



Mohammad Zulafif Bin Rahim merupakan orang asli suku kaum Kuala di Senggarang, Batu Pahat, Johor. Beliau merupakan graduan ijazah sarjana muda kejuruteraan mekanikal (Pembuatan) juga sarjana kejuruteraan Mekanikal (Pembuatan Termaju) UTM, Malaysia. Berdasarkan pencapaian di UTM, beliau dianugerahkan pelajar terbaik pasca-siswazah UTM pada tahun 2012. Beliau telah menamatkan pengajian dalam bidang falsafah kedoktoran dalam Kejuruteraan Pembuatan dari Royal Melbourne Institute of Technology, Australia pada tahun 2015. Beliau pernah terlibat dengan projek kerjasama penyelidikan di antara RMIT University dan pelbagai syarikat dari Australia dan Amerika Syarikat juga merupakan ahli Persatuan Jurutera Mekanikal Amerika dan Malaysia. Beliau kini berkhidmat sebagai pensyarah di Universiti Tun Hussein Onn Malaysia di Jabatan Kejuruteraan Aeronautik. Dalam perkhidmatan, beliau telah menerbitkan pelbagai artikel ilmiah dan saintifik dalam pelbagai jurnal antarabangsa, juga merupakan penerima kepada lebih 15 geran penyelidikan dalam tempoh 2 tahun.

Profile



Full Name	Dr Mohammad Zulafif Bin Rahim
Faculty	Fakulti Kejuruteraan Mekanikal dan Pembuatan
Department	Jabatan Kejuruteraan Aeronautik (JKA)
Staff Number	02437
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Designation	DS51 - Pensyarah

Areas of Research Interest

1. Electrical Discharge Machining
2. Tool wear
3. Conventional Machining

Academic Qualification

Year	Qualification	Institution
2015	DOKTOR FALSAFAH KEJURUTERAAN MEKANIKAL (PEMBUATAN)	ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY UNIVERSITY
2012	SARJANA KEJ. (MEKANIKAL-TEKNOLOGI PEMBUATAN TERMAJU)	UNIVERSITI TEKNOLOGI MALAYSIA
2010	SARJANA MUDA KEJURUTERAAN MEKANIKAL (PEMBUATAN)	UNIVERSITI TEKNOLOGI MALAYSIA

Professional Appointments

DS51 - Pensyarah

Professional Societies

Year	Description	Role	Level
25/02/2016 - 25/02/2017	American Society Of Mechanical Engineers (ASME)	Ahli	Antarabangsa
27/01/2011 - 31/12/2011	Lembaga Jurutera Malaysia	Jurutera Siswazah	Kebangsaan

Teaching Experience

Year	Description	Level
2016	Mechanical Engineering Practice II [BDA18101], 2015/2016 Session, Semester 2, Universiti Tun Hussein Onn Malaysia, 2016	University
2016	BDA18301, Mechanical Engineering Workshop II [BDA18301], 2015/2016 Session, Semester 2, Universiti Tun Hussein Onn Malaysia, 2016	University
2016	Technical Drawing and CAD [BDA10703], 2015/2016 Session, Semester 2, Universiti Tun Hussein Onn Malaysia, 2016	University
2015	Mechanical Engineering Workshop 1 [BDA18201], 2015/2016 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2015	University
2015	Computer Integrated Manufacturing [MANU2078] (Master's degree subject), 2015 Session, Semester 2, Royal Melbourne Institute of Technology (RMIT) University, Australia, 2015	International
2015	Technical Drawing and Computer Integrated Design [BDA10703], 2015/2016 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2015	University
2015	Computer Integrated Manufacturing [MANU1418], 2015 Session, Semester 1, Royal Melbourne Institute of Technology (RMIT) University, Australia, 2015	International
2014	Computer Integrated Manufacturing [MANU1418], 2014 Session, Semester 1, Royal Melbourne Institute of Technology (RMIT) University, Australia, 2014	International
2011	Reverse and Concurrent Engineering [BDD4053], 2011/2012 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2011	University
2011	Metal Casting [BDD4063], 2011/2012 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2011	University
2011	Mechanical Engineering Practice 1 [BDA18001], 2011/2012 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2011	University
2011	Mechanical Engineering Practice III [BDA28001], 2011/2012 Session, Semester 1, Universiti Tun Hussein Onn Malaysia, 2011	University

