

# **CURRICULUM VITAE**



#### **PERSONAL DETAILS**

Name : ASSOCIATE PROF. Ts. DR.

KHAIRUR RIJAL BIN JAMALUDIN

Gender : MALE

Date of Birth : 04<sup>th</sup> OCTOBER 1973

Nationality : MALAYSIA

Marital Status : MARRIED

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ONN

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Expertise : QUALITY IN PROCESSING

H Index : 12

# **ACADEMIC QUALIFICATIONS**

NO	LEVEL OF EDUCATION	COURSE	UNIVERSITY	STARTING DATE	ENDING DATE
1	PHD	Mechanical	UNIVERSITI	2006	2009
		& Materials	KEBANGSAAN		
		Engineering	MALAYSIA		
2	MASTER	Advanced	UNIVERSITY	1997	1998
		Mechanical	OF WARWICK		
		Engineering			
3	BACHELOR	Mechanical	UNIVERSITI	1991	1996
		Engineering	TEKNOLOGI		
			MALAYSIA		

#### **AWARD AND HONORS RECEIVED**

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
1	Taguchi Award for Activity in the ASEAN Region.	International	2021
2	Best Track Paper: Integrated Quality Environmental Management Practices and its Impact on Operational and Environmental Performances in Food Processing SMEs at IEOM Conference Award (March 6, 2019). Bangkok, Thailand	International	2019
3	International Engineering Invention & Innovation Exhibition Award: Silver <b>Medal</b>	International	2014
4	Excellent Taguchi Method Case Study Award: Dynamic Response Optimization for Cemented Carbide Injection Molding at 1st International Conference on Robust Quality Engineering, Kuala Lumpur (25 April 2013). Panel of Assessor: Shin Taguchi from American Supplier Institute and Prof Dr Masayoshi Koike from National	International	2013

	Metrology Institute, Japan/ Quality Engineering Society, Japan		
5	Excellent Paper: Ball Milling of WC-Co Powder as Injection Molding Feedstock at 2011 International Conference on Mechanical and Aerospace Engineering, Bangkok, Thailand.	International	2011
6	Best Paper Award for paper entitled: Multiple Performence Optimization for the Best Metal Injection Molding (MIM) Green Compacts at International Conference on Plant Equipment and Reliability, a Conference of World Engineering, Science & Technology Congress 2010.	International	2010
7	Excellent Service Award	UTM	2009
8	Excellent Service Award	UTM	2003

# PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION

NO	NAME OF PROFESIONAL MEMBERSHIP	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	ROLE	YEAR
1	Malaysia Board of Technologist	National	Member of Technology & Technical Working Group: Manufacturing Technology and Industry	July 2022- June 2023
2	Program External Examiner: Master of Quality	National	Program External Examiner	Nov 2021- Nov 2024
3	Malaysia Productvity Corparation	National	INDUSTRY4WRD Readiness Assessor	2021-2022
4	Asia Pacific of Industrial Engineering and Management Society (APIEMS)	International	Board Member	2018-Now

5	Board of Technologies	National	Professional Technologist	2018-Now
6	Board of Technologies	National	Graduate	2017-Now
7	Board of Engineers, Malaysia	National	Graduate	1996-Now
8	Institution of Engineers Malaysia	National	Graduate Member	1996-Now
9	Quality Engineering Society, Japan	International	Member	2013-Now
10	Malaysia Powder Metallurgy & Particulate Materials Association	National	Co-founder/ Committee Member	2008-Now
11	International Conference on Robust Quality Engineering	International	Board Member	2012-Now
12	1) Journal of Applied Science 2) Trend in Applied Sciences Research 3) Asian Journal of Materials Science 4) Singapore Journal of Scientific Research	International	Regional Editor	2010-2018
13	Reviewer for Research Grant Proposal for The National Center of Science and Technology Evaluation, Kazakhstan	International	International Reviewer	2014
14	Advisor of the International Conference on Engineering Business Management, 22- 23/8/2015	International	Advisor	2015
15	Chairman of 1st International Conference on Robust Quality Engineering, 22-26/4/ 2013	International	Chairman	2015
16	Malaysia Qualification Agency Auditor	National	Auditor	Feb 2010- 2023

# ADMINISTRATIVE EXPERIENCE

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT
1	Acting Dean	1 June 2019	14 August 2019	Razak Faculty of Technology and Informatics
2	Deputy Dean (Academic & Students Affair)	1 July 2018	30 June 2021	Razak Faculty of Technology and Informatics

3	Deputy Dean (Academic & Students Affair)	15 April 2015	30 June 2018	Razak School of Engineering and Advanced Technology
4	Acting Deputy Dean (Development)	1 March 2014	30 Oct 2014	Razak School of Engineering and Advanced Technology
5	Academic Manager (Graduate Studies)	Nov 2012	14 April 2015	Razak School of Engineering and Advanced Technology
6	Program Coordinator	March 2010	Nov 2012	Razak School of Engineering and Advanced Technology
7	Head of Department	March 1999	Aug 2002	Mechanical Engineering Dept. Diploma Program Studies

#### **WORKING EXPERIENCE**

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ORGANISATION
1	Engineering Executive 1 (Engineer)	2May 1996	1 Feb 1997	Proton Sdn Bhd
2	Tutor	2 Feb 1997	1 Dec 1998	Universiti Teknologi Malaysia
3	Lecturer (DS45)	2 Dec 1998	13 Jan 2010	Universiti Teknologi Malaysia
4	Senior Lecturer (DS52)	14 Jan 2010	26 Feb 2013	Universiti Teknologi Malaysia
5	Associate Professor (DS54)	27 Feb 2013	Now	Universiti Teknologi Malaysia

#### **CONSULTANCY EXPERIENCE**

NO	NAME OF	ROLE	AMOUNT	STARTING	<b>ENDING</b>	VOTE NO
	CONSULTANCY		(RM)	DATE	DATE	
1	Study on Exploring	Consultant	RM 99,935	19/12/2011	1/6/2012	(through
	Re-manufacturing					UTMSB)
	activities in					
	Malaysia for					
	Ministry of					
	International					
	Trade and Industry					
	(MITI)					
2	Study and audit on	Consultant	RM	10/5/2016	1/7/2017	KM/2016/00053
	G3M Economic		1,900,000			
	and Environmental					
	Impact					
	Assessment for					
	Remanufacturers					
	in Malaysia.					
	Project awarded					
	by Ministry of					

	International					
	Trade and Industry (MITI)					
3	Consultation	Project	RM	21/9/2017	20/12/2017	PU2017/16198
	projects for the	Leader	300,000			
	Prime Minister					
	Department (ICU-					
	Pulau Pinang) for					
	coaching					
	Bumiputera's mico					
	sized industry to					
	be certified by					
	Halal JAKIM					
4	Consultation	Project	RM	21/2/2018		PU/2018/20142
	projects for the	Leader	150,000			
	Prime Minister					
	Department (ICU-					
	Pulau Pinang) as					
	continuation					
	project for					
	coaching					
	Bumiputera's					
	micro sized					
	industry to be					
	certified by Halal					
	JAKIM					
5	Consultation	Project	RM220,374	21/2/2018		PU/2018/19841
	projects for the	Leader				
	Prime Minister					
	Department (ICU-					
	Pulau Pinang) for					
	the development					
	of Plant Factory					
	Artificial Light					

# **FACULTY APPOINTMENT COMMITTEE**

NO	NAME OF	ROLE	STARTING	<b>ENDING</b>
	COMMITTEE		DATE	DATE
1	Financial	Member	6/4/2016	5/4/2018
	Committee			
2	Quotation and	Member	31/10/2015	31/3/2020
	Purchase Order			
	Reviewer			
	Committee			

3	Publications	Member	1/1/2005	31/12/2006
	Committee			
4	Academic	Member	1/3/2010	30/6/2021
	Committee			
5	Executive	Member	1/3/2010	30/6/2021
	Committee			
6	Human	Member	1/3/2010	30/6/2021
	Resource			
	Development			
	Committee			

#### **UNIVERSITY APPOINTMENT COMMITTEE**

NO	NAME OF	ROLE	STARTING	<b>ENDING</b>
	COMMITTEE		DATE	DATE
1	Student	Member	March 2021	March
	Development			2023
	Committee			
2	Task Force	Member	9 June 2019	31 Dec
	Member:			2020
	Talents			
	Transformation,			
	Governance and			
	High			
	Performance			
	Delivery			
3	UTMKL	Member	1 June 2019	14 Aug.
	Management			2019
	Group Member			
4	UTMKL	Member	1 June 2019	14 Aug.
	Management			2019
	Committee			
	Member			
5	Protem member	Member	7 Mac 2018	1 July
	of setting up			2018
	new faculty:			
	UTM Razak			
	Faculty of			
	Technology and			
	Informatics			
6	University	Member	1/1/2014	30 June
	Graduate			2021
	Academic			
	Committee			

# NATIONAL APPOINTMENT COMMITTEE

INAI	IONAL APPOIN	INITIAL CON		
NO	NAME OF	ROLE	STARTING	<b>ENDING</b>
	COMMITTEE		DATE	DATE
1	Program External	National	Program	Nov 2021-
	Examiner: Master		External	Nov 2024
	of Quality		Examiner	
2	INDUSTRY4WRD	Industry	19 April	Now
	Readiness	Readiness	2021	
	assessment.	Assessor and		
	Appointment by	Intervention		
	Malaysia	Program		
	Productivity	monitor		
	Corporation	A 11.	2012	2010
3	Program full	Auditor	2013	2019
	accreditation:			
	Master of			
	Engineering			
	(Manufacturing			
	System) at			
	Universiti			
	Kebangsaan			
	Malaysia			
4	Program	Auditor	June 2021	July 2021
7		Auditor	June 2021	July 2021
	maintenance			
	audit: Master of			
	Science (Renewal			
	Energy) * A full			
	research master			
	program at			
	Universiti			
	Kebangsaan			
	Malaysia			
	ivialaysia			
5	Program	Auditor	June 2021	July 2021
	maintenance	7 Idditoi	June 2021	July 2021
	audit: Doctor of			
	Philosophy			
	(Renewal Energy)			
	at Universiti			
	Kebangsaan			
	Malaysia			
	,			
	<u>l</u>	l		

6	Board of study for new master program at Universiti Teknikal Malaysia Melaka. Program: Master of Business Information management and Master of Engineering Business Management	Board of Study	15 May 2018	
7	Promotion reviewer to the position of Associate Professor. Dr Muhamad Hussain Ismail.	Reviewer	2018	
8	Sirim Standard 13:2017. Lean Management - Part 2: Requirements for competent persons.	Chairman	12 Julai 2016	
9	Islamic Innovation Expo, Universiti Sains Islam Malaysia.	Judge	8/11/2016	
10	Full accreditation audit for Bachelor of Engineering Technology (Process & Technology) and Bachelor of Engineering Technology (Product Design),	Auditor	10/2/2015	11/2/2015

