (ACEM), 2020-2024
- 4. **Chairman**, Training & Education (T&E) Committee, the Association of Consulting Engineers Malaysia (ACEM), 2020-2024.
- 5. **General Committee Member**, Chartered Association of Building Engineers (CABE), United Kingdom, Malaysia and Asia Pacific Region 2023-2024
- 6. Committee Member, Working Group for BEM Who's Who Book, Board of Engineers Malaysia (BEM), 2022
- 7. Committee Member, Working Group for Road Safety Audit, Board of Engineers Malaysia (BEM), 2021.
- 8. **Committee Member**, Working Group for Professional Competency Examination (PCE) Enhancement, Board of Engineers Malaysia (BEM), 2021-2023.
- 9. **Committee Member**, Application Committee (Application), the Board of Engineers Malaysia (BEM) Session 2021-2022
- 10. Committee Member, Training and Education (T&E), the Board of Engineers Malaysia (BEM) (2019-2020)

- 11. **Member**, ASEAN Collaboration Partner (Malaysia, Brunei Indonesia, Cambodia, Myanmar and Thailand), Strategic Business Collaboration for ASEAN Member (2020)
- 12. **Committee Member**, Education and Training (T&E), the Board of Engineers Malaysia (BEM) (2016-2019) and **Speaker**, *Engineering Ethics* for Board of Engineers Malaysia (BEM) Roadshow 2017-2018.

DRAFTING / MANUSCRIPT DEVELOPMENT COMMITTEE:

- 1. **Committee Member,** NSC 19/TC 5 "Safety of Household and Similar Electrical Appliances", Department of Standard Malaysia (DSM), 2022-2023
- Chairman, Module Development of Learning Package for Certified Site Supervisor Program (Mechanical & Electrical), for Mega Jati Consult Sdn Bhd appointed by Construction Industry Development Board Malaysia (CIDB), 2018.
- 3. **Drafting Committee**, Workshop on Classification of Engineering Branch and Sub-branch appointment by the Standing Committee for Examination and Qualification, Board of Engineers Malaysia (BEM), 2019.
- 4. **Chairman and Lead Facilitator**, Module Development and enhancement of Program Curriculum appointed by Construction Industry Development Board Malaysia (CIDB), June 2020– Dec 2020, Involving below new CIDB's Certified Construction Personnel Program for year 2021:
 - i) Certified Construction Project Manager (CCPM) Level 6 Enhancement
 - ii) Certified Facility Management Project Manager (FMPM) New Program
 - iii) Certified Construction Manager (CCM) Level 5 Enhancement
 - iv) Certified Construction Manager Electrical (CCM-E) Level 5 New Program
 - v) Certified Construction Manager Mechanical (CCM-M) Level 5 New Program
 - vi) Certified Construction Site Supervisor (CSS) C&S Level 4 Enhancement
 - vii) Certified Construction Site Supervisor (CSS) B&A Level 4 Enhancement
 - viii) Certified Construction Site Supervisor (CSS) Mechanical Level 4 Enhancement
 - ix) Certified Construction Site Supervisor (CSS) Electrical Level 4 Enhancement
 - x) Certified Construction Traffic Management Officer (CTMO) Level 4 Enhancement
 - xi) Certified Facility Management Executive (FME) Level 4 Enhancement
 - xii) Certified Facility Management Manager (FMM) Level 5 Enhancement
 - xiii) Certified Facility Management Specialist Area New Program
 - i) General Building
 - ii) Healthcare Services
 - iii) Water Services
 - iv) Road & Highway
 - v) Railway Assets Management
 - vi) Energy, Oil & Gas
 - vii) Airport & Ground Services
 - viii) Port & Harbour (2022)
 - ix) Power & Telecommunication (2022)
 - x) Estate & Plantation (2022)
- 5. **Drafting Committee**, Renewable Energy Policy Framework for the Kingdom of Cambodia appointment by Malaysia External Trade Development Corporation, MATRADE (2018-2021)
- 6. **Technical Committee Member**, Development of **SIRIM STANDARD** for `Best Practice in Implementing Energy Management for SMEs'. (2016-2017)
- 7. Editorial Board Member, Science Journal of Energy Engineering Science Publishing Group, Science PG, United States of America. (http://www.sciencepublishinggroup.com/journal/index?journalid=269)
- 8. **Reviewer**, Cogent Engineering, Taylor & Francis Group (www.cogentoa.com)
- 9. Reviewer, Malaysian Technical Universities Conference on Engineering and Technology (MUCET 2015),