Research Grants And Contracts

Code	Title	Designation	End Date
1586	<u>Parameter Correlation and Mechanism in Catalytic Erosion of Polycrystalline Diamond</u>	Ketua	31/07/2019
1591	<u>Determination of tribological characteristic of modified jatropa oil mixed with ionic liquid as an additive for sustainable lubricant in machining process</u>	Ahli	31/07/2019
1594	<u>The influence of nozzle designs and input parameters on the characterization of SCCO2 flow pattern that affects the machining performance</u>	Ahli	31/07/2019
U805	<u>Investigation on removal mechanism in catalytic aided electrical discharge machining of polycrystalline diamond</u>	Ketua	31/08/2018
U554	<u>Experimental And Simulation Of Ultrasonic Vibration Assisted Milling In Surface Roughness And Temperature Toward Inconel 718</u>	Ahli	31/05/2018
U531	<u>Catalytic Aided Electrical Discharge Machining of Polycrystalline Diamond Tools</u>	Ketua	31/03/2018
U743	<u>The Impact of industrial engineering (IE0 to small and medium enterprises (SMEs) in Malaysia specifically</u>	Ketua	31/03/2018
U596	<u>Experimental and simulation of ultrasonic vibration assisted milling in surface roughness and temperature toward inconel 718</u>	Ahli	31/01/2018
A102	<u>Semi-Automated Dough Divider Machine</u>	Ketua	01/05/2017
A095	<u>Semi-Automated Medium Muruku Machine</u>	Ahli	01/03/2017
A096	<u>Semi Automatic Rotating Pot</u>	Ahli	01/03/2017
A075	<u>Semi Automated Kuih Kapit, Smart Dryer and Roll-Stamping Biscuits Manufacturing Syatem</u>	Ahli	15/11/2016
A076	<u>Semi-Automated Mattress Production System</u>	Ahli	15/11/2016
A084	<u>Semi-automated Burger Processing and Manufacturing System</u>	Ahli	15/11/2016
A091	<u>Semi-Automated Cake Layering Mechanism Integrated Baking System</u>	Ahli	01/04/2017
A081	<u>Semi-Automated Filling Machine</u>	Ketua	01/04/2017
A082	<u>Semi-Automated Otak-Otak Production System</u>	Ketua	01/04/2017
A080	<u>Semi-Automated Production System for Bun/Cookies</u>	Ahli	15/12/2016

Publications

Journal

Zainon Binti Mat Sharif, Norhasnina Binti Mohd Taib, Mohd Sallehuddin Bin Yusof, Mohammad Zulafif Bin Rahim, Abdul Latif Bin Mohd Tobi, Mohd Syafiq Bin Othman
(2017) A Study On Shelf Life Prolonging Process Of Chili Soy Sauce In Malaysian Smes? (Small Medium Enterprise), IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 012026-1, ISSN:1757899X

K. A. Mamat, M.S. Yusof, Wan Fauziah Wan Yusoff, M. Zulafif Rahim, S. Hassan, M Qusyairi. A. Rahman, M. A. Abd Karim
(2017) Dehydration Of Traditional Dried Instant Noodle (Mee Siput) Using Controlled Temperature & Humidity Dryer, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 012009-1, ISSN:1757-899X

Zainon Binti Mat Sharif, Norhasnina Binti Mohd Taib, Mohd Sallehuddin Bin Yusof, Mohammad Zulafif Bin Rahim, Abdul Latif Bin Mohd Tobi, Mohd Syafiq Bin Othman
(2017) Designation Of Soap Molder Machine And Procedure For Transparent Soap, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 1, ISSN:1757-899X

