

Profile Image

## **PROF. MADYA IR. TS. DR. JULIZA BINTI JAMALUDIN**

PENSYARAH UNIVERSITI DS14

### **CONTACT**

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**Faculty:** Fakulti  
Kejuruteraan Dan Alam  
Bina

### **SUPERVISION**

PhD - Completed: 0, O.  
2

Master - Completed: 3,  
Ongoing: 4

### **AREAS OF EXPERTISE**

Sensor Technology In Control And Instrumentation

Digital Tomography (including Computer Tomography)

Optical And Optoelectronics Engineering

### **ACADEMIC QUALIFICATION**

PhD in Kejuruteraan Elektrik (2016)

Master in Kejuruteraan Elektrik- Mekatronik Dan Kawalan  
Automatik (2013)

Bachelor in Kejuruteraan Elektrik- Kawalan Dan  
Instrumentasi (2008)

### **RESEARCH**

**1. INVESTIGATING THE POTENTIAL OF PORTABLE WATER QUALITY INSPECTION  
SYSTEM INTEGRATED WITH TF MINI-S LIDAR AND IOT MONITORING SYSTEM**

2024 GERAN ANTARABANGSA ON GOING MAIN RESEARCHER

**2. SALAH CHAIR**

2023 GERAN PENYELIDIKAN LAB2MARKET ON GOING MAIN RESEARCHER

**3. DEVELOPMENT OF UPPER LIMB EXOSKELETON SYSTEM**

2023 GERAN PEMBANGUNAN INOVASI (GPI) ON GOING MAIN RESEARCHER

**4. DEVELOPMENT OF MOBILE APPLICATION FOR WOMEN'S "PRELOVED" BUSINESS  
PLATFORM: FASHION ARCHADE (FACADE)**

2022 GERAN PENYELIDIKAN AGENSI KERAJANAN COMPLETED MAIN RESEARCHER

**5. CONCEPTUAL MODELLING OF DUAL-MODE TOMOGRAPHY TECHNIQUE FOR  
DENTAL DIAGNOSTICS BASED ON ULTRASOUND AND LIGHT PROPAGATION  
ANALYSIS.**

2022 GERAN PENYELIDIKAN USIM ON GOING MAIN RESEARCHER

# RESEARCH

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## 6. A CONCEPTUAL MODELLING OF QUANTITATIVE GRADING VALUATION OF RUBY STONE VIA USING CHARGE-COUPLED DEVICE (CCD) TOMOGRAPHY APPROACH

2020   GERAN KPT   COMPLETED   MAIN RESEARCHER

## 7. SECURITY-HARDENED DESIGN SPACE EXPLORATION FOR HARD REAL-TIME EMBEDDED NOC IN CYBER-PHYSICAL SYSTEMS

2018   GERAN PENYELIDIKAN USIM   COMPLETED   MAIN RESEARCHER

# PUBLICATION

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## 1. ONLINE SIMULATION TO MONITOR MULTIPHASE FLOW USING LASER SOURCE AS TRANSMITTER