Universiti Tun Hussein Onn Malaysia, 2015. (http://www.mucet.net/2015/?q=node/17)

10. **Reviewer**, International Conference on Architecture and Built Environment (ICABE 2016), International Islamic University Malaysia, Kuala Lumpur, Malaysia. (https://icabe2016.wordpress.com/)

PROFESSIONAL ASSESSOR / INTERVIEWER / FACILLITATOR / EXPERT PANEL:

- Interviewer Officer for Certified Construction Project Manager (CCPM) and Certified Construction Site Supervisor, CSS (Electrical & Mechanical), the Construction Industry Development Board (CIDB) Malaysia since 2018.
- Certified Trainer for Management Program, Construction Industry Development Board Malaysia (CIDB) Since Nov 2018.
- Certified Trainer for Supervision Program, Construction Industry Development Board Malaysia (CIDB) Since Nov 2018.
- 4. **Facilitator**, Kota Perdana SBEZ Physical Planning and Implementation Lab, Northern Corridor Implementation Authorities (NCIA), Malaysia (2018).
- 5. **Panel Member (Industry)**, Engineering Accreditation Council **(EAC)** and Engineering Technology Accreditation Council **(ETAC)**, Board of Engineers Malaysia (Since 2016)
- 6. Professional Examination Interviewer (PI), the Institute of Engineers Malaysia (Kedah/Perlis Branch) Since 2016.
- 7. Professional Assessment Examination Interviewer (PAE) and Professional Examination Reviewer (For Fail Cases), Malaysia Society of Engineering and Technology (MySET) (Since 2016)
- 8. **Technical Expert**, Green Technology Financing Scheme (GTFS), Malaysian Green Technology Corporation (Since 2015)

EVALUATION PANEL FOR ENGINEERING ACCREDITATION COUNCIL (EAC), BOARD OF ENGINEERS MALAYSIA (BEM) VISIT LIST:

NO	INSTITUTE OF HIGHER LEARNING (IHLs)	PROGRAMME	DATE VISIT
1	Universiti Teknikal Malaysia, Melaka (UTeM)	Electronics Engineering	25-26 th April 2016
2	Universiti Malaysia Pahang (UMP), Pahang.	Electronics Engineering	7-8th September 2016
3	MANIPAL Universiti Nilai, Negeri Sembilan	Electronics Engineering	28-29th November 2016
4	Universiti Tunku Abdul Rahman (UTAR). KL.	Electronics Engineering	22-23 rd March 2017
5	CURTIN Malaysia (CURTIN), Miri, Sarawak.	Electronics Engineering	3-4 th May 2018
6	QUEST International University, Ipoh, Perak.	Electronics Engineering	15-16 th August 2018
7	Universiti Teknologi Malaysia Skudai, Johor.	Electronics Engineering	18-19 th Sept 2018
8	Universiti Tun Hussein Onn, Batu Pahat, Johor.	Electronics Engineering	12-13 th November 2018
9	INTI College Penang	Electronics Engineering	16 th -17 th March 2021
10	UniKL BMI, Gombak, Kuala Lumpur	Electrical & Electronic Eng.	26 th -27 th August 2021
11	UTAR Sungai Long, Selangor (WA Joint Visit)	Electronics Engineering	1st-2nd March 2023

EXAMINER FOR PROFESSIONAL ASSESMENT EXAMINATION (PAE) BOARD OF ENGINEERS & EXAMINER FOR PROFESSIONAL INTERVIEW (PI) INSTITUTION OF ENGINEERS MALAYSIA SINCE 2016:

	NUMBER OF PROFESSIONAL ENGINEER CANDIDATES (ELECTRICAL / ELECTRONICS)								
	REVIEWER	REVIEWER APPOINTED AS EXAMINER EXAMINED BALANCE							
PAE-BEM - MySET	2	107	107	0					
PI-IEM	-	64	64	0					
PAE-ACEM	-	6	6	0					
TOTAL COUNT	2	177	177	0					

WORKING EXPERIENCES:

 <u>1st</u> January 2020-Present: Chief Executive Officer, Mega Jati ACADEMY Sdn Bhd. (www.megajatiacademy.com) the training & education arm for Mega Jati Consult Sdn Bhd, registered as a Certified Training Provider for MOF, HRDCorp, CIDB, Energy Commission, Skill Development Department (JPK) and the Skills Development Fund Corporation (PTPK), the Ministry of Human Resource Malaysia (KSM), OTHM Qualifications United Kingdom, conducting both Continuous Professional Development (CPD) and Competency Training nationwide.