	Universiti Teknikal			
	Melaka.			
11	Islamic Innovation Expo, Universiti Sains Islam Malaysia.	Judge	29/11/2014	
12	Industry Lead Body for National Document Presentation. Malaysia Automotive Institute.	Endorsement Committee	24/12/2014	
13	MQA full accreditation for M.Sc. in Energy and M.Sc. in Renewal Energy. Herriot Watt Univ. Malaysia.	Auditor	24/11/2014	25/11/2014
14	MQA full accreditation for Bachelor in Renewal Energy, Xiamen University Malaysia	Auditor	6/11/2014	13/11/2014
15	MQA full accreditation Diploma of Technology in Machine Tool at German Malaysia Institute.	Auditor	10/2/2014	11/2/2014
16	MQA full accreditation for Diploma Technology in	Auditor	10/2/2014	11/2/2014

	Industrial Design at German Malaysia Institute.			
17	MQA full accreditation for Diploma in Mechanical Engineering at Politeknik Mukah.		24/4/2013	25/4/2013
18	MQA full accreditation for Diploma in Mechanical Engineering at Politeknik Melaka.		18/1/2013	19/1/2013
19	MQA full accreditation for Diploma in Mechanical Engineering at Politeknik Seberang Perai.		15/3/2013	16/3/2013
20	Malaysia Powder Metallurgy & Particulate Materials Associations	Co-Founder/ Secretary	2009	2012
21	Malaysia Powder Metallurgy & Particulate Materials Associations	Committee Member	2012	Now
22	IEM Standing Committee for Publications	Editor/ Committee Member	2005	2012

# INTERNATIONAL APPOINTMENT COMMITTEE

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Asia Pacific of Industrial Engineering and Management Society (APIEMS)	Board Member	Dec 2018	Now
2	International Conference on Engineering Business Management	Advisor	22/8/2015	23/8/2015
3	International Conference on Engineering Business Management	Chairman	22/4/ 2013	26/4/2013
4	International Conference on Robust Quality Engineering	Founder and also the International Organizing Committee	April 2012	Now

#### SELECTED ACTIVITIES / WORKSHOPS / SEMINARS / COURSES

NO	NAME OF	PLACE OF	STARTING	ENDING
	ACTIVITIES	ACTIVITIES	DATE	DATE
1	Speaker for	Department of	14/10/2021	21/10/2021
	Preparing	Industrial		
	High Quality	Engineering,		
	Manuscripts	Universitas		
	for Reputable	Andalas,		
	Journals	Indonesia		
2	Speaker for	UTMKL,	16/11/2017	
	Supervisory	Organized by		
	Development	UTM Lead		
	Program			

3	Speaker for	UTMKL,	10/11/2017	
	Supervisory	Organized by		
	Orientation	SPS		
	Program			
4	Speaker for	Faculty of	26/4/2017	
	talk on the	Engineering,		
	Introduction	UPM		
	to Taguchi			
	Method			
5	Facilitator for	UTM Razak	28/7/2016	
	Workshop for	School		
	Program			
	Outcome			
6	Speaker for	Universiti	16/3/2016	17/3/2016
	Taguchi	Malaya		
	Method			
	Workshop			
7	Trainer for	UNIMAP	3/7/2013	4/7/2013
	Taguchi			
	Method			
8	Trainer for	German	3/10/2013	4/10/2013
	Workshop on	Malaysia		
	Taguchi	Institute		
	Method			
9	Trainer for	Industrial	26/3/2012	27/3/2012
	Workshop on	Unit, UTM		
	Robust	Razak School		
	Engineering			

# **RESEARCH ACTIVITIES**

PI: 1) International =  $\Sigma$  RM 423,751 2) National =  $\Sigma$  RM 400,820 3) University =  $\Sigma$  RM 285,60

BIL	NAME OF GRANT	ROLE	CATEGORY	TYPE OF	AMOUNT	STARTING	ENDING	VOTE
			OF	GRANT	(RM)	DATE	DATE	NO
			GRANT(UTM/					
1	New Taguchi's Robust Predictive Analytical Model with Integration of Robust MM-Estimator and Binary Bat Algorithm-Based Search Mechanism.	PI	National	FRGS 2021-1	RM 116,000	7/9/2021	6/9/2024	FRGS/1/20 21/TK0/UT M/02/45
2	Remodelling of Materials Control Flow in Materials Management Unit	PI	International	DTD: Industry Research	RM 127,125	1/3/2022	28/2/2023	4C610
3	Productivity Improvement of the unit assembly production line with Lean Manufacturing Technique	PI	International	DTD: Industry Research	RM 296,626	1/3/2022	28/2/2023	
4	Developing Methadone Dispensing Monitoring System Using Modified Mahalanobis-Taguchi System for Classification Accuracy Improvement	PI	National	CRG	RM 20,000	1/11/2019	31/10/2021	4B494
5	Characterization of Sinter- Hip and Microwave Sintering	PI	National	Networking Grant	RM 98,000	1/8/2016	31/7/2018	4X189

6	Parameters on Nano Grain Size Cemented Carbide for Metal Injection Molding Theoretical Model of Core	PI	National	FRGS 2016-1	DM 82 000	1/8/2016	31/7/2018	4F819
0	Acquisitions for Durable Products Return	PI	National	FRGS 2010-1	RM 82,000	1/8/2010	31///2018	(FRGS/1/2 016/TK03/ UTM/02/6)
7	Characterization of Mahalanobis-Taguchi System and Bees Algorithm for Diagnosis and Forecasting in Multidimensional System	PI	National	FRGS 2014-1	RM 52,000	1/7/2014	31/12/2015	4F535 (FRGS/1/2 014/TK01/ UTM/02/4)
8	Characterization of Polyethylene Terephthalate (PET) Waste as Sustainable Binder for Metal Injection Molding	PI	National	FRGS 2012-1	RM 90,820	1/4/2012	31/3/2014	4F124 (ID: 2862)
9	Characterization of Newly Developed feedstock in Metal Injection Moulding Application using Tungsten Carbide with palm stearin binder system	PI	National	FRGS 2010-1	RM 40,000	1/4/2010	31/3/2012	78641
10	Highly Efficient Hybrid Al- CNT-A1203 Nanocomposite Based Coatings for Corrosion Protections	PI	University	PDRU	RM 125,600	1/7/2018	30/6/2020	04E36
11	Enhancement of Mahalanobis Taguchi System Based on Swarm Intelligence	PI	University	GUP Tier 1	RM 40,000	1/10/2016	30/9/2018	15H43

	for Multivariate Pattern Recognition							
12	Developing Sustainable Binder for Metal Injection Molding using Recycle Materials	PI	University	GUP Tier 1	RM 50,000	1/5/2012	30/4/2013	06J50
13	Determination of automotive product re- manufacturability using AHP methodology	PI	University	Inst. Grant	RM 50,000	15/5/2011	14/11/2012	4B029
14	Multi-characteristic Optimization for Metal Injection Molding (MIM) Processing Parameter	PI	University	Short Term	RM 20,000	1/7/2010	31/12/2012	77367
15	Overall Performance Measurement for Logistics Operation	PI	University			30/9/2001	29/9/2002	75217
16	Hybrid Modeling of modified queuing theory with Taguchi's T-method of city bus traveling time predictions	R	National	FRGS	RM 82,000	1/9/2019	31/5/2022	5F247
17	Bio-Oil Upgrading as Vehicle Fuels Using Water/Oil Based Extraction	R	University	Tier 2	RM 30,000	1/8/2019	31/1/2022	15J85
18	Investigation of Microstructure and fatique behavior on newly developed Ti-Al-Fe Alloys	R	National	FRGS	RM 94,200	1/9/2019	31/8/2021	5F205

	with addition of Mo and Cu as Quaternary Elements							
19	CRG31.0 : Developing Methadone Dispensing Monitoring System Using Modified Mahalanobis- Taguchi System	R	National	CRG	RM 100,000	1/11/2019	30/4/2022	08G27
20	Optimization of High- Performance Drill Geometry Design For Orthopedic Surgical Application	R	University	Tier 2	RM 20,000	1/8/2019	31/1/2022	16J45
22	CRG31.1 : Thresholding Development	R	National	CRG	RM 40,000	1/11/2019	30/4/2022	08G38
23	Characterization of modified-Bees Algorithm in the Mahalanobis-Taguchi System for Pattern Recognition	R	National	FRGS	RM 66,700	1/9/2019	31/5/2022	5F233
24	A hybrid methodology in Mahalanobis Taguchi System using robust Mahalanobis distance and binary whale optimization algorithm for medical data classifications	R	National	Networking Grant	RM 50,100	15/8/2017	14/8/2019	4X309
25	Impact of product individualization under Industry 4.0 towards Halal certification	R	University	Tier 2	RM 20,000	1/8/2019	31/1/2022	16J00
26	Significant feature selection scheme in Mahalanobis-	R	University	Potential Academic Staff	RM 20,000	1/7/2018	30/6/2019	03K33

	T- 1:0 : : :							
	Taguchi System based on a							
	modified-Bees Algorithm.							
27	Evaluation of Nanoparticles as Additives in Lubricant in High Speed Machining of Advanced Materials	R	University	Tier 1	RM 40,000	1/7/2017	30/9/2019	16Н21
28	Environmental Management System Practices Among Small and Medium Food Manucaturers In Malaysia	R	University	Tier 1	RM 50,000	15/11/2015	14/11/2017	12H61
29	Determining the Theoretical Model for Lean Adoption	R	National	FRGS	RM 72,000	1/12/2014	30/11/2016	4F678
30	Machinability of Advanced Materials for Medical Devices And Engineering Applications	R	University	Tier 1	RM 70,000	1/4/2014	31/3/2016	06Н89
31	Optimization of Heat Treatment Effect On Microstructure And Mechanical Properties Of Ti- 6AI-(1-3%)Fe Alloys For Aerospace Application	R	University	Potential Academic Staff	RM 20,000	1/11/2014	31/10/2015	01K37
32	Low Velocity Impact Response of Kenaf/Epoxy Corrugated Sandwich Structures	R	University	Potential Academic Staff	RM 20,000	1/11/2014	31/12/2015	01K15
33	Kinesthetics Approach to Validate Work Movement Task Analysis Observational Tool	R	University	Encouragement Grant	RM 20,000	1/5/2015	31/7/2016	10Ј96

