



DR. MARINAH BINTI OTHMAN

PENSYARAH UNIVERSITI DS13

CONTACT

Phone: 6787

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marinah@usim.edu.my

Faculty: Fakulti
Kejuruteraan Dan Alam
Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 2

Master - Completed: 1,
Ongoing: 1

AREAS OF EXPERTISE

Optical/photonic Sensor

Computational Simulation And Modelling

Semiconductor Materials And Devices Physics

ACADEMIC QUALIFICATION

PhD in Laser (2010)

Master in Engineering Science (2002)

Bachelor in Electronic & Electrical Engineering (1998)

RESEARCH

1. ANOMALY DETECTION IN WATER QUALITY PARAMETERS AND POLLUTION PREDICTION BASED ON REGRESSION AND RANDOM FOREST THEORY

2026 GERAN SEPADAN ANTARABANGSA ON GOING CO-RESEARCHER

2. GOLD AUTHENTICATION SYSTEM

2025 GERAN PENYELIDIKAN INDUSTRI ON GOING CO-RESEARCHER

3. UAV-BASED AUTOMATED OIL PALM TREE DETECTION AND COUNTING

2025 GERAN PENYELIDIKAN INDUSTRI ON GOING MAIN RESEARCHER

4. SURFACE PLASMON RESONANCE-BASED PHOTONIC CRYSTAL FIBER SENSOR FOR ACCURATE MICROPLASTIC DETECTION IN WATER USING ARTIFICIAL NEURAL NETWORKS

2025 GERAN KPT ON GOING MAIN RESEARCHER

5. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"

2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED CO-RESEARCHER

RESEARCH

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

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED CO-RESEARCHER

7. STUDY OF RAINFALL EFFECT TO OPTIMIZE POWER LINES PERFORMANCE

2020 GERAN PENYELIDIKAN USIM RACER COMPLETED CO-RESEARCHER

8. BIOCLIMATIC ARCHITECTURE AND INTEGRATED HYBRID SOLAR COOLING SYSTEM FOR ENGAGING RESILIENT COMMUNITY TO CLIMATE CHANGE

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

9. MODELLING OF QUANTUM BASED TUNNEL DIODE FOR THZ MEDICAL IMAGING

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

10. ULTRA-HIGH SENSITIVE BIOANALYTICAL DETERMINATION OF LARD USING NANOHYBRID BIOSENSING APPROACH AS A TOOL FOR HALAL PRODUCT INVESTIGATION

2018 GERAN PENYELIDIKAN KHAS ON GOING CO-RESEARCHER

11. MIZAN SOLAR HOME MODEL FOR SUSTAINABLE LIVELIHOOD

2017 GERAN PENYELIDIKAN KHAS COMPLETED CO-RESEARCHER

12. DETERMINATION OF ZT FOR SEGMENTED THERMOELECTRIC GENERATOR (TEG) UNDER LARGE TEMPERATURE DIFFERENCE (L?T) USING "OPEN-SHORT CIRCUIT" TECHNIQUE

