UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Kurikulum Vitae
Curriculum Vitae

.

I. Maklumat Peribadi:
Personal Particulars

Nama: **DR. RAJA IZAMSHAH BIN RAJA ABDULLAH**
Name:

No. Kad Pengenalan: **791003-14-5947** **Fakulti/Pusat:** **FKP**
IC No.: ***Faculty/Centre***

Jawatan : **PENSYARAH KANAN** ***Tetap / Sementara/Kontrak*** **TETAP**
Current Position: ***(Permenant/temporary)***

Gred Kumpulan: **DS52** **Tarikh Pengemaskinian CV :** **1 AUG 2013**
Gred position **Date of CV updated:**

II. A. Kelulusan Akademik dan Profesional (Sila senaraikan semua kelulusan akademik bermula daripada Ijazah Sarjana Muda mengikut susunan kronologi**)**
Academic and Professional Qualifications *(Please list all academic qualifications, from your first degree in chronological order)*

Tahun ***Year***	**Kelulusan** ***Degree***	**Pengkhususan** ***Discipline***	**Universiti** ***University***
1997	Cert.	Computer Engineering	South Kent College, Kent United Kingdom
2000	Dip.	Mechanical Engineering	Universiti Teknologi Malaysia, Malaysia (UTM)
2004	B Eng.	Mechanical Engineering	Universiti Teknologi MARA, Malaysia (UiTM)
2005	M Sc.	Manufacturing Engineering	University of Birmingham, United Kingdom
2012	Ph D.	Manufacturing Engineering	RMIT University, Australia

B. Tajuk tesis pascasiswazah (Sila senaraikan tajuk tesis bermula daripada peringkat Sarjana mengikut susunan kronologi)
Titles of postgraduate thesis written (Please list all thesis written, from your Master Degree in chronological order)

- Machinability of Gamma Titanium Aluminide - MSc Thesis, School of Mechanical and Manufacturing Engineering, University of Birmingham.
- Optimisation of Thin-Walled Machining for Titanium Alloys – PhD. Thesis, School of Aerospace, Mechanical and Manufacturing Engineering, RMIT University.

III. Bidang Penyelidikan *Utama* (Sila senaraikan tiga sahaja)
Main Areas of Research Interest *(Please list a maximum of three)*

- CAD/CAM/CAE
- Precision Machining
- Biomedical Engineering
- Modeling

IV. Projek Penyelidikan Yang dilaksanakan *(Sila tulis tajuk, tajaan dan nombor rujukan projek sejak 2007)*
Completed/On-going research project since 2007 *(Please write the title, funder and reference number)*

1. Design and Fabrication of Energy Efficient Drying System – Short Term Grant PJP/2006/FKP (18) S229 - RM 20 000
2. Five-Axis Side Cutting Machining on The Curved Shape of Aircraft Parts (Aluminum 7075) FRGS/2007/FKP (14) F0039 – RM 54, 000
3. Shaft Alignment Solution Using Spreadsheet Application Short Term Grant PJP/2006/FKP (14) S229- RM 20 000
4. Development of Acrylic Plastic Injection Mould Base for Education Purpose PJP/2006/FKP (17)/S00228 - RM 20 000
5. Optimisation of Titanium Machining for Aerospace Industry AUSINDUSTRY - AUD $2M
6. A Novel Study on the Effects of Cutter Geometrical Feature in Component Failure for Machining Thin-Wall Low Rigidity Structural Component FRGS/2012/FKP/TK01/03/2/F00134- RM 61,500
7. Sustainable Manufacturing Technique for Biomedical Implant Material FRGS(RACE)/2012/FKP/TK01/02/1/F00153 – RM48, 000
8. 'Grinder less' Mirror Surface Sculptured Profile Machining Strategies for Future Advanced High Speed Machining of Hardened Mould and Die Material RAGS/2012/UTEM/TK01/7 – RM 63, 000
9. Sustainable Conventional Machining Process for Composite Tool MTUN/2012/UTeM-FKP/13/M0021 – RM 88, 000
10. Geo Composite Manufacture MTUN/2012/UTHM-FKP/2/M0002 – RM 73,800
11. Super Energy Saving Locking System Gluar/2012/FKP(1)/G00010 – RM 140, 485.30
12. Modified of Cooling System of Dumbell Injection Mould : Reducing of Warpage Defect PJP/2012/FKP(25B)/S01028 - RM 27 000
13. Improvement of Microstructure and Mechanical Properties of Aluminum Alloy 1050 H24 by Localized Laser Heat Treatment PJP/2012/FKP(1B)/S01093 - RM 25 500
14. High Speed Machining of AISI D2 for Stamping Die Applications PJP/2012/FKP(49C)/S01056 - RM 21 000
15. Growth and Characterization of vertically Aligned Carbon Nanotube on Conducting Substrate Using Ethanol-Based Growth Technique. ERGS/2013/FKP/TK04/UTEM/02/01/E00031 RM 116,000
16. Improving the Machinability of AISI D2 Using Hybrid Machining for Metal Stamping Industry. RAGS/2012/FKP/TK01/1 B00012 – RM 80, 000
17. Machinability of Titanium Alloy Using Different Coating Methods Of Carbide Tools. PJP/2013/FKP(15B)/S01219 - RM 24,000.00
18. A Novel Twin Spindle Milling Cutter Strategy for Effectively Machining Thin-Wall Aerospace Structural Component. PJP/2013/FKP(19C)/S01278 - RM 21,100
19. Portable Accumulator for Domestic Water System. PJP/2013/FKP(18A)/S01276 - RM 20,200
20. High Performance Cutting Tool Specifically for Machining Thin-Wall Low Rigidity Aerospace Component: A Prototype. PJP/2013/PROTOTYPE/FKP)/S01292 - RM 20,000

