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FACULTY OF BIOENGINEERING AND TECHNOLOGY
UNIVERSITI MALAYSIA KELANTAN KAMPUS JELI
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A. PERSONAL DETAILS

UMK JOIN DATE	01-Aug-2017
DATE OF APPOINTMENT FOR CURRENT POSITION	02-Jan-2003
DATE OF CONFIRMATION FOR CURRENT POSITION	01-Jul-2020
EDUCATION(S)	<ul style="list-style-type: none">• (2008) UNIVERSITY OF BIRMINGHAM IJAZAH DOKTOR FALSAFAH KEJURUTERAAN KIMIA RAWATAN AIR• (2000) UNIVERSITI PUTRA MALAYSIA IJAZAH SARJANA ALAM SEKITAR• (1996) UNIVERSITI KEBANGSAAN MALAYSIA IJAZAH SARJANA MUDA SAINS KIMIA• (1989) SEKOLAH MENENGAH SULTAN IBRAHIM DUA SPM
GROUP OF EXPERTISE	<ul style="list-style-type: none">• Engineering Science and Technology
AWARD(S)	<ul style="list-style-type: none">• Award Name: Anugerah Perkhidmatan Cemerlang (APC) Tahun 2023 (2024) Awarded by: Universiti Malaysia Kelantan
WORKING EXPERIENCE(S)	<ul style="list-style-type: none">• TECHNICAL EXECUTIVE MACKIM CHEMICALS SDN BHD 01-Aug-1997-31-May-2002• PROFESOR MADYA UNIVERSITI MALAYSIA PAHANG 01-Jun-2002-31-Jul-2017• PROF MADYA UNIVERSITI MALAYSIA KELANTAN 01-Aug-2017-
PROFESIONAL MEMBERSHIP(S)	

B. TEACHING-LEARNING ACTIVITIES

COURSES TAUGHT	<ul style="list-style-type: none">• EFT2143 - RESEARCH METHODOLOGY AND SCIENTIFIC WRITING• ENT2113 - TECHNIQUES IN ENVIRONMENTAL ANALYSIS• EWT3203 - FOREST RESOURCES BIOENERGY• FFT1043 - PRINCIPLE OF CHEMISTRY• FIE4163 - BIOINDUSTRIAL WASTE MANAGEMENT• FIE4183 - INDUSTRIAL TECHNOLOGY MANAGEMENT• FIT3223 - RESEARCH PROJECT I• FIT4218 - INDUSTRIAL TRAINING• FIT4233 - RESEARCH PROJECT II• FPE3213 - INDUSTRIAL ECOLOGY• FPE3223 - ENVIRONMENTAL IMPACT ASSESSMENT• JFT10802 - OCCUPATIONAL SAFETY AND HEALTH• JFT20302 - STUDENT IN ENTERPRISE PROGRAMME• JLT21103 - ANALYTICAL CHEMISTRY
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C. RESEARCH AND DEVELOPMENT