2015 GERAN KPT COMPLETED CO-RESEARCHER

13. AB INITIO CALCULATION OF VIBRATIONAL SPECTRA OF ZINC CLUSTER OF THE STANNITE-KESTERITE AND THE RAMAN SPECTRA

2013 GERAN KPT COMPLETED CO-RESEARCHER

14. NEW POLYNOMIAL FOR LINEAR FEEDBACK SHIFT REGISTERS (LFSRS)-BASED A5/1 STREAM CIPHERS FOR GSM COMMUNICATIONS

2013 GERAN KPT COMPLETED CO-RESEARCHER

PUBLICATION

1. I-V CHARACTERISTICS OF GAAS/ALAS ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT) USING STATISTICAL VALIDATION

JOURNAL OF SCIENCE AND TECHNOLOGY

2025 JOURNAL MYCITE CO-AUTHOR

2. SIMULATION OF A DUAL-SIDE POLISHED PHOTONIC CRYSTAL FIBER FOR SURFACE PLASMON RESONANCE SENSING

JURNAL OPTOELEKTRONIK

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

3. NUMERICAL OPTIMIZATION OF A SINGLE-MODE FIBER-BASED SPR SENSOR FOR AIR CONTAMINANT DETECTION APPLICATIONS

JURNAL OPTOELEKTRONIK

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

4. ASSISTIVE PRAYER TECHNOLOGY: DEVELOPING A RAKAAT TRACKING SYSTEM FOR ELDERLY MUSLIMS WITH PHYSICAL LIMITATIONS

JOURNAL OF TOMOGRAPHY SYSTEM & SENSORS APPLICATION

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

5. EXPLORING LIDAR AS A SCALABLE PHOTONIC ALTERNATIVE TO TURBIDIMETERS FOR WATER TURBIDITY MONITORING

JURNAL OPTOELEKTRONIK

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

6. POLYMER COMPOSITE BASED NO-CORE FIBER STRUCTURE AS REFRACTIVE INDEX SENSOR

THE 10TH INTERNATIONAL CONFERENCE ON COMPOSITE MATERIALS AND MATERIAL ENGINEERING

2025 PROCEEDING SCOPUS CO-AUTHOR

7. TORQUE ASSESSMENT FOR LOW VOLTAGE AERIAL BUNDLE CABLE (ABC) INSULATED PIERCING CONNECTOR (IPC) USING AI ANALYSIS

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING SCOPUS CO-AUTHOR

8. PRELIMINARY STUDY ON LIDAR PERFORMANCE IN VIBRATION MEASUREMENT

IEEE ASIA-PACIFIC CONFERENCE ON APPLIED ELECTROMAGNETICS

2024 PROCEEDING SCOPUS CO-AUTHOR

9. HANDOVER PERFORMANCE OF MOBILITY ROBUSTNESS OPTIMIZATION FOR BEYOND 5G NETWORKS

2024 IEEE 14TH SYMPOSIUM ON COMPUTER APPLICATIONS & INDUSTRIAL ELECTRONICS

2024 PROCEEDING SCOPUS CO-AUTHOR

10. INVESTIGATION OF TRENCH NO-CORE FIBER SENSOR FOR HIGH REFRACTIVE INDEX SENSING

2024 14TH INTERNATIONAL CONFERENCE ON SYSTEM ENGINEERING AND TECHNOLOGY (ICSET)

2024 PROCEEDING SCOPUS CO-AUTHOR

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

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

12. COMPUTATIONAL ANALYSIS OF NO-CORE FIBER SENSOR FOR DETECTING AGING TRACES IN TRANSFORMER OIL

2024 IEEE INTERNATIONAL CONFERENCE ON ADVANCED TELECOMMUNICATION AND NETWORKING TECHNOLOGIES

2024 PROCEEDING NON-INDEX CO-AUTHOR

13. SURFACE PLASMON RESONANCE BASED PCF SENSOR FOR DOM DETECTION

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

14. 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

15. TEMPERATURE DEPENDENT GAIN AND NOISE ANALYSIS OF AN ERBIUM DOPED FIBER AMPLIFIER WITH DIFFERENT PUMPING CONFIGURATIONS

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK MAIN AUTHOR

16. A5/1 STREAM CIPHER IN GLOBAL SYSTEM FOR MOBILE (GSM) (EMPIRICAL PERSPECTIVES).

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CO-AUTHOR

17. HANDOVER PARAMETER FOR SELF-OPTIMISATION IN 6G MOBILE NETWORKS: A SURVEY

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2023 JOURNAL SCOPUS CO-AUTHOR

18. CRYPTOGRAPHY (STREAM CIPHER) IN HARDWARE IMPLEMENTATION

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

19. DESIGN OF SINGLE STAGE C BAND ERBIUM DOPED FIBER AMPLIFIER (EDFA) FOR OPTICAL COMMUNICATIONS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK MAIN AUTHOR

20. PRINCIPLES, CHARACTERISTICS AND APPLICATIONS OF OPTICAL FIBRE IN TELECOMMUNICATION AND SENSORY SYSTEMS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