34	Quality Management Practices and Organizational Performance Relationship in E&E Manufacturing Industry	R	University	Potential Academic Staff	RM 20,000	1/4/2013	31/3/2014	00K34
35	Using larger flaw sizes as acceptable criteria for aerostructure applications	R	University	Tier 2	RM 39,900	1/4/2011	31/7/2012	03J93
36	A Web Based Manufacturing Performance Evaluation Tool for Malaysian Automotive Industry	R	University	Tier 2	RM 47,000	1/4/2011	31/7/2012	04J44
37	Design of a novel magnetorheological (MR) damper using combination of squeeze and shear modes.	R	University	Tier1	RM 130,000	1/4/2011	31/3/2013	01H20
38	Design of Ultrasonic Horn for Powder Metal Compaction	R	University	Others	RM 50,000	15/5/2011	14/5/2013	4B028
39	Particle Size and Particle Shape Distribution on Metal Injection Moulding processing parameter	R	National	FRGS	RM 80,000	2007	2009	FRGS: UKM-KK- 02- FRGS0013- 2006

<sup>\*</sup> P.I = Principle Investigator; R = Researcher

# **COLLABORATION / MOU**

NO	NAME OF	LEVEL OF MOU	STARTING	ENDING
	MOU	(NATIONAL/INTERNATIONAL)	DATE	DATE
1	Memorandum	National	30/6/2010	29/6/2015
	of Agreement			
	between			
	Razak School			
	of Engineering			
	and Advanced			
	Technology;			
	and KLIA			
	Training &			
	Research			
	Centre Sdn			
	Bhd			
2	MOU	International	1/2/2015	31/1/2020
	Between			
	Yalova			
	University and			
	UTM			

# **TEACHING ACTIVITIES**

# **POSTGRADUATE**

YEAR OF SEMESTER	SEMESTER (1/2)	SUBJECT CODE	NAME OF SUBJECT	CREDIT HOUR	SECTION
		MRTE 1523	RTE 1523 Quality for Business Sustainability		01&06
		ERSA 1273	Current topics in Lean Operations	3	01
	2	MRSE 1523	Quality Management & Technique	3	01 &06
2021/2022	_	MRSE 2533&	Lean Operations	3	01
2021/2022		MRTE 2533			
	1	MKAB 2373	Project Quality Management	3	03,11
	1	MRSE 1523	Quality Management & Technique	3	01,06
	2	ERSA 1243	Current topics in Total Quality Management	3	01
		ERSA 1273	Current topics in Lean Operations	3	01
		MRSE 1523	Quality Management & Technique	3	05
2020/2021		MRSE 2533	Lean Operations	3	01
		MKAB 2373	Project Quality Management	3	03,11
	1	MRSA 2123	Quality Management and Reliability	3	01
		MRSE 1523	Quality Management & Technique	3	01,02
		MKAB 2373	Project Quality Management	3	12
	2	MRSA 2123	Quality Management and Reliability	3	01
2010/2020	۷	MRSE 1523	Quality Management & Technique	3	01,02
2019/2020		MRSE 2533	Lean Operations	3	01
	1	ERSA 1243	Current topics in Total Quality Management	3	01
	1	ERSA 1273	<b>Current topics in Lean Operations</b>	3	01

		MKAB 2373	Project Quality Management	3	03
		MRSA 2123	Quality Management and Reliability	3	01
		MRSE 1523	Quality Management & Technique	3	01,02
		MRSP 2063	Quality Management	3	01
		MRSA 2123	Quality Management and Reliability	3	01,02
	2	MRSE 1523	Quality Management & Technique	3	01
2018/2019		MRSE 2533	Lean Operations	3	02
	1	MRSA 2123	Quality Management and Reliability	3	01
	1	MRSE 1523	Quality Management & Technique	3	01,02
		MRSE 2533	Lean Operations	3	01
	2	MRSE 2663	Design for Six Sigma	3	01
2017/2018		MRSA2123	Quality Management and Reliability	3	01
	1	MRSA2123	Quality Management and Reliability	3	01
		MRSE1523	Quality Management & Technique	3	01
		MRSE2533	Lean Operations	3	01
	2	ERSA 1273	Current topics in Lean Operations	3	01
		MRSA 2123	Quality Management and Reliability	3	01
2016/2017		MRSA2123	Quality Management and Reliability	3	01
2016/2017		ERSA1123	Current topics in technology management	3	01
	1	ERSA 1273	Current topics in lean Operations	3	01
		MRSE1523	Quality Management & Technique	3	01
		MRSE2803	Robust Product Development	3	01
		MRSE2533	Lean Operations	3	01
2015/2016	2	MRSA2123	Quality Management and Reliability	3	01
		MRSE2803	Robust Product Development	3	01

					I
		ERSA1243	Current Topics in Total Quality Management	3	01
	1	MRSE1523	Quality Management & Technique	3	01
		MRSE2593	Technology Management	3	01
	2	EDW3243	Quality Management & Technique	3	01
		MRSE2533	Lean Operations	3	01
2014/2015		ERSA 1273	Current topics in lean Operations	3	01
	1	MDE1523	Quality Management & Technique	3	01
		MRB2233	Quality & Change Management	3	01
		MRB2233	Quality & Change Management	3	01
	2	EMS2193	Technology & Innovations Management	3	01
	2	MDE1523	Quality Management & Technique	3	01
2013/2014		MDE2533	Lean Operations	3	01
		MRB2233	Quality & Change Management	3	01
	1	MDE1523	Quality Management & Technique	3	01
		MDE2533	Lean Operations	3	01
		MRB2233	Quality & Change Management	3	01
	2	MDE2533	Lean Operations	3	01
2042/2042		MDE1523	Quality Management & Technique	3	01
2012/2013		EMS2193	Technology & Innovations Management	3	01
	1	MDE1523	Quality Management & Technique	3	01
		MRB2233	Quality & Change Management	3	01
2011/2012	2	MDE1523	Quality Management & Technique	3	01
2011/2012	1	MDE1523	Quality Management & Technique	3	01

TOTAL CREDIT HOUR 213

# **UNDERGRADUATE**

YEAR OF SEMESTER	SEMESTER (1/2)	SUBJECT CODE	NAME OF SUBJECT	CREDIT HOUR	SECTION
2024/2022	2	SRSD 4924	Bachelor's degree Project 2	4	19
2021/2022	1	SRSD 4912	Bachelor's degree Project 1	2	19
		SRI 1203	Materials and Manufacturing Process	3	01
2010/2011	1	KJM 541 (UiTM)	Fluid Mechanics 4	4	01
	2	DDJ3303	Fluid Mechanics 2	3	17
		DDJ 3312	Fluid Power	2	19,20
2005/2006		SZA 5323	Vehicles Aerodynamics	3	01
2003/2000	1	DDJ3303	Fluid Mechanics 2	3	20
		DDJ 3003	Manufacturing Process	3	01
		DDJ 3312	Fluid Power	2	14,15
	2	DDJ3303	Fluid Mechanics 2	3	17,18
2004/2005	1	DDJ2303	Fluid Mechanics 1	3	01
		DDJ3303	Fluid Mechanics 2	3	19,20

		DDJ 3703	Manufacturing Process	3	01
		DDJ3312	Fluid Power	2	17
		KJM 541	Fluid Mechanics 4	4	01
		(UiTM)			
2003/2004	2	DDJ3303	Fluid Mechanics 2	3	16,17,18
		KJM 532	Mass and Heat Transfer	4	01
		(UiTM)			
	1	DDJ3312	Fluid Power	2	17,18
		DDJ3313	Hydraulics and Pneumatics	3	19
		DDB2552	Hydraulics and Pneumatics	2	20
2002/2003	2	DDJ3313	Hydraulics and Pneumatics	3	18,19
	1	DDJ3313	Hydraulics and Pneumatics	3	18,19
		DDB2552	Hydraulics and Pneumatics	2	20
2001/2002	2	DDJ3313	Hydraulics and Pneumatics	3	18,19
		SZM2103	Mechanics of Materials 1	3	01,02
	1	DDJ3313	Hydraulics and Pneumatics	3	16,17
		DDB2552	Hydraulics and Pneumatics	2	20
2000/2001	2	DDJ3313	Hydraulics and Pneumatics	3	18,19
		SZM2103	Mechanics of Materials 1	3	01,01
	1	DDJ3313	Hydraulics and Pneumatics	3	16,17
		DDB2552	Hydraulics and Pneumatics	2	20
1999/2000	2	DDJ3313	Hydraulics and Pneumatics	3	15,16
		DDJ3513	Product Development	3	90
		SZM2103	Mechanics of Materials 1	3	01,02
	1	DDJ3313	Hydraulics and Pneumatics	3	13,14
		DDB2552	Hydraulics and Pneumatics	2	20
		SZM 1013	Engineering Drawing	3	01,02,03

1998/1999	2	DDJ 2302	Basic of Fluid Mechanics	2	13
		DDJ3313	Hydraulics and Pneumatics	3	18,19
1997/1998	1	DJJ 2303	Fluid Mechanics 1	3	65
		DJJ 2703	Manufacturing Technology	3	01,02,03
1996/1997	2	DJJ2303	Fluid Mechanics 1	3	70
		DJJ2803	Industrial Engineering	3	60

TOTAL CREDIT HOUR 125

# **SUPERVISION**

# PHD STUDENTS

# **Main Supervisor**

No	Name	Status	Title	Date
		(Graduated/		
		Ongoing)		
1	Nasuha Lee Abdullah	Graduated	Operational Complexity Impact on Quality and Performance of Electrical and Electronics Industry in Malaysia	7/1/2015
2	Mohd Yazid Abu	Graduated	Integration of Mahalanobis-Taguchi System and Activity based Costing in Decision Making for Remanufacturing	9/3/2016
3	Faizir Ramlie	Graduated	Characterization of Bees Algorithm into the Mahalanobis-Taguchi System for Classification	8/2/2017
4	Fazimah Mat Noor	Graduated	Porous Stainless Steel 316L for Biomedical Applications by Foam Replication Method	25/7/2018
5	Wan Zuki Azman Wan Muhamad	Graduated	Hybrid Mahalanobis Taguchi System With Randomized Algorithms for Simultaneous Feature Selection and Binary Classification	21/5/2019
6	Syed Ali Raza Shah ( <b>Pakistan</b> )	Graduated	Integrated Quality and Environmental Management Framework for Small and Medium Food Processing Enterprises in Pakistan	26/6/2019
7	Nawaf Mohammed Ahmed Al Shehhi ( <b>Oman</b> )	Graduated	Framework for Lean Management in Alumunium Company in United Arab Emirates	23/7/2019
8	Tan Hong Wai	Graduated	Improvement of Inventory Management in a stamping manufacturer using Lean Techniques	20/2/2020
9	Nolia Haruddin	Graduated	Hybrid Bootstrap-Based Approach with Binary Artificial Bee Colony and Particle Swarm Optimization in Taguchi's T-method	28/10/2020

