Profile Image

# DR. KHAIRUL NABILAH BINTI ZAINUL ARIFFIN

PENSYARAH UNIVERSITI DS13

## CONTACT


**PHONE**

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**E-MAIL**

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**FACULTY**

Fakulti Kejuruteraan Dan Alam Bina


## SUPERVISION

| | COMPLETED | ONGOING |
|---|---|---|
| PhD | 0 | 0 |
| Master | 0 | 2 |

## AREAS OF EXPERTISE

- Semiconductor Materials And Devices Physics
- Other Electronics Engineering N.e.c

## ACADEMIC QUALIFICATION

- 2019 **PhD** - Kejuruteraan Elektrik Dan Elektronik
- 2013 **Master** - Kejuruteraan Elektronik (sistem Telekomunikasi)
- 2012 **Bachelor** - Kejuruteraan Elektronik (kejuruteraan Komputer)
- 2009 **Diploma** - Kejuruteraan Elektronik

## RESEARCH

1. **SMART AQUAGUARD: IOT-POWERED WATER QUALITY MONITORING FOR SUSTAINABLE AQUATIC MANAGEMENT**
   2025 | GERAN KPT | ON GOING | MAIN RESEARCHER

2. **SMART AQUAGUARD: IOT-POWERED WATER QUALITY MONITORING FOR SUSTAINABLE AQUATIC MANAGEMENT**
   2025 | GERAN PENYELIDIKAN INDUSTRI | ON GOING | MAIN RESEARCHER

3. **MODELLING OF SILICON CARBIDE (SIC) SCHOTTKY BARRIER DIODE FOR HIGH-TEMPERATURE TERAHERTZ APPLICATIONS**
   2024 | GERAN KPT | ON GOING | MAIN RESEARCHER

4. **DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"**
   2022 | GERAN PENYELIDIKAN AGENSI KERAJAAN | COMPLETED | MAIN RESEARCHER

5. **MODELLING OF QUANTUM BASED TUNNEL DIODE FOR THZ MEDICAL IMAGING**
   2019 | GERAN PENYELIDIKAN USIM | COMPLETED | MAIN RESEARCHER

## PUBLICATION

**1. A COMSOL MULTIPHYSICS FOR POLY (VINYL-ALCOHOL) PVA HYDROGEL EFFECT ON PHOTOVOLTAIC SOLAR CELL BY USING HEAT TRANSFER MODULE**

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING (ICAEE)

2024 PROCEEDING SCOPUS MAIN AUTHOR

**2. SURFACE PLASMON RESONANCE BASED PCF SENSOR FOR DOM DETECTION**

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING NON-INDEX MAIN AUTHOR

**3. SINGLE MODE FIBER BASED SPR SENSOR FOR THE DETECTION OF AIR CONTAMINANTS**

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

**4. IOT BASED INDOOR AIR AND WATER QUALITY MONITORING SYSTEM USING NODE-RED**

9TH INTERNATIONAL CONFERENCE ON COMPUTER AND COMMUNICATION ENGINEERING (ICCCE 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

**5. NON-EQUILIBRIUM GREENS FUNCTION ON GAAS/ALAS DOUBLE BARRIER QUANTUM WELLS RESONANT TUNNELLING DIODE (RTD)**

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2019

2019 PROCEEDING NON-INDEX MAIN AUTHOR

## CONSULTATION

**1. Penggubal Soalan Basic Engineering 2**

Kementerian Pendidikan Malaysia

National

**2. Pentaksir Soalan Basic Engineering 1**

Kementerian Pendidikan Malaysia

National

**3. Pentaksir Soalan Electrical and Electronic Engineering 2**

Kementerian Pendidikan Malaysia

National

**4. Panel Penasihat Industri (Universiti Awam)**

Universiti Teknikal Malaysia Melaka (UTeM)

National

## AWARDS/RECOGNITION

**1. EMPLOYEE OF THE MONTH (JUN 2025)**

2025 UNIVERSITY

**2. TRAINER / FACILITATOR**

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2025 NATIONAL

**3. ADVISORY / EDITOR / EDITORIAL**

NAICO MALAYSIA & MINISTRY OF INVESTMENT, TRADE AND INDUSTRY (MITI)

2025 NATIONAL

**4. ACADEMIC ADVISOR**

KEMENTERIAN PENDIDIKAN TINGGI (KPT)

2025 NATIONAL

**5. ARTIFICIAL INTELLIGENCE APPLICATIONS FOR CCS PIPELINE INTEGRITY MONITORING**

INNOVATION BANK CHALLENGE 2025

2025 ANTARABANGSA SILVER