M.A. Haikal Ahmad, M. Zulafif Rahim, M. F. Mohd Fauzi, N. Hafizah Azis, A.E Ismail, Mohd Fahrul Hassan, A.M.T. Arifin, M.S. Yusof, and M. Rasidi Ibrahim
(2017) Electrical Discharge Machining Of Polycrystalline Diamond Using Copper Electrode - Finishing Condition, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING, IOP Publishing , 6, 012019-1, ISSN:1757899X

S Hassan, M S Yusof, S Ding, M I Maksud, M N Nodin, K A Mamat, M S Sazali, M Z Rahim
(2017) Investigation Of Carbon Nanotube Ink With Pdms Printing Plate On Fine Solid Lines Printed By Micro-Flexographic Printing Method, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 012017-1, ISSN:1757899X

Zainon Binti Mat Sharif, Norhasnina Binti Mohd Taib, Mohd Sallehuddin Bin Yusof, Mohammad Zulafif Bin Rahim, Abdul Latif Bin Mohd Tobi, Mohd Syafiq Bin Othman
(2017) Solving Cracking Phenomenon In Premium Transparent Toilet Soap Production Using Stretched Lldpe Film Wrap, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 012015-1, ISSN:1757-899X

Zainon Binti Mat Sharif, Norhasnina Binti Mohd Taib, Mohd Sallehuddin Bin Yusof, Mohammad Zulafif Bin Rahim, Abdul Latif Bin Mohd Tobi, and Mohd Syafiq Bin Othman
(2017) Study On Handling Process And Quality Degradation Of Oil Palm Fresh Fruit Bunches (Ffb) , IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING, IOP Publishing , 6, 012027-1, ISSN:1757899X

N. Hafizah Azis , M. Zulafif Rahim, Nasuha Sa'ude, N. Rafai, M.S. Yusof, ALM Tobi, ZM Sharif, M. Rasidi Ibrahim, A.E Ismail
(2017) The Influence Of Injection Molding Parameter On Properties Of Thermally Conductive Plastic, IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING JOURNAL, IOP Publishing , 6, 012018-1, ISSN:1757899X

M. Zulafif Rahim

(2016) Electrical Discharge Grinding Of Polycrystalline Diamond ? Effect Of Wheel Rotation, MACHINING SCIENCE AND TECHNOLOGY: AN INTERNATIONAL JOURNAL, Taylor & Francis , 4, 62, ISSN:10910344

Rahim M.Z., Li G., Ding S., Mo J., Brandt M.

(2016) Electrical Discharge Grinding Versus Abrasive Grinding In Polycrystalline Diamond Machining-Tool Quality And Performance Analysis, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, Springer , 277, ISSN:2683768

Guangxian Li, Mohammad Zulafif Rahim, Songlin Ding, Shoujin Sun and John Mo

(2016) Experimental Study On Quality Of Pcd Tools Machined By Different Electric Discharge Grinding Processes, COGENT ENGINEERING, Taylor and Francis , 8, 1, ISSN:23311916

M. Zulafif Rahim

(2015) ELECTRICAL DISCHARGE GRINDING VERSUS ABRASIVE GRINDING IN POLYCRYSTALLINE DIAMOND MACHINING, Jurnal Teknologi, - , Vol: 74, 3, 79-87, ISSN:21803722

M. Zulafif Rahim

(2015) Electrical Discharge Grinding of Polycrystalline Diamond-Effect of Machining Parameters and Finishing In-Feed, Journal of Manufacturing Science and Engineering, - , Vol: 137, 4, 1-11, ISSN:10871357

Mohammad Zulafif Rahim

(2015) Electrical discharge grinding versus abrasive grinding in polycrystalline diamond machining?tool quality and performance analysis, The International Journal of Advanced Manufacturing Technology, - , Vol: - , 10, 1-15, ISSN:02683768

M. Zulafif Rahim

(2015) Gap Control of Electrical Discharge Grinding With High Bandwidth Dual Stage Actuators, Jurnal Teknologi, - , Vol: 75, 3, 101-106, ISSN:21803722

