PROF. MADYA DR. AZWANI SOFIA BINTI AHMAD KHIAR

PENSYARAH UNIVERSITI DS14

CONTACT

Phone: 06-798 6541

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Faculty: Fakulti Sains Dan Teknologi

SUPERVISION

PhD - Completed: 0, O
0

Master - Completed: 4, Ongoing: 2

AREAS OF EXPERTISE

Solid State And Polymer Electrolyte Physics

Polymer Electrolytes

Electrolytes For Batteries

ACADEMIC QUALIFICATION

PhD in Bahan Termaju (2006)

Bachelor in Fizik Komputer Dan Elektronik (2002)

RESEARCH

1. TRANSPORT PROPERTIES OF CELLULOSE DERIVATIES BASED POLYMER ELECTROLYTE DOPED WITH IONIC LIQUIDS USING SPECTROSCOPY METHODS

2023 | GERAN KPT | ON GOING | MAIN RESEARCHER

2. ELECTRICAL STUDIES OF RENEWABLE BIONANOCOMPOSITE BIOPOLYMER ELECTROLYTE FOR DYE SENSITIZED SOLAR CELL (DSSC) APPLICATION

2016 | GERAN KPT | COMPLETED | MAIN RESEARCHER

3. CHARACTERIZATION OF DEEP EUTETIC SOLVENT (DES) - DOPED CHITOSAN BASED POLYMER ELECTROLYTE FRO SOLAR CELL APPLICATION

2013 | GERAN PENYELIDIKAN USIM | COMPLETED | MAIN RESEARCHER

4. ELECTRICAL STUDIES OF LAUROYL-CHITOSAN BLEND POLYMER ELECTROLYTES FOR APPLICATION IN LITHIUM BATTERY

2012 | GERAN KPT | COMPLETED | MAIN RESEARCHER

5. THE STUDY OF SOLID POLYMER ELECTROLYTES FROM BIOPOLYMERS

2008 | GERAN KPT | COMPLETED | MAIN RESEARCHER

RESEARCH

6. DEVELOPMENT OF SOLID ELECTROLYTES USING NATURAL POLYMERS

2007 | GERAN PENYELIDIKAN FUNDAMENTAL | COMPLETED | MAIN RESEARCHER

PUBLICATION

1. EFFECT OF BMITFSI TO THE ELECTRICAL PROPERTIES OF CHITOSAN/METHYLCELLULOSE BASED POLYMER ELECTROLYTE

AIP CONFERENCE PROCEEDINGS

2018 JOURNAL SCOPUS MAIN AUTHOR

2. CONDUCTIVITY STUDIES OF METHYL CELLULOSE/CHITOSAN/1-BUTYL-3-METHYL IMIDAZOLIUM BIS(TRIFLUORO SULFONYL) IMIDE DOPED WITH AMMONIUM TRIFLATE BASED POLYMER ELECTROLYTE

19TH WORLD CONGRESS ON MATERIALS SCIENCE AND ENGINEERING

2018 PROCEEDING NON-INDEX MAIN AUTHOR

3. COLOR STABILITY AND CORROSION RESISTIVITY OF NATURAL DYE COATING PAINT FILM CONSISTING OF CURCUMIN

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS MAIN AUTHOR

4. EFFECT OF 1-ETHYL-3-METHYLIMIDAZOLIUM NITRATE ON THE ELECTRICAL PROPERTIES OF STARCH/CHITOSAN BLEND POLYMER ELECTROLYTE

