

	<p><b>TS. DR. MUHAMMAD IQBAL BIN AHMAD (01080A)</b>  PENSYARAH UNIVERSITI (TETAP)  FACULTY OF BIOENGINEERING AND TECHNOLOGY  UNIVERSITI MALAYSIA KELANTAN KAMPUS JELI  KAMPUS JELI, BEG BERKUNCI NO.100  JELI</p> <p>Email: iqbal.a@umk.edu.my  Tel: 09-9477000</p>
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## A. PERSONAL DETAILS

UMK JOIN DATE	01-Dec-2013
DATE OF APPOINTMENT FOR CURRENT POSITION	01-Dec-2013
DATE OF CONFIRMATION FOR CURRENT POSITION	25-Oct-2016
EDUCATION(S)	<ul style="list-style-type: none"> <li>• () INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM</li> <li>• (2021) UNIVERSITI SAINS MALAYSIA IJAZAH DOKTOR FALSAFAH COMPUTATIONAL FLUID DYNAMICS (CFD) COMPUTATIONAL FLUID DYNAMICS (CFD)</li> <li>• (2011) UNIVERSITI SAINS MALAYSIA IJAZAH SARJANA ENERGY KEJURUTERAAN MEKANIKAL</li> <li>• (2000) MRSM LANGKAWI SPM</li> </ul>
GROUP OF EXPERTISE	<ul style="list-style-type: none"> <li>• Engineering Science and Technology</li> <li>• Software Process Models</li> </ul>
AWARD(S)	<ul style="list-style-type: none"> <li>• Award Name: <b>Anugerah Gemilang Universiti tahun 2015 kategori Penyelidikan dan Inovasi (2016)</b> Awarded by: Universiti Malaysia Kelantan</li> </ul>
WORKING EXPERIENCE(S)	<ul style="list-style-type: none"> <li>• Lecturer   Universiti Teknologi Mara, Pulau Pinang 01-Jan-2008-01-Sep-2013</li> </ul>
PROFESIONAL MEMBERSHIP(S)	

## B. TEACHING-LEARNING ACTIVITIES

COURSES TAUGHT	<ul style="list-style-type: none"> <li>• EFT1053 - CALCULUS</li> <li>• EFT1063 - ALGEBRA</li> <li>• EFT1103 - BASIC PHYSICS</li> <li>• EFT1252 - COMPUTER APPLICATION IN DESIGN</li> <li>• EKE2053 - ENERGY AND NATURAL RESOURCES</li> <li>• EME2183 - COMPOSITE MATERIALS IN MANUFACTURING</li> <li>• EME2273 - MATERIAL AGRO TECHNOLOGY</li> <li>• EME4303 - JOINT AND WELDING TECHNOLOGY</li> <li>• EMT2122 - MATERIAL TESTING AND ASSESMENT</li> <li>• EMT3142 - COATING TECHNOLOGY</li> <li>• EMT3162 - MATERIALS TECHNOLOGY IN BUSINESS ENVIRONMENT</li> <li>• EMT3243 - RESEARCH PROJECT I</li> <li>• EMT4198 - INDUSTRIAL TRAINING</li> <li>• EMT4253 - RESEARCH PROJECT II</li> <li>• EWT3163 - RESEARCH PROJECT I</li> <li>• FFT2074 - BIOMETRY AND EXPERIMENTAL DESIGN</li> </ul>
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### C. RESEARCH AND DEVELOPMENT

