



UNIVERSITI KEBANGSAAN MALAYSIA

The National University of Malaysia

ZAINUDDIN SAJURI

CURRICULUM VITAE

2023



ZAINUDDIN SAJURI

Professor (Dr. Eng.)

Department of Mechanical and Manufacturing Engineering
Faculty of Engineering and Built Environment
Universiti Kebangsaan Malaysia

PROFILE

Started as a Senior Lecturer in the Department of Mechanical and Materials Engineering, Faculty of Engineering, UKM in 2005, currently serving as a researcher and associate professor at the Department of Mechanical and Manufacturing Engineering.

Expert in joining and failure analysis of metal materials, and frequently referred by the industries and related government agencies for forensic engineering consultations on accident/failure of engineering structures.

Actively involved in curriculum design and assessment for integrated Cumulative Grade Point Average (iCGPA) as committee member at the university and national levels.

CONTACT

PHONE:

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WEBSITE:

https://ukmsarjana.ukm.my/main/lihat_profil/SzAxNDIzMg==

WoS ResearcherID: AAE-7770-2019

Scopus ORCID: 6507807714

<https://scholar.google.com/citations?user=wHoKY9oAAAAJ&hl=en>

EMAIL:

zsajuri@ukm.edu.my

ADMINISTRATIVE APPOINTMENT

DEPUTY DIRECTOR (Postgraduate Competency and Promotion)

Centre for Academic Management, UKM
15 Aug 2022 - Current

DEPUTY DEAN (Postgraduate)

Faculty of Engineering and Built Environment
1 Oct 2021 - 14 Aug 2022

CHAIR

Department of Mechanical and Manufacturing Engineering (JKMP)
1 Dec 2019 - 30 Sept 2021

CHAIR

Centre for Materials Engineering and Smart Manufacturing (MERCU)
15 Feb 2018 - 30 Nov 2019

HEAD OF DEPARTMENT

Department of Mechanical and Materials Engineering (JKMB)
1 Jun 2015 - 31 Dec 2017 & 28 Sep 2012 - 31 Mar 2013

HEAD OF PROGRAMME

Mechanical Engineering Programme
1 Jan 2018 - 14 Feb 2018

RESEARCH STRENGTH

RESEARCH EXPERTISE: Materials Processing

Publications	: 136 Articles
Citations	: 1415
H-index	: 20

Total research/consultation fund received : RM 1,438,328.00
(as a leader)

Supervision	PhD Students		Master Students	
	Completed	On-going	Completed	On-going
Main Supervisor	8	3	2	1
Co-Supervisor	10	1	3	-

BIODATA

Name	:	Professor Dr. Zainuddin Sajuri
Date and Place of Birth	:	28 th June 1971, Selangor, Malaysia
Gender	:	Male
Nationality	:	Malaysia
Marital Status	:	Married
Corresponding Address	:	Department of Mechanical and Manufacturing Engineering Faculty of Engineering and Built Environment Universiti Kebangsaan Malaysia 43600 Bangi, Selangor, Malaysia
Telephone	:	+603 8911 8017; +6013 333 4747
Fax	:	+603 8925 9659
Email	:	zsajuri@ukm.edu.my
Current Designation	:	Professor Department of Mechanical and Manufacturing Engineering (Since 2023)
Research Area	:	Materials
Research Expertise	:	Metal Materials Processing
Research Topics	:	• Friction Stir Welding • Performance and Failure of Advanced Materials • Strength of Similar and Dissimilar Materials Joint • Additive Manufacturing
Tertiary Qualifications	:	• 2002 – 2005 Dr.Eng. (Materials Science) Nagaoka University of Technology, Japan • 2000 – 2002 M.Eng. (Mechanical System) Nagaoka University of Technology, Japan • 1995 - 1997 B.Eng. (Mechanical Design & Production Engineering) Nagaoka University of Technology, Japan • 1992 - 1995 Diploma (Mechanical Engineering) Ishikawa National College of Technology, Japan • 1991 - 1992 Diploma (Natural Sciences - Japanese Language) Japanese Language School of International Student Institute, Tokyo, Japan
Professional Qualification	:	Professional Learning Facilitator (NBO Leadership) Graduate Member, Board of Engineers Malaysia (BEM), Registration No.: 58000A

Carrier History

:

<u>No.</u>	<u>Period</u>	<u>Designation</u>
1.	Aug 2022 – Now	Deputy Director (Postgraduate Competency and Promotion) , Centre for Academic Management, UKM
2.	Oct 2021 – Aug 2022	Deputy Dean (Postgraduate) , Faculty of Engineering and Built Environment
3.	Dec 2019 – Sept 2021	Chair , Department of Mechanical and Manufacturing Engineering, Faculty of Engineering & Built Environment, UKM
4.	Mac 2019 – Apr 2019	Research Attachment Centre for Marine Technology and Ocean Engineering (CENTEC), Instituto Superior Tecnico (IST), University of Lisbon, Portugal
5.	Feb 2018 – Nov 2019	Chair , Centre for Materials Engineering and Smart Manufacturing, Faculty of Engineering & Built Environment, UKM
6.	Jan 2018 – Feb 2018	Programme Head , Mechanical Engineering Programme, Faculty of Engineering & Built Environment, UKM
7.	Jun 2015 – Dec 2017	Head , Department of Mechanical and Materials Engineering, Faculty of Engineering & Built Environment, UKM
8.	Apr. 2014 – May 2015	Head , Industry and Community Partnerships, Faculty of Engineering & Built Environment, UKM
9.	Oct. 2012 – Mar. 2013	Head , Department of Mechanical and Materials Engineering, UKM
10.	2011 – 2014	Programme Coordinator , Bachelor of Engineering (Mechanical Engineering Programme), UKM
11.	8 Feb 2011 – to date	Associate Professor , Faculty of Engineering & Built Environment, UKM
12.	2010 – 2011	Programme Coordinator , Master of Engineering (Mechanical Engineering Programme), UKM
13.	2005 – 2011	Senior Lecturer , Faculty of Engineering & Built Environment, UKM
14.	2000 - 2005	Master and PhD , Nagaoka University of Technology, Japan
15.	1997 – 2000	Production Engineer , Shin Etsu Handoutai (S.E.H. Shah Alam) Sdn.Bhd.

VISITING PROFESSOR/LECTURER

#	Date	Activities	Venue	Invitation
1	21/11/2013 - 23/11/2013	Research Collaboration Visit to Syarif University of Technology, Tehran, Iran	Sharif University of Technology, Tehran, Iran	Sharif University of Technology
2	06/11/2018 - 09/11/2018	Collaboration meeting with the Faculty of Engineering and Technology, Botswana International University of Science & Technology (BIUST)	Botswana International University of Sci & Tech, Botswana	Faculty of Engineering & Tech, BIUST
3	10/11/2018 - 15/11/2018	Visiting Professor to Amirkabir University of Technology, Iran	Amirkabir University of Technology, Tehran, Iran	Office of Vice Chancellor of International Affair, AUT
4	01/03/2019 - 15/04/2019	Research Attachment/ Visiting Lecturer at the Instituto Superior Tecnico (IST), Universidade de Lisboa, Portugal	Universidade de Lisboa, Portugal	Instituto Superior Tecnico (IST)
5	15/01/2020 - 25/01/2020	Visiting Professor to Amirkabir University of Technology, Iran	Amirkabir University of Technology, Tehran, Iran	Office of Vice Chancellor of International Affair, AUT

SPEAKER/FACILITATOR IN INTERNAL WORKSHOP

#	Date	Activities	Venue	Organizer
1	05/04/2013 - 07/04/2013	Bengkel Penghayatan OBE Dan Pemantapan Proforma	Royale Bintang, Seremban, Negeri Sembilan	Pusat Pembangunan Profesional & Kepimpinan UKM
2	27/06/2013 - 27/06/2013	Bengkel Proforma	Hotel Grand Season, Jalan Pahang, Kuala Lumpur	Fakulti Sains Kesihatan
3	21/01/2014 - 21/01/2014	Bengkel Sistem Pengukuran Pengajaran Program (SP3P)	Hotel Bangi-Putrajaya, Bandar Baru Bangi	Pusat Pembangunan Profesional & Kepimpinan UKM
4	09/04/2014 - 09/04/2014	Pemantapan Pensyarah Baharu	Bilik Seminar 10, Aras 3, Bangunan Pentadbiran FKAB	Fakulti Kejuruteraan & Alam Bina (FKAB)
5	27/07/2016 - 27/07/2016	Bengkel Kemasukkan Maklumat Pentaksiran Peperiksaan Ke Dalam SP3P, FEP	Makmal Komputer 3, Aras 2, FEP	Fakulti Ekonomi & Perniagaan (FEP)
6	14/03/2017 - 14/03/2017	Roadshow iCGPA & Bengkel Portfolio Pensyarah JKAS	Bilik Mesyuarat Utama FKAB, UKM	Fakulti Kejuruteraan & Alam Bina (FKAB)
7	12/05/2017 - 12/05/2017	Bengkel Pembangunan Kerangka Konsep Dan Templat Analisis HPP/HPK/Card Score iCGPA	Bilik Mesyuarat Dekan FTSM, Blok G	Pusat Jaminan Kualiti