V. Senarai Anugerah Penyelidikan yang diperolehi *(Senarai perolehan anugerah penyelidikan sejak 2007)*
List of awards *(Please list research awards received since 2007)*

1. 2012 Thatcher Bros Prize by Manufacturing Industries Division, Institution of Mechanical Engineers (IMechE) United Kingdom

VI. Senarai Penyeliaan Pelajar PascaSiswazah *(Sila senaraikan nama pelajar, tajuk dan peringkat pengajian semenjak 2007)*
Supervisor for postgraduate students since 2007 *(Please list their names, project title and status)*

1. Nor Mohamad B Sulong, Analysis of EDM Parameters on Surface Roughness, Material Removal Rate, Electrode Wear and Microstructure of Berylium Copper Alloy, MSc. 2008
2. Nurul Husna Binti Mohd Nawawi, Optimisation of Cutter Geometrical Feature for Machining Orthopaedic, Trauma and Spinal Biomaterial Implant, MSc. 2012
3. Aaron Yu Lung, Optimisation of Machining parameter and Annealing Condition for Machining Polyetheretherketones (PEEK) Biomaterials Implant, MSc. 2012
4. Abdul Alif Bin Abdul Aziz, Robust Design Analysis of Energy Saving Locking System, MSc. 2012
5. Siti Sarah Nadia Binti Ahmad, Sustainable Conventional Machining Process for Composite Tool, MSc. 2012
6. Nurul Fatin Binti Mohamad Raffi, Surface Integrity in Ball End Milling of AISI D2 Tool Steel, MSc. 2012
7. Mohd Zulhairi Bin Tajry, A Novel Study on the Effects of Cutter Geometrical Feature in Component Failure for Machining Thin-Wall Low Rigidity Structural Component, MSc. 2012
8. Mohd Mokhtar – New Router Bit Design for Trimming CFRP Composite, D.Eng 2012
9. Defriansyah – Analysis of Top Cover of Battery Design for Stamping Die, MSc. 2012
10. Liyana Binti Norizan – Cutter Path Strategy for Grinderless Machining, M.Eng 2012
11. Adzrin Bin Ahmad –Reducing Interruption in MSG Line Due Materials Specification Combination Issue, M.Eng 2012
12. Mohd Hafiz Bin Hj Md Sani – Machining Hybrid Composite Material, M.Eng 2012

VII. SENARAI UTAMA PENERBITAN BERIMPAK*(penerbitan jurnal/prosiding/buku sejak 2007 nyatakan impak faktor)*
List of Major Publication *(Please list publication since 2007- state the impact factor) – Please use Font Arial 9*