<p><b>JOURNAL(S)</b></p>	<ol style="list-style-type: none"> <li>1. STUDY ON INTERMETALLIC COMPOUND (IMC) IN DISSIMILAR JOINING OF STEEL AND ALUMINUM (FE-AL) ¿ A REVIEW PAPER   CO   2024-09</li> <li>2. STUDY ON INTERMETALLIC COMPOUND (IMC) IN DISSIMILAR JOINING OF STEEL AND ALUMINUM (FE-AL) ¿ A REVIEW PAPER   CO   2024-09</li> <li>3. INVESTIGATIONS OF INFRARED DESKTOP REFLOW OVEN WITH FPCB SUBSTRATE DURING REFLOW SOLDERING PROCESS   MAIN   2021-08</li> <li>4. THE EFFECT OF RATIO BETWEEN TILAPIA FISH (OREOCHROMIS NILOTICUS) AND OTOSHIMI ON PROPERTIES OF SAGO FISH CRACKERS   CO   2021-12</li> <li>5. EFFECT OF TORREFACTION PROCESS ON CRYSTALLINITY INDEX PROPERTIES OF EMPTY FRUIT BUNCH¿S BIOCHAR   CO   2022</li> <li>6. TRACE METALS CONTAMINATION POTENTIAL AND HEALTH RISK ASSESSMENT OF COMMONLY CONSUMED FISH OF PERAK RIVER, MALAYSIA   CO   2020</li> <li>7. TRACE METALS CONTAMINATION POTENTIAL AND HEALTH RISK ASSESSMENT OF COMMONLY CONSUMED FISH OF PERAK RIVER, MALAYSIA   CO   2020</li> <li>8. CHARACTERIZATION ON MORPHOLOGICAL AND BONDING BEHAVIOR OF TORREFIED BIOCHAR FROM OIL PALM EMPTY FRUIT BUNCH   CO   2020</li> <li>9. INFLUENCE OF TORREFACTION PARAMETERS ON ELEMENTAL PROPERTIES OF TORREFIED OIL PALM EMPTY FRUIT BUNCH BIOCHAR   CO   2023</li> <li>10. TORREFACTION ON AGRICULTURAL RESIDUES EMPTY FRUIT BUNCH: EFFECT OF TORREFACTION PROCESSING FACTORS ON THERMAL PROPERTIES OF TORREFIED EMPTY FRUIT BUNCH BIOCHAR   CO   2023</li> <li>11. APPLICABILITY OF ORGANIC POLYMER FOR PHARMACEUTICAL REMOVAL   CO   2023</li> <li>12. PRODUCER GAS COMPOSITION PREDICTION USING ARTIFICIAL NEURAL NETWORK ALGORITHM   CO   2023-03</li> <li>13. EPOXY-GRAPHENE COMPOSITE REINFORCED WITH BAMBOO BIOCHAR POWDER: EFFECT ON MECHANICAL PROPERTIES   CO   2023</li> </ol>
<p><b>PROCEEDING(S)</b></p>	<ol style="list-style-type: none"> <li>1. TORREFACTION OF EMPTY FRUIT BUNCH (EFB) FIBRES ADOPTED IN MODIFIED MICROWAVE   CORRESPNDG   2021-09</li> <li>2. COMPARISON OF CHEMICAL COMPOSITIONS BETWEEN TWO FAST GROWING SPECIES: ACACIA MANGIUM AND LEUCAENA LEUCOCHEPHALA   CO   2021-09</li> <li>3. EVALUATION ON MECHANICAL PROPERTIES OF PLYWOOD FROM TWO FAST GROWING SPECIES: NEOLAMARCKIA CADAMBA AND PARASERIANTHES FALCATARIA   CO   2021-09</li> <li>4. POTENTIAL OF OIL PALM TRUNK STARCH AS FLOCCULANT FOR CONTAMINANT OF EMERGING COMPOUND REMOVAL   CO   2021-09</li> <li>5. TORREFACTION OF EMPTY FRUIT BUNCHES (EFB) MATERIALS IN MODIFIED MICROWAVE SCALE REACTOR   CORRESPNDG   2022</li> <li>6. EFFECTS OF BG11, SKM AND MKM CULTURE MEDIA ON OPTICAL DENSITY OF SPIRULINA PLATENTIS CULTIVATION   CO   2022</li> <li>7. NATURAL-BASED POLYMERS FOR WASTEWATER TREATMENT   CO   2022</li> <li>8. REMOVAL OF NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS) FROM WATER USING EMPTY FRUIT BUNCH (EFB) BASED BIO SORBENT   CO   2022</li> <li>9. TORREFACTION'S OPTIMIZATION OF MULTIPLE RESPONSES ANALYSIS ON TORREFIED BIOCHAR FROM OIL PALM EMPTY FRUIT BUNCH   CO   2020-09</li> <li>10. EFFECTS OF TORREFACTION PROCESS ON CHEMICAL PROPERTIES OF SMALL DIAMETER ACACIA MANGIUM WOOD   CO   2023</li> <li>11. THE PROSPECT OF BIOCHAR BY OIL PALM EMPTY FRUIT BUNCH (OPEFB) IN THE REMOVAL OF CONTAMINANTS EMERGING CONCERN (CECS)   CO   2023</li> <li>12. ELUCIDATING ON TIME AND TEMPERATURE EFFECTS ON TORRIFIED MOLDY BREAD   MAIN   2023</li> <li>13. EFFECT OF TEMPERATURE ON FLEXIBLE PRINTED CIRCUIT BOARD LAYOUT DURING REFLOW SOLDERING PROCESS   CO   2023</li> </ol>
<p><b>BOOK(S)</b></p>	
<p><b>CHAPTER(S)</b></p>	<ol style="list-style-type: none"> <li>1. RELIABILITY ANALYSIS ON THE FLEXIBLE PRINTED CIRCUIT BOARD AFTER REFLOW SOLDERING   MAIN   2022</li> </ol>
<p><b>OTHER(S)</b></p>	
	<ol style="list-style-type: none"> <li>1. APPLICATION OF TIG-MIG HYBRID WELDING PROCESS FOR WIRE ARC ADDITIVE MANUFACTURING (WAAM)   MEMBER   UMK-MATCH   2022</li> <li>2. CHARACTERIZATION OF MOLDY BREAD AND TUBER PEELS WASTES FOR SOLID BIOFUEL PRODUCTION   HEAD   UMK-FUND   2021</li> <li>3. CHARACTERIZATION OF MOLDY BREAD AND TUBER PEELS WASTES FOR SOLID BIOFUEL PRODUCTION   HEAD   UMK-FUND   2022</li> <li>4. CHILI SAUCE PROCESSING MACHINE   MEMBER   PPRN   2016</li> <li>5. ENHANCING ENERGY PROPERTIES OF OIL PALM EMPTY FRUIT BUNCHES AS BIOFUEL FOR ENERGY RESOURCES BY USING MICROWAVE HEATING   HEAD   RAGS   2014</li> </ol>