OPTIK-INTERNATIONAL JOURNAL FOR LIGHT AND ELECTRON OPTICS

2021 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR

## 2. AN APPLICATION OF CHARGE-COUPLED DEVICE (CCD) TOMOGRAPHY SYSTEM FOR GEMOLOGICAL INDUSTRY - A REVIEW

INNOVATIVE MANUFACTURING, MECHATRONICS AND MATERIALS FORUM 2021

2021 PROCEEDING NON-INDEX MAIN AUTHOR

## 3. THE DEVELOPMENT OF SALAH CHAIR USING ELECTRONIC SENSOR TO ASSIST DISABLED MUSLIMS IN PERFORMING PRAYERS

REKA ELKOMIKA: JURNAL PENGABDIAN KEPADA MASYARAKAT

2020 JOURNAL OTHER DATABASE MAIN AUTHOR

## 4. A STUDY OF OBJECT TRANSPARENCY VIA CHARGE-COUPLED DEVICE MATHEMATICAL MODELLING ASSESSMENT

MALAYSIAN JOURNAL OF SCIENCE HEALTH & TECHNOLOGY

2020 JOURNAL OTHERS DATABASE MAIN AUTHOR

## 5. CCD OPTICAL TOMOGRAPHY SYSTEM TO DETECT SOLID CONTAMINATION IN CRYSTAL-CLEAR WATER

IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS

2020 JOURNAL SCOPUS MAIN AUTHOR

## 6. CYBER-PHYSICAL SYSTEM (CPS) APPLICATION\_A REVIEW

REKA ELKOMIKA: JURNAL PENGABDIAN KEPADA MASYARAKAT

2020 JOURNAL OTHER DATABASE MAIN AUTHOR

## 7. A STUDY ON EARLY DETECTION OF SEWER PIPELINE BLOCKAGE USING CCD TOMOGRAPHY APPROACH

IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE, 3RD INTERNATIONAL CONFERENCE ON CIVIL AND ENVIRONMENTAL ENGINEERING 18 NOVEMBER 2020

2020 PROCEEDING NON-INDEX MAIN AUTHOR

## 8. CHARGE-COUPLED DEVICE OPTICAL TOMOGRAPHY SYSTEM FOR AIR BUBBLES DETECTION

2020 BOOK MAIN AUTHOR

## 9. DEVICES IN OPTICS, TOMOGRAPHY AND BIOSENSING

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & BUILT ENVIRONMENT

2019 CHAPTER IN BOOK MAIN AUTHOR

## 10. STATISTICAL ANALYSES IN VALIDATING THE PERFORMANCE OF OPTICAL TOMOGRAPHY SYSTEM IN MEASURING OBJECT DIAMETER

EMERGING THEMES IN FUNDAMENTAL AND APPLIED SCIENCES

2019 CHAPTER IN BOOK MAIN AUTHOR

## 11. OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE FOR TRANSPARENT OBJECT DETECTION

INTERNATIONAL JOURNAL OF INTEGRATED ENGINEERING

2018 JOURNAL SCOPUS MAIN AUTHOR

## 12. ANALYSIS ON THE EFFECT OF SENSOR VIEWS IN IMAGE RECONSTRUCTION PRODUCED BY OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE

IEEE TRANSACTIONS ON IMAGE PROCESSING

2018 JOURNAL WOS MAIN AUTHOR

## 13. TOMOGRAPHY VALIDATION METHOD THROUGH STATISTICAL ANALYSIS OF VARIANCE TECHNIQUE

SYMPOSIUM ON INSTRUMENTATION AND SENSING TECHNOLOGY (SINOSET) 2018

2018 PROCEEDING NON-INDEX MAIN AUTHOR

# PUBLICATION

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## 14. CYBER-PHYSICAL SYSTEM (CPS): STATE OF THE ART

IEEE ICE CUBE 2018 : INTERNATIONAL CONFERENCE ON COMPUTING, ELECTRONIC AND ELECTRICAL ENGINEERING

2018 PROCEEDING NON-INDEX MAIN AUTHOR

## 15. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM FOR MONITORING TWO-PHASE FLOW

ELECTRONIC LETTERS

2017 JOURNAL WOS MAIN AUTHOR

## 16. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM FOR MONITORING MULTIPHASE FLOW

INTERNATIONAL JOURNAL OF INTEGRATED ENGINEERING

2017 JOURNAL SCOPUS MAIN AUTHOR

## 17. CHARGE-COUPLED DEVICE BASED ON OPTICAL TOMOGRAPHY SYSTEM IN DETECTING SOLID AND TRANSPARENT OBJECTS IN NON-FLOWING CRYSTAL CLEAR WATER.

