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PENSYARAH UNIVERSITI DS14

CONTACT

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FACULTY
Fakulti Sains Dan Teknologi

SUPERVISION

PhD	**2** COMPLETED	**1** ONGOING
Master	**0** COMPLETED	**0** ONGOING

AREAS OF EXPERTISE

Energy Storage | Electrochemical Materials | Membranes

ACADEMIC QUALIFICATION

- 2009 **PhD** - Bahan Termaju
- 2001 **Bachelor** - Fizik Gunaan
- 1996 **Diploma** - Elektrik Kuasa Dan Kawalan
- 1995 **Sijil** - Elektrik Kuasa

RESEARCH

1. **DEVELOPMENT OF ARTIFICIAL INTELLIGENCE BASED INTEGRATED UNMANNED AIRCRAFT COUNTERMEASURES AND MANAGEMENT SYSTEM**
   2025 | GERAN KPT | ON GOING | CO-RESEARCHER

2. **DEVELOPMENT OF ARTIFICIAL INTELLIGENCE BASED INTEGRATED UNMANNED AIRCRAFT COUNTERMEASURES AND MANAGEMENT SYSTEM**
   2025 | GERAN PENYELIDIKAN INDUSTRI | ON GOING | CO-RESEARCHER

3. **ANALISIS PENILAIAN KURIKULUM INTEGRASI INAQ USIM UNTUK KELESTARIAN GRADUAN HOLISTIK**
   2024 | GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) | ON GOING | CO-RESEARCHER

4. **IDENTIFICATION OF PSYCHOLOGICAL PROFILES OF E-SPORT ADDICTION AND IT'S RELATION TOWARDS VIOLENCE IN MALAYSIA**
   2019 | GERAN PENYELIDIKAN USIM | COMPLETED | CO-RESEARCHER

5. **DEVELOPMENT OF INTEGRATION OF NAQLI AND AQLI KNOWLEDGE MODEL AS AN EPISTEMOLOGICAL FOUNDATION IN MOULDING UNIVERSITI SAINS ISLAM MALAYSIA?S EDUCATIONAL PRACTICES**
   2018 | GERAN PENYELIDIKAN USIM | COMPLETED | CO-RESEARCHER

RESEARCH

6. THE ABILITY OF HYBRID SOLID POLYMER ELECTROLYTE (HSPE) FROM DIAPERS FOR HIGH PERFORMANCE ELECTROCHEMICAL DOUBLE LAYER CAPACITOR(EDLC)

2015 | GERAN PENYELIDIKAN PENTADBIR | COMPLETED | MAIN RESEARCHER

7. DENSITY FUNCTIONAL THEORY (DFT) CALCULATION OF SUPERCONDUCTIVITY OF CAC6, BAC6, YBC6, C6CAC6 AND OTHER GRAPHITE COMPOUNDS

2013 | GERAN PENYELIDIKAN USIM | COMPLETED | CO-RESEARCHER

8. CARBON NANOTUBE AS ELECTRODE MATERIAL FOR HIGH PERFORMANCE ELECTROCHEMICAL DOUBLE LAYER CAPACITORS (EDLC) WITH HYBRID SOLID POLYMER ELECTROLYTE (HSPE).

2011 | GERAN KPT | COMPLETED | MAIN RESEARCHER

9. THE STUDY OF CELLULOSE-BASED HYBRID SOLID POLYMER ELECTROLYTES

2010 | GERAN KPT | COMPLETED | MAIN RESEARCHER

PUBLICATION

1. THE IMPACT OF HIGHER SECONDARY ICT EDUCATION ON UNIVERSITY STEM STUDENT PERFORMANCE

EMERGING SCIENCE JOURNAL

2025 | JOURNAL | SCOPUS | CO-AUTHOR

2. CHALLENGES AND FUTURE PERSPECTIVES OF SUPERCAPACITOR MATERIALS: MINI REVIEW

BIMA JOURNAL OF SCIENCE AND TECHNOLOGY

2024 | JOURNAL | OTHER DATABASE | CO-AUTHOR

3. GEOMAGNETIC EFFECT ON TERMITE DISTRIBUTION AT PLANTATION PLOT, SUNGAI MENYALA FOREST RESERVE, PROT DICKSON NEGERI SEMBILAN