SPEAKER/FACILITATOR IN NATIONAL WORKSHOP

#	Date	Activities	Venue	Organizer
1	19/08/2013 - 22/08/2013	Workshop - Fatigue: Theory and Experiment	Makmal Ukm - Zwick, Bangunan Akademik, FKAB, UKM	Fakulti Kejuruteraan & Alam Bina (FKAB)
2	16/06/2016 - 16/06/2016	Kursus Panduan Pelaksanaan Sistem Purata Nilai Gred Kumulatif Bersepadu (iCGPA) dan Pendidikan Berasaskan Hasil (OBE)	Universiti Sains Islam Malaysia, Nilai, Negeri Sembilan	Pejabat Timbalan Naib Canselor (Akademik dan Antarabangsa), USIM
3	17/07/2017 - 18/07/2017	Bengkel iCGPA Sempena Persidangan Antarabangsa iCGPA 2017	Hotel Istana, Kuala Lumpur	Ministry of Higher Education Malaysia
4	27/03/2018 - 27/03/2018	Program Hari Bersama Pelanggan Siri 3/2018 dan Majlis Perjumpaan PPTS bersama IPTS Zon Sabah 2018	Kota Kinabalu, Sabah	Department of Higher Education, Ministry of Higher Education Malaysia

Committee Member at National Level

1.	Development of Malaysian Standard MS 2667:2016 (Alloy steel bolting for high temperature service)	Standard and Industrial Research Institute of Malaysia (SIRIM)
2.	Development of Malaysian Standard MS 2668:2016 (Alloy steel for special application bolting materials)	Standard and Industrial Research Institute of Malaysia (SIRIM)
3.	iCGPA International Conference 2017	Ministry of Higher Education, Malaysia
4.	Technical Committee of integrated Cumulative Grade Point Average (iCGPA) 2015-2016	Ministry of Higher Education, Malaysia
5.	Technical Committee of integrated Cumulative Grade Point Average (iCGPA) 2016-2018	Ministry of Higher Education, Malaysia

Panel of Judge/Jury

1.	Poster Competition at the iCGPA International Conference 2017	Ministry of Higher Education, Malaysia
2.	Panel of Expert at the Higher Degree Working Paper Series (Hi-Works) 2019	Universiti Teknologi MARA, Terengganu Branch
3.	IEM-METD Student Design Award 2016	The Institution of Engineers Malaysia
4.	Program Hari Matematik FKAB 2018	Faculty of Engineering and Build Environment, UKM
5.	USIM Publication Award 2019	Universiti Sains Islam Malaysia

Thesis External Examiner

1.	Mohd Nizam bin Ahmad (PhD) - 2020 In-Vitro Investigation of Friction and Binding Effect of NiTi Archwire on Orthodontic Treatment	Universiti Sains Malaysia
2.	Hishamiakim bin Mohamad (Master) - 2018 Pseudoelastic and Cyclic Behaviours of Aged Ni-Rich NiTi Shape Memory Alloy	Universiti Sains Malaysia

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| 3. | Maureen Mudang (PhD) – 2018
High Temperature Creep Behavior of Solution Treated Fe-33Ni-19Cr and Fe-40Ni-24Cr Alloys | Universiti Teknologi Malaysia |
| 4. | Iliani Binti Mohd Ikram (Master) - 2018
Experimental Study on Underwater Friction Stir Welding (UFSW) of AA5085 Aluminium Alloy | Universiti Kuala Lumpur |
| 5. | Pittaya Imlamai (Master) – 2014
Creep Behaviors of Sn-Ag-Cu With Addition of Al | Universiti Sains Malaysia |

TEACHING AND SUPERVISION

Record of Graduate Students Supervision

Supervision	PhD Students		Master Students	
	Completed	On-going	Completed	On-going
Main Supervisor	8	4	2	1
Co-Supervisor	10	1	3	-

Graduated PhD Students

#	Matrix	Name	Supervision	Year
1	P83224	NORA BT OSMAN <i>Kimpalan Terlapis Kacau Geseran Berbilang-Laluan Aloi Aluminium Al6061 Dan Aloi Kuprum C2801p</i>	Main Supervisor	2020
2	P78495	MOHD ANIF BIN MOHD ARIF <i>Kebolehbentukan-Tikso Dan Sifat Mekanikal Aloi Aluminium 2014 Terubahsuai Silikon Dan Kumpum</i>	Co-Supervisor	2020
3	P75405	MOHD NAJIB BIN MUHAMED <i>Cantuman Pateri Keras Lapisan Logam Keluli AR500 Dan Aloi Aluminium 7075 Sebagai Panel Perisai</i>	Co-Supervisor	2020
4	P67934	AMMAR ADIL ABDULNABE <i>Peramalan Perambatan Retak Lesu Kepingan Sangat Nipis Keluli Tahan Karat 301L Menggunakan Algoritma Genetik Dan Sistem Pentakbiran Kabur</i>	Main Supervisor	2020
5	P75173	UKWUEZE BONAVENTURE EMEKA <i>Pengacuan Suntikan Sebuk 2-Komponen (2C-PIM) Keluli Tahan Karat (SS17-4PH) Dan Yttria Zirkonia Terstabil (3YSZ)</i>	Co-Supervisor	2019
6	P73298	NOR FAZILAH BT. MOHAMAD SELAMAT <i>Kesan Gelekan Dan Rawatan Haba Terhadap Sambungan Terkimpal Aloi Aluminium Kimpalan Kacau Geseran</i>	Main Supervisor	2019
7	P65750	AMIR HOSSEIN BAGHDADI	Main Supervisor	2019

#	Matrix	Name	Supervision	Year
		<i>Kesan Rawatan Haba Pasca Kimpal Terhadap Mikrostruktur Dan Sifat Mekanik Bagi AloI Al-Mg-Si Dan Al-Mg Terkimpal Kacau Geseran</i>		
8	P79529	NAJIHAH BINTI MD ZAIN @ ABDUL RAHMAN <i>Penilaian Kedalaman Penembusan Panel Berlamina Keluli Aluminium Terhadap Rintangan Balistik</i>	Supervision Committee	2018
9	P78153	JUYANA BINTI A WAHAB <i>Kelakuan Hakisan Dan Kakisan Keluli Bersalut Al_2O_3-13%TiO_2 Tertekstur Laser</i>	Co-Supervisor	2017
10	P65737	HEND ALI ELHARARI OMAR <i>Pembangunan Ujikaji Regangan Dan Penyiasatan Kesan Kerosakan Lembapan Terhadap Cirian Rekatan Bitumen Terubahsuai Lempung Nano</i>	Co-Supervisor	2017
11	P64611	MUHAMMAD AZIM BIN AZIZI <i>Pendekatan Peridinamik Untuk Kelakuan Rayapan Viskoelastik Dan Kepatahan</i>	Co-Supervisor	2017
12	P62726	MOHAMAD FAIZAL BIN ABDULLAH <i>Pembangunan Komposisi Optimum Tiub Nano Karbon Dan Plumbum Dalam AloI Magnesium Untuk Peningkatan Prestasi Rintangan Balistik</i>	Co-Supervisor	2017
13	P60937	NORADILA BINTI ABDUL LATIF <i>Effects of Velocity on Tensile Properties and Fracture Toughness of Magnesium Alloys</i>	Main Supervisor	2015
14	P59493	MOHAMMED N. ABDUL RAZAQ <i>Semi-Solid Joining of AISI D2-AISI D2 and AISI D2-AISI 304 Steels.</i>	Co-Supervisor	2015
15	P45954	OMAR BIN BAPOKUTTY <i>Kesan Rawatan Haba Terhadap Sifat Mekanikal Inconel 718 pada Suhu Tinggi</i>	Main Supervisor	2015
16	P44196	NORIE ALLAFI ALI AKEEL <i>Finite Element Analysis of Fatigue Crack Initiation and Propagation In Rail Track Under Rolling Contact Loading</i>	Main Supervisor	2013
17	P49308	MOHAMMED ABDULRAZZAQ ABBOOD <i>Fatigue Life Prediction Under Constant and Variable Amplitude Loading Using Cascade-Neuro-Fuzzy Inference System.</i>	Co-Supervisor	2012
18	P38414	MOHD AHADLIN BIN MOHD DAUD <i>Kesan Rawatan Haba Larutan dan Pemesinan Wayar Nyahcas Elektrik (Wire-EDM) Terhadap Sifat Lesu Dan Kegagalan Retak AloI Magnesium AZ61.</i>	Main Supervisor	2011

