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Faculty: Fakulti

Kejuruteraan Dan Alam

Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0, Ongoing: 0

AREAS OF EXPERTISE

High Voltage

Electrical Power System

Electrical Power Generation And Supply

ACADEMIC QUALIFICATION

PhD in Kejuruteraan Elektrik Dan Elektronik (2021)

Master in Kejuruteraan Elektrik Dan Elektronik (2017)

Bachelor in Kejuruteraan Elektrik (2014)

RESEARCH

1. QUANTUM-INSPIRED RESOURCE ALLOCATION FOR UAV-ASSISTED 6G NETWORKS

2026 GERAN PENYELIDIKAN FUNDAMENTAL ON GOING CO-RESEARCHER

2. DEVELOPING A FUNDAMENTAL FRAMEWORK FOR AI-BASED TRANSFORMER FAULT DIAGNOSIS USING DISSOLVED GAS ANALYSIS

2026 GERAN PENYELIDIKAN FUNDAMENTAL ON GOING MAIN RESEARCHER

3. 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

4. FARMNET: DECENTRALIZED MONITORING AND CONTROL SYSTEM FOR POULTRY FARM MANAGEMENT

2026 GERAN ANTARABANGSA ON GOING CO-RESEARCHER

5. ADVANCING BATTERY MONITORING SYSTEM WITH STATE-OF-HEALTH METRIC AT JAYALAX RESOURCES

2025

GERAN KPT

ON GOING

CO-RESEARCHER

RESEARCH

6. INTEGRATING BATTERY MONITORING SYSTEM WITH THE STATE-OF-HEALTH METRIC AT JAYALAX RESOURCES

2025

GERAN PENYELIDIKAN INDUSTRI

ON GOING

CO-RESEARCHER

PUBLICATION

1. MECHANICAL STRENGTH AND DEGREE OF POLYMERIZATION OF OIL-PAPER NON-WOOD KENAF BAST FIBER AS NEW TRANSFORMER INSULATION PRESSPAPER

MALAYSIAN JOURNAL ON COMPOSITES SCIENCE AND MANUFACTURING

2025 JOURNAL OTHER DATABASE CO-AUTHOR

2. IMPACT OF IRON, SILICON AND BORON NANOPARTICLES ON THE AC BREAKDOWN VOLTAGE OF RICE BRAN OIL IN THE PRESENCE OF CTAB

JOURNAL OF ADVANCED RESEARCH IN MICRO AND NANO ENGINEERING

2025 JOURNAL OTHER DATABASE CO-AUTHOR

3. PERFORMANCE EVALUATION OF NATURAL ESTER OILS AS SUSTAINABLE DIELECTRIC FLUIDS FOR TRANSFORMERS: AI ENHANCED STATISTICAL ANALYSIS

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION

2024 JOURNAL ERA MAIN AUTHOR

4. INVESTIGATIONS ON THE SUITABILITY OF NON-WOOD KENAF BAST FIBER AS AN ALTERNATIVE FOR MAKING INSULATING PRESSPAPER FOR TRANSFORMERS

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION

2024 JOURNAL ERA CO-AUTHOR

5. CELLULOSE PARTICLES EFFECT ON THE ELECTRICAL FIELD DISTRIBUTION BETWEEN PALM OIL AND MINERAL OIL INSULATION SYSTEMS

2022 IEEE INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2024 PROCEEDING SCOPUS CO-AUTHOR

6. 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

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

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 PROCEEDING NON-INDEX CO-AUTHOR

8. DELAY OPTIMIZATION OF WI-FI MESH IN NEIGHBOURHOOD AREA NETWORK USING DEEP REINFORCEMENT LEARNING

2024 IEEE INTERNATIONAL CONFERENCE ON ADVANCED TELECOMMUNICATION AND NETWORKING TECHNOLOGIES (ATNT)

2024 PROCEEDING SCOPUS CORRESPONDING AUTHOR

9. THERMAL AGING EFFECTS ON THE ELECTRICAL BREAKDOWN VOLTAGE OF TIO₂ AND MWCNT NANOFLUIDS BASED ON POME

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION

2023 JOURNAL ERA CO-AUTHOR

10. INVESTIGATION OF IMPULSE VOLTAGE ON THE THERMALLY-AGED EMPTY FRUIT BUNCHES (EFB) FIBER PAPER IMMERSSED IN TRANSFORMER OIL