RESEARCH(S)	<ol style="list-style-type: none"> <li>6. ELUCIDATING OF ZR02 NANO-REINFORCEMENT AGGLOMERATION AND ITS RELATIONSHIP TO THE FORMATION OF MICRO-VOIDS IN LED ENCAPSULATION.   MEMBER   FRGS   2022</li> <li>7. FILLING AND CAPPING MACHINE OF MULTIPURPOSE SEASONING (PERENCAH SERBAGUNA)   MEMBER   PPRN   2017</li> <li>8. GERAN PEMBANGUN MODUL SOFT-SKILL TEKNOLOGI   MEMBER   GRANT(I/A)   2023</li> <li>9. INTERFACIAL BONDING MECHANISM AND ELECTROSTATIC INTERACTION OF CELLULOSE NANOCRYSTALS/ E-POLYLYSINE AS HYBRID NANOFILLERS FOR POLY (VINYL ALCOHOL) NANOCOMPOSITES   MEMBER   FRGS   2023</li> <li>10. OPTIMISATION AND CHARACTERISATION OF MULTIPLE RESPONSES ANALYSIS ON TORREFIED BIOCHAR FROM OIL PALM RESIDUE AS SOLID FUEL   MEMBER   UMK-FUND   2022</li> <li>11. OPTIMISATION AND CHARACTERISATION OF MULTIPLE RESPONSES ANALYSIS ON TORREFIED BIOCHAR FROM OIL PALM RESIDUE AS SOLID FUEL   MEMBER   UMK-FUND   2022</li> <li>12. PEMBANGUNAN EKOSISTEM PEMROSESAN TOTAL MIXED RATION UNTUK PENTERNAKAN RUMINAN (E-RUMINAN)   HEAD   GRANT(I/A)   2023</li> </ol>
SUPERVISION	<ul style="list-style-type: none"> <li>• <b>ENHANCING MONKEY TRAP: ADVANCE DESIGN FOR OPTIMAL USE BY PERHILITAN</b>   CO SUPERVISOR FOR A MASTER'S STUDENT</li> <li>• <b>STUDY OF INTERMETALLIC COMPOUND (IMC) FORMATION IN AL STEEL DISSIMILAR JOINING</b>   CO SUPERVISOR FOR A PHD'S STUDENT</li> </ul>
RESEARCH AWARD (S)	<ul style="list-style-type: none"> <li>• Product Name: Waste to wealth; A novel biodegradable composite from agricultural waste for drug delivery Award: GOLD Role: Member Exhibition Name:MTE 2021</li> <li>• Product Name: B-CAPS 462; A NOVEL PLANT-BASED CAPSULES FROM AGRICULTURE WASTE FOR ORAL DRUG DELIVERY Award: GOLD Role: Member Exhibition Name:PECIPTA 2022</li> <li>• Product Name: FAST POWDER FILLING MACHINE USING TWIN HOPPER Award: GOLD Role: Member Exhibition Name:023 Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition (IPITex) in Thailand Inventors' Day 2023</li> <li>• Product Name: ECO-NAA FILMS Award: GOLD Role: Member Exhibition Name:PECIPTA 2022</li> <li>• Product Name: Food Waste in Kelantan as Films Fertilizer (Bio-Agriff) Award: GOLD Role: Member Exhibition Name:MTE 2022</li> <li>• Product Name: B-Cutler 462; A Novel Biocomposites from Agriculture Waste for Biodegradable Cutlery Award: GOLD Role: Member Exhibition Name:Pertandingan Rekapipta Inovasi Internasional &amp; Nasional 2022 (PRIIN 2022)</li> <li>• Product Name: Waste to wealth; A novel biodegradable composite from agricultural waste for drug delivery Award: SPECIAL Role: Member Exhibition Name:MTE 2021</li> <li>• Product Name: SMART POWDER DUO-FILL: AI-POWERED Award: SILVER Role: Member Exhibition Name:(RISE2023 -INTERNATIONAL RESEARCH AND INNOVATION SYMPOSIUM AND EXPOSITION 2023)</li> <li>• Product Name: WASTE TO WEALTH; A NOVEL BIODEGRADABLE COMPOSITES FROM AGRICULTURE WASTE FOR DRUG DELIVERY Award: SILVER Role: Member Exhibition Name:Virtual Research &amp; Innovation Exhibition 2022</li> </ul>

## D. CONSULTATION

CONSULTATION(S)	
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## E. COMMUNITY SERVICES

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