Graduated Master of Science Students

#	Matrix	Name	Supervision	Year
1	P64589	EKO KURNIAWAN <i>Resapan Unsur Pada Pensinteran Untuk Aloji Ti-10% at. Mo-10% at. Cr</i>	Co-Supervisor	2019
2	P73202	AHMAD MUHAMMAD BIN AZIZ <i>Sifat Mekanik Aloji Aluminium A319 Yang Dihasilkan Melalui Pemprosesan Separa Pepejal</i>	Co-Supervisor	2018
3	P78147	MOHAMMAD AZLAN B. ARIPI <i>Kesan Alur Skala Mikro Terhadap Kekuatan Dan Kelakuan Patah Komposit Plat Logam Berbeza Terikat-Perekat</i>	Main Supervisor	2017
4	P58264	AHMAD NASIRUDDIN AB RAZAK <i>Robust and Reliable Dual Tire Classification System with Error Compensation Module</i>	Main Supervisor	2014
5	P53340	ABEER ADEL SALIH AL-NUAIMI <i>The Effect Of Heat Treatment on Microstructural And Mechanical Properties Of SS440c Steel</i>	Co-Supervisor	2014

On-going PhD and Master Students

#	Matrix	Name	Supervision	Expected Year of Graduation
1	P75773	FADZILAH BINTI ADNAN	Main Supervisor	2021-2022/1
2	P75454	WAN NURAINI BINTI MOHD JAMIL	Main Supervisor	2022-2023/1
3	P104850	AHMED ESMAEL MOHAN	Main Supervisor	2023-2024/1
4	P103707	MOHAMMAD AZLAN BIN ARIPI	Main Supervisor	2022-2023/2
5	P100118	AHMAD MUHAMMAD BIN AZIZ	Co-Supervisor	2022-2023/2
6	P109142	KOH HOOI HOOI (Master)	Main Supervisor	2022-2023/2

Graduated Master of Engineering (Mechanical) Students

#	Matrix	Name	Supervision	Year
1	P81266	RASYIDI BIN MOHD TAHIR	Main Supervisor	2017
2	P78219	NURLAILI SUHANA BINTI MAHMUD	Main Supervisor	2016
3	P71118	NOR FAZILAH BINTI ABDULLAH	Main Supervisor	2015
4	P71114	SITI SAUDAH BINTI SHAFEI	Main Supervisor	2015

PATENTS AND INTELLECTUAL PROPERTIES

#	Certification	Certificate No	Title	Role
1	28/07/2020	MY18-01467-0101 (Industrial Design)	Entruss Body Protective System for Defence and Security (Bullet Proof Vest)	Project Leader
2	18/12/2017	(Patent)	Sistem Pelan Pentaksiran Program Pengajian	Project Member
3	12/12/2013 (Filing)	PI 2013702417 (Patent)	AXLE TIRE COUNTING SYSTEM (Strain Gage Switch Array Dual Tire Treadle Sensor for Automatic Vehicle Classification at Toll Plazas)	Project Member
4	21/10/2013 (Filing)	(Industrial Design and Patent)	Dual Tire Classification System with Error Compensation Module	Project Member
5	30/04/2013	MY-148588-A (Patent)	An Orthopaedic Implant and Method for Producing the Same	Project Member

RESEARCH PROJECT (2011 – 2020)

Project Code/Fund	Project Title	Role	Duration	Amount (RM)
DIP-2021-005 UKM Internal Research Grant	Hybrid Composites Joint as In Situ Strengthening Mechanism for Friction Stir Welding of Aluminium Alloys	Project Leader	01/09/2021 - 31/08/2023	100,000.00
GPK-C19-2020-012 Geran Penyelidikan Khas Top Down	Comfortable Coverall PPE Suit for Protecting Frontliners from Infectious COVID-19 Disease	Project Leader	01/08/2020 - 31/01/2022	35,888.00
FRGS/1/2019/TK03/UKM/02/3 External Research Grant (MOHE)	High-Temperature Tensile and Creep Behaviours of 316L Stainless Steel Fabricated by Additive Manufacturing	Project Leader	01/09/2022 - 30/11/2022	143,500.00
AP-2015-016 UKM Internal Research Grant	Development of Light Weight Materials for Ballistic Applications in Tropical Climates	Project Leader	01/01/2016 - 30/06/2018 Completed	200,000.00
DIP-2014-024 UKM Internal Research Grant	Computationally Inverse Model For The Fatigue And Fracture Characterization Of Structural Steel Materials In Corrosive Environment	Project Leader	01/08/2014 - 31/07/2016 Completed	20,000.00
ERGS/1/2011/TK/UKM/02/9 External Research Grant (MOHE)	Effect of Strain Rate on Fracture Toughness and Damage Mechanisms of Magnesium Alloy	Project Leader	21/06/2011- 20/06/2013 Completed	81,000.00
FRGS/1/2013/TK01/UKM/02/4 External Research Grant (MOHE)	Microstructure and Thermo-Mechanical Reliability of Weld Repair GTD-111 Nickel Based Superalloy	Project Leader	01/04/2013 - 31/03/2016 Completed	147,000.00
FRGS/1/2019/TK03/UKM/02/3 External Research Grant (MOHE)	High-Temperature Tensile and Creep Behaviours of 316L Stainless Steel Fabricated by Additive Manufacturing	Project Leader	01/09/2019 - 30/11/2022 On-going	143,500.00

GPK-C19-2020-012 UKM Internal Research Grant	Comfortable Coverall PPE Suit for Protecting Frontliners from Infectious COVID-19 Disease	Project Leader	01/08/2020 - 31/07/2021 On-going	35,888.00
GSP-2013-029 UKM Internal Research Grant	Fatigue Properties Characterization of copper phosphorus Alloy Tube	Project Leader	15/01/2014 - 14/01/2016 Completed	2,400.00
PKT 7/2012 Industrial Research Grant (O.Y.L. Research Collaboration Sdn. Bhd.)	Fatigue Properties Characterization of copper phosphorus Alloy Tube	Project Leader	01/10/2012 - 30/09/2013 Completed	24,000.00
PKT1/2011 Industrial Research Grant (O.Y.L. Research Collaboration Sdn. Bhd.)	Material and Mechanical Properties Characterization of Bi-Metal Copper-Aluminium Tubes	Project Leader	01/06/2011 - 31/05/2012 Completed	24,000.00
PTS-2013-022 UKM Internal Research Grant	Pembangunan Pelan Pengukuran Pencapaian Hasil Pembelajaran Program Berdasarkan Petunjuk Prestasi dan Aras Taksonomi	Project Leader	01/07/2013 - 31/12/2014 Completed	10,000.00
TD-2015-001 UKM Internal Research Grant	Mereka Bentuk dan Membina Purwarupa Kediaman Bagi Tujuan Mendapatkan Tajaan Dana Untuk Pembinaan Kediaman Sementara Bagi Mangsa Banjir	Project Leader	01/06/2015 - 29/02/2016 Completed	29,000.00
UKM-GUP-NBT-08-26-089 UKM Internal Research Grant	Creep Rupture Properties of Welded Turbine Blade Materials	Project Leader	01/06/2008 - 30/11/2011 Completed	50,000.00
03-01-02-SF0722 External Research Grant (ScienceFund MOSTI)	Boundary Element Analysis Of Metal Corrosion Using Polasization Curve	Co-Researcher	01/08/2011 - 31/07/2013 Completed	192,232.00
DIP-2016-009 UKM Internal Research Grant	Magnetic – Non-magenetic Layered Bi-material through Co-Powder Injection Moulding (Co-PIM)	Co-Researcher	24/10/2016 - 23/10/2019 Completed	100,000.00
DIP-2017-001 UKM Internal Research Grant	Effect of repeated heating on powder metallurgy of additive manufactured titanium alloy through selective laser melting	Co-Researcher	16/10/2017 - 15/07/2020 Completed	150,000.00
DIP-2018-025 UKM Internal Research Grant	Wear resistance and mucotoxicity evaluation of novel nanozirconia for dental applications	Co-Researcher	14/12/2018 - 13/03/2021 On-going	100,000.00
DIP-2020-008 UKM Internal Research Grant	Mechanism in Processability of Copper-Aluminium-Manganese Shape Memory Alloys (SMAs) Through Powder Injection Moulding (PIM)	Co-Researcher	01/08/2020 - 31/07/2022 On-going	100,000.00
DPP-2013-031 UKM Internal Research Grant	Probalistic And Non-Probalistic Formulation Of Fatigue Behaviour In Multiscale Structure	Co-Researcher	01/01/2013 - 31/03/2014 Completed	60,000.00
DPP-2013-033 UKM Internal Research Grant	Structure-Property Relationship, Processing And Performance Of Advanced Materials	Co-Researcher	01/01/2013 - 31/03/2014 Completed	60,000.00
DPP-2013-053 UKM Internal Research Grant	Microwave Sinterig Of Titanium (Ti) Alloy	Co-Researcher	01/01/2013 - 31/03/2014 Completed	50,000.00

