Profile Image

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CONTACT

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FACULTY
Fakulti Kejuruteraan Dan Alam Bina

SUPERVISION

	COMPLETED	ONGOING
PhD	1	0
Master	0	0

AREAS OF EXPERTISE

- High Voltage
- Electrical Power System
- Electrical Power Generation And Supply

ACADEMIC QUALIFICATION

- 2017 **PhD** - Kejuruteraan Elektrik Kuasa
- 2013 **Master** - Kejuruteraan Elektrik Kuasa
- 2010 **Bachelor** - Kejuruteraan Elektrik Kuasa

RESEARCH

1. **INVESTIGATION OF THE IMPACT OF CORROSIVE SULFUR ON THE DIELECTRIC PERFORMANCE OF SUSTAINABLE ESTER-BASED TRANSFORMER OILS**
   2026 | GERAN PENYELIDIKAN FUNDAMENTAL | ON GOING | CO-RESEARCHER

2. **ADVANCING BATTERY MONITORING SYSTEM WITH STATE-OF-HEALTH METRIC AT JAYALAX RESOURCES**
   2025 | GERAN KPT | ON GOING | CO-RESEARCHER

3. **INTEGRATING BATTERY MONITORING SYSTEM WITH THE STATE-OF-HEALTH METRIC AT JAYALAX RESOURCES**
   2025 | GERAN PENYELIDIKAN INDUSTRI | ON GOING | CO-RESEARCHER

4. **DEVELOPMENT OF DATA BASED ENERGY EFFICIENCY MANAGEMENT SYSTEM AT KAMPUS BAROKAH USIM FOR COST EFFECTIVE PRACTISE USING PREDICTIVE AND MACHINE LEARNING CAPABILITY**
   2022 | GERAN PENYELIDIKAN USIM | ON GOING | CO-RESEARCHER

5. **BATTERY MONITORING SYSTEM FOR GENERATOR SETS**
   2022 | GERAN PENYELIDIKAN AGENSI KERAJAAN | COMPLETED | CO-RESEARCHER

RESEARCH

6. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"

2022 | GERAN PENYELIDIKAN AGENSI KERAJAAN | COMPLETED | CO-RESEARCHER

7. CORROSION-AMPACITY MODELLING FOR AMPACITY PERFORMANCE INDEX FORMULATION ON OVERHEAD CONDUCTORS

2022 | GERAN KPT | ON GOING | CO-RESEARCHER

8. INVESTIGATION OF INDUCED VOLTAGE ON UNDERGROUND TRANSMISSION CABLES WITHIN LINE CORRIDORS FOR URBAN PLANNING.

2021 | GERAN KPT | COMPLETED | MAIN RESEARCHER

PUBLICATION

1. MODELING LIGHT PROPAGATION THROUGH HUMAN SKIN FOR EARLY DETECTION OF MELANOMA USING COMSOL MULTIPHYSICS

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2025

2025 | PROCEEDING | OTHER DATABASE | CORRESPONDING AUTHOR

2. SMART AQUAPONICS SYSTEM WITH HYBRID RENEWABLE ENERGY WITH IOT MONITORING

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2025

2025 | PROCEEDING | OTHER DATABASE | CORRESPONDING AUTHOR

3. EVALUATION OF SURGE PROTECTIVE DEVICES (SPD) ON PHOTOVOLTAIC (PV) SYSTEM INSTALLATIONS: MITIGATING THE IMPACT OF LIGHTNING STRIKES

2025 IEEE 5TH INTERNATIONAL CONFERENCE IN POWER ENGINEERING APPLICATIONS (ICPEA)

2025 | PROCEEDING | SCOPUS | CO-AUTHOR

4. ANALYSIS OF UNDERGROUND TRANSMISSION CABLE AMPACITY FOR ON-SITE APPLICATIONS

JOURNAL OF ELECTRICAL AND ELECTRONIC SYSTEMS RESEARCH

2024 | JOURNAL | MYCITE | CO-AUTHOR

5. INVESTIGATION OF LIGHTNING ELECTROMAGNETIC FIELDS ON THE DISTRIBUTION POWER LINES CLOSE TO THE LINE CORRIDOR TOWERS

2024 IEEE 4TH INTERNATIONAL CONFERENCE IN POWER ENGINEERING APPLICATIONS (ICPEA)

2024 | PROCEEDING | NON-INDEX | MAIN AUTHOR

6. DEVELOPMENT OF BATTERY MONITORING SYSTEM FOR POWER GENERATORS: INSIGHTS AND EXPERIENCE

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 | PROCEEDING | NON-INDEX | CO-AUTHOR

7. ANALYSIS OF ELECTRIC FIELD ON OVERHEAD DISTRIBUTION LINE DUE TO LIGHTNING STRIKE

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 | PROCEEDING | NON-INDEX | CO-AUTHOR

PUBLICATION

8. PALM OIL AS A TRANSFORMER INSULATING FLUID: A REVIEW

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 | PROCEEDING | NON-INDEX | CO-AUTHOR