Offer customized technical training, retiree transition training, Professional Certificates, University Professional Program (Professional Diploma, Bachelor and Masters), International Certification (European Qualification Frameworks with European Credit Transfer System, ECTS), Subject Matter Expert Training, etc including for public, in-house, webinar, preparation course for competencies program and also involved in Training Modules development for various agencies both government and private.

Through certification by Human Resource Development Corporation (HRDCorp), Construction Industry Development Board (CIDB) JPK, PTPK, Suruhanjaya Tenaga (ST) and OTHM Qualifications, the ACADEMY is certified to provide Accredited Programs and Continuous Professional Development Programs. The training activities by the ACADEMY targets contractors, professionals, practitioners, and relevant construction personnel who can benefit from acquiring skills, knowledge, and competencies for addressing tasks in various disciplines in the construction industry.

Mega Jati Academy is registered under CODE 221110: Training Services, Trainer and MODERATOR/NEGOTIATOR and CODE 222704: Services/ Certification & Accreditation of the Ministry of Finance Malaysia.

- <u>1st January 2019-Disember 2019</u>: *Director,* Mega Jati ACADEMY Sdn Bhd. (<u>www.megajatiacademy.com</u>) The training & education arm for Mega Jati Consult Sdn Bhd, registered as a Certified Training Provider for MOF, HRDF, CIDB and Energy Commission, conducting both CPD and Competency Training nationwide.
- <u>1st March 2014-Present</u>: *Director*, Mega Jati Consult Sdn Bhd. (<u>www.megajaticonsult.com</u>) Operating Mega Jati Consult's projects in Malaysia particularly in Peninsular as below:

On Going Projects:

No	Projects	No	Projects
1	Jabatan Pendidikan Negeri Komplex, Kangar, Perlis (2020-2024)	2	Jambatan Kedua Pulau Pinang Rest and Refresh (R&R) Area, Penang (2020-2023)
3	Wet Market Bandar Cassia, Penang (2021-2023)	4	Hospiltal Manjung extension building, Perak (2020-2023)

- 4. <u>September 2013-March 2014</u>: 6 months international exposure in United Kingdom exposed to UK's Competencies Area and moderate climatic building services construction methods in housing, road, drainage, offices and infrastructure. Technical visit to Domestic Solar Power Generation System, Wind Turbine and Nuclear Power Plant. Presented a Research Paper titled Remote Source Daylighting at Sheffield Hallam University, Sheffield United Kingdom on 12th February 2014 for Department of Natural and Build Environment, Faculty of Development and Society, Sheffield Hallam University, United Kingdom, seminar organized by Professor S. Paul.
- <u>1st August 2011-31st July 2013</u>: *Lecturer*, University Malaysia Perlis UniMAP, responsible in teaching: Building Engineering, Fundamental of Electrical Engineering, Project Management, Engineers in Society, Built Environment with School of Environmental Engineering, Universiti Malaysia Perlis.
- <u>April 2011-31st July 2013: Resident Engineer (Mechanical & Electrical)</u> for Mega Jati Consult Sdn. Bhd. M&E consultant for installation of FiT Solar Generator Projects. Development of 6.2MWatt Renewable Energy System at Kuala Perlis, Perlis. Total project worth RM 70M and 8MWatt Solar Renewable Energy System at Kuala Sawah, Rantau, Negeri Sembilan. Total project worth RM 80M.