10	Rosdan Rosman	Graduated	Framework for Localisation of Resin Supply Chain in Malaysia Automotive Industry	13/3/2021
11	Badli Shah Mohd Yusoff	Graduated	An Economic Model of Product Recovery Management for Distribution Transformers	4/7/2022
12	Ahmed Ali Ajmi Ajmi ( <b>Iraq</b> )	On-going	An Integrated Framework to Predict Energy Management Performance Via performance shaping factor in thermal Iraq Power Plants	
13	Nur Najmiyah Jaafar	On-going	T-Method and Queing Theory for City Busses arrival time predictions	
14	Amizi Noor	On-going	Optimization of Automated Guided Vehicles Tracking System	
15	Noor Ashani Mohd Ghani	On-going	Integration of Agile and Lean Framework in the Telecom Malaysia	
16	Zulkifli Marlah @ Marlan	On-going	Robust MM-Estimation-Based Taguchi's T-Method with Hybrid Binary Bat Optimization Algorithm for Predictions	
17	Mohammed Yassin Abdalsalam Zain Elabdeen ( <b>Sudan</b> )	On-going	Framework for Lean Management in Sudanese Aviation Industry	
18	Suziyana Mat Dahan	On-going	An Instrument to Measure Eco- Process Innovation Performance in an Electrical and Electronics Company	
19	Nor Azlina Binti Ahmad Zaini	On-going	Development of Green Supplier Selection Model for Public Procurement Using Integrated Delphi-Analytic Network Process	
20	Noor Azam Bin Md Saad	On-going	Deployment of Lean Six Sigma in Felda Global Venture	
21	Farah Adibah Binti Adnan	On-going	An Integrated Mahalanobis Taguchi System with the Presence of Missing Data for Classification	
22	Sriyanto ( <b>Indonesia</b> )	On-going	Hospital Pharmacy Supply Chain Performance Enhancement Through Data Segmentation and Simulation	
23	Syed Izzairie Arafat Bin Syed Omar	On-going		

# PhD Co Supervisor

No	Name	Status	Title	Date
		(Graduated/		
		Ongoing)		
1	Sri Yulis M Amin (UKM)	Graduated	Injection Molding of Cemented Carbide with Palm Stearine Binder System	10/2016
2	Jesbain Kaur	Graduated	The effect of Annealing on the Microstructural Changes for the High Quality Aluminium Nitride Epitaxial Layer on Sapphire Using Transmission Electron Microscopy	5/6/2017
3	Mohd Tanwyn Mohd Khushairi	Graduated	Copper and Brass Filled Alumunium based Epoxy for Improvement of Injection Moulding Process	29/1/2020
4	George Decruz	Graduated	Cost of Equipment Failure Model to Prioritize Maintenance Decision in a Cement Plant	14/7/2022
5	Tengku Nurainun (Indonesia)	On-going	Integrated Quality Environmental Management Practices And Sharia Compliance Among Small And Medium Enterprises In Indonesian Leather Industry	

#### MASTER STUDENTS

# Master by Research (Co Supervisor)

No	Name	Status	Title	Date
		(Graduated/		
		Ongoing)		
1	Nurul Nadzirah Ismail	Graduated	Waste Polystyrene as Backbone for Metal Injection Moulding Binder	8/7/2015
2	Datuk Khan bin Mohd Akram Khan	Graduated	A Data-Driven Based Framework for End-Of-Life Vehicle Implementation in Malaysia	1/2/2022

#### **UTM POSTGRADUATE EXAMINATION / VIVA**

#### PHD

NO NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Internal	Mohd Faizal Sadali	Assessment of	2022
	Examiner		the	
			Microstructure	
			and	
			Mechanical	
			Properties of a	
			Ti-6al-4v Alloy	
			Produced by	
			Selective Laser	
			Melting	
2	Internal	Razni Khalid	Maintenance	2021
	Examiner		Strategy Using	
			Total	
			Productive	
			Maintenance	
			Approach for	
			Old Lathe	
			Machine in	
			MARA	
			Technical	
			Vocational	
			Education	
			Training	
		A1 : C !! !	Institutions	2040
3	Internal	Abrari Salleh	Sustainable	2018
	Examiner		Service Quality	
			of Malaysian Water and	
			Sewerage	
			Companies	
4	Internal	Jamal Ahmed Hama	Ethical and	2015
-	Examiner	Kareen	Psycological	2013
	LAUTHING	Kurccii	Factors in 5S	
			and Total	
			Productive	
			Maintenance	
			on Production	
			Line	
			Effectiveness.	
5	Internal	Muhamad Murrad	Maintenance	2013
	Examiner		and Reliability	

of Nuri Main	
Rotor Gearbox	
in the	
Malaysian	
Armed Forces	

#### **MASTER BY RESEARCH**

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Internal Examiner	Nurul Liyana Burhanuddin	Numerical Technique Via Transfer Matrix Method For Dynamic Characteristics Of Euler Beam In Three Dimension Structure.	2016
2	Internal Examiner	Nurul Fatiha Mesbah	Resolving Trade off Problem on Bracking System for Passenger Car by Integrating Triz with Taguchi Method.	2014

# EXTERNAL POSTGRADUATE EXAMINATION / VIVA

<u>РПО</u>				1
NO	ROLE	NAME OF	TITLE	YEAR
		STUDENT		
1	External Examiner at	Husam Al-	Evaluation of	2022
	Universiti Teknologi	Salman	Novel	
	Petronas		Microwave-	
			Current Assisted	
			Sintering of Pure	
			β-Silicon Carbide	
			Nanopowder	
			Based on the	
			Optimization of	

			Sintering Parameters.	
2	External Examiner at	Nur Adilla	Pemantauan Fasa	2021
	Universiti Kebangsaan Malaysia	Kasim	Haus Mata Alat Berasaskan	
	ivialaysia		Pembelajaran	
			Mesin Separa	
			Terselia – Fixum	
			K-Means (F-Km)	
3	External Examiner at	Hassan R S	Hybrid	2019
	Universiti Teknologi	Mahmoud	Thermochemical	
	Petronas		Treatments and	
			Characterization	
			of Surface	
			Expanded	
			Austenite Layers	
			on Stainless Steel	
			(AISI 316L) under Transient	
			Conditions	
4	External Examiner at	Zailan Karin	Pembangunan	2017
	Universiti Kebangsaan	Zanan Karin	Sistem	2017
	Malaysia		Pemantauan	
	7		Proses Larik	
			Berbilang	
			Penderia	
			Berasaskan	
			Peramalan	
			Mahalanobis I-	
			KAZ	

#### **MASTER BY RESEARCH**

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	External Examiner at Universiti Tun Hussein Onn	Yarshine Rani A/P Rajasakaran	Fabrication of Stainless Steel Foam With Bio Active Ceramic Addition Using Slurry Method	2022
2	External Examiner at Universiti Malaysia Pahang	Sri Nur Areena Mohd Zaini	Comparative Study Between Product and Service	2021

			Operation Using	
			Time-Driven	
			Activity Based	
			Costing	
3	External Examiner at	Nik	A Case Study In	2020
3	Universiti Malaysia	Nurharyantie	Electrical &	2020
	Pahang	Nik Mohd Kamil	Electronic	
	Fallalig	INIK IVIOTIU Kattili	Industry Using	
			Mahalanobis-	
			Taguchi System	
			And Time-	
			Driven Activity-	
			Based Costing	
			on Production	
			Environment	
4	External Examiner at	Syazwanie	Microstructure	2018
7	Universiti Malaysia	Manan	and Properties	2010
	Pahang	Iviariari	Study of	
	i uliulig		Stainless Steel	
			Fabricated by	
			Metal Injection	
			Molding	
5	External Examiner at	Nur Aidah	Co Cr Mo Alloy	2018
	Universiti Malaysia	Nabihah	Compact on	
	Pahang	Dandang	Microstructures	
			and Properties	
			Fabricated by	
			Metal Injection	
			Molding Process	
6	External Examiner at	Mahfuzah	Ceramics	2017
	Universiti Teknologi	Zainudin	Injection	
	MARA		Molding of	
			Yittria Zirconia	
			Ceramics	
			Implant	
			Fabrications	
7	External Examiner at	Nur Suliani Ab.	Producing and	2017
	Universiti Tun Hussein	Manaf	Characterisation	
	Onn		of Cobalt	
			Chromium	
			Molybdenum	
			Foams Using	
			Slurry Method	
8	External Examiner at	Najiy Rizal	Multi-cavity	2017
	Universiti Teknologi	Suriani Rizal	mould design	
	MARA		and simulation	

			of PET Plastic Parison	
9	External Examiner at Universiti Kebangsaan Malaysia	Haw Pei Li	Pengoptimuman proses Pengacuanan Logam Serbuk dengan Kaedah Taguchi	2012
10	External Examiner at Universiti Kebangsaan Malaysia	Farhana Mohd Foudzi	Keupayaan Pemprosesan Yitria Zirkonia Terstabil Bersaiz Nano dengan Bahan Pengikat Berasaskan Stearin Sawit dalam Pengacuan Suntikan Serbuk Mikro	2011

# **PUBLICATIONS**

# WEB OF SCIENCE JOURNALS \*(Q1= 6; Q2= 9; Q3= 3; Q4= 6; ERSI= 18; Total = 42)

NO	ARTICLE TITLE	JOURNAL TITLE	ISSN	Vol.	Issues	Page	Publication year	IF	Type of Publication	Category of Publication	Quartile Ranking	Category Author
1	Intelligent Integrated Model for Performance in Industry 4.0 of Power Plant	CMC- Computers, Materials & Continua	1546- 2218	70	3	5783- 5801	2022	3.86	Research	Materials Science, Multidisciplinary	Q2	Coresponding Author
2	Novel Approach to Energy Management via Performance Shaping Factors in Power Plants	CMC- Computers, Materials & Continua	1546- 2218	73	3	5025– 5039	2022	3.86	Research	Materials Science, Multidisciplinary	Q2	Coresponding Author
3	A Review of the Current Publication Trends on Missing Data Imputation Over Three Decades: Direction and Future Research	Neural Computing and Applications	0941- 0643				2022	5.102	Research	Computer Science, Artificial Intelligence - Scie	Q2	UTM First Author
4	Quality Management Implementation and Their Impact on Operational Performance Of	International Journal for Quality Research	1800- 6450	16	3	669- 688	2022		Research	Engineering Industrial	Emerging Sources Citation Index	UTM First Author

	Pakistan's Food Processing SMEs											
5	Modelling energy management sustainability: Smart integrated framework for future trends	Energy Reports	2352- 4847	8		8027- 8045	2022	4.937	Research	Energy & Fuels - Scie	Q2	Co-Author
6	Bamboo-Fiber- Reinforced Thermoset and Thermoplastic Polymer Composites: A Review of Properties, Fabrication, and Potential Applications	Polymers	2073- 4360	14	7	1387	2022	4.967	Research	Polymer Science	Q1	Co-Author
7	Physical, Mechanical and Perforation Resistance of Natural-Synthetic Fiber Interply Laminate Hybrid Composites	Polymers	2073- 4360	14	7	1322	2022	4.967	Research	Polymer Science	Q1	Co-Author
8	Modeling the Sustainable Integration of Quality and Energy Management in Power Plants	Sustainability (Switzerland)	2071- 1050	14	4	2460	2022	3.889	Research	Environmental Sciences - Scie(Q2); Environmental Studies - Ssci(Q2); Green & Sustainable Science & Technology	Q2	Co-Author