21. PRINCIPLES, CHARACTERISTICS AND APPLICATION OF OPTICAL FIBRE IN TELECOMMUNICATION AND SENSORY SYSTEM

TECHNOLOGIES IN SCIENCE AND ENGINEERING: A MULTIDISCIPLINARY APPROACH

2023 CHAPTER IN BOOK CO-AUTHOR

22. DESIGN OF SINGLE STAGE C BAND ERBIUM DOPED FIBER AMPLIFIER (EDFA) FOR OPTICAL COMMUNICATION

TECHNOLOGIES IN SCIENCE AND ENGINEERING : A MULTIDISCIPLINARY APPROACH

2023 CHAPTER IN BOOK MAIN AUTHOR

23. UTILITY FUNCTION BASED RESOURCE BLOCK SCHEDULING IN WIRELESS NETWORKS

ASIA PACIFIC CONFERENCE ON COMMUNICATIONS 2021

2021 PROCEEDING NON-INDEX CO-AUTHOR

24. EFFECTIVENESS OF EARTHING SYSTEM IN VERTICAL CONFIGURATIONS

INTERNATIONAL CONFERENCE ON ELECTRICAL ENGINEERING AND SMART GRIDS

2021 PROCEEDING NON-INDEX CO-AUTHOR

25. ELECTROCHEMICAL DETECTION OF TRIBUTYRIN USING PRUSSIAN BLUE FUNCTIONALIZED GLASSY CARBON ELECTRODE

IEEE INTERNATIONAL CONFERENCE ON SENSORS AND NANOTECHNOLOGY 2021

2021 PROCEEDING NON-INDEX CO-AUTHOR

26. ANALYSIS OF CURRENT-VOLTAGE CHARACTERISTICS ASSOCIATED TO THE QUANTUM STRUCTURE OF ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT): A PROMISING TERAHERTZ DEVICE

