



# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## STAFF PROFILE

**NAME** PROFESOR MADYA TS. DR. SHAJAHAN BIN MAIDIN

**FACULTY / CENTRE** FAKULTI KEJURUTERAAN PEMBUATAN

**DESIGNATION** PENSYARAH UNIVERSITI

**CURRENT POSITION** KETUA, KLUSTER PENGKOMPUTERAN PINTAR DAN KECERDASAN PERNIAGAAN - PUSAT PEMBUATAN TERMAJU

**EMAIL** shajahan@utem.edu.my



### ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2011	KEDOKTORAN FALSAFAH (PH.D)	LOUGHBOROUGH UNIVERSITY
2002	SARJANA (MASTERS)	WARWICK UNIVERSITY
1999	SARJANA MUDA (BACHELOR)	UNIVERSITY PORTSMOUTH

### FIELD OF INTEREST

ADDITIVE MANUFACTURING

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

#### UNDERGRADUATES

SESSION	COURSE
2021/2022	BMFR3513 - PRODUCT DESIGN AND MANUFACTURING
2021/2022	BMFR4613 - ADDITIVE MANUFACTURING
2020/2021	BMFP4322 - MANUFACTURING SUSTAINABILITY
2020/2021	BMFR3413 - PRODUCTION TOOLS DESIGN
2020/2021	BMFR3513 - PRODUCT DESIGN AND MANUFACTURING
2020/2021	BMFR4223 - PRODUCTION TOOL AND DESIGN
2020/2021	BMFR4613 - ADDITIVE MANUFACTURING
2020/2021	DMFM2122 - CAD/CAM
2019/2020	BMFP4322 - MANUFACTURING SUSTAINABILITY
2019/2020	BMFR4613 - ADDITIVE MANUFACTURING
2018/2019	BMFB1221 - ENGINEERING LAB 1
2018/2019	BMFR3513 - PRODUCT DESIGN AND MANUFACTURING
2018/2019	BMFR4613 - ADDITIVE MANUFACTURING
2018/2019	BMFS1122 - MANUFACTURING WORKSHOP
2017/2018	BMCG1523 - ENGINEERING GRAPHICS AND COMPUTER AIDED DESIGN
2017/2018	BMFP4322 - MANUFACTURING SUSTAINABILITY
2017/2018	BMFR3161 - MANUFACTURING DESIGN LAB I
2017/2018	BMFR3513 - PRODUCT DESIGN AND MANUFACTURING
2016/2017	BMFR4173 - DESIGN FOR ENVIRONMENT



**POSTGRADUATES**

SESSION	COURSE
2020/2021	MMFU5013 - SUSTAINABLE PRODUCT DESIGN AND MANUFACTURING
2019/2020	MMFU5013 - SUSTAINABLE PRODUCT DESIGN AND MANUFACTURING

**LIST OF GRANTS (last 5 years)**

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2021	INTEGRATED COVID-19 RISK STRATIFICATION FOR ENTRY POINT SECURITY PURPOSE	TOPDOWN (UTEM)	48200	MAIN RESEARCHER
2021	ANALYSIS OF VACUUM PRESSURE AND CORRELATION TO SURFACE FINISH AND MECHANICAL PROPERTIES IN METAL ADDITIVE MANUFACTURING	GERAN FRGS (NATIONAL)	167800	MAIN RESEARCHER
2020	CONCEPTUAL DESIGN OF 3D PRINTED WOOD DUST REINFORCED RECYCLED POLYPROPYLENE COMPOSITES (R-WOPPC) DRONE FRAME USING INTEGRATED APPROACH	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2020	RHEOLOGICAL, THERMAL AND MECHANICAL PROPERTIES OF SELECTED NATURAL FIBRE REINFORCED THERMOPLASTIC COMPOSITES WITH DIFFERENT FIBRE LOADING AND MODIFICATION METHODS FOR FILAMENT OF FUSED FILAMENT FABRICATION.	GERAN FRGS (NATIONAL)	110700	CO-RESEARCHER
2020	MECHANISM OF MELT POOL FORMATION AND CORRELATION TO 3D PRINTED STRUCTURE IN MICROPLASMA ASSISTED METAL ADDITIVE MANUFACTURING	GERAN FRGS (NATIONAL)	120200	CO-RESEARCHER
2017	DEVELOPMENT OF A NEW ADVANCED MANUFACTURING TECHNIQUE FOR 3D METAL PRINTING USING A MICRO-PLASMA SYSTEM AND CHARACTERIZATION OF THE PRINTED MATERIAL	GERAN SCIENCEFUND (NATIONAL)	256000	CO-RESEARCHER

