



# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## STAFF PROFILE

**NAME** PROFESOR MADYA DR MOHAMAD ZAINOL ABIDIN BIN ABD. AZIZ

**FACULTY / CENTRE** FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

**DESIGNATION** PENSYARAH UNIVERSITI

**CURRENT POSITION** PROFESOR MADYA - FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

**EMAIL** mohamadzoinol@utem.edu.my



### ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2015	KEDOKTORAN FALSAFAH (PH.D)	UNIVERSITI TEKNOLOGI MALAYSIA
2005	SARJANA (MASTERS)	UTM
2000	SARJANA MUDA KEPUJIAN(BACHELOR HONS)	UTM

### FIELD OF INTEREST

ANTENNA, MICROWAVE, WIRELESS COMMUNICATION SYSTEM

### TEACHING EXPERIENCE *(last 5 years)*

#### UNDERGRADUATES

SESSION	COURSE
2021/2022	BENT4793 - MICROWAVE ENGINEERING
2021/2022	BENU3863 - INTEGRATED DESIGN PROJECT
2020/2021	BENG4711 - ELECTRONIC ENGINEERING LAB 5
2020/2021	BENT4793 - MICROWAVE ENGINEERING
2020/2021	BENT4833 - ANTENNA AND WAVE PROPAGATION
2020/2021	BENU3863 - INTEGRATED DESIGN PROJECT
2019/2020	BEET4833 - ANTENNA ENGINEERING
2019/2020	BENT4833 - ANTENNA AND WAVE PROPAGATION
2018/2019	BEET4833 - ANTENNA ENGINEERING
2018/2019	BENG4711 - ELECTRONIC ENGINEERING LAB 5
2018/2019	BENT4833 - ANTENNA AND WAVE PROPAGATION
2017/2018	BENT4143 - ANTENNA ENGINEERING
2017/2018	BENT4313 - ANTENNA & MICROWAVE PROPAGATION
2017/2018	BENT4833 - ANTENNA AND WAVE PROPAGATION
2017/2018	BETT4833 - ANTENNA ENGINEERING
2016/2017	BENT4143 - ANTENNA ENGINEERING
2016/2017	BENT4721 - TELECOMMUNICATION ELECTRONICS LAB 4

