



Mr. Rosdi Bin Daud  
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Faculty of Mechanical Engineering,  
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Pahang, MALAYSIA.  
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### Academic Qualification

1. M.Sc. (Advanced Manufacturing Technology), Portsmouth University, United Kingdom, 2002.
2. B.Eng. (Hons) Mechanical Engineering, UKM, 2000.

### Brief Profile

Currently, Rosdi Daud is a senior lecturer, researcher at Faculty of Mechanical Engineering in University Malaysia Pahang. He is a member of International Association of Engineer (IAENG) and member of Institute of Material Malaysia (IMM). Currently he is studying PhD in UTM focusing in Biomechanics and Artificial Intelligent. He graduated from University of Portsmouth, U.K with a Master Science (Engineering) in 2002. After his first degree in 2000, he works at German Malaysian Institute (GMI), Cheras for about 4 years as a Technical Training Officer. He has shown vast interest in product design & development, applied and computational mechanics, structural integrity & failure analysis, precision machining, CAD/CAM, engineering material and manufacturing research area. At present, he actively involves in product design & development, finite element analysis, biomechanics, parameter optimization, artificial intelligent and machining research activities.

### Working Experiences / Appointment

- |     |                      |  |
|-----|----------------------|--|
| 1.  | Jun 2004~Current     | Senior Lecturer, University Malaysia Pahang (UMP).             |
| 2.  | July 2006~Mac 2009   | Head of Technical, University Malaysia Pahang                  |
| 3.  | May 2007~Mac 2009    | UMP Permanent Campus Development Committee                     |
| 4.  | July 2006~Aug. 2008  | UMP Temporary Campus Development Committee                     |
| 5.  | Jan. 2007~Dec 2008   | UMP Safety & Health Committee                                  |
| 6.  | July 2006~Mac 2009   | UMP Technical Committee  |
| 7.  | Feb. 2007~Jun 2007   | Faculty of Manufacturing Development Committee, UMP            |
| 8.  | Jan 2005~2009        | Academic Committee of Faculty, UMP                             |
| 9.  | 10 Apr 2008~9 Apr 09 | EAC Task-Force Committee                                       |
| 10. | Jan 2005~2009        | Examination Committee of Faculty, UMP                          |
| 11. | Jan 2005~2009        | Technical Committee of Faculty, UMP                            |
| 12. | Jun 2007~2009        | Research & Post Graduate Committee of Faculty, UMP             |
| 13. | May 2000~May 2004    | Technical Training Officer, German Malaysian Institute, Cheras |

### Expert Area

Product Design & Development, Biomechanics, Artificial Intelligent, CAD/CAM/CAE, Structural Integrity & Failure Analysis and Manufacturing Processes & Tooling

### Research Interest

Product Design & Development, Biomechanics, Artificial Intelligent, Applied and Computational Mechanics, Structural Integrity & Failure Analysis, Precision Machining, Manufacturing Processes and Tooling, Engineering Materials and Parameter Optimization