9	Development of Ti6AlFe Alloy and its Microstructural Transformation During Synthesis and Subsequent Thermo- Mechanical Treatment	Metallography, Microstructure, and Analysis	2192- 9262				2022		Research	Metallurgy & Metallurgical Engineering – Q3 DOI https://doi.org/10.1007/s13632- 022-00833-2	Emerging Sources Citation Index	Co-Author
10	Dynamic Mechanical Properties and Thermal Properties of Longitudinal Basalt/Woven Glass Fiber Reinforced Unsaturated Polyester Hybrid Composites	Polymers	2073- 4360	13	3343	1-14	2021	3.636	Research	Polymer Science	Q1	Co-Author
11	Implications COVID-19 on Performance and Energy Management in the Production Electricity	CMC- Computers, Materials & Continua	1546- 2218	69	1	895- 911	2021	4.89	Research	Materials Science, Multidisciplinary	Q1	Co-Author
12	Binary Bitwise Artificial Bee Colony as Feature Selection Optimization Approach within Taguchi's T- method	Mathematical Problems in Engineering	1563- 5147	2021		1-10	2021	1.009	Research	Engineering, Multidisciplinary	Q3	Co-Author

13	Physicomechanical Properties of rice Husk/Coco Peat Reinforced Acrylonitrile Butadine Styrene Blend Composites	Polymers	2073- 4360	13	7	1-14	2021	3.636	Research	Polymer Science	Q1	Co-author
14	Classification Performance of Thresholding Methods in Mahalanonis- Taguchi System	APPLIED SCIENCES- BASEL	2076- 3417	11		1-22	2021	2.474	Research	Engineering, Multidisciplinary	Q2	Co-author
15	Development of F- N-C-O Taguchi Method for Robust Measurement System Using a Case Study of T- Peel Test on Adhesion Strength	APPLIED SCIENCES- BASEL	2076- 3417	10	18		2020	2.474	Research	Engineering, Multidisciplinary	Q2	Co-Author
16	Microstructure, Hardness and Corrosion Behaviour of Gas Tungsten Arc Welding Clad Inconel 625 Super Alloy Over A517 Carbon Steel Using ERNICRMO3 Filler Metal	Journal Of Materials Engineering and Performance	10599495	29	10	6919- 6930	2020	1.652	Research		Q3	UTM First Author
17	Process- microstructure- properties	Transactions of Nonferrous	1003- 6326	30	9	2339- 2354	2020	2.607	Research	Research Areas:Metallurgy & Metallurgical Engineering	Q1	UTM First Author

	relationship in Al- CNTs-Al2O3 nanocomposites manufactured by hybrid powder metallurgy and microwave sintering process	Metals Society of China								Web of Science Categories: Metallurgy & Metallurgical Engineering		
18	Surface treatment of Al7075 Matrix by TiC particles via hybrid ball milling and tungsten inert gas cladding	Metallurgia Italiana	0026- 0843		6	21	2020	0.546	Research	Research Areas:Metallurgy & Metallurgical Engineering Web of Science Categories:Metallurgy & Metallurgical Engineering	Q4	UTM First Author
19	Binary Particle Swarm Optimization for Variables Selection Optimization in Taguchi's T- Method	Matematika	0127- 8274	36	1	69-84	2020		Research	Research Areas:Mathematics Web of Science Categories:Mathematics	Emerging Sources Citation Index	UTM First Author
20	The Effect of the Addition of CNTs on the Microstructure, Densification and Mechanical Behavior in Al-CNT-Al2O3 Hybrid Nanocomposites	JOM	1047- 4838	72	6	2283- 2294	2020	2.62	Research	Research Areas:Materials Science; Metallurgy & Metallurgical Engineering; Mineralogy; Mining & Mineral Processing Web of Science Categories:Materials Science, Multidisciplinary; Metallurgy & Metallurgical Engineering; Mineralogy; Mining & Mineral Processing	Q2	UTM First Author

21	A combined friction stir processing and ball milling route for fabrication Al5083-Al2O3 nanocomposite	Materials Research Express	2053- 1591	6	6		2019	1.929	Research	Research Areas:Materials Science Web of Science Categories:Materials Science, Multidisciplinary	Q3	UTM First Author
22	Characterisation of activity based costing on remanufacturing crankshaft	International Journal of Automotive and Mechanical Engineering	2229- 8649	14	2	4211- 4224	2017		Research	Research Areas:Engineering Web of Science Categories:Engineering, Mechanical	Emerging Sources Citation Index	UTM First Author
23	Classification of crankshaft remanufacturing using Mahalanobis-Taguchi system	International Journal of Automotive and Mechanical Engineering	2229- 8649	13	2	3413- 3422	2016		Research	Research Areas:Engineering Web of Science Categories:Engineering, Mechanical	Emerging Sources Citation Index	UTM First Author
24	Reduction of dislocation density of aluminium nitride buffer layer grown on sapphire substrate	Journal Of Mechanical Engineering and Sciences	2289- 4659	10	1	1908- 1916	2016		Research Article	Research Areas:Engineering Web of Science Categories:Engineering, Mechanical	Emerging Sources Citation Index	UTM first Author
25	Electron microscopy analysis of microstructure of postannealed aluminum nitride template	Applied Physics Express	1882- 0778	9	6		2016	3.086	Research	Research Areas:Physics Web of Science Categories:Physics, Applied	Q2	UTM first Author

26	Characterization of the Feedstock Properties of Metal Injection- molded WC-Co with Palm Stearin Binder System	Sains Malaysiana	0126- 6039	43	1	123- 128	2014	0.747	Research	Research Areas:Science & Technology - Other Topics Web of Science Categories:Multidisciplinary Sciences	Q4	UTM First Author
27	Dynamic response optimization for cemented carbide injection molding	Jurnal Teknologi (Sciences and Engineering)	01279696	68	4	41-44	2014		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	Corresponding Author
28	Influence of composition and sintering temperature on density for pure and titanium alloy foams	Jurnal Teknologi (Sciences and Engineering)	01279696	68	4	83-86	2014		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	Corresponding Author
29	Pretesting impact of operational complexity in Malaysia's electrical and electronics manufacturing industry	Jurnal Teknologi (Sciences and Engineering)	01279696	67	3	43-50	2014		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	UTM First Author
30	Optimization of injection molding parameters for WC-Co feedstocks	Jurnal Teknologi (Sciences and Engineering)	01279696	63	1	51-54	2013		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	UTM First Author
31	Production of 316L Stainless Steel (SS316L) Foam via Slurry Method	Journal of Mechanical Engineering and Sciences	2289- 4659	5		707- 712	2013		Journal Article	Research Areas:Engineering Web of Science Categories:Engineering, Mechanical	Emerging Sources Citation Index	UTM First Author

32	Challenges of quality management: A case study at malaysian electronics	Jurnal Teknologi (Sciences and Engineering)	01279696	59	Suppl. 2	29-32	2012		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	UTM First Author
33	manufacturing services company Human factor issue in quality	Jurnal Teknologi	01279696	59	Suppl.	33-35	2012		Journal Article	Engineering: General Engineering	Emerging Sources	Co author
	management	(Sciences and Engineering)							7 6.6.0		Citation Index	
34	Delaminating control on drilling the medium density fiber board with robust optimization	Jurnal Teknologi (Sciences and Engineering)	01279696	59	Suppl. 2	95-98	2012		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	Corresponding Author
35	Solvent debinding process for ZK60 magnesium alloy mim compact	Jurnal Teknologi (Sciences and Engineering)	01279696	59	Suppl. 2	159- 168	2012		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	UTM First Author
36	Optimization of injection molding parameters by data mining method in PIM process	Jurnal Teknologi (Sciences and Engineering)	01279696	59	Suppl. 2	193- 196	2012		Journal Article	Engineering: General Engineering	Emerging Sources Citation Index	Corresponding Author
37	Optimization of Micro Metal Injection Molding with Multiple Performance	Chiang Mai Journal of Science	0125- 2526	38	2	231- 241	2011	0.382	Research	Research Areas:Science & Technology - Other Topics Web of Science Categories:Multidisciplinary Sciences	Q4	Corresponding Author

	Characteristics using Grey Relational Grade											
38	Characterisation of Titanium Foams Sintered at Different Temperatures Prepared by the Slurry Method	Sains Malaysiana	0126- 6039	39	1	77-82	2010	0.747	Research	Research Areas:Science & Technology - Other Topics Web of Science Categories:Multidisciplinary Sciences	Q4	Corresponding Author
39	Single Performance Optimization of Micro Metal Injection Molding for the Highest Green Strength by Using Taguchi Method	International Journal of Integrated Engineering	2600- 7916	2	1	35-44	2010		Research	General Engineering	Emerging Sources Citation Index	UTM First Author
40	Optimisation of Sintering Factors of Titanium Foams Using Taguchi Method	International Journal of Integrated Engineering	2600- 7916	2	1	1-6	2010		Research	General Engineering	Emerging Sources Citation Index	UTM First Author
41	Performance of Solvent Debinding using Design of Experiment Method	Sains Malaysiana	0126- 6039	38	6	883- 888	2009	0.747	Research	Research Areas:Science & Technology - Other Topics Web of Science Categories:Multidisciplinary Sciences	Q4	UTM First Author
42	Optimizing the Injection Parameter of	Chiang Mai Journal of Science	0125- 2526	36	3	349- 358	2009	0.382	Research	Research Areas:Science & Technology - Other Topics	Q4	Corresponding Author

Water Atomised					Web of Science	
SS316L Powder					Categories: Multidisciplinary	
with Design of					Sciences	
Experiment						
Method for Best						
Sintered Density						