- December 2009-April 2011: Resident Engineer (Mechanical & Electrical) for Mega Jati Consult Sdn. Bhd. for North Butterworth Container Terminal (NBCT) Butterworth, Penang, KDN State Complex, Perlis, UPP Padang Besar Project, Perlis and PDC Properties High Rise Residential Apartment, Penang, Malaysia. Total project worth RM 200M. Mechanical & Electrical installation scope of works.
- 8. October 2007-December 2009: Resident Engineer (Mechanical & Electrical) for Mega Jati Consult Sdn. Bhd. Design and Build Project for Advanced Technology Centre (ADTEC), Kamunting Raya, Taiping, Perak Darul Ridzwan for The Ministry of Human Resources, Malaysia involved in consultation, supervision, reporting and liaison with various authorities, ministry (Government), Public Works Department (PWD) and subcontractors/suppliers etc. Scope of work: Electrical Medium High Voltage & distribution systems, PA systems, MATV, telephone, lightning protection & grounding systems, CCTV & Security System, external lightings, air conditioner & ventilation, compressed air systems, cold water & sanitary systems, fire fighting systems, dust extractor and kitchen equipment. Project worth RM160M.
- 9. <u>April 2004-March 2006</u>: Senior Project Engineer for Rasma Corporation Sdn. Bhd. Returned to Headquarters as Senior Project Engineer, continue controlling, supervising, making progress claim, attend meetings, substantiating variation order claims, preparing final account liaising with authorities, consultants, ministry (Government), Public Works Department (PWD) and subcontractors/suppliers for IKBN Seberang Prai Project & Radar Head Station TUDM Western Hill, Penang. Involved in tender preparations for PUTRAJAYA, UIA Gombak, MRSM Gemencheh, Mahkamah Jalan Duta Kuala Lumpur, Tabung Haji, Kompleks Perumahan SPNB, Kompleks Rakan Muda, TUDM Sukhoi, Gong Kedak Terengganu. Seconded to Tabung Haji Switchgear project and TUDM Sukhoi Project as Project Engineer.
- June 2003-March 2004: Project Engineer for Rasma Corporation Sdn. Bhd. Full-time site representative at TUDM Western Hill Project, scope of work includes demolition, dismantle & transport, civil works, building works, mechanical & electrical services. Upgrading & refurbishment TUDM Radar Station for The Ministry of Defense. Project worth RM 30 million.
- 11. <u>May 2001-June 2003:</u> Project Engineer for Mega Nine Sdn. Bhd., a subsidiary of Rasma Corporation Sdn. Bhd. Full-time site representative at Institut Kemahiran Belia Negara, Seberang Prai, Penang. Delivery, installation, testing & commissioning of mechanical & electrical services. Responsible in controlling, managing, liaising with authorities, reporting, supervising, preparation of progress and variation order claims, etc. for The Ministry of Youths & Sports Malaysia. Project worth RM 62 million.
- 12. <u>June 2000-May 2001</u>: *Testing Engineer* for Just Basic Engineering Sdn. Bhd., was assigned to perform the following duties:
 - 1. Testing of electrical EHV switchgears namely rated 11kV and 33kV vacuum circuit breakers, 132kV gas (SF6) circuit breakers & 275kV Gas Insulated Switchgears (GIS).
 - 2. Testing of power transformer rating 275/132/33 kV (240 MVA, 90 MVA, 30MVA)
 - 3. Testing of grounding and lightning protection system for EHV Switchgear at substation.
 - 4. Testing of control and protection system for EHV switchgear at substation.
 - 5. Working in an AC DC Converter Station 300kV HVDC at Gurun Substation.
 - 6. Substation DC (110 V) and AC (415 V) supply distribution system.
 - 7. Working in a live 275/132/33 kV substation.

