

Profile Image

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ZAKIAH BINTI WAN ISMAIL**

PENSYARAH UNIVERSITI DS14

CONTACT

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Faculty: Fakulti Kejuruteraan
Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 6

Master - Completed: 3, Ongoing: 4

AREAS OF EXPERTISE

Optics, Non - Linear Optics And Quantum Optics

Quantum Electronics And Lasers

Digital Signal Processing

Biosensor

Photonics Materials

ACADEMIC QUALIFICATION

PhD in Lasers And Quantum Electronics (2016)

Master in Electronics (telecommunication) (2007)

Bachelor in Electronics (2005)

RESEARCH

1. A NOVEL WATER QUALITY ANOMALIES SENSING AND
FORECASTING METHOD USING TIME SERIES REGRESSION
FOREST (TSRF) FOR SUSTAINABLE MODERN AGRICULTURE.

2024 GERAN KPT ON GOING MAIN RESEARCHER

2. STUDY OF HEMOGLOBIN AND GLUCOSE USING VISIBLE (VIS)
AND NEAR INFRA-RED (NIR)-BASED HEALTHCARE PLATFORM
AND DEVICES

2024 GERAN PENYELIDIKAN INDUSTRI ON GOING MAIN RESEARCHER

3. DEVELOPMENT OF A SPECTROMETER FOR DETECTING
CHEMICAL CONTAMINANT IN WATER

2023 GERAN PENYELIDIKAN INDUSTRI COMPLETED MAIN

RESEARCHER

4. DEVELOPMENT OF INTELLIGENT WATER QUALITY MONITORING
SYSTEM FOR AGRICULTURE SECTOR IN MALAYSIA

2022 GERAN SEPADAN AGENSI KERAJAAN ON GOING MAIN

RESEARCHER

5. TESTING AND DATA COLLECTION OF VITAL SIGNS USING REVA
AND MASSIMO DEVICES

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED MAIN

RESEARCHER

RESEARCH

6. DEVELOPMENT OF MICROELECTRONICS SYSTEMS, RELATED TECHNOLOGY AND PRODUCTS FOR VIS NIR-BASED HEALTHCARE PLATFORM AND DEVICES

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED MAIN RESEARCHER

7. DEVELOPMENT OF LASER ILLUMINATION WARNING SYSTEM BASED ON LASER PHOTODIODE AND DETECTION TECHNOLOGY

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED MAIN RESEARCHER

8. FORMULATING A METHOD TO DETECT CONTAMINANT IN WATER BASED ON LIGHT PROPAGATION THEORY FOR CONSERVING NATURAL WATER RESOURCES

2021 GERAN KPT ON GOING MAIN RESEARCHER

9. INVESTIGATING LIGHT SCATTERING ON PROPERTIES OF RANDOM LASERS BASED ON SCATTERING PROBABILITY THEORY FOR POTENTIAL USE IN MEDICAL AND BIOSENSING APPLICATIONS

2019 GERAN KPT COMPLETED MAIN RESEARCHER

10. ANALYZING PERFORMANCE OF RANDOM LASERS AS THE OPTICAL DEVICES FOR BIOSENSING AND MEDICAL APPLICATIONS

2018 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

PUBLICATION

1. DETECTION OF CONTAMINATION IN WATER USING SPECTROSCOPY

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024

CHAPTER IN BOOK

MAIN AUTHOR

2. STUDY OF LIGHT EMITTING DIODE (LED) AND HIGH-PRESSURE SODIUM VAPOUR (HPSV) LAMP BASED ON PHOTOMETRIC METHOD FOR ROAD LIGHTING IN MALAYSIA

SEMINAR ANTARABANGSA SAINS DAN ISLAM

2023

PROCEEDING

NON-INDEX

MAIN AUTHOR

3. DETECTION ON CHEMICAL CONTAMINANTS IN WATER FOR IRRIGATION SYSTEMS: A SYSTEMATIC REVIEW

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY

2023

PROCEEDING

NON-INDEX

MAIN AUTHOR

4. SYNTHESIS AND CHARACTERIZATION OF SILVER-GOLD BIMETALLIC NANOPARTICLES FOR RANDOM LASING NANOMATERIALS

2022

JOURNAL

ISI

MAIN AUTHOR

5. INVESTIGATING LIGHT PROPAGATION IN FULL AND SKIMMED MILK BASED ON SPECTROSCOPY AND MONTE CARLO ANALYSIS

JOURNAL OF ENGINEERING AND APPLIED SCIENCE

2020

JOURNAL

SCOPUS

MAIN AUTHOR

6. PROPERTIES OF RANDOM LASERS IN A HOLLOW CORE PHOTONIC CRYSTAL FIBER

LASER PHYSICS

2020

JOURNAL

WOS

MAIN AUTHOR

7. AN OVERVIEW OF RANDOM LASER

2020

BOOK

MAIN AUTHOR

8. ENHANCEMENT OF RANDOM LASER PROPERTIES ON SOLID POLYMER FILMS BY INCREASING SCATTERING EFFECT

JOURNAL OF RUSSIAN LASER RESEARCH

2019

JOURNAL

ISI

MAIN AUTHOR

9. PLASMONIC EFFECT ON PERFORMANCE OF RANDOM LASERS

ADVANCE SCIENCE LETTERS

2018

JOURNAL

SCOPUS

MAIN AUTHOR

10. PLASMONIC EFFECT ON PERFORMANCE OF RANDOM LASERS

INTERNATIONAL CONFERENCE ON COMPUTER AND NETWORK APPLICATIONS

2017

PROCEEDING

NON-INDEX

MAIN AUTHOR

11. DOPAMINE SENSING AND MEASUREMENT USING THRESHOLD AND SPECTRAL MEASUREMENTS IN RANDOM LASERS

OPTICS EXPRESS

2016

JOURNAL

WOS

MAIN AUTHOR

12. EXTENDED EMISSION WAVELENGTH OF RANDOM DYE LASERS BY EXPLOITING RADIATIVE AND NON-RADIATIVE ENERGY TRANSFER

APPLIED PHYSICS B:LASERS AND OPTICS

2016

JOURNAL

WOS

MAIN AUTHOR

13. W. Z. WAN ISMAIL, T. P. VO, E. M. GOLDYS AND J. M. DAWES

LASER PHYSICS

2015

JOURNAL

WOS

MAIN AUTHOR

PUBLICATION

14. SPECTRAL AND COHERENCE SIGNATURES OF THRESHOLD IN RANDOM LASERS

JOURNAL OF OPTICS

2014

JOURNAL

WOS

MAIN AUTHOR

AWARDS/RECOGNITION

1. ANUGERAH PENYELIDIKAN TERBAIK

2024 UNIVERSITY

2. ANUGERAH PENYELIDIK CEMERLANG

2024 OTHERS

3. BEST PAPER AWARD

2024 UNIVERSITY

4. BUKU KARYA SUNTINGAN TERBAIK

2024 UNIVERSITY

5. DEVELOPMENT OF INTELLIGENT WATER QUALITY MONITORING SYSTEM FOR AGRICULTURE SECTOR IN MALAYSIA
4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI BRONZE