MATERIALS SCIENCE FORUM

2016 JOURNAL SCOPUS MAIN AUTHOR

5. ELECTRICAL PROPERTIES OF STARCH/PEO BLEND POLYMER ELECTROLYTES.

APPLIED MECHANICS AND MATERIALS

2015 JOURNAL SCOPUS MAIN AUTHOR

6. ELECTRICAL PROPERTY OF METHYLCELLULOSE/CHITOSAN-NH4NO3-EC PLASTICIZED POLYMER ELECTROLYTE

APPLIED MECHANICS AND MATERIALS

2015 JOURNAL SCOPUS MAIN AUTHOR

7. EFFECT OF BMITFSI TO THE ELECTRICAL PROPERTIES OF METHYLCELLULOSE/CHITOSAN/NH4TF BASED POLYMER ELECTROLYTE

SPIE MICRO+NANO MATERIALS, DEVICES, AND SYSTEMS

2015 PROCEEDING NON-INDEX MAIN AUTHOR

8. EFFECT OF LICF3SO3 ON L-CHITOSAN/PMMA BLEND POLYMER ELECTROLYTES

MOLECULAR CRYSTALS AND LIQUID CRYSTALS

2014 JOURNAL SCI MAIN AUTHOR

9. CONDUCTIVITY AND DIELECTRIC STUDIES OF METHYLCELLULOSE/CHITOSAN-NH4CF3SO3 POLYMER ELECTROLYTE

KEY ENGINEERING MATERIALS

2014 JOURNAL SCOPUS MAIN AUTHOR

10. CONDUCTIVITY AND DIELECTRIC BEHAVIOUR STUDIES OF LICF3SO3 DISSOCIATION IN L-CHITOSAN/PMMA-BASED POLYMER ELECTROLYTES

REGIONAL ANNUAL FUNDAMENTAL SCIENCE SYMPOSIUM 2012

2012 PROCEEDING NON-INDEX MAIN AUTHOR

11. CONDUCTIVITY AND DIELECTRIC BEHAVIOR STUDIES OF STARCH/PEO + X WT% NH4NO3 POLYMER ELECTROLYTE

MATERIALS RESEARCH INNOVATIONS

2011 JOURNAL WOS MAIN AUTHOR

12. CONDUCTIVITY STUDIES OF STARCH-BASED POLYMER ELECTROLYTES

IONICS

2010 JOURNAL WOS MAIN AUTHOR

13. CONDUCTIVITY AND DIELECTRIC BEHAVIOR STUDIES OF STARCH/PEO + X WT% NH4NO3 POLYMER ELECTROLYTE

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

2010 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

14. NATURAL POLYMERS: ALTERNATIVE RESOURCES FOR THE DEVELOPMENT OF POLYMER ELECTROLYTES.

TWAS YOUNG SCIENTISTS OF ASIA CONCLAVE: PRESSING PROBLEMS OF HUMANKIND: ENERGY & CLIMATE (A MEETING OF CONCERNED YOUNG SCIENTISTS))

2009 PROCEEDING NON-INDEX MAIN AUTHOR

15. EFFECT OF STARCH/CHITOSAN BLEND TO THE PERFORMANCE ON A SOLID STATE CELL

17TH INTERNATIONAL CONFERENCE ON SOLID STATE IONICS

2009 PROCEEDING NON-INDEX MAIN AUTHOR

16. EFFECT OF ADDITIVE TO AMMONIUM NITRATE DOPED STARCH BASED POLYMER ELECTROLYTE

NATIONAL WORKSHOP ON FUNCTIONAL MATERIALS 2009

2009 PROCEEDING NON-INDEX MAIN AUTHOR

17. PLASTICIZED-CHITOSAN BASED POLYMER ELECTROLYTES.

INTERNATIONAL CONFERENCE ON ADVANCEMENT OF MATERIALS AND NANOTECHNOLOGY 2007

2007 PROCEEDING NON-INDEX MAIN AUTHOR

18. CONDUCTIVITY STUDIES OF A CHITOSAN-BASED POLYMER ELECTROLYTE.

PHYSICA B: CONDENSED MATTER

2006 JOURNAL WOS MAIN AUTHOR

19. IONIC HOPPING TRANSPORT IN CHITOSAN-BASED POLYMER ELECTROLYTES

MATERIALS SCIENCE FORUM

2006 JOURNAL SCOPUS MAIN AUTHOR

20. CHARACTERIZATIONS OF CHITOSAN-AMMONIUM TRIFLATE (NH4CF3SO3) COMPLEXES BY FTIR AND IMPEDANCE SPECTROSCOPY

PHYSICA STATUS SOLIDI A

2006 JOURNAL WOS MAIN AUTHOR

CONSULTATION

1. PENILAIAN PEMATUHAN SYARAT-SYARAT AKREDITASI SEMENTARA DIPLOMA SAINS SECARA KERJASAMA DENGAN UITM (MQA/FA 7207)

AGENSI KELAYAKAN MALAYSIA

2020 NATIONAL

2. PANEL PENILAI AKREDITASI PENUH PROGRAM DOKTOR FALSAFAH UNIVERSITI MALAYSIA PAHANG

AGENSI KELAYAKAN MALAYSIA

2019 NATIONAL

3. PANEL PENILAI PENILAIAN PEMATUHAN AKREDITASI PENUH PROGRAM

AGENSI KELAYAKAN MALAYSIA

2019 NATIONAL

4. PENILAI PROGRAM 'DIPLOMA IN SCIENCE' SECARA KERJASAMA DENGAN UITM (MQA/FA 7207)

AGENSI KELAYAKAN MALAYSIA

2018 NATIONAL

5. PELANTIKAN SEBAGAI AUDITOR UNTUK AUDIT AKREDITASI PENUH/AUDIT VERIFIKASI PROGRAM IJAZAH SARJANA MUDA SAINS DAN IJAZAH SAINS MUDA SAINS GUNAAN DI PUSAT PENGAJIAN SAINS FIZIK, USM

UNIVERSITI SAINS MALAYSIA

2018 NATIONAL

AWARDS/RECOGNITION

1. CELF BIOFILM GREEN ELECTROLYTE FOR PROTON BATTERY

Malaysia Technology Expo (MTE) 2023

2023 ANTARABANGSA SILVER

2. CELF BIO-FILM: GREEN ELECTROLYTE FOR PROTON BATTERY

34th INTERNATIONAL INVENTION & TECHNOLOGY EXHIBITION MALAYSIA (ITEX2023)

2023 ANTARABANGSA GOLD

3. CELF, GREEN CONDUCTING ELECTROLYTE

INVENTION, INNOVATION & DESIGN EXPOSITION 2023 (IIDEX 2023)

2023 ANTARABANGSA SILVER

4. ACADEMIC ADVISOR

UNIVERSITI PENDIDIKAN SULTAN IDRIS

2022 NATIONAL

5. CELF BIOFILM: PROTON CONDUCTING CELLULOSE BASED ELECTROLYTES

INNOVATION BANK CHALLENGE (IBC 2022)

2022 UNIVERSITI GOLD