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FACULTY / CENTRE FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

DESIGNATION PENSYARAH UNIVERSITI

CURRENT POSITION PENSYARAH KANAN - FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

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ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2018	KEDOKTORAN FALSAFAH (PH.D)	NEWCASTLE UNIVERSITY
2012	SARJANA (MASTERS)	UNIVERSITI KEBANGSAAN MALAYSIA
2010	SARJANA MUDA (BACHELOR)	UNIVERSITI HIROSHIMA

TEACHING EXPERIENCE

UNDERGRADUATES

SESSION	COURSE
2-2012/2013-B	BENC3761 - COMPUTER ENGINEERING LABORATORY 2
2-2012/2013-B	BENM3133 - INTEGRATED CIRCUIT DESIGN & PROCESS
2-2012/2013-D	DENH2173 - DIFFERENTIAL EQUATIONS
1-2013/2014	DENE3263 - INDUSTRIAL ELECTRONICS
1-2013/2014	DENT2233 - ELECTRICAL CIRCUITS
2-2013/2014	DENC2443 - DIGITAL SYSTEMS
1-2014/2015	BENG2223 - MICROPROCESSOR TECHNOLOGY
1-2014/2015	BENM1143 - LOGIC CIRCUITS
1-2018/2019	BENG1413 - DIGITAL ELECTRONICS
1-2018/2019	DENC3363 - COMPUTER ENGINEERING
2-2018/2019	BENG2431 - ELECTRONIC ENGINEERING LAB2
1-2019/2020	BENU3863 - INTEGRATED DESIGN PROJECT
2-2019/2020	BENC2423 - MICROPROCESSOR TECHNOLOGY
1-2020/2021	BENC2423 - MICROPROCESSOR TECHNOLOGY
1-2020/2021	BENR2211 - COMPUTER ENGINEERING LAB 1
1-2020/2021	BENU3863 - INTEGRATED DESIGN PROJECT
2-2020/2021	BENE4253 - IC DESIGN AND PROCESS
1-2021/2022	BENC2423 - MICROPROCESSOR TECHNOLOGY
1-2021/2022	BENR1123 - LOGIC CIRCUIT
2-2021/2022	BENE4253 - IC DESIGN AND PROCESS
2-2021/2022	DENG2223 - ELECTRONIC & MICROPROCESSOR FUNDAMENTALS
1-2022/2023	BENE4333 - ARTIFICIAL INTELLIGENCE
2-2022/2023	BENR2221 - COMPUTER ENGINEERING LAB 2
2-2022/2023	BENR3613 - VLSI DESIGN

POSTGRADUATES

SESSION	COURSE
2022/2023	MENE5533 - SENSOR TECHNOLOGY
2021/2022	MENC5213 - COMPUTER ARCHITECTURE
2021/2022	MENE5533 - SENSOR TECHNOLOGY
2020/2021	MENC5213 - COMPUTER ARCHITECTURE
2020/2021	MENE5533 - SENSOR TECHNOLOGY
2019/2020	MENE5533 - SENSOR TECHNOLOGY