## Research Project / Grant

1. "Investigation on Initial Peak Force and Energy Absorption of High strength Steel Crash Box Having Notch as Initial Mechanism" as Researcher, Grant amount: RM99440.00, RDU160140-Fundamental Research Grant Scheme awarded by Ministry of Education (Status: Approved, on-going).
2. "Development of a Lightweight Front Lower Control Arm using Polyetheretherketone (PEEK)" as Project Leader, Grant amount: RM29,000.00, RDU1703311 awarded by Universiti Malaysia Pahang (Status: Approved, on-going).
3. "Effects of biodegradable PLA on hydroxyapatite coating to improve adhesion properties on Co-Cr-Mo alloy" as a main researcher, Grant amount: RM34,500.00, RDU1703319 awarded by Universiti Malaysia Pahang (Status: Approved, on-going).
4. "Surface Integrity of Al-Si/AlN MMC in End Milling Machining Process under Dry Cutting Condition" as a main researcher, Grant amount: RM33,000.00, RDU1603114 awarded by Universiti Malaysia Pahang (Status: Approved, on-going).
5. "BEE-QX: Moulded Plastic Type Queen Excluder for Bee Hives" as a main researcher, Grant amount: RM43,460.00, UIC160907-industry collaboration research grant awarded by Universiti Malaysia Pahang (Status: Approved, on-going).
6. "Hydroxyapatite coating with oxide interlayer on biomedical grade cobalt based alloy" as a main researcher, Grant amount: RM32,000.00, RDU1403118 awarded by Universiti Malaysia Pahang (1 Nov. 2014 ~ 30 April 2017) (Status: completed).
7. "Development of a new approach to provide ankle morphometrics measurements for Total Ankle Arthroplasty (TAA) design" as Project Leader, Grant amount: RM23,000.00, RDU1403111 awarded by Universiti Malaysia Pahang, (25 Oct. 2014 ~ 25 Jan. 2017) (Status: completed).
8. "Development of Laser Cutting and Engraving Machine Utilising PC-NC Controller" as a researcher, Grant amount: RM 78,000.00, RDU070308 awarded by Universiti Malaysia Pahang , (4 Jan. 2007 ~ 30 March 2008) (Status: Completed).
9. "Development of Prototype Automated Guided Vehicle For Dispatching Application" as a main researcher, Grant amount: RM 18,000.00, RDU080323 awarded by Universiti Malaysia Pahang , (1 Aug. 2008 ~ 31 July 2009) (Status: Completed).
10. "Statistical and artificial intelligent study to determine the effect of milling parameters on cutting force, stress and surface roughness when milling Aluminium and Nickel Superalloy", as Researcher, Grant amount: RM15,400.00, RDU080324 awarded by Universiti Malaysia Pahang (1 Aug. 2008 ~ 31 July 2009) (Status: Completed).
11. "Design and Develop Blow Mould Using Machining Optimization Parameters", as main researcher, RDU090202 awarded by Universiti Malaysia Pahang (1 Aug. 2009 ~ 31 July 2010) (Status: Completed).

## Professional Qualification / Membership / Affiliation / Experience

1. Graduate Engineer, Board of Engineer, Malaysia (BEM No. 54435R)
2. Member, International Association of Engineers (IAENG No. 101583)
3. Member, IAENG Society of Artificial Intelligence (ISAI No. 101583)
4. Member, IAENG Society of Industrial Engineering (ISIE No. 101583)
5. Member, IAENG Society of Mechanical Engineering (ISME No. 101583)
6. Member, IMM Institute of Materials, Malaysia (IMM No. 4742)

## Teaching Experience

1. 2017  
DMM1413 Engineering Drawing & CAD  
BMM2613 Computer Aided Design  
BMM3923 Final Year Project 1&2 (4 Students)
2. 2016  
DMM1523 Engineering Materials  
BMM2613 Computer Aided Design  
BMM3923 Final Year Project 1&2 (4 Students)

3. FEB 2015  
DMM1523 Engineering Materials  
DMM2941 Mechanical Technology Lab 4  
BMM3923 Final Year Project 2 (2 Students were supervised & 3 students were co-supervised)
4. SEPT 2014  
DMM1413 Engineering Drawing & CAD  
DMM2931 Mechanical Technology Lab 3  
BMM3923 Final Year Project 1 (2 Students supervised & 3 students co-supervised)
5. FEB 2014  
DMM1523 Engineering Materials  
BMM3611 Manufacturing Process Lab
6. NOV 2013/2014  
DMM1412 Engineering Drawing
7. DEC 2008/2009  
BMM3663 CAE & Failure Analysis  
BMM3912 Final Year Project 1, 2 credits (6 Students)
8. JUL 2008/2009  
BMM2613 Computer Aided Design  
BMM3923 Final Year Project 2, 4 credits (4 Students)
9. DEC 2007/2008  
BMM3663 CAE & Failure Analysis  
BMM3912 Final Year Project 1, 2 credits (6 Students)
10. JUL 2007/2008  
BMF4733 CAD CAM  
BMM3923 Final Year Project 2, 4 credits (8 Students)  
DMM3011 Occupational Safety & Health
11. DEC 2006/2007  
BMF4733 CAD CAM  
BMM3912 Final Year Project 1, 2 credits (9 Students)
12. JULY 2006/2007  
BMF4733 CAD CAM  
BMM3912 Final Year Project 1, 2 credits (4 Students)  
DMM3663 CNC Technology
13. DEC 2005/2006  
BMF1543 Strength of Material  
DMM1532 Static
14. JULY 2005/2006  
BMM2613 Computer Aided Design  
DMM3663 CNC Technology
15. DEC 2004/2005  
DMM1432 Metrology  
DMM2623 Hydraulic & Pneumatic Technology
16. JULY 2004/2005  
DMM1222 Chemistry  
DMM2412 Metrology
17. May 2000-May 2004 (German Malaysian Institute)
  - i. CAD CAM 2 Axis
  - ii. CAD CAM 3 Axis

