



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

STAFF PROFILE

NAME DR. MUHAMMAD ZULKARNAIN

FACULTY / CENTRE FAKULTI TEKNOLOGI KEJURUTERAAN MEKANIKAL DAN PEMBUATAN

DESIGNATION PENSYARAH UNIVERSITI

CURRENT POSITION PENSYARAH KANAN - FAKULTI TEKNOLOGI KEJURUTERAAN MEKANIKAL DAN PEMBUATAN

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ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2015	KEDOKTORAN FALSAFAH (PH.D)	UNIVERSITI SAINS MALAYSIA
2007	SARJANA (MASTERS)	UNIVERSITI SAINS MALAYSIA
2002	SARJANA MUDA (BACHELOR)	UNIVERSITI SYIAH KUALA

FIELD OF INTEREST

NANO MATERIAL, COMPOSITE, COMPOSITE SIMULATION, ELECTRONIC PACKAGING MATERIAL, CONDUCTIVE COMPOSITE

COMPOSITE, NANO COMPOSITE, ELECTRONIC PACKAGING MATERIAL

TEACHING EXPERIENCE *(last 5 years)*

UNDERGRADUATES

SESSION	COURSE
2021/2022	BMMH2313 - FLUID MECHANICS
2021/2022	BMMH2503 - FUNDAMENTAL OF HVAC & REFRIGERATION
2021/2022	BMMH3523 - CLASSIFICATION OF AIR CONDITIONING SYSTEM
2020/2021	BMMA1333 - STATICS
2020/2021	BMMH2503 - FUNDAMENTAL OF HVAC & REFRIGERATION
2020/2021	BMMH3513 - BASIC COMPONENTS OF AIR-CONDITIONING & REFRIGERATION
2020/2021	BMMM1062 - PHYSICS
2020/2021	BMMP1303 - MANUFACTURING PRACTICES
2019/2020	BMMH2313 - FLUID MECHANICS
2019/2020	BMMH2503 - FUNDAMENTAL OF HVAC & REFRIGERATION

LIST OF GRANTS *(last 5 years)*

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2020	SHELTER BASED DESIGN METHOD OF A LIGHTWEIGHT AND PORTABLE BY USING NATURE FIBER REINFORCED HONEYCOMB PANEL	SHORT TERM (UTEM)	20000	MAIN RESEARCHER

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

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2021	EFFECT OF STEEL FIBER REINFORCED IN FRP CONFINED CONCRETE BY USING NUMERICAL ANALYSIS	KEY ENGINEERING MATERIALS	MUHAMMAD ZULKARNAIN, ZAIMI ZAINAL MUKHTAR AND IKHWAN YUSOF.
2020	APPROACHING 3D FIBRE ORIENTATION AND DISTRIBUTION ALGORITHM FOR REINFORCEMENT CONCRETE	JOURNAL OF ADVANCED RESEARCH IN DYNAMICAL AND CONTROL SYSTEM (JARDCS)	MUHAMMD ZULKARNAIN, SILVI ARIYANTI, M.SOBRON LUBIS
2020	APPROACHING 3D FIBRE ORIENTATION AND DISTRIBUTION ALGORITHM FOR REINFORCEMENT CONCRETE	JOURNAL OF ADVANCED RESEARCH IN DYNAMICAL AND CONTROL SYSTEM (JARDCS)	MUHAMMD ZULKARNAIN, SILVI ARIYANTI, M.SOBRON LUBIS
2020	NATURAL FIBERS CONCRETE MODEL USING POINTS LAUNCHING ALGORITHM IN THERMAL CONDUCTIVITY PREDICTION	INTERNATIONAL JOURNAL OF MULTIPHYSICS	ARIYANTI, S., ZULKARNAIN, M. (CORRESPONDING AUTHOR), LUBIS, M.

PROFESSIONAL MEMBERSHIPS / LEARNED SOCIETY

YEAR	ROLE	INSTITUTION	LEVEL
2019	MEMBERSHIP (LEMBAGA TEKNOLOGIS MALAYSIA)	LAIN-LAIN	KEBANGSAAN
2018	MEMBERSHIP (INTERNATIONAL ASSOCIATION OF ENGINEERS)	LAIN-LAIN	ANTARABANGSA

STAFF PROFILE

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"> • UNDERGRADUATES 	
<ul style="list-style-type: none"> • POSTGRADUATES 	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)