LIST OF GRANTS

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2022	ELUCIDATION OF ALL INORGANIC CSPBI3 PEROVSKITE QUANTUM DOTS SOLAR CELLS ON A FLEXIBLE SUBSTRATE FOR EFFICIENT CHARGE TRANSFER	GERAN FRGS (NATIONAL)	154400	MAIN RESEARCHER
2022	DEVELOPMENT OF LOW-COST SPIN COATING SYSTEM WITH IOT	GERAN INDUSTRI (INDUSTRY/PRIVATE)	26000	MAIN RESEARCHER
2022	ELUCIDATION OF THE CHARGE TRANSPORT MECHANISM OF THE ELECTRODEPOSITED MOLYBDENUM SULFIDE WITH DIFFERENT PH LEVELS AND ELECTROLYTE CONCENTRATION AS A COUNTER ELECTRODE FOR DYE-SENSITIZED SOLAR CELLS	GERAN FRGS (NATIONAL)	105990	CO-RESEARCHER
2021	DEVELOPMENT OF CHITOSAN BINDER MIXED WITH GRAPHENE-BASED MATERIAL FOR WEARABLE AND FLEXIBLE ELECTRONIC APPLICATIONS	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2021	CHARGE TRANSPORT MECHANISM OF NICKEL OXIDE QUANTUM DOTS AS A COUNTER ELECTRODE IN DYE-SENSITIZED SOLAR CELLS	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2021	DEVELOPMENT OF ROBUST AUTONOMOUS LOCALIZATION AND NAVIGATION USING DEEP Q LEARNING FOR OUTDOOR AUTONOMOUS TRANSPORTER (OAT)	GERAN INDUSTRI (INDUSTRY/PRIVATE)	140000	MAIN RESEARCHER
2020	MODELING AND OPTIMIZATION OF BILAYER GRAPHENE FET LAYOUT USING TAGUCHI-BASED GREY RELATIONAL ANALYSIS WITH ANN FOR LOW POWER CONSUMPTION.	GERAN FRGS (NATIONAL)	59600	CO-RESEARCHER
2020	CHARGE TRANSPORT MECHANISM OF NICKEL OXIDE QUANTUM DOTS AS HOLE TRANSPORT MATERIAL IN PEROVSKITE SOLAR CELLS	GERAN FRGS (NATIONAL)	152700	CO-RESEARCHER
2020	HUMANISING THE CILIPADI PICKING ROBOT FOR THE FERTIGATION FARNING SYSTEM ADOPTION: A QUINTIPLE HELIX INNOVATION APPROACH	SHORT TERM (UTEM)	7000	CO-RESEARCHER
2019	ENHANCED EFFICIENCY OF SENSITIZED SOLAR CELL BY THE INCORPORATION OF ZNO QUANTUM DOTS	GERAN RACER (NATIONAL)	56000	MAIN RESEARCHER
2014	INVESTIGATION ON THE IMPACT OF PHOTOVOLTAIC CONNECTION TO THE MALAYSIAN DISTRIBUTION SYSTEM	SHORT TERM (UTEM)	16530	CO-RESEARCHER
2013	FABRICATION OF NATURAL DYE SENSITIZED SOLAR CELLS BASED ON NANOCRYSTALLINE TiO2.	SHORT TERM (UTEM)	15000	CO-RESEARCHER
2013	OPTIMIZATION OF POWER AND GAIN IN CLASS AB AMPLIFIER USING TAGUCHI'S METHOD FOR MEMS APPLICATIONS	SHORT TERM (UTEM)	7180	CO-RESEARCHER
2012	CHARACTERIZATION OF MOLYBDENUM THIN FILMS AS SOLAR CELL BACK CONTACT	SHORT TERM (UTEM)	11400	CO-RESEARCHER
2012	WIRELESS WEARABLE MICROWAVE RADAR FOR PATIENT'S CARDIAC MONITORING	SHORT TERM (UTEM)	30000	CO-RESEARCHER
2012	FABRICATION OF MICRO CONTACT BASED CONTACT PROBE CELL FOR IC TESTING	SHORT TERM (UTEM)	9000	MAIN RESEARCHER
2010	DESIGN OF SILICON PHASE MODULATOR BASED ON P-I-N DIODE STRUCTURE	SHORT TERM (UTEM)	12000	CO-RESEARCHER