<p>JOURNAL(S)</p>	<ol style="list-style-type: none"> 1. PREFACE CO 2024-05-03 2. GLOBAL TRENDS IN BALANCED SCORECARD ADOPTION WITHIN THE EDUCATIONAL SECTOR: A BIBLIOMETRIC ANALYSIS CO 2024-07 3. CHARACTERISTIC OF TIO2-SIO2 NANOFLUID WITH WATER/ETHYLENE GLYCOL MIXTURE FOR SOLAR APPLICATION CO 2021-05 4. THE DESIGNING AND DEVELOPMENT OF GENDANG KECAPI AS BAMBOO-BASED MUSICAL INSTRUMENTS ON ECO-TOURISM ACTIVITIES CO 2021-07 5. TIO2-SIO2NANOFLUIDS MIXTURE WITH W/EG FOR SOLAR WATER HEATING SYSTEM: THERMAL CONDUCTIVITY ANALYSIS BASED ON DIFFERENT RATIOS CO 2022 6. GRANITE EXPLORATION BY USING ELECTRICAL RESISTIVITY IMAGING (ERI): A CASE STUDY IN JOHOR CO 2020 7. THERMOPHILIC BIOHYDROGEN PRODUCTION FROM OPTIMIZED ENZYMATIC PRETREATMENT OF PALM OIL MILL EFFLUENT VIA BOX-BEHNKEN DESIGN CO 2023 8. THERMOPHILIC BIOHYDROGEN PRODUCTION FROM OPTIMIZED ENZYMATIC PRETREATMENT OF PALM OIL MILL EFFLUENT VIA BOX-BEHNKEN DESIGN CO 2023 9. EXPERIMENTAL STUDY ON THERMO-PHYSICAL PROPERTIES OF TIO2-SIO2 NANOFLUIDS (70:30) IN WATER/ETHYLENE GLYCOL MIXTURE CO 2023
<p>PROCEEDING(S)</p>	<ol style="list-style-type: none"> 1. INCORPORATING SOLID WASTE PARTICLES INTO CONCRETE DESIGN TO ENHANCE DRAINAGE INFRASTRUCTURE CO 2024 2. CELLULOSE NANOFIBER AND CARRAGEENAN FILMS INFUSED EUGENOL FOR FOOD PRESERVATION CO 2024-11-13 3. INVESTIGATION ON STABILITY OF TIO2-SIO2NANOFLUIDS WITH RATIO (70:30) IN W/EG MIXTURE (60:40) CO 2021-02 4. EXPERIMENTAL DETERMINATION OF WATER, WATER/ETHYLENE GLYCOL AND TIO2-SIO2NANOFLUIDS MIXTURE WITH WATER/ETHYLENE GLYCOL TO THREE SQUARE MULTILAYER ABSORBER COLLECTOR ON SOLAR WATER HEATING SYSTEM: A COMPARATIVE INVESTIGATION CO 2021-02-15 5. THE DESIGNING AND DEVELOPMENT OF GENDANG KECAPI AS BAMBOO-BASED MUSICAL INSTRUMENTS ON ECO-TOURISM ACTIVITIES CO 2021-07 6. THE NITRIC ACID PRETREATMENT ON PALM OIL MILL EFFLUENT (POME) TO ENHANCE REDUCING SUGAR PRODUCTION CORRESPNDG 2022 7. EFFECTS OF HEAT TRANSFER BASED WATER FOR THREE SQUARE MULTILAYER ABSORBER SOLAR COLLECTOR CO 2020-06 8. GRAPHENE OXIDE SILVER CELLULOSE ALGINATE FOR ANTIBACTERIAL CO 2020 9. TIO2 SIO2 NANOFLUID CHARACTERIZATION: TOWARDS EFFICIENT WITH WATER/ETHYLENE GLYCOL MIXTURE FOR SOLAR APPLICATION CO 2020-06 10. BOX BEHNKEN-DESIGN BASED OPTIMIZATION STRATEGY FOR ALKALINE PRETREATMENT OF PALM OIL MILL EFFLUENT FOR PRODUCING REDUCING SUGAR CO 2020-12-28 11. PHYSICO-CHEMICAL PHYSICAL CHARACTERISTICS AND ANTIOXIDANT ACTIVITIES OF THREE EDIBLE RED SEAWEEDS (KAPPAPHYCUS ALVAREZII, EUCHEUMA SPINOSUM AND EUCHEUMA STRIATUM) FROM SABAH, MALAYSIA CO 2020-12-22
<p>BOOK(S)</p>	
<p>CHAPTER(S)</p>	
<p>OTHER(S)</p>	
<p>RESEARCH(S)</p>	<ol style="list-style-type: none"> 1. CHARACTERIZATION OF MICROSTRUCTURES AT COARSE GRAINED HEAT AFFECTED ZONE (CGHAZ) OF LOW ALLOY CARBON STEEL MEMBER RACE 2019 2. DEVELOPMENT OF TILAPIA POND SMART WATER QUALITY MONITORING SYSTEM BASED ON INTERNET OF THINGS (LOT) MEMBER SGJP 2017 3. INSIGHT INTO PHYSICO-CHEMICAL AND MECHANICAL PROPERTIES OF MODIFYING PINEAPPLE PEEL HEMICELLULOSE-BASED NANOCOMPOSITE HYDROGEL ENHANCED BY GLUTARALDEHYDE CROSSLINKER. MEMBER FRGS 2022 4. KAJIAN LAPANGAN ORANG ASLI DI NENGGIRI, GUA MUSANG MEMBER GRANT(I/A) 2022 5. KINETIC MECHANISM AND DIFFUSION RELEASE STUDY OF δ-TOCOPHEROL/CAMELLIA SINENSIS ACTIVE COMPOUNDS INCORPORATED WITH ACTIVE CN-FILM IN FOOD MODEL SYSTEMS MEMBER FRGS 2021 6. KINETIC STUDIES OF ENZYMATIC HYDROLYSIS PRE-TREATMENT AND MICROBIAL FERMENTATION OF INDUSTRIAL FOOD WASTE-DERIVED LACTIC ACID MEMBER FRGS 2021 7. PROJEK INSENTIF PENDAPATAN RAYAT HEAD MOF 2023 8. TUNABLE LIGHT ABSORPTION SPECTRUM OF HYBRID PLANT-DERIVED THIN FILM AS PHOTO-ABORBER IN SOLAR ENERGY APPLICATION MEMBER SGJP 2017 9. BAMBOO HEAD GRANT(I/A) 2020 10. δANALYSIS OF THE ECONOMIC AND ENVIRONMENTAL FEASIBILITY OF CIRCULAR ECONOMY PRACTICES AMONG THE PALM OIL SMALLHOLDERS MEMBER KPT 2023