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

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2021	ULTRASONIC ASSISTED FUSED DEPOSITION MODELING TO IMPROVE MECHANICAL PROPERTIES OF RECYCLED ACRYLONITRILE BUTADIENE STYRENE	INTERNATIONAL JOURNAL OF MECHANICAL & MECHATRONICS ENGINEERING IJMME-IJENS	
2019	VACUUM SYSTEM ASSISTED FDM CHARACTERISTIC OF HEAT TRANSFER USING FINITE ELEMENT ANALYSIS	INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY AND ENGINEERING	MAIDIN S., WONG J.H.U., MOHAMED A.S., ROMLEE W.F.A., AKMAL S.
2018	A METHODOLOGY TO DEVELOP TAXONOMY OF ADDITIVE MANUFACTURING USING FORMAL ATTRIBUTES SPECIFICATION TEMPLATE	JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	AKMAL S., HAMBALI R.H., HASHIM S.M., MAIDIN S.
2018	DESIGN AND DEVELOPMENT OF A LOW-COST 3D METAL PRINTER	JOURNAL OF MECHANICAL ENGINEERING RESEARCH AND DEVELOPMENTS	N.A. ROSLI, M.R. ALKAHARI, F.R. RAMLI, S. MAIDIN, M.N. SUDIN, S. SUBRAMONIAN AND T. FURUMOTO
2018	TOOLS TO INCORPORATE BIOMIMETIC INTO PRODUCT DESIGN- A REVIEW	JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	MAIDIN S., ROMLEE W.F.A., MOHAMED A.S., UNG J.W.H., AKMAL S.
2017	EFFECT OF VACUUM ASSISTED FUSED DEPOSITION MODELING ON 3D PRINTED ABS MICROSTRUCTURE	INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH	
2017	INFLUENCE OF INTEGRATED PRESSING DURING FUSED FILAMENT FABRICATION ON TENSILE STRENGTH AND POROSITY	JOURNAL OF MECHANICAL ENGINEERING	S. N. A. MAJID, M.R. ALKAHARI, F. R. RAMLI, S. MAIDIN, C.F. TAN, M.N. SUDIN
2017	INVESTIGATION OF OPTIMUM GATING SYSTEM DESIGN OF FUSED DEPOSITION MODELLING PATTERN FOR SAND CASTING	JOURNAL OF MECHANICAL ENGINEERING AND SCIENCES	MAIDIN S., YI T.M., HAMBALI A., AKMAL S., HAMBALI R.H., ABDULLAH Z.
2017	THE INFLUENCE OF ACETON TO IMPROVE SURFACE FINISH OF 3D PRINTED PART FOR ABS AND PLA MATERIAL.	INTERNATIONAL JOURNAL OF ENGINEERING AND MANAGEMENT,	
2017	VACUUM FUSED DEPOSITION MODELLING SYSTEM TO IMPROVE TENSILE STRENGTH OF 3D PRINTED PARTS	JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES	

**CONFERENCE**

YEAR	TITLE	NAME OF CONFERENCE	AUTHORS
2020	DESIGN AND DEVELOPMENT OF A FLEXIBLE WEARABLE SIT-STAND PASSIVE EXOSKELETON USING QUALITY FUNCTION DEPLOYMENT	MECHANICAL ENGINEERING RESEARCH DAY 2020	ZULKEFLEE ABDULLAH ISA HALIM SHAJAHAN MAIDIN MARIAM MD GHAZALY MOHD AMRAN MOHD ALI

**PROFESSIONAL MEMBERSHIPS / LEARNED SOCIETY**

YEAR	ROLE	INSTITUTION	LEVEL
2020	TEKNOLOGIS PROFESIONAL	LAIN-LAIN	KEBANGSAAN

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

NO	NAME	LEVEL OF STUDY	ROLE	STATUS
1	SAANDILIAN A/L DEVADAS	DOCTORATE	MAIN SUPERVISOR	GRADUATED (2018)
2	TING KUNG HIENG	MASTERS	MAIN SUPERVISOR	GRADUATED (2021)
3	BIN HARHARA SOHAIB MOHAMMED NASSER	MASTERS	MAIN SUPERVISOR	GRADUATED (2021)
4	AHMAD SYAFIQ BIN MOHAMED @ ALIAS	MASTERS	MAIN SUPERVISOR	GRADUATED (2020)
5	CHONG SEE YING	MASTERS	MAIN SUPERVISOR	GRADUATED (2018)
6	MUHAMMAD KAZIMI BIN MUHAMAD	MASTERS	MAIN SUPERVISOR	GRADUATED (2017)
7	JOHN WONG HUANG UNG	MASTERS	MAIN SUPERVISOR	GRADUATED (2017)
8	SITI LYDIA BINTI RAHIM	MASTERS	MAIN SUPERVISOR	GRADUATED (2014)
9	ABERNICE ANN ANAK ABERT ACHILLES NUNONG	MASTERS	CO-SUPERVISOR	ACTIVE

**INTELLECTUAL PROPERTIES**

YEAR	INVENTION NAME	TYPE
2017	VACUUM ASSISTED FUSED DEPOSITION	COPYRIGHT
2017	ULTRASONIC ASSISTED FUSED DEPOSITION MODELING SYSTEM	COPYRIGHT
2017	ULTRASONIC AND VACUUM ASSISTED FUSED DEPOSITION MODELING SYSTEM	COPYRIGHT

## 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"> <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)