RESEARCH AND PUBLICATIONS

No.	Publication (Author, title, journal, year, volume, pages)	First Author (Tick (v)	Corresponding Author (Tick (v)	Web of Science (WoS)	Scopus (Tick	Journal Quartile (JCR and not SJR) (Tick ($$)	
		Fir	Corr Auth	Tick $()$	(√)	Q1	Q2
1.	Muhammad Arkam Che Munaaim, Karam Mustafa Al-Obaidi, Mohd Rodzi Ismail, Abdul Malek Abdul Rahman A review study on the application of the fibre optic daylighting system in Malaysian buildings International Journal of Sustainable Building Technology and Urban Development, Taylor & Francis, 2014	V	V		V		
2.	Muhammad Arkam Che Munaaim, Karam Mustafa Al-Obaidi, Mohd Rodzi Ismail, Abdul Malek Abdul Rahman Potential of fibre optic daylighting systems in tropical Malaysia Indoor and Built Environment, SAGE, 2014, (Q2, IF: 1.225)	V	V		\checkmark		
3.	Muhammad Arkam Che Munaaim, Karam Mustafa Al-Obaidi, Mohd Rodzi Ismail, Abdul Malek Abdul Rahman Empirical evaluation of the effect of heat gain from fiber optic daylighting system on tropical building interiors <i>Sustainability</i> , 2014, Volume 6, pp 9231-9243, (Q3, IF: 0.942)	\checkmark	\checkmark	\checkmark	\checkmark		
4.	M. Pauzi M. Kassim, Karam Mustafa Al-Obaidi, Muhammad Arkam Che Munaaim , Abd. Mokhti Salleh Feasibility study on solar power plant utility grid under Malaysia feed-in tariff <i>American Journal of Engineering and Applied Sciences</i> , 2015, Volume 8, pp 210- 222		\checkmark		\checkmark		
5.	Muhammad Arkam Che Munaaim, Karam Mustafa Al-Obaidi, Mohd Rodzi Ismail, Abdul Malek Abdul Rahman The behavior of internal humidity from fibre optic daylighting application <i>Jurnal Teknologi (Sciences & Engineering)</i> , 2015, Volume 75, pp 1-7	V			\checkmark		
6.	Muhammad Arkam Che Munaaim, Nasrul Hamidin, Afizah Ayob, Norazmawati Md. Sani, Abd. Mokhti Salleh Application of micro hydroelectric system attached to effluent discharge point of sewerage treatment plant 5 th Annual Conference on Sustainable Energy and Environmental Sciences (SEES), 2016	\checkmark	\checkmark				
7.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim Lightning protection system in Malaysia: materials selection for down conductor <i>Jurnal Teknologi</i> (Sciences & Engineering), 2016, Volume 78				\checkmark		
8.	Muhammad Arkam Che Munaaim, Nasrul Hamidin, Afizah Ayob Review on the potential of micro hydro electric generator embedded at effluent discharge of sewerage treatment plant <i>Jurnal Teknologi (Sciences &Engineering),</i> 2016, Volume 78.	V	\checkmark		\checkmark		
9.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim , Zuhayr Md.Ghazaly, Ngah Ramzi Hamzah, Zulhelmi Zulkeflee Flexural behaviour of reinforced concrete beam embedded with lightning protection cable International Conference on Civil, Architecture and Sustainable Development (CASD-2016), London (UK), 2016				~		
10.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim , Muhammad Abu Bakar Sidik, Zulhelmi Zulkeflee The temperature effect to the concrete due to the single strike of high electric current <i>Materials Science Forum</i> , 2017, Volume 857, pp 337-341				V		
11.	Adibah Zainon, Afizah Ayob, Muhammad Arkam Che Munaaim Bid evaluation strategy among G7 construction companies in Northern States of Malaysia Research Journal of Fisheries and Hydrobiology, 2017						
12.	Fahisal Abdullah, Muhammad Arkam Che Munaaim , Shafriza Nisha Basah, Sazali Yaacob The feasibility study of applying solar tracking in power plant Kuala Perlis, Malaysia IEEE Conference on Systems, Process and Control, Melaka, Malaysia, 2017				\checkmark		
13.	Karam Mustafa Al-Obaidi, Muhammad Arkam Che Munaaim , Muhammad Azzam Ismail, Abdul Malek Abdul Rahman Designing an integrated daylighting system for deep-plan spaces in Malaysian low-rise buildings <i>Solar Energy, Elsevier,</i> 2017, (Q1, IF: 4.374)		\checkmark	\checkmark	\checkmark	\checkmark	