## POSTGRADUATES

SESSION	COURSE
2020/2021	MENT5223 - ANTENNA DESIGN

LIST OF GRANTS *(last 5 years)*

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2021	A NEW SPATIAL DETECTION TECHNIQUE USING NEW RF CODES FOR MULTI-STATIC MICROWAVE IMAGING SYSTEM	GERAN FRGS (NATIONAL)	149200	MAIN RESEARCHER
2021	THE DEVELOPMENT OF HIGHLY INTUITIVE MOBILE APPS FOR SMART DOCUMENT MANAGEMENT SYSTEM (SDMS) IN SUPPORTING MALAYSIA SUSTAINABILITY PALM OIL (MSPO) STANDARD	GERAN INDUSTRI (INDUSTRY)	50000	CO-RESEARCHER
2021	DEVELOPMENT OF HIGHLY INTUITIVE MOBILE APPS FOR SMART WAREHOUSE MANAGEMENT SYSTEM (SMART WMS) IN SUPPORTING WAREHOUSING & CUSTOM LEGAL REQUIREMENT	GERAN PPRN (NATIONAL)	34329	CO-RESEARCHER
2021	LIGHTNING INTERFERENCE IN 4G WIRELESS COMMUNICATION LINKS	GERAN INDUSTRI (INDUSTRY)	142000	CO-RESEARCHER
2021	INVESTIGATION ON THE MULTI-ENVIRONMENTAL PARAMETER SENSING CAPABILITIES OF A CHIPLESS RFID SENSOR-TAG	GERAN FRGS (NATIONAL)	77000	CO-RESEARCHER
2020	DESIGN AND DEVELOPMENTS OF VHF FRONT-END INTERFEROMETER SYSTEM	HIGH IMPACT (UTEM)	46000	CO-RESEARCHER
2020	LIGHTNING MEASUREMENT SYSTEM FOR FLASH FLOOD REAL-TIME MONITORING SYSTEM	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2019	MM-WAVE COUPLER DESIGN AND ANALYSIS USING WAVEGUIDE TECHNOLOGY	SHORT TERM (UTEM)	20000	MAIN RESEARCHER
2019	ELECTRODYNAMICS MODELING AND NOVEL EXPERIMENTAL INVESTIGATION OF LIGHTNING INITIATION MECHANISM PRODUCING GAMMA-RAY AND X-RAY BURSTS	GERAN FRGS (NATIONAL)	63200	CO-RESEARCHER
2019	DEVELOPMENT OF BROADBAND INTERFEROMETER ANTENNA SYSTEMS OVER PENINSULAR MALAYSIA FOR FLASH FLOOD MONITORING	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2018	REAL-TIME FLASH FLOOD WARNING SYSTEM USING ELECTROMAGNETIC SENSOR	GERAN ANTARABANGSA (INTERNATIONAL)	30000	CO-RESEARCHER
2018	INVESTIGATION ON THE PERFORMANCE OF VIRTUAL REALITY INTEGRATION METHOD FOR VISION-BASED HAPTIC BILATERAL CONTROL SYSTEM	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2018	A NEW TECHNIQUE TO MAP THE DIRECTION OF NARROW BIPOLAR EVENT BREAKDOWN PROPAGATION PRODUCING GAMMA-RAY AND X-RAY BURSTS BY USING MICROWAVE INTERFEROMETER	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2017	A NEW HIGH-Q BANDPASS CAVITY FILTER DESIGN FOR MICROWAVE IMAGING	HIGH IMPACT (UTEM)	30000	CO-RESEARCHER
2017	A NEW CLASS OF METASURFACE STRUCTURE FOR CIRCULAR POLARIZED ANTENNA PERFORMANCE ENHANCEMENT	HIGH IMPACT (UTEM)	28000	MAIN RESEARCHER