- iii. Computer Aided Design-2D
- iv. Computer Aided Design-3D
- v. Technical Drawing
- vi. Static & Dynamics (Bachelor Technology Programme twinning with **ITTHO**)
- vii. Fluid Mechanics (Bachelor Technology Programme twinning with **ITTHO**)
- viii. Unigraphics Software(Bachelor Technology Programme twinning with **ITTHO**)

### Postgraduate Supervision

1. Master dissertation student: Fadirul Amri Bin Nasaruddin, research title: 3D Finite Element Analysis of Bolted Flanged and Lens Ring Joint as a co-supervisor, status: completed

### Degree / Final Year Supervision

1. Nurul Uzran Bin Nadzar (MA14036), "Prediction of a Cutting Stress in Othogonal Cutting using the Finite Element Method", 2017
2. Muhammad Zakwan Hazim Bin Jantan (MA14024), "Application of an Interface Failure Model to Predict Fatigue Crack Growth in Mobile Bearing of an Ankle Implant", 2017
3. Muhammad Hariz Bin Muh Riza (MA12092), "Simulation of a Tidal Stream Turbine and its Potential in Malaysian Waters", 2017
4. Nur Syazana Bt. Yahya (MC12035), "Finite element analysis of contact stress and wear characterization in total ankle arthroplasty", 2016-2017
5. Nor Mazira Azma Bt. Azam (MA12072), "Finite Element Modeling and Analysis of Total Knee Arthroplasty", 2016-2017
6. Farah Amira Bt. Zakaria (MA12067), "The Effect of Position and Difference Size of Radial Holes on Performance of Cannulated Pedicle Screw", 2015-2016
7. Lokman Hakim B. Aziz (MA11049), "Prediction of Talus Bone Parameters using Neural Network", 2015-2016
8. Suaidah Syazwani Bt. Sulaiman (MG11021), "The Development of Anatomically Shaped of Malaysian Total Ankle Arthroplasty (MTAA)", 2014-2015
9. Anuarul Ikhwan Mat Nazri (ME07001), "Analysis and Optimization of Incremental Forming Process", 2008-2009
10. Ahmad Amiruddin Rosdi (ME06071), "Warpage Optimization of Name Card Holder Using Neural Network Model and Genetic Algorithm", 2008-2009
11. Mohd Nasri Md Salim (ME06050), "Effects of Dimensional Parameters on Warpage of Name Card Holder Plastic Parts Using Integrated Response Surface Method and Genetic Algorithm"
12. Melcot Jinikol (ME06038), "Punching Tool Wear Modeling Using Finite Element Method", 2008-2009
13. Ahmad Bakri Abdul Aziz (MA07100), "Design and Development of Vacuum Fruit Frying Machine for SME Application" 2008-2009
14. Zairul Ezree Bin Mohd. Yunus, "Study of Machining Parameters of Surface Roughness in Electro Discharge Machining of Tool Steels", 2007~2008.
15. Nor Komariah Binti Hasfa (ME05033), "Prediction of Chatter in CNC Machining based on Dynamic Cutting Force for Ball End Milling", 2007-2008