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

PUBLICATION

27. IMPROVING ELECTRO-THERMAL CALCULATION OF OVERHEAD LINES CONDUCTORS FOR MORE ON-GRID RENEWABLE ENERGY RESOURCES

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

28. EFFECT OF THE DOPING CONCENTRATION AND JUNCTION DEPTH ON THE PERFORMANCE OF SOLAR CELLS

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

29. RADIO OVER FIBRE FREE SPACE OPTICS (ROFSO) SYSTEM

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

30. EFFECT OF THE SLOT SHAPE AND GROUND PLANE ON THE MICROSTRIP PATCH ANTENNA PERFORMANCE

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

31. APPLICATION OF FINITE ELEMENT METHOD (FEM) IN THE ELECTRICAL SAFETY ASSESSMENT

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

32. DC ANALYSIS OF GAAS/ALAS SINGLE BARRIER ASYMMETRIC SPACER TUNNEL DIODE

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

33. IMPACT OF IDEALITY FACTOR AND SEMICONDUCTING MATERIAL ON PV MODULE PERFORMANCES

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

34. PRINCIPLES AND CHARACTERISTICS OF RANDOM LASERS AND THEIR APPLICATIONS IN MEDICAL, BIOIMAGING AND BIOSENSING

THE 2ND INTERNATIONAL CONFERENCE ON APPLIED PHOTONICS AND ELECTRONICS

2020 PROCEEDING NON-INDEX CO-AUTHOR

35. BAND ANTI-CROSSING MODELLING ON TAILORED GA_{1-X}IN_X YAS_{1-Y} BAND GAP ENERGY BASED NITROGEN FRACTION

UNIVERSAL JOURNAL OF ELECTRICAL AND ELECTRONIC ENGINEERING

2019 JOURNAL SCOPUS CO-AUTHOR

36. ELECTRICAL PROPERTIES OF A GA_{0.952}IN_{0.048}N_{0.016}AS_{0.984} P-I-N SCHOTTKY BARRIER DIODE

ASM SCIENCE JOURNAL

2019 JOURNAL SCOPUS CO-AUTHOR

37. FINITE ELEMENT MODELING OF OVERHEAD LINE THERMAL RATING METHOD

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2019

2019 PROCEEDING NON-INDEX CO-AUTHOR

38. PERFORMANCE ANALYSIS OF SISO AND MIMO FSO COMMUNICATION UNDER MALAYSIA WEATHER CONDITION BY EMPLOYING OPTISYSTEM

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2019

2019 PROCEEDING NON-INDEX CO-AUTHOR

39. OUTCOME-BASED EDUCATION FOR ENGINEERING PROGRAMME: A CASE STUDY OF USIM

2019 BOOK MAIN AUTHOR

PUBLICATION

40. PHOTOVOLTAIC TECHNOLOGY: A REVIEW

ADVANCES IN SUSTAINABLE LIVING

2019 CHAPTER IN BOOK MAIN AUTHOR

41. INFLUENCE OF REMOTE EARTH AND IMPULSE POLARITY ON EARTHING SYSTEMS BY FIELD MEASUREMENT

IET SCIENCE, MEASUREMENT & TECHNOLOGY

2018 JOURNAL SCOPUS CO-AUTHOR

42. RANDOMNESS EVALUATION OF MODIFIED A5/1 STREAM CIPHER FOR GLOBAL SYSTEM FOR MOBILE COMMUNICATION

MALAYSIAN JOURNAL OF SCIENCE HEALTH & TECHNOLOGY

2018 JOURNAL OTHER DATABASE CO-AUTHOR

43. COMPARATIVE PERFORMANCE OF GAINNAS/GAAS MULTI QUANTUM WELL PHOTODETECTOR FOR 1.0 μ M WAVELENGTH

31ST INTERNATIONAL MICROPROCESSES AND NANOTECHNOLOGY CONFERENCE (MNC2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

44. IMPULSE CHARACTERISTICS OF EARTH ELECTRODES IN DIFFERENT SOIL RESISTIVITY BY FIELD MEASUREMENTS

2018 IEEE PES ASIA-PACIFIC POWER AND ENERGY ENGINEERING CONFERENCE (APPEEC2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

45. PERFORMANCE COMPARISON ON CURRENT CONSUMPTION BETWEEN ARDUINO NANO AND ARM CORETEX M3 FOR PORTABLE DIALYSIS SYSTEM

IEEE INTERNATIONAL CONFERENCE ON SEMICONDUCTOR ELECTRONICS (ICSE2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

46. COMPACT U-SHAPED SLOTTED ANTENNA WITH CONDUCTOR-BACKED PLANE FOR ULTRA-WIDEBAND (UWB) APPLICATIONS

3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING (ICEECC 2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

47. EFFECT OF THE NUMBER OF TAPPING BITS OF THE A5/1 STREAM CIPHER TOWARDS HARDWARE PERFORMANCE

SCIENCE INTERNATIONAL JOURNAL

2017 JOURNAL SCOPUS CO-AUTHOR

48. THE EFFECT OF TOTAL BITS AND NUMBER OF LFSRS ON THE HARDWARE PERFORMANCE OF MODIFIED A5/1 STREAM CIPHERS

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

49. HARDWARE IMPLEMENTATION OF MODIFIED A5/1 STREAM CIPHER

INTERNATIONAL JOURNAL OF COMPUTER THEORY AND ENGINEERING

2017 JOURNAL OTHER DATABASE CO-AUTHOR

50. CHARACTERIZATIONS OF A SINGLE ROD ELECTRODE UNDER HIGH IMPULSE CURRENTS WITH DIFFERENT POLARITIES

1ST IEEE INTERNATIONAL CONFERENCE ON ELECTRICAL MATERIALS AND POWER EQUIPMENT (ICEMPE 2017)

2017 PROCEEDING NON-INDEX CO-AUTHOR

51. HARDWARE PERFORMANCE ANALYSIS ON MODIFIED A5/1 STREAM CIPHER

2016 WORLD INTERNATIONAL CONFERENCE ON ISLAMIC SCIENCES 2016

2016 PROCEEDING NON-INDEX CO-AUTHOR

52. HARDWARE IMPLEMENTATION OF MODIFIED A5/1 STREAM CIPHER

2016 INTERNATIONAL CONFERENCE ON COMMUNICATION AND INFORMATION SYSTEMS

2016 PROCEEDING NON-INDEX CO-AUTHOR

PUBLICATION

53. RANDOMNESS EVALUATION OF MODIFIED A5/1 STREAM CIPHER FOR GLOBAL SYSTEM FOR MOBILE COMMUNICATION

KOLOKIUUM SISWAZAH SAINS & TEKNOLOGI

2016 PROCEEDING NON-INDEX CO-AUTHOR

54. EFFECT OF THE NUMBER OF TAPPING BITS OF THE A5/1 STREAM CIPHER TOWARDS HARDWARE PERFORMANCE

2ND INTERNATIONAL CONFERENCE ON ENGINEERING SCIENCE AND TECHNOLOGY

2016 PROCEEDING NON-INDEX CO-AUTHOR

55. METHODOLOGIES OF IMPULSE TESTS ON EARTHING SYSTEMS BY FIELD MEASUREMENTS WITH DIFFERENT REMOTE EARTH

2016 IEEE INTERNATIONAL CONFERENCE ON HIGH VOLTAGE ENGINEERING AND APPLICATION

2016 PROCEEDING NON-INDEX CO-AUTHOR

56. IMPROVING GSM SECURITY BY ENHANCING THE RANDOMNESS PROPERTY OF THE A5/1 DESIGN

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2015 JOURNAL SCOPUS MAIN AUTHOR