9. HIGH-TEMPERATURE LOW SAG CONDUCTOR: THE NEW TREND TO TRANSMIT ELECTRICITY

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 | CHAPTER IN BOOK | CO-AUTHOR

10. CHAPTER 2 HIGH TEMPERATURE LOW SAG CONDUCTOR: THE NEW TREND TO TRANSMIT ELECTRICITY

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 | CHAPTER IN BOOK | CO-AUTHOR

11. EFFECTS OF LIGHTNING ELECTROMAGNETIC FIELD DUE TO LIGHTNING STRIKES ON A TALL STRUCTURE

JOURNAL OF ELECTRICAL & ELECTRONIC SYSTEMS RESEARCH (JEESR)

2023 | JOURNAL | MYCITE | MAIN AUTHOR

12. COMPARISON TECHNIQUES FOR OPTIMIZATION SWITCHING FREQUENCY IN ENERGY ENCRYPTION OF WIRELESS POWER TRANSFER SYSTEM

JOURNAL OF ADVANCED RESEARCH IN APPLIED SCIENCES AND ENGINEERING TECHNOLOGY

2022 | JOURNAL | MYCITE | CO-AUTHOR

13. COMPARISON TECHNIQUES FOR OPTIMIZATION SWITCHING FREQUENCY IN ENERGY ENCRYPTION OF WIRELESS POWER TRANSFER SYSTEM

JOURNAL OF ADVANCED RESEARCH IN APPLIED SCIENCES AND ENGINEERING TECHNOLOGY

2022 | JOURNAL | OTHER DATABASE | CO-AUTHOR

14. THE EFFECT OF THE AMBIENT TEMPERATURE PROFILE IN THE DETERMINATION OF POWER CABLE RATINGS

2022 IEEE INTERNATIONAL CONFERENCE ON POWER SYSTEMS TECHNOLOGY (POWERCON)

2022 | PROCEEDING | SCOPUS | CO-AUTHOR

15. ANALYSIS OF PERMITTIVITY AND TEMPERATURE EFFECT ON CHARGE ACCUMULATION WITHIN CROSS-LINKED POLYETHYLENE (XLPE) VIA NUMERICAL SIMULATION

13TH INTERNATIONAL CONFERENCE ON THE PROPERTIES AND APPLICATIONS OF DIELECTRIC MATERIALS (ICPADM 2021)

2021 | PROCEEDING | NON-INDEX | CO-AUTHOR

16. PARTIAL DISCHARGE DETECTION USING ROGOWSKI COIL SENSOR ON MEDIUM VOLTAGE AERIAL BUNDLE CABLE

JOURNAL OF ELECTRICAL & ELECTRONIC SYSTEMS RESEARCH (JEESR)

2020 | JOURNAL | MYCITE | MAIN AUTHOR / CONTACT PERSON IN USIM

17. PARTIAL DISCHARGE DETECTION DEVICE USING ULTRASONIC SENSOR ON MEDIUM VOLTAGE XLPE CABLE

INDONESIAN JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

2019 | JOURNAL | SCOPUS | CO-AUTHOR

18. LIGHTNING-INDUCED VOLTAGE ON DISTRIBUTION LINE DUE TO INCLINED LIGHTNING CHANNEL

2018 | BOOK | MAIN AUTHOR

PUBLICATION

19. VARIATIONS IN RETURN STROKE VELOCITY AND ITS EFFECT ON THE RETURN STROKE CURRENT ALONG LIGHTNING CHANNEL

INTERNATIONAL CONFERENCE ON LIGHTNING PROTECTION (ICLP)

2016 PROCEEDING NON-INDEX MAIN AUTHOR

20. EFFECT OF SOIL RESISTIVITY ON MAGNETIC FIELD IN THE CASE OF LIGHTNING STRIKE TO A TALL STRUCTURE

INTERNATIONAL CONFERENCE ON LIGHTNING PROTECTION (ICLP)

2016 PROCEEDING NON-INDEX MAIN AUTHOR

21. EFFECT OF THE GROUNDING SYSTEM ON THE LIGHTNING CURRENT PROFILE ALONG A TALL STRUCTURE

IET SCIENCE, MEASUREMENT & TECHNOLOGY

2015 JOURNAL JCR MAIN AUTHOR / CONTACT PERSON IN USIM

22. EFFECT OF THE GROUNDING SYSTEM ARRANGEMENT ON THE LIGHTNING CURRENT ALONG TALL STRUCTURES

INTERNATIONAL CONFERENCE ON LIGHTNING PROTECTION (ICLP),

2014 PROCEEDING NON-INDEX MAIN AUTHOR

23. ON THE BEHAVIOR OF LIGHTNING CURRENT AND CHARGE DENSITY IN THE CASE OF TALL TOWER

INTERNATIONAL CONFERENCE ON LIGHTNING PROTECTION (ICLP 2014)