**PUBLICATIONS (last 5 years)****JOURNAL**

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2021	DESIGN OF A HIGH DIRECTIVE SENSOR FOR MICROWAVE IMAGING APPLICATION	PRZEGLAD ELEKTROTECHNICZNY (ELECTRICAL REVIEW)	
2021	PATTERN RECONFIGURABLE PLANAR ANTENNA ARRAY BASED ON TWO CIRCULAR DEFECTED GROUND STRUCTURE	PRZEGLAD ELEKTROTECHNICZNY (ELECTRICAL REVIEW)	
2020	A PLANAR KEYHOLE SHAPE UWB ANTENNA FOR RETRANSMISSION BASED CHIPLESS RFID	INTERNATIONAL JOURNAL OF SCIENTIFIC AND TECHNOLOGY RESEARCH	AKM ZAKIR HOSSAIN, WIN ADIYANSYAH INDRA, JAMIL ABEDALRAHIM JAMIL ALSAYAYDEH, MOHAMAD ZAINOL ABIDIN BIN ABD. AZIZ
2019	DESIGN OF DUAL-BAND MICROSTRIP PATCH ANTENNA WITH RIGHT-ANGLE TRIANGULAR APERTURE SLOT FOR ENERGY TRANSFER APPLICATION	INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING	HASSAN N., ZAKARIA Z., SAM W.Y., HANAPIAH I.N.M., MOHAMAD A.N., ROSLAN A.F., AHMAD B.H., ISMAIL M.K., ABD AZIZ M.Z.A.
2019	INITIAL ELECTRIC FIELD CHANGES OF LIGHTNING FLASHES IN TROPICAL THUNDERSTORMS AND THEIR RELATIONSHIP TO THE LIGHTNING INITIATION MECHANISM	ATMOSPHERIC RESEARCH	M.H.M. SABRI, M.R. AHMAD, M.R.M. ESA, D. PERIANNAN, G. LU, H. ZHANG, V. COORAY, E. WILLIAMS, M.Z.A.A. AZIZ, Z. ABDUL-MALEK, A.A. ALKAHTANI, M.Z.A.A.B. KADIR
2018	ANALYSIS ON COMPLEX FREQUENCY SELECTIVE SURFACE (FSS) USING FINITE DIFFERENT TIME DOMAIN METHOD (FDTD)	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	H. NORNIKMAN, N. C. PEE, B. H. AHMAD, S. N. SALLEH, M. Z. A. ABD AZIZ
2018	BANDWIDTH ENHANCEMENT AT MICROSTRIP PATCH ANTENNA USING MODIFIED EC-SRR STRUCTURES	EEA - ELECTROTEHNICA, ELECTRONICA, AUTOMATICA	N. HASSAB, B. H. AHMAD, M. Z. A. A. ABD AZIZ, M. S. N. AZIZI, M. K. ISMAIL, M. F. A. MALEK
2018	COMPARABLE ANALYSIS ON FREQUENCY SELECTIVE SURFACE (FSS) STRUCTURES USING FINITE FDTD IN FORTRAN AND CST	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	NORNIKMAN H., PEE N.C., AHMAD B.H., SALLEH S.N., ABD AZIZ M.Z.A.
2018	DESIGN AND ANALYSIS OF FREQUENCY SELECTIVE SURFACE (FSS) USING COMPLEMENTARY TECHNIQUES ON GLASS	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	HUSSIN, F.A., AHMAD, B.H., AZIZ, M.Z.A.A., SUAIDI, M.K.
2018	DUAL FREQUENCIES BAND AND ENHANCED WIDEBAND EFFECT OF DUAL LAYER MICROSTRIP PATCH ANTENNA WITH PARASITIC	JOURNAL OF PHYSICS : CONFERENCE SERIES	NORNIKMAN, H., AHMAD, B.H., ABD AZIZ, M.Z.A., BAKAR, H.A.
2018	INVESTIGATION OF CIRCULAR PATCH METASURFACE (MS) ON INVERTED SUSPENDED CIRCULAR POLARIZED ANTENNA	JOURNAL OF PHYSICS : CONFERENCE SERIES	BAKAR, H.A., ABD AZIZ, M.Z.A., AHMAD, B.H., HASSAN, N.
2018	NUMBER OF ITERATION ANALYSIS FOR COMPLEX FSS SHAPE USING GA FOR EFFICIENT ESG	BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	HASSAN N., ZAKARIA Z., AHMAD B.H., PEE N.C., SALLEH S.N., AZIZ M.Z.A.A., MALEK M.F.A., ISMAIL M.K.
2018	RADIO FREQUENCY (RF) ENERGY HARVESTING USING METAMATERIAL STRUCTURE FOR ANTENNA/RECTENNA COMMUNICATION NETWORK: A REVIEW	JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY	AHMAD B.H., MALEK M.F.A., AZIZ M.Z.A.A., BAKAR H.A., AZIZI M.S.N., ISMAIL M.K.
2018	USING ANALYTICAL HIERARCHY PROCESS (AHP) TO EVALUATE BARRIERS IN ADOPTING FORMAL IT GOVERNANCE PRACTICES	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	OTHMAN M.F.I., PEE N.C., RAHIM Y.A., SULAIMAN H.A., OTHMAN M.A., AZIZ M.Z.A.A.
2017	BROADBAND RIGHT-HANDED CIRCULAR POLARIZED (RHCP) ANTENNA WITH LOOP METASURFACES	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	BAKAR H.A., AZIZ M.Z.A.A., AHMAD B.H., GHANI S., NORNIKMAN H.
2017	DESIGN AND IMPEDANCE MODELING FOR RECTANGULAR SLOT FREQUENCY SELECTIVE SURFACE (FSS) ON GLASS	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	HUSSIN F.A., AHMAD B.H., AZIZ M.Z.A.A., ALI N.S.A.S., SUAIDI M.K.
2017	DESIGN AND IMPEDANCE MODELING OF COMPLEMENTARY CIRCULAR LOOP FSS AT 2.4GHZ	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	ABD AZIZ M.Z.A., ABU HUSSIN F., AHMAD B.H., SUAIDI M.K., MD FAUZI N.A.
2017	RECTANGULAR MICROSTRIP PATCH ANTENNA WITH DIFFERENT LOCATION OF MINKOWSKI ISLAND SPLIT RING RESONATOR (MI-SRR) STRUCTURE	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	HASSAN N., AZIZI M.S.N., AHMAD B.H., AZIZ M.Z.A.A., BAKAR H.A., RAMLI M.H., OTHMAN M.A., SULAIMAN H.A.