SUPERVISION	<ul style="list-style-type: none"> • MICROWAVE PYROLYSIS OF PALM OIL EMPTY FRUIT BUNCH (EFB) TO PRODUCE BIOCHAR AND BIO OIL MAIN SUPERVISOR FOR A PHD'S STUDENT • THERMAL MANAGEMENT ENHANCEMENT THROUGH ADOPTION OF ETHYLENE GLYCOL/WATER BASED Al₂O₃ NANOFUIDS AS A COOLANT SYSTEM IN A PROTON EXCHANGE MEMBRANE FUEL CELL MAIN SUPERVISOR FOR A PHD'S STUDENT
RESEARCH AWARD (S)	<ul style="list-style-type: none"> • Product Name: A NOVEL BIODEGRADBLE COMPOSITE FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: GOLD Role: Member Exhibition Name:MTE • Product Name: SEAFILM: ACTIVE FOOD PACKAGING FILM Award: GOLD Role: Member Exhibition Name:ITEX • Product Name: BLACK SOLDIER FLY: TURNING ORGANIC RESIDUE INTO VALUABLE BIOECONOMIY FEEDSTOCK Award: GOLD Role: Member Exhibition Name:5th SUSTAINABLE CHALLENGE 2023 (UKM) • Product Name: SEAFILM: ACTIVE FOOD PACKAGING FILM Award: SPECIAL Role: Member Exhibition Name:ITEX • Product Name: A NOVEL BIODEGRADBLE COMPOSITE FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: SPECIAL Role: Member Exhibition Name:MTE • Product Name: INNOVATION DESIGN OF SUBLIMATION MACHINE Award: SILVER Role: Member Exhibition Name:MTE • Product Name: GENDANG KECAPI Award: SILVER Role: Member Exhibition Name:MTE • Product Name: GENDANG KECAPI BULUH Award: BRONZE Role: Member Exhibition Name:PECIPTA • Product Name: GENDANG KECAPI Award: NONE Role: Member Exhibition Name:MTE • Product Name: INNOVATION DESIGN OF SUBLIMATION MACHINE Award: NONE Role: Member Exhibition Name:MTE • Product Name: SEAFILM: ACTIVE FOOD PACKAGING FILM Award: NONE Role: Member Exhibition Name:ITEX

D. CONSULTATION

CONSULTATION(S)	<ol style="list-style-type: none"> 1. KAJIAN TAHAP KETERLIBATAN KAKITANGAN DALAM ORGANISASI KADA MEMBER 2020 2. EXECUTION FOR EMMP, ENVIRONMENTAL MONITORING AND COMPLIANCE AUDIT FOR THE DESIGN & BUILD OF 3 DETENTION BASINS IN TUTONG DISTRICT, BRUNEI DARUSSALAM HEAD 2020
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E. COMMUNITY SERVICES

COMMUNITY SERVICES	
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