2014 PROCEEDING NON-INDEX CO-AUTHOR

24. CHARACTERIZATION PRELIMINARY BREAKDOWN IN THE MEASURED LIGHTNING ELECTRIC FIELDS

IEEE 8TH INTERNATIONAL POWER ENGINEERING AND OPTIMIZATION CONFERENCE (PEOCO2014)

2014 PROCEEDING NON-INDEX CO-AUTHOR

25. ON THE BEHAVIOR OF LIGHTNING RETURN STROKE CURRENT INCIDENCE TO TALL TOWERS

IEEE 8TH INTERNATIONAL POWER ENGINEERING AND OPTIMIZATION CONFERENCE (PEOCO2014), LANGKAWI, THE JEWEL OF KEDAH, MALAYSIA.

2014 PROCEEDING NON-INDEX CO-AUTHOR

26. EVALUATION OF LIGHTNING INDUCED VOLTAGE DUE TO THE EFFECT OF DESIGN PARAMETERS ON MEDIUM VOLTAGE DISTRIBUTION LINE

JURNAL TEKNOLOGI (SCIENCES AND ENGINEERING)

2013 JOURNAL SCOPUS AND ERA MAIN AUTHOR / CONTACT PERSON IN USIM

27. EVALUATION OF LIGHTNING INDUCED OVER-VOLTAGE DUE TO VARIATIONS OF CHANNEL ANGLE

2013 IEEE 7TH INTERNATIONAL POWER ENGINEERING AND OPTIMIZATION CONFERENCE (PEOCO 2013)

2013 PROCEEDING NON-INDEX MAIN AUTHOR

28. ON THE INFLUENCE OF INCLINED LIGHTNING CHANNEL ON LIGHTNING INDUCED VOLTAGE EVALUATION

2012 INTERNATIONAL CONFERENCE ON LIGHTNING PROTECTION

2012 PROCEEDING NON-INDEX MAIN AUTHOR

CONSULTATION

1. PENILAIAN TEKNIKAL SIJIL GUNA PAKAI BAGI LIMA PRODUK FEEDER PILLAR

TNB LABS SDN BHD

2023 NATIONAL

2. LOW VOLTAGE HRC BLADE CONTACT TYPE

TNB LABS SDN BHD

2022 UNIVERSITY

3. BATTERY STORAGE MANAGEMENT SYSTEM (BSMS) AND TECHNICAL KNOWLEDGE

TECHNOPRENEUR UNIMAP SDN BHD (TUSB)

2021 UNIVERSITY

4. Penilaian Teknikal Sijil Guna Pakai bagi Dua Product Feeder Pillar

TNB Labs Sdn Bhd

Others

AWARDS/RECOGNITION

1. ANUGERAH PERKHIDMATAN CEMERLANG

2025 UNIVERSITY

2. FEASIBILITY STUDY OF HYBRID RENEWABLE ENERGY SYSTEM (HRES) FOR SUSTAINABLE COMMUNITIES DEVELOPMENT

Final Year Project & Postgraduate (FYPP): Research & Innovation Poster Competition 2025

2025 KEBANGSAAN GOLD

3. INVESTIGATION OF ELECTRICAL EARTHING HAZARDOUS VOLTAGE AT SEREMBAN, NEGERI SEMBILAN

Final Year Project & Postgraduate (FYPP): Research & Innovation Poster Competition 2025

2025 KEBANGSAAN GOLD

4. BEST PROJECT AWARD OF FINAL YEAR PROJECT

2024 UNIVERSITY

5. FINAL YEAR PROJECT & POSTGRADUATE: RESEARCH & INNOVATION POSTER COMPETITION (RIPC) 2024/ GOLD AWARD

2024 UNIVERSITY

6. IIUM RESEARCH & INNOVATION DAY 2024/ BRONZE AWARD

2024 UNIVERSITY

7. IIUM RESEARCH & INNOVATION DAY 2024/ BRONZE AWARD

2024 UNIVERSITY

AWARDS/RECOGNITION

8. INVESTIGATION OF LIGHTNING ELECTROMAGNETIC FIELDS ON THE DISTRIBUTION POWER LINES CLOSE TO THE LINE CORRIDOR TOWERS

2024 IEEE 4th International Conference in Power Engineering Applications

2024 | ANTARABANGSA | BEST PAPER AWARD

9. IOT- BASED BATTERY MONITORING SYSTEM

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRiIN 2022)

2022 | ANTARABANGSA | SILVER

10. PROJECT BASED LEARNING-ELECTRICAL POWER SYSTEM SIMULATION

Electrical Power System Simulation Competation (EPSSCOM)

2022 | KEBANGSAAN | CERTIFICATE OF APPRECIATION

11. PROJECT BASED LEARNING-ELECTRICAL POWER SYSTEM SIMULATION

2022 TheGreatLab Grand Design Challenge

2022 | KEBANGSAAN | CERTIFICATE OF APPRECIATION