57. ANALYSIS OF THE CHARACTERISTICS OF AN EARTHING SYSTEM BASED ON FINITE ELEMENT METHOD

POSTGRADUATE COLLOQUIUM 2014, FACULTY OF SCIENCE AND TECHNOLOGY

2014 PROCEEDING NON-INDEX CO-AUTHOR

58. FEASIBILITY STUDY OF "OPEN-SHORT CIRCUIT" DIMENSIONLESS FIGURE-OF-MERIT (ZT) MEASUREMENT TECHNIQUE FOR THERMOELECTRIC DEVICE

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK

59. MULTIWAVELENGTH BRILLOUIN ERBIUM FIBER LASER

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK

CONSULTATION

1. FASILITATOR PROGRAM "TRAINING ON CURRICULUM DEVELOPMENT", INSTITUT AGAMA ISLAM NEGERI (IAIN) WALISONGO INDONESIA

INSTITUT AGAMA ISLAM NEGERI (IAIN) INDONESIA

2013

INTERNATIONAL

AWARDS/RECOGNITION

1. ANUGERAH STAF CONTOH FAKULTI

2025 OTHERS

2. CONCEPTUAL MODELLING OF GOLD AUTHENTICATION SYSTEM BASED ON ULTRASOUND PROPAGATION ANALYSIS

INNOVATION BANK CHALLENGE 2025

2025 ANTARABANGSA GOLD

3. ACADEMIC ADVISOR

JPT

2023 NATIONAL

4. ACADEMIC ADVISOR

JPT

2022 NATIONAL

5. ACADEMIC ADVISOR

USIM

2022 UNIVERSITY

6. SMART PARCEL DROP BOX

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

7. I-SOLD: A PROTOTYPE OF SOLAR COOLING INTEGRATED FACADE FOR BALANCING HUMAN COMFORT, SUSTAINABILITY IN WORKING AND LEARNING SPACE

8th EXPOSITION ON ISLAMIC INNOVATION (i-INOVA) 2018

2018 UNIVERSITI BRONZE

8. USIM MIZAN HOMESTAY

THE INTERNATIONAL CONFERENCE AND EXPOSITION ON INVENTION (PECIPTA 17)

2017 UNIVERSITI BRONZE

9. MIZAN SOLARHOME

27TH INTERNATIONAL INVENTION & INNOVATION EXHIBITION 2017 (ITEX 2017)

2017 ANTARABANGSA SILVER

10. SILVER; NOVEL RESEARCH & INNOVATION COMPETITION 2015 (NRIC 2015)

2015 NATIONAL

11. QIBLAH FINDER FOR VISUALLY IMPAIRED PERSON

NOVEL RESEARCH & INNOVATION COMPETITION (NRIC) 2015

2015 KEBANGSAAN SILVER

12. NEW POLYNOMIAL STRUCTURE FOR A5/1 STREAM CIPHER TO STRENGTHEN GSM SECURITY

EKSPO INOVASI ISLAM I-INOVA 2014

2014 KEBANGSAAN CERTIFICATE OF APPRECIATION

13. SECOND RUNNER UP; "QIBLAT COMPASS FOR THE BLIND -- I SEE"; COMMUNITY RESEARCH & INNOVATION COMPETITION 2013 (CORIC 2013)

2013 NATIONAL

14. ANUGERAH E-NILAI - SEMESTER 2 2012/2013

2013 UNIVERSITY

AWARDS/RECOGNITION

15. SENIOR MEMBER IEEE

2013

INTERNATIONAL

16. MOTION DETECTION OF BREAST TUMORS BASED ON TISSUE ELASTICITY FROM B MODE ULTRASOUND IMAGES USING GRA

4TH EXPOSITION ON ISLAMIC INNOVATION 2013 (I-INOVA"13)

2013

KEBANGSAAN

BRONZE