2022 IEEE INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2023 PROCEEDING SCOPUS CO-AUTHOR

11. DISSOLVED GASES ANALYSIS OF RICE BRAN OIL UNDER THERMAL FAULT FOR TRANSFORMER APPLICATION

2022 IEEE INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2023 PROCEEDING SCOPUS MAIN AUTHOR

12. DISSOLVED GASES ANALYSIS COMPARISON OF ELECTRICAL FAULTS BETWEEN RICE BRAN OIL AND MINERAL OIL INSULATION SYSTEMS

2022 INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2023 PROCEEDING NON-INDEX MAIN AUTHOR

13. RAMAN SPECTROSCOPY CHARACTERIZATION OF MINERAL OIL AND PALM OIL WITH ADDED MULTI-WALLED CARBON NANOTUBE FOR APPLICATION IN OIL-FILLED TRANSFORMERS

ENERGIES

2022 JOURNAL ERA MAIN AUTHOR

PUBLICATION

14. THE EFFECT OF ANNEALING TEMPERATURES OF THE PHASE TRANSITION AND STRUCTURAL PROPERTIES OF MNCOGE COMPOUNDS

KEY ENGINEERING MATERIALS

2022 JOURNAL SCOPUS AND ERA CO-AUTHOR

15. PERFORMANCE AND LIMITATION OF MINERAL OIL-BASED CARBON NANOTUBES NANOFLUID IN TRANSFORMER APPLICATION

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2022 JOURNAL SCOPUS MAIN AUTHOR

16. ELECTRICAL PROPERTIES OF PALM OIL AND RICE BRAN OIL UNDER AC STRESS FOR TRANSFORMER APPLICATION

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2022 JOURNAL SCOPUS CO-AUTHOR