1. **R. Izamshah**, John P.T Mo, Songlin Ding, Hybrid Deflection Prediction On Machining Thin-Wall Monolithic Aerospace Components, Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture Vol. 226 Issue 4 pp. 592-605, 2012. IF=0.770 – Scopus/ISI
2. **R. Izamshah**, Yuhazri M Y, M Hadzley, M Amran, Sivarao Effects of End Mill Helix Angle on Accuracy for Machining Thin-Rib Aerospace Component, 2013, Applied Mechanics and Materials, 315, 773-777. Scopus
3. Mohd Yuhazri Yaakob, Kamarul A M, Haeryip Sihombing, Yahaya S H, **Izamshah R**, An Experimental Study of Different Thermal Boxes Heated by Solar Thermal Radiation for Hot Water System at Night, 2013, Applied Mechanics and Materials, 315, 788-792. Scopus
4. S.R. Subramonian, A.Z. Khalim, Hussein, N. I. S, **R. Izamshah**, M. Amran and M. Hadzley, "Transforming Linear Laser Cutting machine Into Laser Lathing - An Empirical Investigation & Evaluation of Roundness Quality ", Journal of Current Engineering Research (JCER), 2(2) pp. 98-104, 2012.
5. **R. Izamshah**, Yuhazri M Y, M Hadzley, M Amran, Sivarao Effects of End Mill Helix Angle on Accuracy for Machining Thin-Rib Aerospace Component, ICME2012-International Conference on Mechanical and Manufacturing Engineering 20 & 21 November 2012 Batu Pahat, Johor, Malaysia
6. Mohd Yuhazri Yaakob, Kamarul A M, Haeryip Sihombing, Yahaya S H, **Izamshah R**, An Experimental Study of Different Thermal Boxes Heated by Solar Thermal Radiation for Hot Water System at Night, ICME2012-International Conference on Mechanical and Manufacturing Engineering 20 & 21 November 2012 Batu Pahat, Johor, Malaysia
7. Yuhazri Yaakob, Kamarul Amir Mohamed, Rahimah Abdul Hamid, Haeryip Sihombing Pieter, Saifudin Hafiz Yahaya and **Raja Izamshah**; Experimental Study on Effect of Reflector Bed Designs Heated by Direct Solar Radiation for Hot Water Storage System, Proceedingsof iDECON 2012, page 117-121
8. Mohd Hadzley Abu Bakar, **Raja Izamshah Raja Abdullah**, Nur Izan Syahriah Hussein and Mohd Fairuz Dimin, Simulation of Chip Formation for Machining Ti-6Al-4V Titanium Alloys, Proceedingsof iDECON 2012, page 239-242
9. **R. Izamshah**, M Hadzley, Sivarao, M Amran, M. Razali; Effects of Cutter Geometrical Feature on Part Deflection for

Machining Thin-Wall Component,GCSM2012- Global Conference on Sustainable Manufacturing 1 & 2 November 2012 Istanbul, Turkey

10. **R. Izamshah**, Hadzley, M., Amran, M. and Sivarao, S. Effects of End Mill Clearance Angle on Surface Error for Machining Low Rigidity Aerospace Structure Component, Proceedings of iDECON 2012, page 308-312.

11. Amran, M., **Izamshah, R**., Hadzley, M., Sivarao, S., Syahriah, N.I., Nobukawa, S. and Yamaguchi, M. Mechanical Properties of Polypropylene Composites Containing Polymer Fibers, Proceedings of iDECON 2012, page 239-242

12. Mohd Hadzley Abu Bakar, **R. Izamshah**, M., Amran, Simulation of Chip Formation for Machining Ti-6Al-4V Titanium Alloys, Proceeding of Malaysian Technical Universities on Engineering and Technology (MUCET 2012)",

13. M. Amran, S. Salmah, M. Zaki**, R. Izamshah**, M. Hadzley, S. Sivarao and N.I. Syahriah; Optimization Parameters of Injection Moulding Machine for Reducing Warpage of Dog Bone Plastic Part, PPS-28, Polymer Processing Society 28th Annual Meeting, December 11-15, 2012, Pattaya (Thailand)

14. **R. Izamshah R.A,** John P.T Mo, Songlin D., Finite Element Analysis Of Machining Thin-Wall Parts, Journal Key Engineering Materials Vol. 458 (2011) pp 283-288. doi:10.4028/www.scientific.net/KEM.458.283 IF=0.224 (2010) Scopus

15. Songlin D., **R. Izamshah R.A**, John P.T Mo, Yongwei Zhu, Chatter Detection in High Speed Machining of Titanium Alloys, Journal Key Engineering Materials Vol. 458 (2011) pp 289-294. doi:10.4028/www.scientific.net/KEM.458.289 IF=0.224 (2010) Scopus

16. Songlin D., **R. Izamshah R.A**, John P.T Mo, Quansheng Liu, Online Tool Life Prediction in the Machining of Titanium Alloys, Journal Key Engineering Materials Vol. 458 (2011) pp 355-361. doi:10.4028/www.scientific.net/KEM.458.355 IF=0.224 (2010) Scopus

17. Songlin D., **R. Izamshah R.A**, John P.T Mo, Yongwei Zhu, The Development of an Economic Model for the Milling of Titanium Alloys, Journal Key Engineering Materials Vol. 458 (2011) pp 362-367. doi:10.4028/www.scientific.net/KEM.458.362 IF=0.224 (2010) Scopus

18. **R. Izamshah R.A**, John P.T Mo, Songlin D., Deflection Prediction On Machining Thin-Wall Monolithic Aerospace Components, Journal of Mechanical Engineering and Technology Vol. 3 (2011).

19. **R. Izamshah R.A**, John P.T Mo, Songlin D.,Task Automation for Modelling Deflection Prediction on Machining Thin-Wall Part with Catia V5, *Proceedings 2011 International Conference on Mechanical, Industrial and Manufacturing Engineering,* 15-16 January 2011, Melbourne, Australia.