DPP-2014-037 UKM Internal Research Grant	Probabilistic and Non-Probabilistic Formulation of Fatigue Behaviour in Multiscale Structure	Co-Researcher	01/04/2014 - 31/03/2015 Completed	30,000.00
DPP-2014-038 UKM Internal Research Grant	Structure-Property Relationship, Processing and Performance of Advanced Materials	Co-Researcher	01/04/2014 - 31/03/2015 Completed	30,000.00
DPP-2014-050 UKM Internal Research Grant	Development of Porous Metal via Metal Injection Moulding-Powder Space Holder	Co-Researcher	01/04/2014 - 31/03/2015 Completed	25,000.00
DPP-2015-034 UKM Internal Research Grant	Structure-Property Relationship, Processing and Performance of Advanced Materials	Co-Researcher	15/06/2015 - 30/09/2016 Completed	20,000.00
DPP-2015-047 UKM Internal Research Grant	Probabilistic and Non-Probabilistic Formulation of Fatigue Behaviour in Multiscale Structure	Co-Researcher	15/06/2015 - 30/09/2016 Completed	9,000.00
DPP-2015-049 UKM Internal Research Grant	Development of Copper Graphene Composite	Co-Researcher	15/06/2015 - 30/09/2016 Completed	9,000.00
ERGS/1/2011/TK/UKM/01/8 External Research Grant (MOHE)	Characterisation and Evaluation of the Effect of Nano Powders in the Metal Injection Molding Process	Co-Researcher	21/06/2011 - 20/12/2014 Completed	106,000.00
ERGS/1/2012/TK04/UKM/02/5 External Research Grant (MOHE)	Development of Fabrication Method for Porosity-free Beta type Ti-10%Mo-10%Cr Alloy as Novel Metallic Biomaterial	Co-Researcher	01/06/2012 - 31/05/2015 Completed	80,000.00
FRGS/1/2011/TK/UKM/01/6 External Research Grant (MOHE)	Effect of vanadium Carbide (VC) on the Properties and Microstructure of Ultrafine tungsten Carbide (WC-10C0) Component Produced by Micro Powder Injection Molding Process	Co-Researcher	06/06/2011 - 05/06/2015 Completed	196,400.00
FRGS/1/2011/TK/UKM/02/20 External Research Grant (MOHE)	Effect of Metal Injection Molding (MIM) Processing Parameters on the Intra Networking Phase of Novel Hybrid Materials	Co-Researcher	06/06/2011 - 05/12/2013 Completed	165,200.00
FRGS/1/2014/TK01/UKM/01/2 External Research Grant (MOHE)	Thixoforming of novel aluminium alloys	Co-Researcher	01/07/2014 - 31/12/2017 Completed	145,000.00
FRGS/1/2015/TK03/UKM/01/3 External Research Grant (MOHE)	Effects of graphene dispersion and orientation on mechanical and thermal properties of Copper/graphene composite through Powder injection Moulding	Co-Researcher	02/11/2015 - 01/11/2019 Completed	149,800.00
FRGS/1/2016/TK03/UKM/01/1 External Research Grant (MOHE)	Characterization of Subsurface microstructure in cryogenic machining of alloy steel for Automotive Industry	Co-Researcher	01/08/2016 - 31/01/2019 Completed	91,500.00
FRGS/1/2016/TK03/UKM/02/4 External Research Grant (MOHE)	Giant Straining of Highly Commercial Aluminum Alloys via High-pressure Torsion Process for Vehicle Applications	Co-Researcher	01/08/2016 - 31/10/2020 Completed	102,000.00
FRGS/1/2017/TK03/UKM/02/1 External Research Grant (MOHE)	Countermeasures in Strain Mismatch of Ceramic-Ceramic via Micro Co-Powder Injection Molding (μ -CoPIM)	Co-Researcher	15/08/2017 - 14/01/2020 Completed	96,200.00

FRGS/1/2019/TK03/UKM/01/1 External Research Grant (MOHE)	Mechanical Properties and Microstructural Evolution of Thixoformed Graphene Nanosheets Reinforced Aluminium Alloy Matrix Composites	Co-Researcher	01/09/2019 - 30/11/2021 On-going	126,000.00
GUP-2014-016 UKM Internal Research Grant	Investigating the mechanism of micro plasticity for carbon steel based on magnetic leakage response	Co-Researcher	01/08/2014 - 31/07/2016 Completed	50,000.00
KK-2017-004 International Research Grant (European Commission)	Reliability and Safety Engineering and Technology For Large Maritime Engineering Systems (RESET)	Co-Researcher	01/05/2017 - 30/04/2021 On-going	779,220.00
LRGS/2013/UPNM-UKM/DS/04 External Research Grant (MOHE)	Investigating Of The Durability Performance Of A Lightweight Ballistic Resistance Panel For Armored Vehicles	Co-Researcher	01/01/2014 - 21/02/2019 Completed	1,434,533.00
PTS-2013-023 UKM Internal Research Grant	Pembangunan aspek rubrik untuk penilaian pembangunan kelestarian dan kejuruteraan kompleks dalam kursus kejuruteraan mekanik dan pembuatan	Co-Researcher	01/07/2013 - 31/12/2014 Completed	10,000.00
PTS-2013-154 UKM Internal Research Grant	Measurement of Programme Learning Outcomes: Development of Holistic Programme Assessment Plan	Co-Researcher	01/07/2013 - 30/06/2014 Completed	90,000.00
PTS-2013-163 UKM Internal Research Grant	Tuning of Programme Outcomes Based on Stakeholders` input	Co-Researcher	01/07/2013 - 31/12/2014 Completed	15,000.00
TD-2015-010 UKM Internal Research Grant	Pembinaan Sistem Pentaksiran Holistik Hasil Pembelajaran Program	Co-Researcher	01/01/2016 - 31/12/2017 Completed	30,000.00
TF0109C003 External Research Grant (TechnoFund MOSTI)	Development Of Intelligent Sensors And Systems For Automated Vehicle Classification In The Toll Industry	Co-Researcher	01/10/2009 - 15/09/2012 Completed	1,830,189.00
UKM-GUP-2011-057 UKM Internal Research Grant	Study on Joining Technique for Metallic Alloys Via Semi-Solid Route	Co-Researcher	08/08/2011 - 07/08/2012 Completed	30,000.00
UKM-GUP-2011-070 UKM Internal Research Grant	mechanism of Austenitic Nucleation and Grain Growth in Multiple Carbides Containing Martensitic Stainless Steel: Enhancing Grain Refinement and Improving Toughness	Co-Researcher	08/08/2011 - 07/08/2012 Completed	30,000.00

Selected Research Projects

No.	Project Detail	Period
1	Comfortable Coverall PPE Suit for Protecting Frontliners from Infectious COVID-19 Disease. RM 35888.00 (GPK-C19-2020-012) – Project Leader	01/08/2020 - 31/07/2021

2	High-Temperature Tensile and Creep Behaviours of 316L Stainless Steel Fabricated by Additive Manufacturing. RM143,500.00 (FRGS/1/2019/TK03/UKM/02/3) – Project Leader	01/09/2019 - 31/08/2022
3	Mechanical Properties and Microstructural Evolution of Thixoformed Graphene Nanosheets Reinforced Aluminium Alloy Matrix Composites. RM126,000.00 (FRGS/1/2019/TK03/UKM/01/1) – Co-Researcher	01/09/2019 - 31/08/2021
4	Wear resistance and mucotoxicity evaluation of novel nanozirconia for dental applications. RM100,000.00 (DIP-2018-025) – Co-Researcher	14/12/2018 - 13/12/2020
5	Effect of repeated heating on powder metallurgy of additive manufactured titanium alloy through selective laser melting. RM150,000.00 (DIP-2017-001) – Co-Researcher	16/10/2017 - 15/04/2020
6	Giant Straining of Highly Commercial Aluminum Alloys via High-pressure Torsion Process for Vehicle Applications. RM102,000.00 (FRGS/1/2016/TK03/UKM/02/4) – Co-Researcher	01/08/2016 - 31/01/2020
7	Investigating of The Durability Performance of a Lightweight Ballistic Resistance Panel For Armored Vehicles. RM1,434,533.00 (LRGS/2013/UPNM-UKM/DS/04) – Co-Researcher	01/01/2014 - 21/02/2019
8	Development of Light Weight Materials for Ballistic Applications in Tropical Climates. RM200,000.00 (AP-2015-016 Arus Perdana) – Project Leader	01/01/2016 – 30/06/2018
9	Mereka Bentuk dan Membina Purwarupa Kediaman Bagi Tujuan Mendapatkan Tajaan Dana Untuk Pembinaan Kediaman Sementara Bagi Mangsa Banjir. RM29,000.00 (Dana Penyelidikan Topdown) – Project Leader	01/06/2014 – 29/02/2016
10	Computationally Inverse Model For The Fatigue And Fracture Characterization Of Structural Steel Materials In Corrosive Environment. RM200,000.00 (DIP-2014-024 Dana Impak Perdana) – Project Leader	01/08/2014 – 31/07/2016
11	Fatigue Properties Characterization of copper phosphorus Alloy Tube. RM2,400.00 (GSP-2013-029 Geran Sanjungan Penyelidikan) – Project Leader	15/01/2014 – 14/01/2016
12	Microstructure and Thermo-Mechanical Reliability of Weld Repair GTD-111 Nickel-Based Superalloy. RM147,000.00 (FRGS/1/2013/TK01/UKM/02/4) – Project Leader	01/04/2013 – 31/03/2016