CV_MUHAMMAD ARKAM BIN CHE MUNAAIM as of FEB 2024

No.	Publication (Author, title, journal, year, volume, pages)	First Author (Tick (√)	Corresponding Author (Tick (\checkmark)	Web of Science (WoS)	Scopus (Tick (√)	Journal Quartile (JCR and not SJR) (Tick (√)	
		Fir	Corn Auth	Tick (√)	(\v)	Q1	Q2
14.	Zainah binti Md.Zain, Muhammad Arkam Che Munaaim , Maziyah Mat Noh Solar powered microcontroller module for real-time sewerage treatment plant monitoring system: prototype development 7 th IEEE International Conference on System Engineering and Technology, 2017				√		
15.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim Awareness of the installation the Lightning Protection System (LPS) by using structural bonding method in Malaysia <i>MATEC Web of Conferences</i> , 2017				V		
16.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim Software analysis of the reinforced concrete beam with additional installation of lightning protection cable <i>Materials Science Forum</i> , 2017, Volume 904, pp 185-188.				\checkmark		
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21.	Esra'a Sh. Abbaas, Ala'eddin A. Saif, Muhammad Arkam Che Munaaim , Md. Azree Othuman Mydin Influence of courtyard ventilation on thermal performance of office building in hot- humid climate: a case study <i>International Conference on Civil and Environmental Engineering (CENVIRON</i> 2017), 2018		V		√		
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23.	Muhammad Arkam Che Munaaim, N.Razali, Afizah Ayob, Nasrul Hamidin, Md. Azree Othuman Mydin The potential of micro hydroelectric generator embedded at 100,000 PE Effluent Discharge of Sewerage Treatment Plant Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 2018	\checkmark			V		
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CV_MUHAMMAD ARKAM BIN CHE MUNAAIM as of FEB 2024

No.	Publication (Author, title, journal, year, volume, pages)	First Author (Tick (√)	espond or (Tick	Web of Science (WoS)	Scopus (Tick (√)	Journal Quartile (JCR and not SJR) (Tick ($$)	
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27.	Fahisal Abdullah, Muhammad Arkam Che Munaaim , Mohd Shuhanaz Zanar Azalan, Siti Marhainis Othman Design and development of a DAST based on 2RPS-1S parallel mechanism <i>Journal of Telecommunication, Electronic and Computer Engineering</i> (<i>JTEC</i>), 2018, Volume 10, pp 117–122						
28.	Saif Ed, Fertahi Saif Ed-Din, Tarik Bouhal, Ng Shu Naa, Muhammad Arkam Che Munaaim, Ho Soon Min Solar energy development: case study in Malaysia and Morocco <i>International Journal on Emerging Technologies,</i> 2019, Volume 10, pp 106-113				\checkmark		
29.	Mustaqqim Abdul Rahim, Abdul Naser Abdul Ghani, Muhammad Arkam Che Munaaim , Zuhayr Md Ghazaly Load-displacement behaviors of reinforced concrete beam embedded with galvanized steel cable: comparison between experiment and finite element analysis <i>Lecture Notes in Civil Engineering</i> , 2020, Volume 53, pp 499-506				\checkmark		
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31.	Md. Azree Othuman Mydin, N. Mohamad, M.N.Mohd Nawi, I.Johari, Muhammad Arkam Che Munaaim An experimental investigation on engineering properties of alkali resistant fibermesh reinforced foamed concrete jacket <i>Journal of Xi'an University of Architecture & Technology</i> , 2020, Volume 12, pp 642- 647				\checkmark		
32.	Md. Azree Othuman Mydin, N. Mohamad, M.N.Mohd Nawi, I.Johari, Muhammad Arkam Che Munaaim Effect of different layers of confinement with fibermesh on the mechanical properties of lightweight foamed concrete <i>Journal of Xi'an University of Architecture & Technology</i> , 2020, Volume 12, pp 648- 654				\checkmark		
33.	Norazmawati Md Sani, Yap Kah Chun, Muhammad Arkam Che Munaaim Integration of UNIMAP's student bus routing towards free city-bus service local people in Perlis <i>Quantum Journal of Social Sciences and Humanities</i> , Volume 1, pp 55–68.						
34.	Ho, S.M., Ng, S.N., Muhammad Arkam Che Munaaim Disposal method of crystalline silicon photovoltaic panels: a case studies in Malaysia <i>Asian Journal of Chemistry</i> , 2021, Volume 33, pp 1215-1221				\checkmark		

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KEYNOTE ADDRESSED

- MAHSA UNIVERSITY MALAYSIA. MAHSA International Technology and Engineering Conference 2023 (MITEC2023), 24th -25th February 2023, THEME "Digital Transformation and Green Technology Towards IR4.0" <u>https://mahsaacademy.com.my/conference/MAHSA%20Conferences/MiTEC23/mitec.html</u> Keynote Paper Presented: Potential of Fibre Optic Daylighting in Malaysia
- 2. Asset and Project Management Conference APMC 2023, 9th JUNE 2023, Kuala Lumpur. Competency Development for Managing Assets and Maintenance Projects. YouTube: https://youtu.be/M8jDiFGZV8I?si=KrNKHzPtfAFfBPTE
- 3. CIDB CREAM DIG.IT.ALL Forum Series, 18[™] October 2023, Sustainable and Smart Building; Where are We Now in Malaysia? Paper Presented: **Optimization Of Building Energy Performance Through Passive Design Strategies**