**SCOPUS JOURNALS (Total = 22)** 

NO	ARTICLE TITLE	JOURNAL TITLE	ISSN	Vol.	Issues	Page	Publication year	IF	Type of Publication	Category of Publication	Quartile Ranking	Category Author
1	Taguchi's T- method with nearest integer- based binary bat algorithm for prediction	Bulletin of Electrical Engineering and Informatics 11(4), pp. 2215- 2224	2089- 3191	11	4	2215- 2224	2022		Article	Mathematics: Control and Optimization		UTM First Author
2	Cost of Equipment Failure Modelling as a Tool for Maintenance Strategy	Lecture Notes in Mechanical Engineering	2195- 4356			140- 149	2021		Article	Mechanical Engineering		Co Author
3	Energy Management Cultures Assessment and Its Impact on	PalArch's Journal of Archaeology of Egypt/Egyptology	1567- 214X	17	7	11398- 11411	2020		Journal Article	Multidisciplinary		Co Author

	the Quality of									
	Service in									
	Power Plants a									
	Research Gap									
	for Future									
	Studies									
4	A Significant	International	09743154	13	1	117-	2020	Journal	General	Со
	Feature	Journal of				136		Article	Engineering	Author
	Selection in the	Engineering								
	Mahalanobis	Research and								
	Taguchi System	Technology								
	using Modified-									
	Bees Algorithm									
5	Integrated	TQM Journal	17542731	31	5	740-	2019	Journal	Business,	 UTM
	quality					757		Article	Management	First
	environmental								and Accountng:	Author
	management								General	
	implementation								Business,	
	in food								Management	
	processing								and Accounting,	
	SMEs: A case								Business and	
	study of a								International	
	developing								Management,	
	country								Strategy	
									Management	
									Decision	
									Sciences:	
									General	

									Decision Sciences	
6	Increasing T- method accuracy through application of robust M- estimatior	International Journal of Engineering and Technology(UAE)	2227524X	7	3	44-48	2018	Journal Article	General Engineering	UTM First Author
7	Mahalanobis- Taguchi system for pattern recognition: A brief review	Far East Journal of Mathematical Sciences	09720871	102	12	3021- 3052	2017	Journal Article	Mathematics: General Mathematics;	UTM First Author
8	A hybrid methodology for the Mahalanobis- Taguchi system using random binary search- based feature selection	Far East Journal of Mathematical Sciences	09720871	101	12	2663- 2675	2017	Journal Article	Mathematics: General Mathematics	UTM First Author
9	Effects of metal fillers on properties of epoxy for rapid tooling inserts	International Journal on Advanced Science, Engineering and Information Technology	20885334	7	4	1155- 1161	2017	Journal Article	Engineering: General Engineering	UTM First Author

10	Mechanical properties of quasi-static and ultrasonic compaction of stainless steel powder metallurgy	ARPN Journal of Engineering and Applied Sciences	18196608	11	10	6594- 6598	2016	Journal Article	Engineering: General Engineering	Co Author
11	Optimal feature selection of Taguchi character recognition in the Mahalanobis-Taguchi system using bees algorithm	Global Journal of Pure and Applied Mathematics	09731768	12	3	2651- 2671	2016	Journal Article	Mathematics: General Mathematics; Applied Mathematics	UTM First Author
12	Operational complexity impact on performance of electrical and electroncis industry in Malaysia	ARPN Journal of Engineering and Applied Sciences	18196608	10	15	6593- 6601	2015	Journal Article	Engineering: General Engineering	UTM First Author
13	Sintering optimization of Ti-6Al-4V powder mix	Advanced Science Letters	19366612	19	1	260- 263	2013	Journal Article	Engineering: General Engineering	UTM First Author

	with palm stearin based binder using grey-Taguchi method									
14	Injection moulding temperature and powder loading influence to the metal injection moulding (MIM) green compact	Scientific Research and Essays	19922248	6	21	4532- 4538	2011	Journal Article	Engineering: General Engineering	Main Author
15	Optimization of injection molding parameter of TI-6AL-4V powder mix with palm stearin and polyethylene for the highest green strength by using taguchi method	International Journal of Mechanical and Materials Engineering	18230334	6	1	126- 132	2011	Journal Article	Materials Science: General Materials Science Engineering: Mechanics of Materials; Mechanical Engineering	UTM First Author
16	Verification of interface	Journal of Applied Sciences	18125654	11	9	1600- 1605	2011	Journal Article	Multidisciplinary	 Co author

	friction of radial ultrasonic compression using FE simulation									
17	Injection molding parameter optimization of titanium alloy powder mix with palm stearin and polyethylene for multiple performance using grey relational analysis	Journal of Applied Sciences	18125654	11	10	1833- 1838	2011	Journal Article	Multidisciplinary	Main Author
18	Multiple performance optimization for the best metal injection molding green compact	Journal of Applied Sciences	18125654	11	9	1663- 1667		Journal Article	Multidisciplinary	Main Author
19	Optimization of micro metal injection molding for	International Journal of Mechanical and	18230334	5	2	282- 289	2010	Journal Article	Materials Science: General Materials Science	Main Author

	highest green strength by using taguchi method	Materials Engineering							Engineering: Mechanics of Materials; Mechanical Engineering	
20	Development and characterization of titanium alloy foams	International Journal of Mechanical and Materials Engineering	18230334	5	2	244- 250	2010	Journal Article	Materials Science: General Materials Science Engineering: Mechanics of Materials; Mechanical Engineering	UTM First Author
21	Flow behaviour to determine the defects of green part in metal injection molding	International Journal of Mechanical and Materials Engineering	18230334	4	1	70-75	2009	Journal Article	Materials Science: General Materials Science Engineering: Mechanics of Materials; Mechanical Engineering	Main Author
22	Rheological behavior of SS316L gas atomized	International Journal of Mechanical and	18230334	3	2	108- 114	2008	Journal Article	Materials Science: General Materials Science	Main Author

powder in	Materials					
bimodal	Engineering				Engineering:	
particle size					Mechanics of	
distribution in a					Materials;	
composite					Mechanical	
binder system					Engineering	

### PROCEEDINGS/CONFERENCE (Indexed in Scopus/ WOS)

- 1. Noorazizi, M.S., Jamaludin, K.R. Sarip, S., Izamshah, R., Zamri, R., Abdullah, L., Maslan, M.N. An Investigation of chip formation on different penetration angle for orthopaedic surgical bone drilling. Proceedings of Mechanical Engineering Research Day 2019 (Merd'19), 2019. Pages 328-329
- Jamaludin, K.R., Talib, H.H.A., Shah, S.A.R. Integrated Quality Environmental Management practices and its impact on operational and environmental performances in food processing SMEs. Proceedings of the International Conference on Industrial Engineering and Operations Management. Volume 2019, Issue MAR, 2019, Pages 32-429th International Conference on Industrial Engineering and Operations Management, IEOM 2019; JW Marriott Hotel, Bangkok; Thailand; 5 March 2019 through 7 March 2019
- Khushairi, M.T.M., Sharif, S., Jamaludin, K.R., Razak, Z. Shah, Z.N. Suhaimi, M.A., Shayfull, Z. Development of metal filled epoxy inserts for injection moulding process. AIP Conference Proceedings Volume 2030, November 2018, Article 020084. 4th International Conference on Green Design and Manufacture 2018, IConGDM 2018; Eden Star Saigon Hotel Ho Chi Minh; Viet Nam; 29 April 2018 through 30 April 2018
- 4. Muhamad, W.Z.A.W., Jamaludin, K.R., Muhtazaruddin, M.N., Yahya, Z.R., Ramlie, F., Harudin, N. Optimal variable screening in automotive crankshaft remanufacturing process using statistical pattern recognition approach in the Mahalanobis-Taguchi system. AIP Conference Proceedings. Volume 2013, Oct. 2018, Article 020031. Volume 2013, 2 October 2018, Article number 020031International Conference on Mathematics, Engineering and Industrial Applications 2018, ICoMEIA 2018; Menara Razak Universiti Teknologi Malaysia (UTM)Kuala Lumpur; Malaysia; 24 July 2018 through 26 July 2018
- 5. Muhamad, W.Z.A.W., Jamaludin, K.R., Saad, S.A., Yahya, Z.R., Zakaria, S.A. Random binary search algorithm based feature selection in Mahalanobis Taguchi system for breast cancer diagnosis. AIP Conference Proceedings. Volume 1974, June 2018, Article 020027. 25th National Symposium on Mathematical Sciences: Mathematical Sciences as the Core of Intellectual Excellence, SKSM 2017; Kuantan, Pahang; Malaysia; 27 August 2017 through 29 August 2017
- Muhamad, W.Z.A.W., Jamaludin, K.R., Zakaria, S.A., Yahya, Z.R., Saad, S.A.
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- 8. Muhamad, W.Z.A.W., Jamaludin, K.R., Ramlie, F., Harudin, N., Jaafar, N.N. Criteria selection for an MBA programme based on the Mahalanobis Taguchi System and the Kanri distance calculator. IEEE Student Conference on Research and Development:

- Inspiring Technology for Humanity, SCOReD 2017 Proceedings Volume 2018-January, 28 February 2018, Pages 220-2231. 5th IEEE Student Conference on Research and Development, SCOReD 2017; Putrajaya; Malaysia; 13 December 2017 through 14 December 2017
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- 10. Noor, F.M., Jamaludin, K.R., Ahmad, S. Fabrication of Porous Stainless Steel 316L for Biomedical Applications. MATEC Web of Conferences. Volume 135, 20 November 2017, Article number 000628th International Conference on Mechanical and Manufacturing Engineering, ICME 2017; Langkawi; Malaysia; 22 July 2017 through 23 July 2017
- 11. Daud, Y., Raman, N.A., Aziz, S.A., Jamaludin, K.R. Design of ultrasonic compaction tool for powder metallurgy, Applied Mechanics and Materials, Vol. 465-466, pp.1016-1020. 4th International Conference on Mechanical and Manufacturing Engineering, ICME 2013; Bangi, Putrajaya; Malaysia; 17 December 2013 through 18 December 2013
- 12. Mad Rosip N. I., Ahmad S., Arpawi N. L., Jamaluddin K. R., Mat Noor F. The Effect of Sintering Temperature and Composition for Density and Porosity of SS316L Foam. Applied Mechanics and Materials Vols. 465-466, pp 988-992. 4th International Conference on Mechanical and Manufacturing Engineering, ICME 2013; Bangi-Putrajaya; Malaysia; 17 December 2013 through 18 December 2013
- 13. Noor F. M., Zain M. I. M., Jamaludin K. R., Hussin R., Kamdi Z., Ismail A., Ahmad S., Taib H. Potassium Bromide as Space Holder for Titanium Foam Preparation. Applied Mechanics and Materials Vols. 465-466, pp 922-926. 4th International Conference on Mechanical and Manufacturing Engineering, ICME 2013; Bangi-Putrajaya; Malaysia; 17 December 2013 through 18 December 2013
- 14. Abu M. Y., Jamaludin K. R. Application of Mahalanobis-Taguchi System on Crankshaft as Remanufacturing Automotive Part: A Case Study. Advanced Materials Research Vol. 845, pp 883-888. 1st International Materials, Industrial, and Manufacturing Engineering Conference, MIMEC 2013; Johor Bahru; Malaysia; 4 December 2013 through 6 December 2013
- 15. Abu, M.Y., Jamaludin, K.R., Ramlie, F. Pattern recognition using Mahalanobis-Taguchi System on connecting rod through remanufacturing process: A case study. Advanced Materials Research Vol. 845, 2014, pp 883-888. 1st International Materials, Industrial, and Manufacturing Engineering Conference, MIMEC 2013; Johor Bahru; Malaysia; 4 December 2013 through 6 December 2013
- 16. Ismail, N.N., Jamaludin, K.R., Ahmad, N. Glycerol as plasticizer for waste polystyrene based Metal Injection Molding (MIM) binder, Advanced Materials Research, Vol. 845, 2014, pp.837-840. 1st International Materials, Industrial, and Manufacturing Engineering Conference, MIMEC 2013; Johor Bahru; Malaysia; 4 December 2013 through 6 December 2013
- 17. Abu, M.Y., Jamaludin, K.R., Abdul Sani, A.S., Abdullah, T.A., Wahab, D.A. An application of failure mode and effect analysis to cylinder head during dismantle of remanufacturing process: A case study, Advanced Materials Research, Vol.845,