JOURNAL ARTICLE PUBLICATIONS (2017 – 2023)

No.	Title	Authors	Year	Journal
1.	Microstructure and mechanical properties of selective laser melted 17–4 PH stainless steel; Build direction and heat treatment processes	Mohammad Azlan Aripin, Zainuddin Sajuri , Nashrah Hani Jamadon, Amir Hossein Baghdadi, Intan Fadhlina Mohamed, Junaidi Syarif, Ahmad Muhammad Aziz, Fathin Iliana Jamhari	2023	Materials Today Communications, 36, 106479 (Q3, IF 3.662)

2.	In-service welding of X70 steel gas pipeline: Numerical and experimental investigations	Matin Vafaei, Amirhossein Mashhuriazar, Hamid Omidvar, Zainuddin Sajuri	2023	Journal of Materials Research and Technology, 26, 6907 – 6918 (Q1, IF 6.267)
3.	Mechanical property improvement in dissimilar friction stir welded Al5083/Al6061 joints: effects of post-weld heat treatment and abnormal grain growth	Amir Hossein Baghdadi, Zainuddin Sajuri , Azadeh Keshtgar, Nurulakmal Mohd Sharif and Armin Rajabi	2022	Materials 15, 288 (Q1, IF 3.623)
4.	Challenges and solutions in the synthesis of nano-TiCN: A review	Armin Rajabi, Peter Hodgson, Mariyam J. Ghazali, Zainuddin Sajuri , Alireza Almaslow, Hamid Ahmad Mehrabi, Amir Hossein Baghdadi	2022	Ceramics International 48 (7), 8921-8929 (Q1, IF 4.527)
5.	Effects of build orientations on microstructure evolution, porosity formation, and mechanical performance of selective laser melted 17-4 PH stainless steel	Mohammad Azlan Aripin, Zainuddin Sajuri , Nashrah Hani Jamadon, Amir Hossein Baghdadi, Junaidi Syarif, Intan Fadhlina Mohamed and Ahmad Muhammad Aziz	2022	Metals 12, 1968 (Q2, IF 2.351)
6.	Deformation behavior of single-crystal magnesium during Nano-ECAP simulation	Amro H. Altayuri, Junaidi Syarif, Zainuddin Sajuri	2022	Heliyon 8, 12, E11837 (WoS)
7.	Effects of heat input on metallurgical behavior in HAZ of multi-pass and multi-layer welded IN-939 superalloy	Amirhossein Mashhuriazar, C. Hakan Gur, Zainuddin Sajuri , Hamid Omidvar	2021	Journal of Materials Research & Technology 15: 1590-1603. (Q1, IF 5.039)
8.	Effect of Laser Metal Deposition Parameters on the Characteristics of Stellite 6 Deposited Layers on Precipitation-Hardened Stainless Steel	Ali Ebrahimzadeh Pilehrood, Amirhossein Mashhuriazar, Amir Hossein Baghdadi, Zainuddin Sajuri and Hamid Omidvar	2021	Materials 14, 5662. (Q1, IF 3.623)
9.	Safety Competency on Heavy Machinery: A Comparison Study Between the Importance and Practices from Site Supervisor Perceptions	Mohd Radzi Abu Mansor, Zainuddin Sajuri , Wan Aizon W Ghopa, Azhari Shamsudeen, Shahrum Abdullah, Mohd Zaidi Omar, Mohd Esa Baruji, Mohd Atif Sholehuddin	2021	Journal of Occupational Safety and Health 18 (1): 57 – 66 (MyCite)
10.	Strength of thixoformed A319 alloy at elevated temperature	A.M. Aziz, M.Z. Omar, Z. Sajuri	2021	Metals and Materials International 27, 2416 – 2429 (Q2, IF: 1.990)
11.	Friction Stir Welding Parameters: Impact of Abnormal Grain Growth during Post-Weld Heat Treatment on Mechanical Properties of Al-Mg-Si Welded Joints	Amir Hossein Baghdadi, Zainuddin Sajuri , Mohd Zaidi Omar and Armin Rajabi	2020	Metals 10 (12), 1607 (Q1, IF 2.117)
12.	Effect of Welding Parameters on the Liquation Cracking Behavior of High-Chromium Ni-Based Superalloy	Mashhuriazar, A., Omidvar, H., Gur, C.H., Sajuri, Z.	2020	Journal of Materials Engineering and Performance 29 (12), pp.7843 (Q3, IF 1.476)

13. Effect of Intercritical Annealing on the Microstructural and Mechanical Behaviours of Dual-Phase Steels	Nora Osman, Zainuddin Sajuri , Intan Fadhlina Mohamed, Mohd Zaidi Omar & Syarif Junaidi	2020	Jurnal Kejuruteraan 32(4) 2020: 629-636 (ESCI)
14. Effects of pre-weld heat treatment and heat input on metallurgical and mechanical behaviour in HAZ of multi-pass welded in-939 superalloy	Mashhuriazar, A., Omidvar, H., Sajuri, Z. , Gur, C.H., Baghdadi, A.H.	2020	Metals 10 (11), 1453 (Q1, IF 2.117)
15. Effects of rapid heating and uniaxial loading on the phase transformation and mechanical properties of direct partial remelted butt joint of AISI D2 tool steel	Adnan, F., Sajuri, Z. , Baghdadi, A.H., Omar, M.Z.	2020	Materials Science and Engineering A 797, 140250 (Q1, IF 4.652)
16. Influence of transient liquid phase bonding followed by homogenization on the fatigue lifetimes of Inconel 738 at elevated temperature	Ebrahimzadeh Pilehrood, A., Omidvar, H., Shamsipur, A., Sajuri, Z.	2020	Journal of Manufacturing Processes 55, pp.348 (Q2, IF 4.086)
17. Al-Si-Zn Behaviour on Interface of AR500 Steel and AA7075 Aluminium Alloy Brazed Joint	Muhamed, M.N., Omar, M.Z., Abdullah, S., Sajuri, Z., Zamri, W.F.H.W.	2020	Journal of Physics: Conference Series 1532 (1) (Scopus)
18. Characterization of biomass-reinforced biopolyol-based polyurethane foams	Yao, L., Jiun, Y.L., Badri, K.H., Zulkoffli, Z., Sajuri, Z., Zulkefly, M.Z.F., Tarawneh, M.A.	2020	International Journal of Nanoelectronics and Materials 13 (Special Issue), pp.95 (Scopus)
19. Effect of partial solution treatment temperature on microstructure and tensile properties of 440C martensitic stainless steel	Syarif, J., Yousuf, M.H., Sajuri, Z. , Baghdadi, A.H., Merabtene, M., Omar, M.Z.	2020	Metals 10 (5), 694 (Q1, IF 2.117)
20. Effects of Cu and Mg on thixoformability and mechanical properties of aluminium alloy 2014	Arif, M.A.M., Omar, M.Z., Sajuri, Z., Salleh, M.S.	2020	Transactions of Nonferrous Metals Society of China (English Edition) 30 (2) ,pp.275 (Q1, IF 2.615)
21. Characterization of Metallurgical and Mechanical Properties of Thixowelded AISI D2 and AISI 304 Steels	Mohammed, M.N., Omar, M.Z., Sajuri, Z., Al-Zubaidi, S.	2020	Journal of Materials Engineering and Performance 29 (2) ,pp.739 (Q1, IF 1.652)
22. Thixoformability of 2014 alloy with the addition of Si and decreasing of Cu, Kebolehbentukan-tikso Aloj 2014 dengan Penambahan Si dan Pengurangan Cu	Arif, M.A.M., Omar, M.Z., Sajuri, Z.	2020	Sains Malaysiana 49 (1) ,pp.179 (Q4, IF 0.626)
23. Cold-rolling strain hardening effect on the microstructure, serration-flow behaviour and dislocation density of friction stir welded AA5083	Sajuri, Z. , Selamat, N.F.M., Baghdadi, A.H., Rajabi, A., Omar, M.Z., Kokabi, A.H., Syarif, J.	2020	Metals 10 (1), 70 (Q1, IF 2.117)
24. Strength of Thixoformed A319 Alloy at Elevated Temperature	Aziz, A.M., Omar, M.Z., Sajuri, Z.	2020	Metals and Materials International https://doi.org/10.1007/s12540-019-00596-6 (Q2, IF 1.990)