INTERNATIONAL JOURNAL OF LIGHT AND ELECTRON OPTIC, ELSEVIER

2017 JOURNAL WOS MAIN AUTHOR

## 18. IMAGE RECONSTRUCTION MODELLING FOR OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE (CCD) LINEAR SENSOR

THE 3RD PUTRAJAYA INTERNATIONAL BUILT ENVIRONMENT, TECHNOLOGY AND ENGINEERING CONFERENCE 2017

2017 PROCEEDING NON-INDEX MAIN AUTHOR

## 19. STATISTICAL ANALYSES IN VALIDATING THE PERFORMANCE OF OPTICAL TOMOGRAPHY SYSTEM IN MEASURING OBJECT DIAMETER

FUNDAMENTAL SCIENCE CONGRESS 2017 (FSC2017) ON 21ST TILL 22ND NOVEMBER 2017

2017 PROCEEDING NON-INDEX MAIN AUTHOR

## 20. OPTICAL TOMOGRAPHY SYSTEM USING CHARGE-COUPLED DEVICE FOR TRANSPARENT OBJECT DETECTION

INTERNATIONAL WORKSHOP ON COMPUTED TOMOGRAPHY AND IMAGING TECHNOLOGY

2017 PROCEEDING NON-INDEX MAIN AUTHOR

## 21. ONLINE OPTICAL TOMOGRAPHY SYSTEM FOR DETECTING AND MEASURING DIAMETER OF SOLID AND TRANSPARENT OBJECTS

IEEE SENSOR JOURNAL

2016 JOURNAL WOS MAIN AUTHOR

## 22. OPTICAL TOMOGRAPHY SYSTEM: APPLICATION OF CHARGE COUPLED DEVICE FOR SOLID AND TRANSPARENT OBJECT DETECTION

JURNAL TEKNOLOGI

2016 JOURNAL SCOPUS MAIN AUTHOR

## 23. ONLINE OPTICAL TOMOGRAPHY SYSTEM APPLICATION OF CHARGE-COUPLED DEVICE (CCD) FOR OBJECT DETECTION IN CRYSTAL CLEAR WATER.

FLOW MEASUREMENT AND INSTRUMENTATION

2016 JOURNAL WOS MAIN AUTHOR

## 24. INTRODUCING AN APPLICATION OF A CHARGED COUPLED DEVICE (CCD) IN AN OPTICAL TOMOGRAPHY SYSTEM

JURNAL TEKNOLOGI

2015 JOURNAL SCOPUS MAIN AUTHOR

## 25. ANALYSIS ON THE PERFORMANCE OF LED AND LASER DIODE WITH CHARGE COUPLED DEVICE LINEAR SENSOR MEASURING DIAMETER OF OBJECT.

JURNAL TEKNOLOGI

2015 JOURNAL SCOPUS MAIN AUTHOR

## 26. A REVIEW OF THE OPTICAL TOMOGRAPHY SYSTEM

JURNAL TEKNOLOGI

2014 JOURNAL SCOPUS MAIN AUTHOR

# PUBLICATION

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## 27. A REVIEW OF TOMOGRAPHY SYSTEM

JURNAL TEKNOLOGI

2013 JOURNAL SCOPUS MAIN AUTHOR

## 28. OPTICAL TOMOGRAPHY SYSTEM FOR BUBBLES DETECTION IN LIQUID MEDIUM.

ELECTRICAL ENGINEERING RESEARCH COLLOQUIUM FOR ELECTRONICS, POWER, INSTRUMENTATIONS AND CONTROL AND COMMUNICATIONS

2013 PROCEEDING NON-INDEX MAIN AUTHOR

# CONSULTATION

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## 1. 100 A NEUTRAL LINK TNBL/QA/BHG.1/PC/N/21/0480

TNB LABS SDN. BHD.

2023 NATIONAL

## 2. INSULATION PIERCING CONNECTORS FOR CONNECTION OF LOW VOLTAGE BARE CONDUCTOR TO AERIAL BUNDLE CABLE

TNBR

2023 NATIONAL

## 3. 100A NEUTRAL LINK

TNB LABS SDN BHD

2022 NATIONAL

# AWARDS/RECOGNITION

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## 1. MUSOLLI COMPANION

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI BRONZE

## 2. CONCEPTUAL MODEL FOR A PORTABLE WRIST AND HAND REHABILITATION SYSTEM FOR STROKE PATIENTS

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

## 3. STAFF CONTOH FEBRUARY 2023

2023 UNIVERSITY

## 4. MOST PROMISING AWARD (IPTA / IPTS / ILK / KV)

2023 NATIONAL

## 5. ANUGERAH KECEMERLANGAN DAN INOVASI TAHUN 2022

2023 UNIVERSITY