PUBLICATIONS

JOURNAL

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2023	INVESTIGATION OF GRAPHENE GAS SENSOR AT DIFFERENT SUBSTRATES FOR ACETONE DETECTION	PRZEGLAD ELEKTROTECHNICZNY	SITI AMANIAH MOHD CHACHULI, YAP PEI YEUAN, OMER COBAN, N.H. SHAMSUDIN, M. IDZDIHAR IDRIS
2022	CONCENTRATION DEPENDENCE OF PHYSICAL PROPERTIES OF LOW TEMPERATURE PROCESSED ZNO QUANTUM DOTS THIN FILMS ON POLYETHYLENE TEREPHTHALATE AS POTENTIAL ELECTRON TRANSPORT MATERIAL FOR PEROVSKITE SOLAR CELL	CERAMICS INTERNATIONAL	SANI MUHAMMAD, AHLAAM T. NOMAAN, ABDULMUTOLIBO. OLAOYE, MUHAMMAD IDZDIHAR IDRIS, MARZAINI RASHID
2022	DEVELOPMENT OF DELTA ROBOT ARM SIMULATION IN ROS2 FOXY FITZROY ENVIRONMENT	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	K.M. SAIPULLAH, W.H.M. SAAD, F.N.I. RAMLEE, M.I. IDRIS, M.A.F.M. DIN
2022	INCREASED MOBILITY IN 4H-SIC MOSFETS BY MEANS OF HYDROGEN ANNEALING	CRYSTALS	IDRIS, MUHAMMAD IDZDIHAR; HORSFALL, ALTON
2022	ROS 2 CONFIGURATION FOR DELTA ROBOT ARM KINEMATIC MOTION AND STEREO CAMERA VISUALIZATION	JOURNAL OF ROBOTICS AND CONTROL (JRC)	KHAIRUL MUZZAMMIL SAIPULLAH, WIRA HIDAYAT MOHD SAAD, SOOK HUI CHONG, MUHAMMAD IDZDIHAR IDRIS, SYAFEEZA AHMAD RADZI
2022	ROS 2 CONFIGURATION FOR DELTA ROBOT ARM KINEMATIC MOTION AND STEREO CAMERA VISUALIZATION	JOURNAL OF ROBOTICS AND CONTROL	KHAIRUL MUZZAMMIL SAIPULLAH, WIRA HIDAYAT MOHD SAAD, SOOK HUI CHONG, MUHAMMAD IDZDIHAR IDRIS, SYAFEEZA AHMAD RADZI
2022	STRUCTURAL, OPTICAL AND ELECTRICAL INVESTIGATION OF LOW-TEMPERATURE PROCESSED ZINC OXIDE QUANTUM DOTS BASED THIN FILMS USING PRECIPITATION-SPIN COATING ON FLEXIBLE SUBSTRATES	PHYSICA B: CONDENSED MATTER	SANI MUHAMMAD, AHLAAM TAHER NOMAAN, MUHAMMAD IDZDIHAR IDRIS, MARZAINI RASHID
2022	VSLAM ANALYSIS USING VARIOUS ORBSLAM PARAMETERS SETTING	PRZEGLAD ELEKTROTECHNICZNY	IDRIS M.I., HUSSIN H., JUNOS S.A.M., SAAD W.H.M., ZAINUDIN M.N.S., YATIM N.M., JAAFAR A.S., KAMARUDIN M.R., SAIPULLAH K.M.
2021	3D STRUCTURES FOR SILICON CARBIDE TRANSISTORS UTILISING AL2O3 AS A GATE DIELECTRIC	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	M. I. IDRIS, A. B. HORSFALL
2021	INVESTIGATION ON THE OHMIC CHARACTERISTIC OF NI/TI/4H-SIC	BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	M. I. IDRIS, Z. A. F. M. NAPIAH, MARZAINI RASHID, M. N. SHAH ZAINUDIN, SITI AMANIAH MOHD CHACHULI, M. A. AZAM
2021	ZNO QUANTUM DOT BASED THIN FILMS AS PROMISING ELECTRON TRANSPORT LAYER: INFLUENCE OF SURFACE-TO-VOLUME RATIO ON THE PHOTOELECTRIC PROPERTIES	CERAMICS INTERNATIONAL	AHLAAM T. NOMAAN, OMAAN, ANAS A. AHMED, NASER M. AHMED, M.I. IDRIS, M.R. HASHIM, MARZAINI RASHID,