**CONFERENCE**

YEAR	TITLE	NAME OF CONFERENCE	AUTHORS
2020	A PLANAR SLOTTED RCS BASED UWB RFID TAG ON A PCB AND A FLEXIBLE SUBSTRATE FOR PACKAGING APPLICATION	11TH MALAYSIAN TECHNICAL UNIVERSITIES CONFERENCE ON ENGINEERING AND TECHNOLOGY, MUCET 2019	ZAKIR HOSSAIN, A.K.M., ABIDIN BIN ABD AZIZ, M.Z., KHANG, A.W.Y., INDRA, W.A.
2019	THE PERFORMANCE OF MEDIUM ACCESS CONTROL PROTOCOL WITH CAPTURE EFFECT FOR LIGHTNING REMOTE SENSING	3RD INTERNATIONAL CONFERENCE ON SCIENCE AND TECHNOLOGY APPLICATIONS IN CLIMATE CHANGE, STA CLIM 2018	N. Q. JALAUDIN, M. R. AHMAD, M. Z. A. A. AZIZ AND M. R. M. ESA

**PROFESSIONAL MEMBERSHIPS / LEARNED SOCIETY**

YEAR	ROLE	INSTITUTION	LEVEL
2014	AHLI	INSTITUT JURUTERA ELEKTRIK DAN ELEKTRONIK (IEEE)	ANTARABANGSA

**POSTGRADUATE SUPERVISION** *(last 5 years)*

NO	NAME	LEVEL OF STUDY	ROLE	STATUS
1	MUHAMMAD MAJDI BIN SAAD	DOCTORATE	MAIN SUPERVISOR	GRADUATED (2021)
2	ALI HASAN MOUSA	DOCTORATE	CO-SUPERVISOR	ACTIVE
3	ABDUL HALIM BIN DAHALAN	DOCTORATE	MAIN SUPERVISOR	ACTIVE
4	SHAMSUL AMMAR BIN SHAMSUL BAHARIN	MASTERS	CO-SUPERVISOR	GRADUATED (2021)
5	CHIN SHU JIA	MASTERS	MAIN SUPERVISOR	GRADUATED (2019)
6	MUHAMMAD HAZIQ BIN MOHAMMAD SABRI	MASTERS	CO-SUPERVISOR	GRADUATED (2019)
7	NUR QALBI BINTI JALAUDIN	MASTERS	CO-SUPERVISOR	GRADUATED (2019)
8	HAMIZAN BIN ABU BAKAR	MASTERS	MAIN SUPERVISOR	GRADUATED (2019)
9	DINESH A/L PERIANNAN	MASTERS	CO-SUPERVISOR	GRADUATED (2019)
10	NUR SHAHEERA ALIA BINTI SADICK ALI	MASTERS	MAIN SUPERVISOR	GRADUATED (2018)
11	NOOR AZAMIAH BINTI MD FAUZI	MASTERS	MAIN SUPERVISOR	GRADUATED (2018)
12	ONG TEIK KEAN	MASTERS	CO-SUPERVISOR	GRADUATED (2017)
13	SITI NADZIRAH BINTI SALLEH	MASTERS	MAIN SUPERVISOR	GRADUATED (2017)
14	MOHAMAD HAFIZE BIN RAMLI	MASTERS	MAIN SUPERVISOR	GRADUATED (2017)
15	NUR ALYAA DIYANA BINTI AHMAD MUFIT	MASTERS	MAIN SUPERVISOR	GRADUATED (2016)
16	PHOO KHO SHIN	MASTERS	MAIN SUPERVISOR	GRADUATED (2016)