Duration	Project's Name	Client/Company	Designation	
6/4/99	Shah Alam (E) 132/33/11kV Substation	Tenaga Nasional Berhad	Trainee	
5/5/99		Multi Discovery Sdn. Bhd.	Technician	
10/5/99 7/6/99	Lumut Extension 132/11kV Substation	Tenaga Nasional Berhad	Trainee Technician	
28/10/99 29/11/99	Tanjung Kupang 132/11kV Substation, Johor.	Tenaga Nasional Berhad	Technician	
July 2000	Paroi 275/132 kV Substation, Negeri Sembilan.	Tenaga Nasional Berhad/ ANSALDO	Testing Engineer	
Aug. 2000 14/9/2000	Kulim Hi-Tech Park (132kV Substation) Kedah.	Northern Utility Resources	Commissioning Engineer	
		ELIN	5	
8/10/00 16/11/00	Seelong 132/11 kV Substation, Johor.	Tenaga Nasional Berhad Mahkota Technologies SB	Testing Engineer	
19/11/00	Matrix Power Sdn. Bhd. (Factory Test), Selangor.	Multi Discovery Sdn. Bhd.	Testing Engineer	
Dec 2000	Kg. Subang 132/33/11kV Selangor.	Tenaga Nasional Berhad Multi Discovery Sdn. Bhd.	Testing Engineer	
Jan 2001	Merck 33 kV Substation (Factory-KHTP), Kedah.	Tenaga Nasional Berhad	Testing Engineer	
Feb 2001	Gurun HVDC 110kV Substation, Kedah.	Tenaga Nasional Berhad	Testing Engineer	
Mar 2001 May 2001	IKBN Pagoh, Johor, Electrical Contractor.	Min. Youths & Sports. Usrahlite Engineering S/B	Electrical Engineer	
May 2001 May 2003	IKBN Seberang Prai, Penang, M & E Contractor.	Min. Youths & Sports. Mega Nine Sdn. Bhd.	Project Engineer	
June 2003 Mar 2004	TUDM Western Hill, Penang. Full-package Main Contractor.	Min. Defense Malaysia Rasma Corporation S/B	Project Engineer	
Apr 2004 – Jan 2005	Tendering, Controlling, Evaluating, Supervising, Claim, Reporting & Meeting.	Rasma Corporation & Mega Nine Sdn. Bhd.	Senior Project Engineer	
Jan 05-	Tendering, Controlling, Evaluating, Supervising,	Rasma Corporation	Senior Project	
31 Mar 06	Reporting & Meeting for Tabung Haji Switchgear Project & TUDM Sukhoi.	Sdn. Bhd. & Mega Nine Sdn. Bhd.	Engineer	
1/1/07-	Construction & Completion of Sekolah Menengah	The Ministry Of Education	Electrical	
Dec 2010	Bertam Kepala Batas & Sports Complex Univ Islam Antarabangsa Kuantan.	University Islam Antarabangsa	Engineer	
Dec 2007- 2008	Faculty of Electrical Engineering, Power System Department, UiTM Permatang Pauh, Penang.	University Technology MARA Pulau Pinang	Lecturer (Part Time)	
1/10/07- 31/12/11	Design And Build for Advanced Technology Centre (ADTEC) at Kamunting RayaTaiping, Perak.	The Ministry Of Human Resources, Malaysia	Resident Engineer (M & E)	
Oct 2009- April 2011	NBCT Butterworth, KHEDN Komplex, Kangar & UPP Padang Besar, Perlis.	Penang Port Sdn Bhd Ministry Of Home Affairs	Resident Engineer (M & E)	
1/8/11-31 July 2013	School of Environmental Engineering, Building Engineering Department	Universiti Malaysia Perlis	Lecturer (Contract)	
1/4/12- 31/12/12	Development of 6.2MWatt Renewable Energy System at Kuala Perlis, Perlis.	Cypark Resources Berhad	Resident Engineer (M & E)	
Dec 2012- August 2013	Development of 8.0MWatt Renewable Energy System at Kuala Sawah, Rantau, Negeri Sembilan, Malaysia.	Cypark Resources Berhad	Resident Engineer (M & E)	
Aug 2013- Feb 2014	International exposure in the UK, exposed to UK's Competencies Area and moderate climatic building services construction methods.	Mega Jati Consult SB Sheffield Hallam Univ UK	Trainee (International Attachment)	
March 2014- Present	Director, Mega Jati Consult Sdn Bhd. Involved in consultancy for Building Services include Mechanical, Electrical & ICT projects and Head for MJC Training and Education Division for Professional Training projects.	Mega Jati Consult Sdn Bhd	Director	
Dec 2019- Present	CEO, Mega Jati ACADEMY Sdn Bhd , a Certified Training Provider for MOF, HRDCorp, JPK, PTPK, CIDB, Energy Commission Malaysia and OTHM Qualifications United Kingdom, conducting both CPD and Competency Training nationwide. Offer customized technical training, Professional Certificates (Professional Certificates, Diploma, Bachelor, Masters) and Expert Training by weekly Webinar.	Chief Executive Officer www.megajatiacademy.com		