25. Effect of process parameters on interfacial bonding properties of aluminium–copper clad sheet processed by multi-pass friction stir-welding technique	Osman, N., Sajuri, Z. , Baghdadi, A.H., Omar, M.Z.	2019	Metals 9 (11), 1159 (Q2, IF 2.259)
26. Effect of intermetallic compounds on the fracture behavior of dissimilar friction stir welding joints of Mg and Al alloys	Baghdadi, A.H., Sajuri, Z. , Selamat, N.F.M., Omar, M.Z., Miyashita, Y., Kokabi, A.H.	2019	International Journal of Minerals, Metallurgy and Materials 26 (10) ,pp.1285 (Q2, IF 1.713)
27. Optimisation of the Hardness AZ31B Reinforced with Lead and Carbon Nanotubes using the Response Surface Method	Abdullah, M.F., Abdullah, S., Risby, M.S., Omar, M.Z., Sajuri, Z.	2019	IOP Conference Series: Materials Science and Engineering 606 (1), 012001 (Scopus)
28. Effect of post-weld heat treatment on the mechanical behavior and dislocation density of friction stir welded Al6061	Baghdadi, A.H., Rajabi, A., Selamat, N.F.M., Sajuri, Z. , Omar, M.Z.	2019	Materials Science and Engineering A 754 ,pp.728 (Q1, IF 4.652)
29. Thixoformability and microstructural evolution of Al-Si-Cu Alloys	Samat, S., Omar, M.Z., Mohamed, I.F., Sajuri, Z., Aziz, A.M., Arif, M.A.M.	2019	Materials Today: Proceedings 17 ,pp.1161-1168 (Scopus)
30. Effect of uniaxial load on microstructure and mechanical properties of Thixo-joint AISI D2 tool steel	Adnan, F., Sajuri, Z. , Omar, M.Z.	2019	Journal of Mechanical Engineering and Sciences 13 (2) ,pp.5006 (Scopus)
31. Weldability and mechanical properties of dissimilar Al-MgSi to pure aluminium and Al-Mg using friction stir welding process	Selamat, N.F.M., Baghdadi, A.H., Sajuri, Z. , Kokabi, A.H.	2019	Jurnal Teknologi 81 (1) ,pp.143 (Scopus)
32. Multi-pass friction stirred clad welding of dissimilar joined AA6061 aluminium alloy and brass	Osman, N., Sajuri, Z. , Omar, M.Z.	2018	Journal of Mechanical Engineering and Sciences 12 ,pp.4285 (Scopus)
33. A study of microstructural evolution of AISI D2 tool steel during Direct Partial Remelting method	Adnan, F., Sajuri, Z. , Omar, Z.	2018	International Journal of Mechanical Engineering and Robotics Research 7 (6) ,pp.689 (Scopus)
34. Experimental and numerical investigation on the layering configuration effect to the laminated aluminium/steel panel subjected to high speed impact test	Rahman, N.A., Abdullah, S., Abdullah, M.F., Zamri, W.F.H., Omar, M.Z., Sajuri, Z.	2018	Metals 8 (9), 732 (Q1, IF 2.259)
35. Brazed joint interface bonding strength of AR500 steel and AA7075 aluminium alloy	Muhammed, M.N., Omar, M.Z., Abdullah, S., Sajuri, Z., Zamri, W.F.H.W., Abdullah, M.F.	2018	Metals 8 (9), 668 (Q1, IF 2.259)
36. Solvent de-binding of bi-material green component of two-component powder injection moulded stainless steel and zirconia	Ukwueze, B.E., Sulong, A.B., Muhamad, N., Sajuri, Z.	2018	International Journal of Mechanical and Mechatronics Engineering 18 (3) ,pp.96 (Scopus)
37. Characterising the transient frequency response of the low velocity impact on an aluminium panel	Mazlan, N.H., Abdullah, S., Sajuri, Z., Omar, Z.,	2018	Journal of Mechanical Engineering 15 (1) ,pp.42 (Scopus)

Zamri, W.F.H., Abdullah, M.F.

38. Determining the water damage resistance of nano-clay modified bitumens using the indirect tensile strength and surface free energy methods	Omar, H.A., Yusoff, N.I.M., Ceylan, H., Rahman, I.A., Sajuri, Z., Jakarni, F.M., Ismail, A.	2018	Construction and Building Materials 167 ,pp.391 (Q1, IF 4.046)
39. Alloying behaviour and microstructural changes of a Ti-10%Mo-10%Cr alloy on sintering process	Syarif, J., Kurniawan, E., Rohmannudin, T.N., Rasani, M.R., Sajuri, Z.	2018	Sains Malaysiana 47 (4) ,pp.811 (Q3, IF 0.605)
40. Change in Tensile Properties of Dual-Phase Steels by Cu Addition	Syarif, J., Handra, N., Sajuri, Z., Omar, M.Z.	2018	Transactions of the Indian Institute of Metals 71 (2) ,pp.513 (Q3, IF 1.176)
41. Observing the behaviour of reinforced magnesium alloy with carbon-nanotube and lead under 976 m/s projectile impact	Abdullah, M.F., Abdullah, S., Omar, M.Z., Sajuri, Z., Risby, M.S.	2018	Journal of Mechanical Engineering 5 (Specialissue2) ,pp.129 (Scopus)
42. Effect of travel speed on quality and welding efficiency of friction stir welded AZ31B magnesium alloy	Baghdadi, A.H., Selamat, N.F.M., Sajuri, Z. , Kokabi, A.H.	2018	International Journal of Engineering and Technology(UAE) 7 (3) ,pp.94 (Scopus)
43. Improvement of energy absorption on magnesium alloy mixed carbon-nanotube and lead reinforcement materials in terms of high velocity impact	Abdullah, M.F., Abdullah, S., Omar, M.Z., Sajuri, Z., Risby, M.S.	2018	International Journal of Integrated Engineering 10 (5) ,pp.38 (Scopus)
44. Ballistic limit of laminated panels with different joining materials subjected to steel-hardened core projectile	Rahman, N.A., Abdullah, S., Abdullah, M.F., Omar, M.Z., Sajuri, Z., Zamri, W.F.H.	2018	International Journal of Integrated Engineering 10 (5) ,pp.8 (Scopus)
45. The effects of cooling slope on the semi-solid microstructures of Al4.8Si2.8Cu0.5Mg aluminium alloy	Arif, M.A.M., Omar, M.Z., Sajuri, Z., Mohamed, I.F., Samat, S.	2018	Journal of Mechanical Engineering 7 (Special Issue) ,pp.231 (Scopus)
46. Investigation of low-velocity impact and flexural loading on AR500 steel/AA7075 aluminum alloy brazed joint	Muhamad, M.N., Omar, M.Z., Abdullah, S., Sajuri, Z., Wan Zamri, W.F.H.	2018	Songklanakarin Journal of Science and Technology 40 (5) ,pp.1034 (Scopus)
47. Effect of tool offsetting on microstructure and mechanical properties dissimilar friction stir welded Mg-Al alloys	Baghdadi, A.H., Mohamad Selamat, N.F., Sajuri, Z.	2017	IOP Conference Series: Materials Science and Engineering 238 (1) (Scopus)
48. Characterising ballistic limits of lightweight laminated-structure as a protective panel for armoured vehicle	Rahman, N.A., Abdullah, M.F., Abdullah, S., Zamri, W.F.H., Omar, M.Z., Sajuri, Z.	2017	Journal of Mechanical Engineering SI 4 (3) ,pp.20 (Scopus)
49. The effect of surface texture on the joint shear strength of AR500 steel and AA7075	Muhamad, M.N., Omar, M.Z., Abdullah, S., Sajuri, Z., Zamri, W.F.H.W.	2017	Journal of Mechanical Engineering SI 4 (2) ,pp.289 (Scopus)

50. Effect of steel fibres and wire mesh reinforcement on flexural strength and strain energy steel-epoxy-aluminium composite laminates	Jamil, W.N.M., Sajuri, Z. , Aripin, M.A., Abdullah, S., Omar, M.Z., Abdullah, M.F., Zamri, W.F.H.	2017	Journal of Mechanical Engineering SI 4 (1) ,pp.185 (Scopus)
51. Optimization of Cold Rolling and Subsequent Annealing Treatment on Mechanical Properties of TWIP Steel	Zamani, D., Golshan, A., Dini, G., Ismarrubie, Z.N., Azmah Hanim, M.A., Sajuri, Z.	2017	Journal of Materials Engineering and Performance 26 (8) ,pp.3666 (Q3, IF 1.340)
52. Fatigue properties of strained very thin 304 stainless steel sheets	Al-Bakri, A.A., Sajuri, Z. , Abdulrazzaq, M., Ariffin, A.K., Fafmin, M.S.	2017	International Journal of Automotive and Mechanical Engineering 14 (2) ,pp.4171 (Scopus)
53. Effects of micro-grooves on tribological behaviour of plasma-sprayed alumina-13%titania coatings	Wahab, J.A., Ghazali, M.J., Sajuri, Z., Otsuka, Y., Jayaprakash, M., Nakamura, S., Baharin, A.F.S.	2017	Ceramics International 43 (8) ,pp.6410 (Q1, IF 2.882)
54. The characterization and rheological investigation of materials for powder injection moulding	Emeka, U.B., Sulong, A.B., Muhamad, N., Sajuri, Z.	2017	Journal of Mechanical Engineering SI 3 (2) ,pp.97 (Scopus)
55. Effect of tensile strain rates on flow stress for extruded AZ31 and AZ61 magnesium alloys	Latif, N.A., Sajuri, Z. , Syarif, J.	2017	International Journal of Automotive and Mechanical Engineering 14 (1) ,pp.3812 (Scopus)