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- 18. Abu M. Y., Jamaludin K. R., Abdul Sani A. S. Current Situation in Cleaning Process of Remanufacturing in Malaysia: A Case Study. Advanced Materials Research Vol. 845, 2014, pp 904-914. 1st International Materials, Industrial, and Manufacturing Engineering Conference, MIMEC 2013; Johor Bahru; Malaysia; 4 December 2013 through 6 December 2013
- 19. Amin, S.Y.M., Norhamidi Muhamad, Khairur Rijal Jamaludin. Rheological Properties Analysis of WC-Co Injection Feedstock. Materials Science Forum Vols. 773-774, 2014, pp 880-886. 15th International Conference on Advances in Materials and Processing Technologies, AMPT 2012; Wollongong, NSW; Australia; 23 September 2012 through 23 September 2012
- 20. Mad Rosip, N.I., Ahmad, S., Jamaluddin, K.R., Mat Nor, F. The influence of SS316L foam fabrication parameter using powder metallurgy route. Advanced Materials Research Vol. 974, 2014, pp.174-178. 5th International Conference on Material and Manufacturing Technology, ICMMT 2014; Kuala Lumpur; Malaysia; 8 May 2014 through 9 May 2014
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- 23. Abdullah, N.L., Jamaludin, K.R., Talib, H.H.A. Quality management effectiveness in Malaysia: A conceptual model for electronics manufacturing services industry ISBEIA 2012 - IEEE Symposium on Business, Engineering and Industrial Applications, 6422882, 2012, pp.258-262. IEEE Symposium on Business, Engineering and Industrial Applications, ISBELA 2012; Bandung; Indonesia; 23 September 2012 through 26 September 2012.
- 24. Yusof Daud, Margaret Lucas, Khairur Rijal Jamaludin. 2012. Finite Element Modelling in Ultrasonic Sheet Metal Forming. Advanced Materials Research Vol. 445, 2012, pp. 3-8. 14th International Conference on Advances in Materials and Processing Technologies, AMPT 2011; Istanbul; Turkey; 13 July 2011 through 16 July 2011
- 25. MR Harun, N Muhamad, AB Sulong, NH Mohamad Nor, KR Jamaludin. Metal injection moulding of ZK60 magnesium alloy powder using palm stearin based binder system. Advanced Materials Research Vol. 445, 2012, pp. 374-379. 14th International Conference on Advances in Materials and Processing Technologies, AMPT 2011; Istanbul; Turkey; 13 July 2011 through 16 July 2011
- 26. Khairur Rijal Jamaludin, Norhamidi Muhamad, Sufizar Ahmad, Mohd Halim Irwan Ibrahim, Nor Hafiez Mohd Nor, Mohd Ruzi Bin Harun, Mohd Yusof Md Daud. 2012. Optimizing the Sintering Parameter of Metal Injection Molding Compact Using Robust Engineering Technique. Advanced Materials Research Vol. 445, 2012, pp.

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- 27. Sri Yulis M. Amin, Norhamidi Muhamad, Khairur Rijal Jamaludin, Abdolali Fayyaz & Heng Shye Yunn. 2012. Ball Milling OF WC-Co Powder as Injection Molding Feedstock. Applied Mechanics and Materials Vols. 110-116: 1425-1430. 2nd International Conference on Mechanical and Aerospace Engineering, ICMAE 2011; Bangkok; Thailand; 29 July 2011 through 31 July 2011
- 28. Khairur Rijal Jamaludin, Norhamidi Muhamad, Hooman Abolhasani, Murtadhahadi & Mohd Nizam Ab. Rahman. An Influence of a binder system to the rheological behavior of the SS316L Metal Injection Molding (MIM) Feedstock. Advanced Materials Research. Vol. 264-265, 2011, pp. 554-558. International Conference on Advances in Materials and Processing Technologies, AMPT 2009; ; 26 October 2009 through 29 October 2009
- 29. NH Mohamad Nor, N Muhamad, KR Jamaludin, S Ahmad & MHI Ibrahim. Characterisation of Titanium Alloy feedstock for Metal Injection Moulding Using Palm Stearin Bider System. Advanced Materials Research. Vol. 264-265, 2011, pp. 586-591. International Conference on Advances in Materials and Processing Technologies, AMPT 2009; ; 26 October 2009 through 29 October 2009
- 30. Mohd Halim Irwan Ibrahim, Norhamidi Muhamad, Abu Bakar Sulong, Khairur Rijal Jamaludin, Nor Hafiez Mohamad Nor & Sufizar Ahmad. Optimization of Micro Metal Injection Molding SS316L for the highest green strength by using Taguchi Method. Advanced Materials Research. Vol. 264-265, 2011, pp. 135-140. International Conference on Advances in Materials and Processing Technologies, AMPT 2009; ; 26 October 2009 through 29 October 2009
- 31. Khairur Rijal Jamaludin, Norhamidi Muhamad, Mohd Halim Irwan Ibrahim & Nor Hafiez Mohamad Nor. Orthogonal Array Technique for Optimizing the Sintering Parameter of the Metal Injection Molding (MIM) Compact: Best Flexure Strength. Advanced Materials Research. Vol. 264-265, 2011, pp. 290-294. International Conference on Advances in Materials and Processing Technologies, AMPT 2009; 26 October 2009 through 29 October 2009
- 32. S. Ahmad, N. Muhamad, A. Muchtar, J. Sahari, KR Jamaludin, MHI Ibrahim & NH Mohamad Nor. Taguchi Method for the Determination of Optimised Sintering Paramaters of Titanium Alloy Foams. Advanced Materials Research. Vol. 264-265, 2011, pp. 1731-1736. International Conference on Advances in Materials and Processing Technologies, AMPT 2009; ; 26 October 2009 through 29 October 2009
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- 34. Nor, N.H.M., Muhamad, N., Ruzi, M., Ahmad, S., Ibrahim, M.H.I., Jamaludin, K.R. Injection molding parameter optimization of Ti-6Al-V powder mix with palm stearin and polyethylene for highest green strength using Taguchi method. AIP Conference Proceedings. Vol. 1315, 2010, pp. 689-694. International Conference on Advances in Materials and Processing Technologies, AMPT2010; Paris; France; 24 October 2010 through 27 October 2010
- 35. Ibrahim, M.H.I., Muhamad, N., Sulong, A.B., Nor, N.H.M., Jamaludin, K.R., Harun, M.R., Murtadhahadi. Optimization of micro metal injection molding by using grey relational grade. AIP Conference Proceedings. Vol. 1315, 2010, pp. 713-718. International Conference on Advances in Materials and Processing Technologies, AMPT2010; Paris; France; 24 October 2010 through 27 October 2010

- 36. Jamaludin, K.R., Muhamad, N., Rahman, M.N.A., Murtadhahadi, Ahmad, S., Ibrahim, M.H.I., Nor, N.H.M. Rheological investigation of water atomized metal injection molding (MIM) feedstock for processibility prediction, Advanced Materials Research, Vol. 83-86, 2010, pp. 945-952. International Conference on Advances in Materials and Processing Technologies, AMPT 2008; Manama; Bahrain; 2 November 2008 through 5 November 2008
- 37. Nor, N.H.M., Muhamad, N., Ahmad, S., Ibrahim, M.H.I., Harun, M.R., Jamaludin, K.R. Parameter optimization of injection molding Ti-6Al-V powder and palm stearin binder for highest green strength using Taguchi method. Key Engineering Materials, Vol. 443, 2010, pp. 69-74. 9th Asia-Pacific Conference on Materials Processing, APCMP2010; Sydney, NSW; Australia; 7 June 2010 through 10 June 2010

### **THESIS**

- i) PhD Thesis: Influence of SS316L Powder Particle Size and Shape on Metal Injection Molding Parameters Using Design of Experiment (2009)
- ii) MSc Dissertation: Flow Behind Cubes and Hemisphere (1998)

### ORIGINAL BOOK

i) Khairur Rijal Jamaludin, Reka Bentuk Sistem Kuasa Bendalir, Penerbit UTM, (2004).

### **TEACHING MODULES**

- Khairur Rijal Jamaludin, Reka Bentuk Sistem Kuasa Bendalir, Cetakan Awal PPD, UTM, 2002
- ii) Khairur Rijal Jamaludin, Kuasa Bendalir, PPD, UTM, 1999

### **BOOK CHAPTER**

- i) Matsumoto, M., Chinen, K., Jamaludin, K.R., Yusoff, B.S.M. From Sustainable Production, Life Cycle Engineering and Management, Barriers for Remanufacturing Business in Southeast Asia: The Role of Governments in Circular Economy, Edited by Y. Kishita et al., Springer Nature Singapore Pte Ltd 2021, Pages 151-161.
- ii) Noor, F.M., Jamaludin, K.R., Ahmad, S. From Solid State Phenomena, Physical and mechanical characteristics of porous SS316L for biomedical implant, Edited by Sahar M.R., Rohani M.S., Trans Tech Publications Ltd, 2017, Pages 374-378
- iii) Noor, F.M., Jamaludin, K.R., Ahmad, S. From Materials Science Forum, Production of stainless steel 316L foam with different solid loading, Edited by Ahmad Z.A., Sulaiman M.Y.M., Abdullah Y., Yarmo M.A., Aziz F.A., Ismail K.N., Abdullah N.S., Ali W.F.F.W., Rejab N.A., Jamaludin A.R., Ali W.F.F.W., Trans Tech Publications Ltd, 2016, Pages 321-325