SUMMARY OF WORKING EXPERIENCES

SHORT BIOGRAPHY

MUHAMMAD ARKAM BIN CHE MUNAAIM, Adj Prof, Ir. Dr. +6016 335 7727 / <u>arkam@engineer.com</u>



Muhammad Arkam Bin Che Munaaim, the recipient of Outstanding Leadership Award by Education 2.0 Conference in Dubai (2024), Productivity Champion Certification Category: LEADER and TALENT by Malaysia Productivity Corporation, MPC (2023), listed as Successful People in Malaysia (2022 and 2023) 4th Edition and 5th Edition by Britishpedia Encyclopedia (Malaysia), British Publishing House, London. Listed as the recipient of Malaysian Top SME CEO Award, 2022 by Dreamtalents Media, Malaysia, awarded as the Building Engineer of The Year (2022), Built Environment Awards 2022 by the Chartered Association of Building Engineers (CABE), United Kingdom in November 2022.

He is Registered Professional Engineer Malaysia since 2005, Fellow of the Institution of Engineers Malaysia (2020) and Chartered Fellow of the Chartered Association of Building Engineers (CABE) United Kingdom (2023). He holds three competencies as a SPAN Qualified Person (National Water Services Commission-SPAN) for water supply and sewerage treatment system, a Registered Electrical Energy Manager (REEM) with Suruhanjaya Tenaga Malaysia (ST) and a Certified Construction Project Manager (CCPM) of Construction Industry Development Board Malaysia (CIDB). He is a also Registered National Industrial Experts (DPIN) with the Ministry of Human Resource Malaysia in 2015 and a Technical Expert of Green Technology Financing Scheme

from Malaysian Green Technology Corporation beside attached as Industrial Advisory Panel for universities and colleges. In 2022, he was appointed as Professor of Engineering (Building Technology) by Jesselton University College (JUC), Kota Kinabalu, Sabah, Malaysia.

He secured about 20 memberships and affiliations includes from the Chartered Association of Building Engineers, UK (CABE) and Chartered Institute of Building (CIOB), Institution Electrical & Electronics Engineers (MIEEE), Institution of Engineering and Technology (MIET), ASEAN Engineers Register (ASEAN Eng), ASEAN Chartered Professional Engineer (ACPE), Asia-Pacific Economic Cooperation Engineer (APEC Eng), EMF International PE, (IntPE), Malaysia Green Building Confederation (MGBC), Malaysian Water Association (MWA), Malaysian Society for Engineering & Technology (MySET), Malaysian Invention & Design Society (MINDS) and Malaysia Energy Professional Association (MEPA).

His area of working includes renewable energy (solar, mini hydro), mechanical & electrical building services, construction and facility management, water and wastewater treatment technologies, project management and construction development and in engineering education as advisory and assessor panel member of Engineering Accreditation Department as EAC/ETAC Panel for the Board of Engineers Malaysia (BEM). He obtained his PhD in Energy Conservation from Universiti Sains Malaysia (USM) (2014), Master of Science in Building Technology USM (2010), where previously in year 2000 obtained his B. Eng. (Hons) in Electrical Engineering from UTM Skudai, Johor, Malaysia. He is currently the CEO of Mega Jati Academy Sdn Bhd. That focus on Construction Personnel Progression program for career advancement.