2020	ACTIVITY RECOGNITION ON SUBJECT INDEPENDENT USING MACHINE LEARNING	CYBERNETICS AND INFORMATION TECHNOLOGIES	Y. J. KEE, M. N. SHAH ZAINUDIN, M. I. IDRIS, R. H. RAMLEE, M. R. KAMARUDIN
2019	CHARACTERIZATION OF SiO2/SiC INTERFACE OF PHOSPHOROUS-DOPED MOS CAPACITORS BY CONDUCTANCE MEASUREMENTS	INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY AND ENGINEERING	IDRIS, M.I., NAPIAH, Z.A.F.M., SHAH ZAINUDIN, M.N., CHACHULI, S.A.M., RASHID, M.
2019	POSITIVE FLATBAND VOLTAGE SHIFT IN PHOSPHORUS DOPED SiO2/N-TYPE 4H-SIC MOS CAPACITORS UNDER HIGH FIELD ELECTRON INJECTION	JOURNAL OF PHYSICS D: APPLIED PHYSICS	M. I. IDRIS, M. H. WENG, N. J. TOWNSEND, N. G. WRIGHT, A. B. HORSFALL
2019	RECOGNIZING THE ACTIVITY DAILY LIVING (ADL) FOR SUBJECT INDEPENDENT	INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY AND ENGINEERING	M.N.SHAH ZAINUDIN, Y.J. KEE, M.I. IDRIS, M.R. KAMARUDDIN, R.H. RAMLEE
2018	PORE WALL THINNING OF MESOPOROUS 4H-SIC BY SACRIFICIAL OXIDATION	CRYSTAL RESEARCH AND TECHNOLOGY	RASHID, M., IDRIS, M. I., HORROCKS, B. R., HEALY, N., GOSS, J. P., HORSFALL, A. B.
2016	INSTABILITY OF PHOSPHOROUS DOPED SiO2 IN 4H-SIC MOS CAPACITORS AT HIGH TEMPERATURES	JOURNAL OF APPLIED PHYSICS	M. I. IDRIS, M. H. WENG, H-K. CHAN, A. E. MURPHY, D. T. CLARK, R. A. R. YOUNG, E. P. RAMSAY, N. G. WRIGHT, AND A. B. HORSFALL
2014	DEPOSITION OF MICRO CONTACT BASED PROBE CELL FOR IC TESTING BY DC MAGNETRON SPUTTERING TECHNIQUE	RESEARCH JOURNAL OF APPLIED SCIENCES, ENGINEERING AND TECHNOLOGY	
2014	DESIGN AND ANALYSIS OF LOW NOISE AMPLIFIER USING CADENCE	JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY	
2014	LOW COST ELECTRO-DEPOSITION OF CUPROUS OXIDE P-N HOMO-JUNCTION SOLAR CELL	ADVANCED MATERIALS RESEARCH	
2014	LOW POWER OPERATIONAL AMPLIFIER IN 0.13UM TECHNOLOGY	MODERN APPLIED SCIENCE	
2014	THICKNESS DEPENDENCE OF THE SURFACE ROUGHNESS OF MICRO CONTACT DEPOSITED BY DC MAGNETRON SPUTTERING TECHNIQUE	AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES	
2013	LOW VOLTAGE CMOS SCHMITT TRIGGER IN 0.18µM TECHNOLOGY	IOSR JOURNAL OF ENGINEERING (IOSRJEN)	
2013	PV-MINI HYDRO-DIESEL HYBRID SYSTEM IN A VILLAGE	INTERNATIONAL JOURNAL OF ENGINEERING & COMPUTER SCIENCE	
2013	UNIVERSAL MOBILITY-FIELD CURVES FOR ELECTRONS IN POLYSILICON INVERSION LAYER	INTERNATIONAL JOURNAL OF ELECTRICAL & COMPUTER SCIENCES	
2013	UNIVERSAL MOBILITY-FIELD CURVES FOR ELECTRONS IN POLYSILICON INVERSION LAYER	INTERNATIONAL JOURNAL OF ELECTRICAL & COMPUTER SCIENCES	
2012	DESIGN OF A LOW VOLTAGE CLASS AB VARIABLE GAIN AMPLIFIER (VGA)	JTEC	