- iv) Yazid, A.M., Rijal, J.K., Awaluddin, M.S., Sari, E. From Procedia CIRP, Pattern Recognition on Remanufacturing Automotive Component as Support Decision Making using Mahalanobis-Taguchi System Edited by Seliger G., Mohd. Yusof N., Elsevier 2015, Vol. 26, Pages 258-263
- v) Mat Nor, M.F., Sharif, S., Jamaludin, K.R. From Applied Mechanics and Materials, Rheological properties of copper-graphite MIM feedstocks prepared with waste PET binder, Edited by Khalid A., Manshoor B., Abdullah K., Siswanto W.A., Rahim E.A., Khalid A., Manshoor B., Abdullah K., Rahim E.A., Khalid A., Siswanto W.A., Khalid A. Trans Tech Publications Ltd. 2014. Volume 660, Pages 209-213.
- vi) S. Ahmad, N. Muhamad, A. Muchtar, J. Sahari, KR Jamaludin, MHI Ibrahim & NH Mohamad Nor. From Key Engineering Materials, Optimisation of Processing Parameters of Titanium foams using Taguchi Method for compressive strength. Edited by Zhao, J; Kunieda, M; Yang, G; Yuan, XM, Trans Tech Publications Ltd, Vol. 447-448, 2010, pp. 671-675.
- vii) Jamaludin, K.R., Muhamad, N., Rahman, M.N.A., Ahmad, S., Ibrahim, M.H.I., Nor, N.H.M., Daud, M.Y.M, From Key Engineering Materials, Application of the Grey-Taguchi method to the optimization of Metal Injection Molding (MIM) process. Edited by Wang, J; Mathew, P; Li, XP; Huang, CZ; Zhu, HT Trans Tech Publications Ltd, Vol. 443, 2010, pp. 63-68.
- viii) Ibrahim, M.H.I., Muhamad, N., Sulong, A.B., Jamaludin, K.R., Nor, N.H.M., Ahmad, S., Harun, M.R., Zakaria, H. From Key Engineering Materials, Parameter optimization towards highest micro MIM density by using Taguchi method, Edited by Wang, J; Mathew, P; Li, XP; Huang, CZ; Zhu, HT, Trans Tech Publications Ltd, Vol. 443, 2010, pp. 705-710.
- ix) Khamis, N., Ab Rahman, M.N., Jamaludin, K.R., Ismail, A.R., Ghani, J.A., Zulkifli, R. From Lecture Notes in Engineering and Computer Science, Development of 5S Practice Checklist for Manufacturing Industry, Edited by Ao, SI; Gelman, L; Hukins, DWL; Hunter, A; Korsunsky, AM, Int. Assoc. Engineers-IAENG, Hong Kong, 2009, pages 545-549.
- x) Jamaludin, K.R., Muhamad, N., Ab Rahman, M.N. Amin, S.Y.M., Ahmad, S., Ibrahim, M.H.I, Hahadi, M., Nor, N.H.M. From Lecture Notes in Engineering and Computer Science, Molding Parameter Optimisation for the Best Sintered Density, Edited by Ao, SI; Gelman, L; Hukins, DWL; Hunter, A; Korsunsky, AM, Int. Assoc. Engineers-IAENG, Hong Kong, 2009, pages 590-594.

### EXPERT REPORT FOR MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY

- Study on Exploring Re-manufacturing activities in Malaysia for Ministry of International Trade and Industry (MITI): 19/12/2011-1/6/2012: RM 99,935.00
- Study on Sustainable Manufacturing Program Remanufacturing (MITI): Feb 2016- Nov 2016: RM 1.9 million
- Sustainable Remanufacturing Project Linear Channel Sdn Bhd.
   Report on Remanufacturing Seven Key Process Area (R7KPA) Audit

- and Gomi Muda Mura Muri Economic and Environmental Impact Assessment (G3M)
- 4. Sustainable Remanufacturing Project Voith Turbo Sdn Bhd. Report on Remanufacturing Seven Key Process Area (R7KPA) Audit and Gomi Muda Mura Muri Economic and Environmental Impact Assessment (G3M)
- Sustainable Remanufacturing Project Adamo Vending Supply Sdn Bhd. Report on Remanufacturing Seven Key Process Area (R7KPA) Audit and Gomi Muda Mura Muri Economic and Environmental Impact Assessment (G3M)
- Sustainable Remanufacturing Project Dachser Integrated Logistics
   (M) Sdn Bhd. Report on Remanufacturing Seven Key Process Area
   (R7KPA) Audit and Gomi Muda Mura Muri Economic and
   Environmental Impact Assessment (G3M)
- 7. Sustainable Remanufacturing Project Delta Perdana Sdn Bhd.
  Report on Remanufacturing Seven Key Process Area (R7KPA) Audit
  and Gomi Muda Mura Muri Economic and Environmental Impact
  Assessment (G3M)
- 8. Sustainable Remanufacturing Project Rentwise Sdn Bhd. Report on Remanufacturing Seven Key Process Area (R7KPA) Audit and Gomi Muda Mura Muri Economic and Environmental Impact Assessment (G3M)
- Sustainable Remanufacturing Project MTU Services (M) Sdn Bhd.
   Report on Remanufacturing Seven Key Process Area (R7KPA) Audit and Gomi Muda Mura Muri Economic and Environmental Impact Assessment (G3M)

#### RESEARCH MONOGRAPH

Overall Performance Measurement for Logistics Operation, 2008. Research Management Centre, UTM

### NATIONAL POLICY PAPERS FOR GOVERNMENT OF MALAYSIA

- National Remanufacturing Policy/ Kertas Polisi Pembuatan Semula
   Kementerian Perdagangan Antarabangsa dan Industri Malaysia 2017
- Pelan Strategi Industri Pembuatan Semula Negara. Kementerian
   Perdagangan Antarabangsa dan Industri Malaysia 2015
- Kertas Halatuju dan Aktiviti RMK11 Industri Pembuatan Semula Kementerian
   Perdagangan Antarabangsa dan Industri Malaysia 2015

### **SIRIM STANDARD**

- 1. Sirim 12:2017. Lean Management Part 1: Requirements for key activities
- 2. Sirim 13:2017. Lean Management Part 2: Requirements for competent persons

# PLENARY/CHAIRPERSON/ORAL POSTER PRESENTER/KEYNOTE ADDRESS / INVITED GUEST SPEAKER

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	Keynote Address	International Conference of Robust Quality Engineering (ICRQE 2021)	10-17 September 2021	Tokyo, Japan
2	Plenary	Expert Forum of Taguchi Method and Mahalanobis Taguchi System at the 3rd International Conference on Robust Engineering	20-21 January 2017	Mumbai, India
3	Keynote Address	Ministry of Public Work Malaysia Technical Seminar	14 Sept 2017	Public Work Ministry, Malaysia
4	Invited Guest Lecture	Workshop on Predictive Engineering Analytical for Sustainability and Recent Trends.	20/7/2017	Universiti Putra Malaysia

5	Invited Guest Speaker	2nd Asia Pasific Remanufacturing Summit 2015	12th -13th Nov 2015	Singapore
6	Keynote Speaker	Malaysia Automotive Institute (MAI) Aftermarket Conference 2015	19 March 2015	Kuala Lumpur
7	Invited Guest Speaker	1nd Asia Pasific Remanufacturing Summit 2014	20th -21th Nov 2014	Singapore
8	Keynote Address	2nd International Conference on Robust Quality Engineering	15 Dec 2014	Bangalore, India
9	Invited Guest Speaker	Asia Pacific Economic Cooperation (APEC) at APEC Market Access Group Workshop; Academic and Scientific Perspectives on Remanufacturing, Surabaya, Indonesia - April 11, 2013. The invitation was from United States Agency, International Development, and United State of America Government.	11 April 2013	Surabaya, Indonesia
10	Invited Guest Speaker	Topic: Powder Metallurgy Research in Malaysia	20 January 2012	Istanbul Ticaret University, Turkiye.
11	Invited Guest Speaker	Topic: Sustainable Binder development in Metal Injection Molding Research	18 January 2012	Bartin University, Turkiye.
12	Plenary	NevilleClarke-UTM Lean Sigma Tea Talk	18 July 2012	UTM KL

# PROFESSIONAL SERVICES

# **Consultation and Training**

NO	ROLE	TITLE OF	DATE	LOCATION	TOTAL
		PROGRAMME			INCOME GENERATED (RM)
1	Member	Development of a technopreneurship readiness profiling tool for Industry 4.0	30/1/2019- 29/10/2019	MTDC	RM 200,000
2	Project Leader	Consultation projects for the Prime Minister Department (ICU-Pulau Pinang) for the development of Plant Factory Artificial Light	21/2/2018	Pulau Pinang	RM 220,374
3	Project Leader	Prime Minister Department (ICU- Pulau Pinang) as continuation project for coaching Bumiputera's mico sized industry to be certified by Halal JAKIM	21/2/2018	Pulau Pinang	RM 150,000
4	Project Leader	Projects for the Prime Minister Department (ICU- Pulau Pinang) for coaching Bumiputera's mico sized industry to be certified by Halal JAKIM	21/9/2017- 20/12/2017	Pulau Pinang	RM 300,000
5	Member	Study and audit on G3M Economic and Environmental Impact Assessment for Remanufacturers in Malaysia. Project awarded by Ministry of International Trade and Industry (MITI)	10/5/2016- 1/7/2017	MITI	RM 1,900,000

6	Member	Study on Exploring	19/12/2011-	MITI	RM99,935.00
		Re-manufacturing	1/6/2012		
		activities in			
		Malaysia for			
		Ministry of			
		International Trade			
		and Industry (MITI)			

## **Commercialisation**

NO	ROLE	NAME OF PRODUCT COMMERCIALISATION	DATE	TOTAL INCOME GENERATED (RM)
1	Co inventor	G3M Economic and Environmental	10 May 2016	RM 1.9 Mil.
		Impact Assessment		

## **Entreprenuership**

NO	SPIN OFF COMPANY (UTM)	TOTAL INCOME GENERATED (RM) (individual equity value based on audited company account in 3 years)
1	RESPECT Business and Advanced Technology Solutions Sdn Bhd	RM 2,000,000

## **Community and University Services**

NO	ROLE	TITLE OF PROGRAMME	DATE	LEVEL	LOCATION
1	Team Member	Adopt a Kampung, Toy Library program	10/8/2018	University	Kampung Sening, Bachok, Kelantan

### **Endowment and Wakaf to University**

NO	NAME OF ENDOWMENT AND WAKAF	TOTAL CONTRIBUTION (RM)
1	Endowment via monthly salary deduction	RM 1000

# Patent Granted and Filing

NO	NAME OF PATENT	STATUS OF PATENT
1	F-N-C-O MEASUREMENT	UTM IP Approved
	SYSTEM DESIGN FOR	(IP/PT/2016/1991)
	ETCHING PROCESS	
	ROBUSTNESS	

# Copyright

NO	NAME OF COPYRIGHT	STATUS OF COPYRIGHT
1	Bees Algorithm into the	Approved
	Mahalanobis Taguchi System	(IP/CR/2016/0675)
2	G3M Economic and	UTM.J.14.01/27.13/1
	Environmental Impact	JLD108(58)
	Assessment tool.	. ,