16. Norhaida Binti Mohamad Noor (ME05025), "Optimization Drilling Process of Glass Fiber Reinforced Plastics", 2007-2008
17. Suyani Binti Arifin (ME05051), "Assessing Safety Analysis at FKM'S Laboratory (General Machine Lab) UMP by Using Energy Analysis Method", 2007-2008
18. Mohd. Safwan Bin Zakaria (ME06002), "Development of Incremental Forming Machine", 2007-2008
19. Mohammad Firdaus Bin Shamsudin (ME05038), "Study and Applications of a Pneumatic Accelerator for Variety Speed of Punching", 2007-2008
20. Siti Norsyahadah Binti Azizan (MG04002), "Development of Turret Punch Cutting Tool", 2006-2007
21. Kameshvaran A/L Nadarajan (MG04026), "Development of Main Cavity Blow Mold of 4 Litre Bottle", 2006-2007
22. Azhar Bin Yusop (MA04009), "Conceptual Design of Two Plate Mould for UMP's Keychain", 2006-2007
23. Mohd Yazid Bin S. Hamid (ME04020), "Design & Fabrication an Electric Buggy Frame", 2006-2007
24. Muhammad Bin Zulkifly (ME05007), "Design & Fabrication Brake System for an Electric Buggy Frame", 2006-2007
25. Wan Ahmad Saiful Bin Wan Muhamad Sukeri (MC04019), "Development of Bottom Insert Blow Mold of 4 Litre Bottle", 2006-2007
26. Mohd. Fahmi Bin Ismail, "Improving Design of Chair with Flip Table", 2006-2007
27. Mohd. Faiza Bin Wahab, "An approach to theoretical modelling and simulation of face milling forces", 2005-2006
28. Mohd Izham Bin Abu Bakar, "Development of Mould Insert", 2005-2006
29. Ahmad Azri Bin Abdul Rahman, "Integrated shaft quality of CNC Lathe Machine using Artificial Neural Networks", 2005-2006

### Diploma Final Year Project Supervision

1. Francisca Tera Anak Pawi, "Design and Analysis Metal to Plastic Automotive Component (Lower Control Arm)", July 2017-December 2017
2. Luqman Nulhaqem Bin Abdul Aziz, "Development of Blow Mold by Reverse Engineering", July 2006 - November 2006
3. Hafiz Rafie Bin Mat Hussin, "Fabrication of Tensile Test Specimen", July 2006 - November 2006
4. Mohd Nurakmal Bin Md. Radzi' "Development of Basic 2D Measurement Apparatus", July 2006 - November 2006
5. Raja Mohd. Bin Raja Idris, "Development of Sliding AGV for Floor Cleaning: Mechanical System", Jan. 2006 - May 2006
6. Ahmad Hafiz Bin Zainudin' "Development of Sliding AGV for Floor Cleaning: Electrical System", Jan. 2006 - May 2006