M. Zulafif Rahim

(2014) CRATER SIZE PREDICTION IN ELECTRICAL DISCHARGE GRINDING (EDG) OF POLYCRYSTALLINE DIAMOND (PCD), Nonconventional Technologies Review (Revista de Tehnologii Neconven?ionale), - , Vol: XVIII, 9, 92-97, ISSN:14543087

M. Zulafif Rahim

(2014) Electrical Discharge Grinding (EDG) of Polycrystalline Diamond-Effect of Machining Polarity, Advanced Materials Research, - , Vol: 1025 - 1026, 9, 628-632, ISSN:16628985

M. Zulafif Rahim

(2014) Experimental Study of Wheel Rotating Speed Effect on Electrical Discharge Grinding, APPLIED MECHANICS AND MATERIALS, - , Vol: 697, 10, 275-279, ISSN:16627482

M. Zulafif Rahim

(2013) Residual Stress Analysis on Electrical Discharge Lapping (EDL) of Polycrystalline Diamond, Applied Mechanics and Materials, - , Vol: 365-366, 8, 973-977, ISSN:16627482

M. Zulafif Rahim

(2013) Residual Stress Analysis of Polycrystalline Diamond after Electrical Discharge Machining, Advanced Materials Research, - , Vol: 820, 9, 106-109, ISSN:16628985

Prosiding / Seminar

Mohd Rasidi Ibrahim, Zulafif Rahim, Erween Rahim, Latif Tobi, Kai Cheng, Hui Ding

(2017) An Experimental Investigation Of Cutting Temperature And Tool Wear In 2 Dimensional Ultrasonic Vibrations Assisted Micro-Milling, EDP Sciences , 1, ISBN:2261236X

M. Zulafif Rahim, M. S. Yusof, E. A. Rahim, Rasidi Ibrahim, and Z. Mohid

(2017) Wire-Cut EDM Of SiC-Preliminary Investigation In Machining Parameter, American Institute of Physics , 020052-1, ISBN:978-0-7354-1499

Mohd Sallehuddin Yusof, Suhaimi Hassan, Mohd Idris Maksud, Muhamad Nor Nodin, Khairul Anuar Mamat, Mohd Safwan Sazali, Wan Intan Safian Meor Zainun, Mohammad Zulafif Rahim
(2016) Development Of Nickel Master For Imprint Lithography Printing Process, sciencedirect , 2214 , ISBN:-

Suhaimi Hassan, Mohd Sallehuddin Yusof, Mohd Idris Maksud, Muhamad Nor Nodin, Khairul Anuar Mamat, Mohd Safwan Sazali, Wan Intan Safian Meor Zainun, Mohammad Zulafif Rahim
(2016) Optimization Of Parameter Setting For Fine Solid Line Image In Micro-Flexographic Printing Process, science direct , 2247 , ISBN:-

Mohammad Zulafif Rahim

(2016) Quality Of PCD Inserts Machined By Different Electrical Discharge Machining Processes, ASME

M.Z Rahim

(2016) Wear Mechanisms Of PCD Tools Of Different Grain Sizes Manufactured By Conventional Abrasive Grinding And Electrical Discharge Grinding, ASME

M. Zulafif Rahim

(2014) Electrical Discharge Grinding (EDG) of Polycrystalline Diamond - Effect of Machining Polarity, -

M. Zulafif Rahim

(2014) Experimental Study of Wheel Rotating Speed Effect on Electrical Discharge Grinding, - , ISBN:9783038353423

Mohammad Zulafif Rahim

(2014) Heat Damage in Polycrystalline Diamond Induced by Electrical Discharge Grinding, -

Mohammad Zulafif Bin Rahim

(2010) Masalah Komunikasi dan Teknologi Maklumat Serta Penyelesaiannya Menurut Perspektif Islam, -