***Bold: Main author/corresponding author**

BOOK AND CHAPTER IN BOOK

Book

1. **Zainuddin Sajuri** and Nor Fazilah Mohamad Selamat. **2022**. Kimpalan Kacau Geseran Aloi Aluminium. ISBN 9789672518709. Penerbit UKM.
2. **Zainuddin Sajuri** and Syarif Junaidi. **2013**. Transactions of Advanced Materials Research, ISBN 978-983-2982-45-6. AMPI, UKM.
3. Ahmad Kamal Ariffin, Shahrum Abdullah, Aidy Ali, Andanastuti Muchtar, Mariyam Jameelah Ghazali and **Zainuddin Sajuri**. **2011**. Fracture and Strength of Solids VII. Key Engineering Materials, Vol. 462 – 463. ISBN 978-0-87849-210-7

Chapter in Book

1. Hend Ali Omar, Nur Izzi Md Yusoff, **Zainuddin Sajuri**, Halil Ceylan, Fauzan Mohd Jakarni, Amiruddin Ismail. **2017**. Chapter 9: The role of adhesion in asphalt mixture. Advances In Materials Processing And Integrity: Non Metals And Hybrids. pp 133 – 154. ISBN 9789674125431. Penerbit UKM.
2. A. L. Noradila, **Z. Sajuri**, J. Syarif, Y. Miyashita and Y. Mutoh. **2014**. Chapter 7: Effect of Strain Rate on Tensile Strength and Work Hardening for Al-Zn Magnesium Alloys. 2014. Recent Trends in Nanotechnology and Materials Science Engineering Materials. Springer International Publishing, pp 77-91. DOI 10.1007/978-3-319-04516-0_7, Print ISBN 978-3-319-04515-3, Online ISBN 978-3-319-04516-0
3. **Z. Sajuri**, M.A.M. Daud, M.Z. Omar and J. Syarif. **2014**. Effect of Heat Treatment on Fatigue Behavior of AZ61 Magnesium Alloy. Advances in Materials Processing Vol. 3: 22-41. ISBN 978- 983-2982-47-0

INTERNATIONAL NETWORKING

Nagaoka University of Technology (NUT), Japan

2005 – up to date

UKM – NUT MoU: 3rd September 2008

Collaborator

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Department of System Safety, NUT, Japan

Industrial Innovation Advisor, Nagaoka City, Japan

Prof Dr Yukio Miyashita

Materials System Engineering, NUT, Japan

Joint Publication

No.	Title	Authors	Year	Journal
1.	Effect of intermetallic compounds on the fracture behavior of dissimilar friction stir welding joints of Mg and Al alloys	Baghdadi, A.H., Sajuri, Z., Selamat, N.F.M., Omar, M.Z., Miyashita, Y. , Kokabi, A.H.	2019	International Journal of Minerals, Metallurgy and Materials 26 (10) ,pp.1285 (Q2, IF 1.713)
2.	Effect of loading rate on fracture behaviour of Mg-Al-Zn alloys	Latif, N.A., Sajuri, Z., Syarif, J., Miyashita, Y.	2016	Jurnal Teknologi 78 (6-9) ,pp.83 (Scopus)
3.	Effect of strain rate on tensile and work hardening properties for Al-Zn magnesium alloys	Abdul Latif, N., Sajuri, Z., Junaidi, S., Miyashita, Y. , Mutoh, Y.	2014	International Journal of Materials Engineering Innovation 5 (1) ,pp.28 (Scopus)
4.	Effect of strain rates on tensile and work hardening properties for Al-Zn magnesium alloys	Noradila, A.L., Sajuri, Z., Syarif, J., Miyashita, Y. , Mutoh, Y.	2013	IOP Conference Series: Materials Science and Engineering 46 (1) (Scopus)
5.	Microstructure and mechanical properties of magnesium composites prepared by spark plasma sintering technology	Muhammad, W.N.A.W., Sajuri, Z., Mutoh, Y. , Miyashita, Y.	2011	Journal of Alloys and Compounds 509 (20) ,pp.6021 (Q1, IF 2.289)

Amirkabir University of Technology (AUT), Iran

2018 – up to date

UKM – AUT MoU: 2018

Collaborator:

Associate Prof Dr Hamid Omidvar

Department of Materials and Metallurgical Engineering, AUT, Iran

Joint Publication

No.	Title	Authors	Year	Journal
1.	Effects of pre-weld heat treatment and heat input on metallurgical and mechanical behaviour in HAZ of multi-pass welded in-939 superalloy	Mashhuriazar, A., Omidvar, H. , Sajuri, Z., Gur, C.H., Baghdadi, A.H.	2020	Metals 10 (11), 1453 (Q1, IF 2.117)

2. Influence of transient liquid phase bonding followed by homogenization on the fatigue lifetimes of Inconel 738 at elevated temperature	Ebrahimzadeh Pilehrood, A., Omidvar, H. , Shamsipur, A., Sajuri, Z.	2020	Journal of Manufacturing Processes 55 ,pp.348 (Q2, IF 4.086)
3. Effect of Welding Parameters on the Liquation Cracking Behavior of High-Chromium Ni-Based Superalloy	Amirhossein Mashhuriazar, Hamid Omidvar , C. Hakan Gur, and Zainuddin Sajuri	2020	Journal of Materials Engineering and Performance (Q3, IF 1.652) Online First https://doi.org/10.1007/s11665-020-05292-w
4. Effects of heat input on metallurgical behavior in HAZ of multi-pass and multi-layer welded IN-939 superalloy	Amirhossein Mashhuriazar, C. Hakan Gur, Zainuddin Sajuri , Hamid Omidvar	2021	Journal of Materials Research & Technology 15: 1590-1603. (Q1, IF 5.039)
5. Effect of Laser Metal Deposition Parameters on the Characteristics of Stellite 6 Deposited Layers on Precipitation-Hardened Stainless Steel	Ali Ebrahimzadeh Pilehrood, Amirhossein Mashhuriazar, Amir Hossein Baghdadi, Zainuddin Sajuri and Hamid Omidvar	2021	Materials 14, 5662. (Q1, IF 3.623)

Sharif University of Technology (SUT), Iran

2015 – up to date

Collaborator:

Prof Dr Amir Hossein Kokabi

Department of Materials Science and Engineering, SUT, Iran

Joint Publication

No.	Title	Authors	Year	Journal
1.	Cold-rolling strain hardening effect on the microstructure, serration-flow behaviour and dislocation density of friction stir welded AA5083	Sajuri, Z., Selamat, N.F.M., Baghdadi, A.H., Rajabi, A., Omar, M.Z., Kokabi, A.H. , Syarif, J.	2020	Metals 10 (1), 70 (Q1, IF 2.117)
2.	Effect of intermetallic compounds on the fracture behavior of dissimilar friction stir welding joints of Mg and Al alloys	Baghdadi, A.H., Sajuri, Z., Selamat, N.F.M., Omar, M.Z., Miyashita, Y., Kokabi, A.H.	2019	International Journal of Minerals, Metallurgy and Materials 26 (10) ,pp.1285 (Q2, IF 1.713)
3.	Weldability and mechanical properties of dissimilar Al-MgSi to pure aluminium and Al-Mg using friction stir welding process	Selamat, N.F.M., Baghdadi, A.H., Sajuri, Z., Kokabi, A.H.	2019	Jurnal Teknologi 81 (1) ,pp.143 (Scopus)
4.	Effect of travel speed on quality and welding efficiency of friction stir welded AZ31B magnesium alloy	Baghdadi, A.H., Selamat, N.F.M., Sajuri, Z., Kokabi, A.H.	2018	International Journal of Engineering and Technology(UAE) 7 (3) ,pp.94 (Scopus)
5.	Friction stir welding of similar and dissimilar aluminium alloys for automotive applications	Selamat, N.F.M., Baghdadi, A.H., Sajuri, Z., Kokabi, A.H.	2016	International Journal of Automotive and Mechanical Engineering 13 (2) ,pp.3401 (Scopus)

University of Sharjah, UAE

2015 – up to date

Collaborator:

Associate Prof Dr Syarif Junaidi

Department of Mechanical & Nuclear Engineering,
College of Engineering, University of Sharjah, UAE