28 SIRI KEPELBAGAIAN BIOLOGI HUTAN. HUTAN SIMPAN SUNGAI MENYALA PORT DICKSON, NEGERI SEMBILAN : PERSEKITARAN FIZIKAL DAN KEPELBAGAIAN BIOLOGI

2024 | CHAPTER IN BOOK | CO-AUTHOR

4. THE PHILOSOPHICAL EXAMINATION ON INTEGRATION OF KNOWLEDGE AND WAYS FORWARD

INTERNATIONAL JOURNAL OF HUMANITIES, PHILOSOPHY AND LANGUAGE (IJHPL)

2021 | JOURNAL | OTHER DATABASE | CO-AUTHOR

5. OPTIMIZATION OF DYE EXTRACTION FROM PURPLE CABBAGE AND CORDYLINE FRUTICOSA IN DYE-SENSITIZED SOLAR CELL

SOLID STATE PHENOMENA

2020 | JOURNAL | ERA | CO-AUTHOR

6. SCAN RATES AND THE DISPARITIES IN THE ELECTROCHEMICAL DOUBLE LAYER CAPACITOR EDLC PERFORMANCE

SOLID STATE PHENOMENA

2020 | JOURNAL | SCOPUS | CO-AUTHOR

PUBLICATION

7. PCM-BASED FOR HEAT STORAGE IN SOLAR-THERMAL CONVERTER

SOLID STATE PHENOMENA

2020 JOURNAL ERA CO-AUTHOR

8. RAHSIA DI SEBALIK ILMU FIZIK

2019 BOOK MAIN AUTHOR

9. THE STRUCTURAL PROPERTIES OF SN-DOPED ZINC OXIDE SYNTHESIZED BY HOT-TUBE THERMAL EVAPORATION

AIP CONFERENCE PROCEEDINGS 1972

2018 JOURNAL SCOPUS CO-AUTHOR

10. HYBRID SOLID POLYMER ELECTROLYTE FROM DIAPERS AS SEPARATOR FOR ELECTROCHEMICAL DOUBLE LAYER CAPACITOR (EDLC)

AIP CONFERENCE PROCEEDINGS 1972,

2018 JOURNAL SCOPUS MAIN AUTHOR

11. A REVIEW OF ZT MEASUREMENT FOR BULK THERMOELECTRIC MATERIAL

RECENT ADVANCEMENT ON APPLIED PHYSICS, INDUSTRIAL CHEMISTRY AND CHEMICAL TECHNOLOGY AIP CONF. PROC. 1972, 030002-1?030002-8; HTTPS://DOI.ORG/10.1063/1.5041223 PUBLISHED BY AIP PUBLISHING. 978-0-7354-1679-6/$30.00

2018 JOURNAL SCOPUS CO-AUTHOR

12. SUPERCAPACITOR ELECTRODES FROM ACTIVATION OF BINDERLESS GREEN MONOLITHS OF BIOMASS SELF-ADHESIVE CARBON GRAINS COMPOSED OF VARYING AMOUNT OF GRAPHENE ADDITIVE

IONICS

2017 JOURNAL SCOPUS CO-EDITOR

13. ELECTRIC DOUBLE-LAYER CAPACITORS WITH TEA WASTE DERIVED ACTIVATED CARBON ELECTRODES AND PLASTIC CRYSTAL BASED FLEXIBLE GEL POLYMER ELECTROLYTES