20. John P.T Mo, **R. Izamshah R.A**, Songlin D.,Challenges in Optimising the Machining Process of Titanium Alloys for JSF Manufacturing, *Proceedings Australian JSF Advanced Technology and Innovation Conference, Department of Defence, Australian Government*, Australia 3rd - 4th May 2010.

21. John P.T Mo, **R. Izamshah R.A,** Songlin D.,Challenges in Optimising the Machining Process of Titanium Alloys, *DMTC and DIIC Workshop on Manufacturing Innovation in Titanium Processing,* 1st June 2010.

22. Hadzley M.A.B., **Raja Izamshah R.A**., Jabir M.S., Wear Performance of Flat End-Mill Cutter During Machining of Copper Based Metal*,* Journal of Advanced Manufacturing Technology, Vol. 2 (2008) pp 11-18. ISSN 1985-3157

23. M. Mohd Razali, S. Nor Mohamad, P. J. Liew, A.B. Mohd. Hadzley, **R.A. Raja Izamshah**, Analysis of EDM Parameters on Material Removal Rate and Electrode Wear of Copper Beryllium Alloy Using Copper Electrode, *International Conference on Advances in Mechanical Engineering 2008.*

24. M.A. Amran, M. Hadzley, S.Amri, **R. Izamshah**, Optimization of Gate, Runner and Sprue in Two-Plate Family Plastic Injection Moulding, *International Conference On Advancement of Materials and Nanotechnology 2007.*

25. M.A.M Amran, **R.A R. Izamshah**, S.M. Amri, Study of The Machining Process on Acrylic Material of Mould Base in Plastic Injection Mould, *International Conference on Engineering Technology 2007.*

26. M.A. Amran, **R. Izamshah**, M. Hadzley, S. Amri, A. Hassan, K. Shahir, Application of Two Dimensional Engineering Design In Plastic Injection Mould, *Conference on Applications and Design in Mechanical Engineering 2007.*

27. M. Irman, **R. Izamshah**, M. Amran, M. Hadzley, M. Shukor, N. Aidil, Analysis of Performance Evaluation Between Oil Based Coolant and Biodegradable Based Coolant on Cutting Surface In Milling Operation, *International Conference on Engineering and ICT 2007.*

28. M S Kasim, S A Faizal**, R. Izamshah R. A**., N M Farid, Hot Alignment Solution Using Spreadsheet Application, *Conference on Applications and Design in Mechanical Engineering 2007.*

29. M. Hadzley A. B., **R. Izamshah R.A**., Sivarao S., M. Amri S., M. Amran M. A., M. Shahir K., M. Jabir, Wear

Performance Of Ball Mill Cutter During Machining Of Copper Based Metal, *The National Metallurgical Conference 2006.*

30. **R. Izamshah R.A**, John P.T Mo, Songlin D.,Task Automation for Modelling Deflection Prediction on Machining Thin-Wall Part with Catia V5, Advances in Mechanical Engineering, Vol. 1, no. 1, 2011. pp 8-14. Issn:2160-0619

31. Mohd Hadzley Abu Bakar, **Raja Izamshah Raja Abdullah**, Mohd Amran Md. Ali, Kamaruzaman Jusoff, Sivarao, Hambali Ariff, Nur Izan Syahriah Hussein, Wan Hasrulnizzam Wan Mahmood, Abu Abdullah, Mariana Yusoff and Meysam Shamshiri, Machining Performance of Ti-6Al-4V Titanium Alloy Assisted by High Pressure Waterjet, World Applied Sciences Journal 21(Special Issue of Engineering and Technology): 98-104, 2013. ISSN 1818-4952

32. AB Hadzley, **R Izamshah**, A Siti Sarah, M Nurul Fatin, Finite Element Model of Machining with High Pressure Coolant for Ti-6Al-4V Alloy, Procedia Engineering Vol 53 2013. pp 324-631

33. **R. Izamshah**, M. A. Azam, M. Hadzley, M.A. Md Ali, M.S. Kasim, M.S. Abdul Aziz, Study of surface roughness on milling unfilled-polyetheretherketones engineering plastics, The Malaysian International Tribology Conference 2013, MITC2013

34. M.A. Amran, S. Salmah, N.I.S. Hussein, **R. Izamshah**, M. Hadzley, S. Subramonian, M.S. Kasim, M.A. Sulaiman, Effects of machine parameters on surface roughness using response surface method in drilling process. , The Malaysian International Tribology Conference 2013, MITC2013

35. M. A. Azam, **R. A. Izamshah**, N. Mohamad, K. Isomura, T. Shimoda, Nanostructuring Ultra-thin Co Films to Active Catalyst Particles for Vertically Aligned Single-Walled CNT Growth. The Malaysian International Tribology Conference 2013, MITC2013