Joint Publication

No.	Title	Authors	Year	Journal
1.	Effect of Intercritical Annealing on the Microstructural and Mechanical Behaviours of Dual-Phase Steels	Nora Osman, Zainuddin Sajuri, Intan Fadhlina Mohamed, Mohd Zaidi Omar & Syarif Junaidi	2020	Jurnal Kejuruteraan 32(4) 2020: 629-636 (WoS ESCI)
2.	Effect of partial solution treatment temperature on microstructure and tensile properties of 440C martensitic stainless steel	Syarif, J. , Yousuf, M.H., Sajuri, Z., Baghdadi, A.H., Merabtene, M., Omar, M.Z.	2020	Metals 10 (5), 694 (Q1, IF 2.117)
3.	Cold-rolling strain hardening effect on the microstructure, serration-flow behaviour and dislocation density of friction stir welded AA5083	Sajuri, Z., Selamat, N.F.M., Baghdadi, A.H., Rajabi, A., Omar, M.Z., Kokabi, A.H., Syarif, J.	2020	Metals 10 (1), 70 (Q1, IF 2.117)
4.	Alloying behaviour and microstructural changes of a Ti-10%Mo-10%Cr alloy on sintering process	Syarif, J. , Kurniawan, E., Rohmannudin, T.N., Rasani, M.R., Sajuri, Z.	2018	Sains Malaysiana 47 (4) ,pp.811 (Q3, IF 0.605)
5.	Change in Tensile Properties of Dual-Phase Steels by Cu Addition	Syarif, J. , Handra, N., Sajuri, Z., Omar, M.Z.	2018	Transactions of the Indian Institute of Metals 71 (2) ,pp.513 (Q3, IF 1.176)
6.	Effect of tensile strain rates on flow stress for extruded AZ31 and AZ61 magnesium alloys	Latif, N.A., Sajuri, Z., Syarif, J.	2017	International Journal of Automotive and Mechanical Engineering 14 (1) ,pp.3812 (Scopus)
7.	Effect of sputtering target's grain size on the sputtering yield, particle size and coercivity (Hc) of Ni and Ni20Al thin films	Reza, M., Sajuri, Z., Yunas, J., Syarif, J.	2016	IOP Conference Series: Materials Science and Engineering 114 (1) (Scopus)

Kyushu University, Japan

2019 – up to date

Collaborator:

Prof Emeritus Dr Zenji Horita

- Department of Materials Science and Engineering, Kyushu University, Japan
- Graduate School of Engineering, Kyushu Institute of Technology, Japan
- Magnesium Research Center, Kumamoto University, Japan

1st October 2020

Prof Emeritus Dr Zenji Horita has been appointed as a Distinguished International Professor at the Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, UKM

- Collaboration research in mechanical properties of magnesium alloys undergone high pressure sliding (HPS) process.

University of Tehran, Iran

2020 – up to date

Collaborator:

1. **Associate Prof Dr Hamed Mirzadeh Soltanpour**
School of Metallurgy and Materials Engineering, College of Engineering,
University of Tehran, Iran
2. **Dr Mahmoud Sarkari Khorami**
School of Metallurgy and Materials Engineering, College of Engineering,
University of Tehran, Iran
 - Collaboration research in fatigue properties of modified dual phase steel and constrained groove pressed (CGP) aluminium alloys.

Universidade de Lisboa, Portugal

01/03/2019 - 15/04/2019

Research Attachment/ Visiting Lecturer at the Instituto Superior Tecnico (IST), Universidade de Lisboa, Portugal

Collaborator:

Prof. Carlos Guedes Soares

Centre for Marine Technology and Ocean Engineering (CENTEC)
Instituto Superior Tecnico (IST),
Universidade de Lisboa (University of Lisbon),
Cidade Universitária, Alameda da Universidade,
1649-004 Lisboa, Portugal

Shiraz University of Technology, Iran

2020 – up to date

UKM – SUTech MoU: 2020

Collaborator:

Associate Prof. Dr. Kamran Kazemi

Director
International and Scientific Relations Office
Shiraz University of Technology
Modarres Blvd., Shiraz, I.R. IRAN

Associate Professor Dr. Akbar Rahideh

Department of Electrical and Electronics Engineering,
Shiraz University of Technology
Modarres Blvd., Shiraz, I.R. IRAN

- Collaboration research, academic exchange and student mobility.

AWARDS

Scholarship Awards

- Scholarship for First Degree under the Look East Policy, Department of Public Service, Malaysia, 1991 – 1997

- Monbusho Scholarship Postgraduate (Research Students), Ministry of Education, Japan, 2000 – 2002
- Monbusho Scholarship, PhD Programme, Ministry of Education, Japan, 2002 – 2005

Service Awards in UKM

- Anugerah Perkhidmatan Cemerlang (Outstanding Service Award) 2008
- Research Award 2009 (CAE-Intelligent & Computational Engineering)
- Certificate of Appreciation for Outstanding Teaching Award 2010
- Anugerah Perkhidmatan Cemerlang (Outstanding Service Award) 2011
- Research Award 2012 (Advanced Materials Processing and Integrity Research Group)
- Anugerah Perkhidmatan Cemerlang (Outstanding Service Award) 2014

Competition Awards

- Best Engineering Award ROBOCON 2007, Ministry of Higher Education Malaysia
- Second Runner-Up ROBOCON 2009, Ministry of Higher Education Malaysia

Research/Paper Awards

- Gold Medal in 6th Asian Welding Technology & Its Application Seminar/Forum/Exhibition 2019
- Top 10% Journal in Materials Science & Engineering A 2019
- Bronze Medal, Invention, Innovation and Design Exposition 2018, Malaysia
- Gold Medal, Melaka International Intellectual Exposition 2017, Malaysia
- Bronze Medal, Invention, Innovation and Design Exposition 2017, Malaysia
- Best Paper Award (3rd Winner) in International Conference on Advanced Processes & Systems in Manufacturing (APSIM 2016)

CONSULTATIONS (2011 – 2020)

No.	Title	Year	Client
1.	Microstructural and Mechanical Properties of Fractured Drive Plates	2023	Sapura Technical Centre Sdn. Bhd.
2.	Ujian & Analisis Barang Kes Letupan Sebuah Tangki Sfera	2022	Department of Occupational Safety and Health (DOSH) Malaysia
3.	A Study on the Competency of Workers in Heavy Machinery (<i>Kajian Kompetensi Pekerja Terhadap Jentera Berat</i>)	2020	National Institute of Occupational Safety and Health (NIOSH), Bangi, Malaysia
4.	Fractography and Metallography Analyses of Duplex Steel Header Structure (<i>Analisis Fraktografi dan Metalografi Bagi Struktur Header Steel Duplex</i>)	2020	Department of Occupational Safety and Health (DOSH) Malaysia

5. A Study On Improvement Of Tower Crane Safety Management System In The Construction Sector	2017	Department of Occupational Safety and Health (DOSH) Malaysia
6. Investigation and Analysis of Explosion of an Ammonia Storage Tank (<i>Ujian dan Analisis Barang Kes Letupan Silinder Gas Ammonia</i>)	2016	Department of Occupational Safety and Health (DOSH) Malaysia
7. Investigation of Mechanical Properties of Current Collector Board and Power Insulator,	2014	Rapid Rail Sdn. Bhd. Kuala Lumpur, Malaysia
8. Investigation and Analysis of Explosion of an Ammonia Storage Tank at Teknogas (M) Sdn. Bhd. (<i>Ujian dan Analisis Barang Kes Kemalangan Letupan Tangki Ammonia di Teknogas (M) Sdn. Bhd.</i>)	2012	Department of Occupational Safety and Health (DOSH) Malaysia
9. Investigation and Analysis of Hammerhead Tower Crane Accident in Johor Bahru (<i>Ujian dan Analisis Barang Kes Kemalangan Kren Menara Hammerhead Di Johor Bahru</i>)	2012	Department of Occupational Safety and Health (DOSH) Malaysia
10. Technical Report: Tensile Properties of Copper Tubes,	2011	OYL R&D Sdn. Bhd.
11. Technical Report: Tensile Properties of S45C,	2011	YMC Forging (M) Sdn. Bhd.
12. Reliability of Vessel Plate of Oblique Sterilizer Against Repeated FFB Falling Impact,	2011	Sime Darby Plantation Sdn. Bhd.
13. Investigation and Analysis of Elevator Accident at Low Cost Apartment in Petaling Jaya (<i>Ujian dan Analisis Barang Kes Kemalangan Lif Jatuh Di Rumah Flat Kos Rendah di Petaling Jaya</i>)	2011	Department of Occupational Safety and Health (DOSH) Malaysia
14. Investigation and Analysis of Tower Crane Accident in Kelana Jaya, Selangor (<i>Ujian dan Analisis Barang Kes Kemalangan Kren di Kelana Jaya, Selangor</i>)	2011	Department of Occupational Safety and Health (DOSH) Malaysia

THANK YOU