JOURNAL OF PHYSICS: CONFERENCE SERIES

2016 JOURNAL SCI CO-AUTHOR

14. PREPARATION OF ACTIVATED CARBON FROM DESICCATED COCONUT RESIDUE BY CHEMICAL ACTIVATION WITH NAOH

JOURNAL OF MATERIALS SCIENCE RESEARCH

2016 JOURNAL OTHER DATABASE CO-AUTHOR

15. GRAPHENE/SEMICRYSTALLINE-CARBON DERIVED FROM AMYLOSE FILMS FOR SUPERCAPACITOR APPLICATION

JOURNAL OF PHYSICS: CONFERENCE SERIES

2016 JOURNAL OTHER DATABASE CO-AUTHOR

16. AN ELECTROCHEMICAL DOUBLE LAYER CAPACITOR BASED ON ACTIVATED CARBON ELECTRODES FROM COCONUT RESIDUE

REGIONAL CONFERENCE ON SCIENCES, TECHNOLOGY AND SOCIAL SCIENCES 2016

2016 PROCEEDING NON-INDEX CO-AUTHOR

PUBLICATION

17. GRAPHENE AND ACTIVATED CARBON BASED SUPERCAPACITOR ELECTRODES

ADVANCED MATERIALS RESEARCH

2015 JOURNAL ERA CO-AUTHOR

18. ACTIVATED CARBON ELECTRODE FROM DESICCATED COCONU T RESIDUE FOR HIGH PERFORMANCE OF SUPERCAPACITORS

JOURNAL OF MATERIALS SCIENCE RESEARCH

2015 JOURNAL SCI CO-AUTHOR

19. DESICCATED COCONUT RESIDUE BASED ACTIVATED CARBON AS AN ELECTRODE MATERIAL FOR ELECTRIC DOUBLE LAYER CAPACITOR

APPLIED PHYSICS RESEARCH

2015 JOURNAL OTHER DATABASE CO-AUTHOR

20. DESIGN, FABRICATION AND CHARACTERIZATION OF A COMMERCIALLY PREPARED CARBOXYL MULTIWALLED CARBON NANOTUBES WITH A HYBRID POLYMER ELECTROLYTES

APPLIED PHYSICS RESEARCH

2014 JOURNAL OTHER DATABASE MAIN AUTHOR

21. A FLEXIBLE SOLID STATE EDLC FROM A COMMERCIALLY PREPARED MULTIWALLED CARBON NANOTUBES AND HYBRID POLYMER ELECTROLYTES

JOURNAL OF MATERIALS SCIENCE RESEARCH

2014 JOURNAL OTHER DATABASE MAIN AUTHOR

22. A NOBLE CONDUCTIVITY STUDIES AND CHARACTERIZATIONS OF PVA-ORTHOPHOSPHORIC-FILTER PAPER ELECTROLYTES

JOURNAL OF MATERIALS SCIENCE RESEARCH

2014 JOURNAL OTHER DATABASE MAIN AUTHOR

23. USING PVA, METHACRYLATE AND LAUROYL CHITOSAN AS SEPARATOR IN SUPERCAPACITORS.

JOURNAL OF MATERIALS SCIENCE RESEARCH

2013 JOURNAL SCI MAIN AUTHOR

24. SUPERCAPACITOR AS A RENEWABLE ENERGY AND ITS CONTRIBUTION TO UMMAH

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK MAIN AUTHOR

25. SHAPE MEMORY BIOPOLYURETHANE

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK CO-AUTHOR

26. ISLAMIC PERSPECTIVE ON THE POTENTIAL OF ELECTRIC POWER TRANSMISSION USING HIGH TEMPERATURE SUPERCONDUCTING WIRES

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK CO-AUTHOR

PUBLICATION

27. A METHOD OF LINES APPROACH IN THE NUMERICAL SOLUTION OF 1-DIMENSIONAL SCHR&#65533;DINGER&#65533;S EQUATION

APPLIED PHYSICS RESEARCH

2012 JOURNAL WOS MAIN AUTHOR

28. SUPERCAPACITORS BASED ON ACTIVATED CARBON AND POLYMER ELECTROLYTE

INTERNATIONAL JOURNAL OF SUSTAINABLE ENERGY AND ENVIRONMENTAL RESEARCH

2012 JOURNAL WOS MAIN AUTHOR

29. SUPERCAPACITORS BASED ON ACTIVATED CARBON AND POLYMER ELECTROLYTE

8TH ASIAN MEETING ON ELECTROCERAMICS (AMEC-8)