CONFERENCE

YEAR	TITLE	NAME OF CONFERENCE	AUTHORS
2022	THE EFFECT OF PH LEVEL AND ANNEALING TEMPERATURE ON NIO THIN FILMS AS HOLE TRANSPORT MATERIAL IN INVERTED PEROVSKITE SOLAR CELLS	2022 IEEE INTERNATIONAL CONFERENCE ON SEMICONDUCTOR ELECTRONICS, ICSE 2022	SUBATHRA MUNIANDY, MUHAMMAD IDZDIHAR BIN IDRIS, ZUL ATFYI FAUZAN BIN MOHAMMED NAPIAH, MAZAINI RASHID
2021	AN INVESTIGATION ON NIO FOR HOLE TRANSPORT MATERIAL IN PEROVSKITE SOLAR CELLS	13TH IEEE REGIONAL SYMPOSIUM ON MICRO AND NANOELECTRONICS, RSM 2021	SUBATHRA MUNIANDY, MUHAMMAD IDZDIHAR BIN IDRIS, ZUL ATFYI FAUZAN MOHAMMED NAPIAH, HAZIEZOL HELMI MOHD YUSOF, SITI AMANIAH MOHD CHACHULI, MARZAINI RASHID
2020	ZINC OXIDE QUANTUM DOTS AS PHOTOANODE FOR DYESENSITIZED SOLAR CELL	IEEE INTERNATIONAL CONFERENCE ON SEMICONDUCTOR ELECTRONICS (ICSE)	YASMIN ZAINOL ABIDIN, HUDA ABDULLAH, S SHAFIE, SITI AMANIAH MOHD CHACHULI, M RASHID, KJ XIAN
2019	INVESTIGATION ON THE OHMIC CHARACTERISTIC OF NI/TI/4H-SIC	INTERNATIONAL CONFERENCE ON SEMICONDUCTOR MATERIALS AND TECHNOLOGY (ICOSEMT 2019)	M. I. IDRIS, Z. A. F. M. NAPIAH, MARZAINI RASHID

POSTGRADUATE SUPERVISION

NO	NAME	LEVEL OF STUDY	ROLE	STATUS
1	KHAIRUL MUZZAMMIL BIN SAIPULLAH	DOCTORATE	CO-SUPERVISOR	ACTIVE
2	SAW CHIA YEE	MASTERS	CO-SUPERVISOR	GRADUATED (2023)
3	YASMIN BINTI ZAINOL ABIDIN	MASTERS	MAIN SUPERVISOR	GRADUATED (2022)
4	MOHD ISKANDAR DZULKARNAIN BIN M. RUMMAJA	MASTERS	MAIN SUPERVISOR	ACTIVE
5	ZARYATI BINTI ZAINI	MASTERS	MAIN SUPERVISOR	ACTIVE
6	SUBATHRA MUNIANDY	MASTERS	MAIN SUPERVISOR	ACTIVE
7	AHMAD MUHAJER BIN ABDULAZIZ	MASTERS	MAIN SUPERVISOR	ACTIVE