17	MAHFUZAH BINTI MD. SHUKOR	MASTERS	MAIN SUPERVISOR	GRADUATED (2015)
18	NUR AISHAH BINTI ZAINUDDIN	MASTERS	CO-SUPERVISOR	GRADUATED (2015)
19	SAM WENG YIK	MASTERS	CO-SUPERVISOR	GRADUATED (2014)
20	MOHD SYAIFUL REDZWAN BIN MOHD SHAH	MASTERS	CO-SUPERVISOR	GRADUATED (2011)
21	MUHAMMAD FAIZ BIN ABDUL KADIR	MASTERS	CO-SUPERVISOR	GRADUATED (2011)
22	DALILA BINTI MISMAN	MASTERS	CO-SUPERVISOR	GRADUATED (2011)
23	ERMAN RAMLI	MASTERS	CO-SUPERVISOR	ACTIVE
24	NURULISWA BINTI ABDULLAH	MASTERS	MAIN SUPERVISOR	ACTIVE
25	AMIER HAFIZUN BIN AB RASHID	MASTERS	CO-SUPERVISOR	ACTIVE
26	NURFARAH IZZATI BINTI ISMAIL	MASTERS	MAIN SUPERVISOR	ACTIVE
27	ASIF JAMIL SAHAD	MASTERS	CO-SUPERVISOR	ACTIVE
28	KAVETHA A/P SUSEENTHIRAN	MASTERS	CO-SUPERVISOR	ACTIVE
29	SITI AISHAH BINTI ABU SALIM	MASTERS	CO-SUPERVISOR	ACTIVE

**CONSULTANCY**

YEAR	TITLE OF PROJECT	AGENCY	ROLES	LEVEL
2019	DESIGN AND MEASUREMENT OF ANTENNA STRIP LINE	MFS TECHNOLOGY (M) SDN BHD	LEADER	NATIONAL

**INTELLECTUAL PROPERTIES**

YEAR	INVENTION NAME	TYPE
2014	HYBRID FREQUENCY SELECTIVE SURFACE (FSS)	COPYRIGHT
2009	A POLARIZATION ANTENNA	PATENT
2009	AN ANTENNA	PATENT

KATEGORI MAKLUMAT	PEJABAT DIRUJUK
PERSONAL INFORMATION	BAHAGIAN SUMBER MANUSIA, PEJABAT PENDAFTAR
ACADEMIC QUALIFICATON	
PROFESSIONAL MEMBERSHIP / LEARNED SOCIETY	
TEACHING EXPERIENCE	BAHAGIAN PENGURUSAN AKADEMIK, PEJABAT PENDAFTAR
<ul style="list-style-type: none"> <li>• UNDERGRADUATES</li> </ul>	
<ul style="list-style-type: none"> <li>• POSTGRADUATES</li> </ul>	PUSAT PENGAJIAN SISWAZAH (PPS)
POSTGRADUATE SUPERVISION	PUSAT PENGAJIAN SISWAZAH (PPS)
FIELD OF INTEREST	PUSAT PENGURUSAN PENYELIDIKAN DAN INOVASI (CRIM)
LIST OF GRANTS	
LIST OF RESEARCH AWARDS	PUSAT PENGKOMERSILAN (UCC)
INTELLECTUAL PROPERTIES	
COMMERCIALIZATION	
PUBLICATIONS	PERPUSTAKAAN LAMAN HIKMAH
CONSULTANCY	PUSAT JARINGAN INDUSTRI DAN MASYARAKAT (PJIM)