2012 PROCEEDING NON-INDEX MAIN AUTHOR

30. SUPERCAPACITOR BASED ON ACTIVATED CARBON AND HYBRID SOLID POLYMER ELECTROLYTE

RESEARCH MATERIAL INNOVATION

2011 JOURNAL WOS MAIN AUTHOR

31. SUPERCAPACITOR BASED ON ACTIVATED CARBON AND HYBRID SOLID POLYMER ELECTROLYTE

3RD INTERNATIONAL CONFERENCE ON FUNCTIONAL MATERIALS AND DEVICES 2010 (ICFMD 2010)

2010 PROCEEDING NON-INDEX MAIN AUTHOR

32. ELECTROCHEMICAL DOUBLE LAYER CAPACITOR BASED ON CELLULOSE-PVA HYBRID ELECTROLYTE

IONICS

2006 JOURNAL WOS MAIN AUTHOR

33. SUPERCAPACITORS BASED ON ACTIVATED CARBON WITH CELLULOSE ELECTROLYTES

INTERNATIONAL MEETING ON FRONTIERS OF PHYSICS 2005

2005 PROCEEDING NON-INDEX MAIN AUTHOR

AWARDS/RECOGNITION

1. ANUGERAH KHIDMAT SETIA 2025

2025 UNIVERSITY

2. ACADEMIC PROGRAM ADVISOR

AGENSI KELAYAKAN MALAYSIA (MQA)

2025 NATIONAL

3. ACADEMIC ADVISOR

FAKULTI SAINS DAN TEKNOLOGI. UTM

2024 NATIONAL

4. ACADEMIC ADVISOR

LEE KONG CHIAN FACULTY OF ENGINEERING AND SCIENCE (LKC FES), UNIVERSITI TUNKU ABDUL RAHMAN, UTAR

2024 NATIONAL

AWARDS/RECOGNITION

5. CURRICULUM ADVISOR (PENASIHAT KURIKULUM)

FAKULTI SAINS DAN TEKNOLOGI, UTM

2024 NATIONAL

6. ACADEMIC ADVISOR

MQA

2023 NATIONAL

7. MODUL TAMARI: INAQ ENVIRONMENTAL SUSTAINABILITY MODULE AT TAMHIDI CENTRE

Pre-University Matriculation Innovation Competition (PIITRAM) 2023

2023 KEBANGSAAN SILVER

8. VISITING RESEARCHER

PERSATUAN SAINS & TEKNOLOGI KEADAAN PEPEJAL MALAYSIA, MASS MALAYSIA

2022 NATIONAL

9. ACADEMIC ADVISOR

UNIVERSITY TUNKU ABDUL RAHMAN, UTAR

2022 UNIVERSITY

10. PENGANUGERAHAN ANUGERAH BUKU UMUM TERBAIK

2021 UNIVERSITY

11. ACADEMIC ADVISOR

FAKULTI SAINS DAN TEKNOLOGI, UTM

2021 UNIVERSITY

12. ACADEMIC ADVISOR

UNIVERSITI TEKNOLOGI MALAYSIA

2021 NATIONAL

13. NOVEL RESEARCH AND INNOVATION COMPETITION 2017 (NRIC 17)

2017 NATIONAL

14. DIAMOND FOR INTERNATIONAL INVENTION OF THE YEAR 2017

2017 INTERNATIONAL

15. DOUBLE GOLD FOR INTERNATIONAL INVENTION OF THE YEAR 2017

2017 INTERNATIONAL

16. DOUBLE LAYERED ROOF COOLING SYSTEM CONTROLLED BY ARDUINO

NOVEL RESEARCH INNOVATION AND COMPETITION (NRIC 2017)

2017 KEBANGSAAN GOLD

AWARDS/RECOGNITION

17. ?DOUBLE LAYERED ROOF COOLING SYSTEM CONTROLLED BY ARDUINO?

?THE 17TH BRITISH INVENTION SHOW? (BIS)

2017 ANTARABANGSA GOLD

18. PENYELIDIKAN TERBAIK

2015 UNIVERSITY

19. SUPER-CAPASITOR: A FUTURE BATTERY ALTERNATIVE

EKSPO INOVASI ISLAM I-INOVA 2012

2012 KEBANGSAAN SILVER