Consultancies

Year	Description	Level
2017	Consultation and Semi-Automation System Development For Epah Bakery, 2016-2017	Private
2016	UNITEN-UTHM-UITM Collaborative Project of Semi-Automated Filling and Pouch Pack Capping Mechanism for Mulberry Juice, Ministry of Education Malaysia, 2016	National
2016	UNITEN-UTHM-UITM Collaborative Project on Production of Semi-Automated Extruder Machine for SME industry, Ministry of Higher Education Malaysia, 2016	National
2016	UNITEN-UITM-UTHM Collaborative Project of Sheep Slaughtering Processes System, Ministry of Education Malaysia, 2016	National
2016	Consultative Panel for the Green Technology Project, Ardhmillenia Sfe Jv Sdn. Bhd., 2016	Private
2016	UNITEN-UTHM-UITM Collaborative Project of Producing and Processing Frozen Coconut Milk, Ministry of Education Malaysia, 2016	National

Supervision

Year	Description	Role
2017	Reviewer for Mechanical Engineering, Science and Technology (MEST2017) International Conference, 2017	Assessor
2016	Supervisor for Basyirah Binti Sazzali, Final Year Project 1, UTHM, 2016	Supervisor
2016	Supervisor for Mohamad Faiz Bin Mohd Fauzi, Final Year Project 1, UTHM, 2016	Supervisor
2016	Supervisor for Nazrul Iszhar bin Ishak, Master by Research, UTHM, 2016	Supervisor
2016	Reviewer for International Conference on Design and Concurrent Engineering 5th IDECON, 2016	Assessor
2016	Reviewer for 7th International Conference on Mechanical and Manufacturing Engineering (ICME), 2016	Assessor
2016	Supervisor for Norhafizah Binti Abd Azis, Final Year Project 2, UTHM, 2016	Supervisor
2016	Supervisor for Norhafizah Binti Abd Azis, Final Year Project 1, UTHM, 2016	Supervisor
2014	Reviewer for Machining Science and Technology. An International Journal	Assessor

Extension & Public Services

Year	Description	Level
2017	Publicity Chair for Mechanical Engineering, Science and Technology (MEST2017) International Conference, 2017	International
2017	Speaker for UTHM Internal Seminar of National Higher Education Carnival (Zone 3), 2017	University
2017	Penerapan Konsep Kejuruteraan dan Teknologi Makanan Untuk Pengusaha Industri Pemakanan Bagi Komuniti Ibu Tunggal Kuantan, Unit Perhubungan Universiti dan Masyarakat UTHM, 2017	University
2016	FKMP representative for The National Higher Education Carnival `Jom Masuk IPT`, Ministry of Higher Education, Malaysia, 2016	University
2016	Head of Website and Social Media Unit, Faculty of Mechanical and Manufacturing Engineering, 2016	University
2016	Task Force Media UTHM, Universiti Tun Hussein Onn Malaysia, 2016	University
2016	Keynote Speaker, International Conference on Recent Trends in Engineering, Science and Technology, Hyderabad, India, 2016	International
2016	ITEX Gold Medal for the invention of "The Innovation of Ultrasonic Vibration Machining Device, Malaysia Invention and Design Society, 2016	International
2016	Keynote Speaker, International Conference on Advanced Material Technologies, Visakhapatnam, India, 2016	University
2016	ICME Committee Member, Universiti Tun Hussein Onn Malaysia, 2016	
2016	Head of Publication and Multimedia Bureau, Recreation and Mechanical Staff Affair Club (MechClub), Faculty of Mechanical and Manufacturing Engineering, 2016	University
2016	SPEAKER FOR "PERBINCANGAN PROGRAM KEUSAHAWANAN DAN TAKLIMAT PUBLIC-PRIVATE RESEARCH NETWORK (PPRN)", KOPERASI DAYA ASLI JOHOR BERHAD, JOHOR, 2016	Private
2014	Outstanding Course award from the College of Science, Engineering and Health for MANU2078, RMIT University, Australia, 2014	University
2013	Victoria Malaysian Postgraduate Association (VMPGA) - 2013/2014 Committee Member (Social and Sports)	National
2012	Post Graduate Best Student Award, Universiti Teknologi Malaysia, 2012	University
2012	Committee Member for Robotics Camp: GEN II Soccer Robot & Sumo Robot competition UTHM	University