17. STRUCTURAL BEHAVIOUR AND ELECTRICAL PROPERTIES OF A BALL MILLED MNCOGE COMPOUNDS

KEY ENGINEERING MATERIALS

2022 JOURNAL SCOPUS AND ERA CO-AUTHOR

18. ELECTRICAL PROPERTIES AND RAMAN SCATTERING OF PALM OIL BASED CARBON NANOTUBE

KEY ENGINEERING MATERIALS

2022 JOURNAL SCOPUS AND ERA MAIN AUTHOR

19. INVESTIGATIONS OF THE APPLICABILITY OF OIL-PALM EMPTY FRUIT BUNCH AS PAPER INSULATION IN TRANSFORMERS

IEEE ACCESS

2022 JOURNAL ISI CO-AUTHOR

20. A REVIEW ON PALM OIL-BASED NANOFLUIDS AS A FUTURE RESOURCE FOR GREEN TRANSFORMER

IEEE ACCESS

2022 JOURNAL ISI MAIN AUTHOR

21. THE CRITICAL BEHAVIOUR AND MAGNETISM OF MNCOGE_{0.97}AL_{0.03} COMPOUNDS

CRYSTALS

2022 JOURNAL ISI CO-AUTHOR

22. INVESTIGATION ON THE DIELECTRIC PROPERTIES OF PALM OIL WITH SILICON CARBIDE DOPING FOR TRANSFORMER APPLICATION

SOLID STATE PHENOMENA

2021 JOURNAL ERA CO-AUTHOR

23. MAGNETIC PROPERTIES AND MAGNETOCALORIC EFFECT OF MNCOAL COMPOUND

INTERNATIONAL JOURNAL OF NANO-ELECTRONICS AND MATERIALS

2021 JOURNAL SCOPUS CO-AUTHOR

24. LIGHTNING IMPULSE BREAKDOWN VOLTAGE OF RICE BRAN OIL FOR TRANSFORMER APPLICATION

ENERGIES

2021 JOURNAL ERA CO-AUTHOR

25. MAGNETISM AND THERMOMECHANICAL PROPERTIES IN SI SUBSTITUTED MNCOGE COMPOUNDS

CRYSTALS

2021 JOURNAL ISI CO-AUTHOR

26. SYSTEMATICAL STUDY OF MULTI-WALLED CARBON NANOTUBE NANOFLUIDS BASED DISPOSED TRANSFORMER OIL

SCIENTIFIC REPORTS

2020 JOURNAL SCOPUS AND ERA MAIN AUTHOR

PUBLICATION

27. OPTIMUM ELECTRICAL AND DIELECTRIC PERFORMANCE OF MULTI-WALLED CARBON NANOTUBES DOPED DISPOSED TRANSFORMER OIL ENERGIES

2020 JOURNAL ERA MAIN AUTHOR

28. A REVIEW ON OIL-BASED NANOFUID AS NEXT-GENERATION INSULATION FOR TRANSFORMER APPLICATION

JOURNAL OF NANOMATERIALS

2020 JOURNAL ERA MAIN AUTHOR

29. ELECTRICAL PERFORMANCE OF PALM OIL AND RICE BRAN OIL AS TRANSFORMER INSULATING LIQUID.

INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY

2018 JOURNAL ERA CO-AUTHOR

30. STRUCTURE ANALYSIS USING XRD REFINEMENT FOR REPLACEMENT OF COPPER (CU) WITH MANGANESE (MN) IN NDMN2S12 COMPOUND

AIP CONFERENCE PROCEEDING

2018 PROCEEDING SCOPUS CO-AUTHOR

31. STATISTICAL ANALYSIS ON AC BREAKDOWN VOLTAGE OF CNT NANOFUID WITH MINERAL OIL AND PALM OIL

2018 IEEE 7TH INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2018 PROCEEDING SCOPUS MAIN AUTHOR

32. DIELECTRIC PROPERTIES OF NATURAL ESTER OILS USED FOR TRANSFORMER APPLICATION UNDER TEMPERATURE VARIATION

2016 IEEE INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2016 PROCEEDING SCOPUS CO-AUTHOR

33. INVESTIGATION ON BREAKDOWN STRENGTH OF MINERAL OIL-BASED CARBON NANOTUBE

IEEE 6TH INTERNATIONAL CONFERENCE ON POWER AND ENERGY (PECON)

2016 PROCEEDING SCOPUS MAIN AUTHOR

AWARDS/RECOGNITION

1. 1ST PLACE IN NETBALL

2025 UNIVERSITY

2. SIMULATION STUDY ON THE RELIABILITY OF PALM OIL-BASED TRANSFORMER UNDER ELECTRICAL FAULT CONDITION

INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE & INNOVATIVE IDEA (IVCCII)

2025 ANTARABANGSA SILVER

3. AI-DRIVEN ANALYSIS OF DISSOLVED GAS DATA FOR TRANSFORMER FAULT DETECTION

INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE & INNOVATIVE IDEA (IVCCII)

2025 ANTARABANGSA SILVER

4. THERMAL AGING SIMULATION OF PALM OIL BASED TRANSFORMER INSULATION MATERIAL

INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE & INNOVATIVE IDEA (IVCCII)

2025 ANTARABANGSA BRONZE

5. REBAN PINTAR - THE AUTONOMOUS AND SUSTAINABLE SMART CHICKEN COOP SYSTEM

INTERNATIONAL FUTURE INNOVATORS CHALLENGE 2025 (IFIC 2025)

2025 ANTARABANGSA SILVER

6. IFIC - M.A.P.S (MONKEY ALERT AND PREVENTION SYSTEM)

INTERNATIONAL FUTURE INNOVATORS CHALLENGE 2025 (IFIC 2025)

2025 ANTARABANGSA SILVER

7. ACADEMIC ADVISOR

AI SINGAPORE

2024 INTERNATIONAL