PROFESSIONAL MEMBERSHIPS / LEARNED SOCIETY

YEAR	ROLE	INSTITUTION	LEVEL
2023	SENIOR MEMBER / CORPORATE MEMBER	INSTITUT JURUTERA ELEKTRIK DAN ELEKTRONIK (IEEE)	ANTARABANGSA
2022	PROFESSIONAL QUALIFICATION	LEMBAGA TEKNOLOGIS MALAYSIA (MBOT)	KEBANGSAAN
2023	PROFESSIONAL QUALIFICATION	LEMBAGA TEKNOLOGIS MALAYSIA (MBOT)	KEBANGSAAN
2022	PROFESSIONAL QUALIFICATION	LEMBAGA TEKNOLOGIS MALAYSIA (MBOT)	KEBANGSAAN
2022	SENIOR MEMBER / CORPORATE MEMBER	INSTITUT JURUTERA ELEKTRIK DAN ELEKTRONIK (IEEE)	ANTARABANGSA
2021	SENIOR MEMBER / CORPORATE MEMBER	INSTITUT JURUTERA ELEKTRIK DAN ELEKTRONIK (IEEE)	ANTARABANGSA
2015	MEMBER	INSTITUT JURUTERA ELEKTRIK DAN ELEKTRONIK (IEEE)	ANTARABANGSA

LIST OF RESEARCH AWARDS

YEAR	TITLE	EXHIBITION	LEVEL	AWARD
2023	SYNTHESIS OF CHITOSAN BIOPOLYMER FOR WEARABLE AND FLEXIBLE ELECTRONIC APPLICATIONS	EKSPLO PENYELIDIKAN ANTARABANGSA , KOLEJ VOKASIONAL TANAH MERAH, DIGIT250, UITM CAWANGAN KELANTAN, BAHAGIAN PENDIDIKAN DAN LATIHAN TEKNIKAL VOKASIONAL ZON KELANTAN-ZON TERENGGANU (KELTER)	INTERNATIONAL	GOLD
2023	DEVELOPMENT OF LOW COST SPIN COATING SYSTEM FOR THIN FILM DEPOSITION	EKSPLO PENYELIDIKAN ANTARABANGSA , KOLEJ VOKASIONAL TANAH MERAH, DIGIT250, UITM CAWANGAN KELANTAN, BAHAGIAN PENDIDIKAN DAN LATIHAN TEKNIKAL VOKASIONAL ZON KELANTAN-ZON TERENGGANU (KELTER)	INTERNATIONAL	GOLD
2022	CHITOSAN BINDER FOR ELECTRONIC APPLICATIONS	EKSPLO PENYELIDIKAN ANTARABANGSA , VIRTUAL	INTERNATIONAL	BRONZE
2020	3 DIMENSIONAL 4H-SIC MOSFET (FINFET)	IPTA R&D EXPO , UNIMAP	NATIONAL	GOLD
2020	4H-SIC FOR EXTREME ENVIRONMENT	ITEX , ITEX 2020	INTERNATIONAL	GOLD
2019	3 DIMENSIONAL 4H-SIC MOSFET (FINFET)	UTEMEX , DEWAN CANSOLOR, UTEM	UNIVERSITY	SILVER
2019	4H-SIC MOSFETS FOR HIGH TEMPERATURE APPLICATIONS	IPTA R&D EXPO , MITEC, SELANGOR	NATIONAL	GOLD

INTELLECTUAL PROPERTIES

YEAR	INVENTION NAME	TYPE
2020	LOW COST SPIN COATING SYSTEM WITH IOT APPLICATIONS	COPYRIGHT
2020	A METHOD OF FABRICATING A FIN FIELD-EFFECT TRANSISTOR	UTILITY INNOVATION

KATEGORI MAKLUMAT	PEJABAT DIRUJUK
PERSONAL INFORMATION	BAHAGIAN SUMBER MANUSIA, PEJABAT PENDAFTAR
ACADEMIC QUALIFICATON	
PROFESSIONAL MEMBERSHIP / LEARNED SOCIETY	BAHAGIAN PEMBANGUNAN BAKAT, PEJABAT PENDAFTAR
TEACHING EXPERIENCE	BAHAGIAN PENGURUSAN AKADEMIK, PEJABAT PENDAFTAR
<ul style="list-style-type: none"> • UNDERGRADUATES 	
<ul style="list-style-type: none"> • POSTGRADUATES 	
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)