### A) International and National Journal

1. Mas Ayu, H., Izman, S., **Daud, R.**, Shah, A., Anwar, M., Krishnamurthy, G. and Kamarul, T., "In-vitro biocompatibility study of hydroxyapatite coated on Co-Cr-Mo with oxide interlayer", 2018, Jurnal Teknologi, Volume 80, Issue 1, January 2018, Pages 35-42.
2. H Mas Ayu, S Izman, **R Daud**, G Krishnamurthy, A Shah, SH Tomadi, MS Salwani, "Surface Modification on CoCrMo Alloy to Improve the Adhesion Strength of Hydroxyapatite Coating", 2017, Procedia Engineering, Volume 184, Pages 399-408.
3. SH Tomadi, JA Ghani, CH Che Haron, H Mas Ayu, **R Daud**, "Effect of Cutting Parameters on Surface Roughness in End Milling of AISi/AlN Metal Matrix Composite", 2017, Procedia Engineering, Volume 184, Pages 58-69.
4. SH Tomadi, JA Ghani, H Mas Ayu, **R Daud**, "Tool wear of uncoated carbide and PVD TiAlN coated carbide tools in end milling of AISi/AlN metal matrix composite", 2017, International Journal of Advanced and Applied Sciences, Volume 4, Issue 9, Pages 150-155.
5. H Mas Ayu, **R Daud**, A Shah, MY Faiz, HM Hazwan, MS Salwani, SH Tomadi, MS Reza, "Thermal oxidation process improved corrosion in cobalt chromium molybdenum alloys", 2017, International Journal of Advanced and Applied Sciences, Volume 4, Issue 9, Pages 144-149.
6. R Hafsham, MS Salwani, H Mas-Ayu, **Daud Rosdi**, "Flexural Performance of the Heat-Treated Boron Alloyed Steel", 2017, Materials Science Forum, Volume 909, Pages 21-26.
7. **R. Daud**, H. Mas Ayu, M.S. Salwani, S.H. Tomadi, Mohammed Rafiq Abdul Kadir, Hanumantharao Balaji Raghavendran, Tunku Kamarul, "Artificial Neural Network: The Alternative Method to Obtain the Dimension of Ankle Bone Parameters", 2017, Journal of Engineering and Applied Sciences, Volume 12, Issue 10, Pages 2782-2787.
8. Zakaria, F.A., **Daud, R.**, Mas Ayu, H., Tomadi, S.H., Salwani, M.S. and Abdul Kadir, M.R., "The effect of position and different size of radial hole on performance of cannulated pedicle screw", MATEC Web of Conferences, Volume 108, 31 May 2017, Article number 130012017 International Conference on Mechanical, Aeronautical and Automotive Engineering, ICMAA 2017; Malacca; Malaysia.
9. H Mas-Ayu, S Izman, A Kadir, M Rafiq, **R Daud**, A Shah, MFM Yusoff, "Influence of Carbon Concentrations in Reducing Co and Cr Ions Release in Cobalt Based Implant: A Preliminary Report", 2014, Advanced Material Research, Vol. 845 (2014), pp 462-466.
10. H Mas-Ayu, S Izman, A Kadir, M Rafiq, **R Daud**, A Shah, MFM Yusoff "Influence of Carbon Concentrations in Reducing Co and Cr Ions Release in Cobalt Based Implant: A Preliminary Report", 2014, Advanced Material Research, Vol. 845, Page 462-466
11. **R.Daud**, MR. Abdul Kadir, S. Izman, APM Saad, MH Lee, Aminuddin Che Ahmad "Three Dimensional Morphometric study of Trapezium Shape of the Trochlea Tali", 2013, Journal of Foot & Ankle Surgery, Vol. 52, Page 426-431
12. S Izman, MA Hassan, MRA Kadir, MR Abdullah, M Anwar, A Shah, **R.Daud** "Effect of Pretreatment Process on Thermal Oxidation of Biomedical Grade Cobalt Based Alloy", 2012 Advanced Material Research, Vol. 399-401, Page 1564-1567
13. K. Kadirgama, M. M. Noor, N. M. Zuki, M. M. Rahman, K. A. Abou-El-Hossein, M. R. M. Rejab, **R. Daud** "Optimization of Cutting Force and Surface Roughness in End Milling on Mould Aluminium Alloys (AA6061-T6) using Response Surface Method and Radian Basis Function Network", July 2008, International Journal of Jordan Mechanical Engineering & Industry, Vol. 2, Page 209-214
14. M. A. Hassan, H. Musa, **R. Daud**, S. Sharif, S. H. Tomadi, "Study of the Surface Integrity of the Machined Workpiece in the WEDM Tungsten Carbide" Journal Publication in Solid State Science & Technology

(MASS).

## B) International and National Conference Papers

1. **R. Daud**, M. A. Hassan, Z. Ezree, S. H. Tomadi, M. M. Noor, K. Kadirgama, M. R. M. Rejab, "Study of Machining Parameters of Surface Roughness in Electro Discharge Machining of Tool Steel," International Advanced Technology Congress (**ATCi 2009**), 3-5 November, University Putra Malaysia, Serdang, Selangor, Malaysia, 2009.
2. **R. Daud**, N. M. Noor, M. A. Hassan, S. H. Tomadi, M. R. M. Rejab, M. A. Muhamad, K. Kadirgama, M. M. Noor, M. S. M. Sani, "Optimization Drilling Process of Glass Fiber Reinforced Plastics," International Conference on Advances in Mechanical Engineering (**ICAME 2009**), 24-25 June, Concorde Hotel Shah Alam, Selangor, 2009.
3. **R. Daud**, N. K. Hasfa, S. H. Tomadi, M. A. Hassan, K. Kadirgama, M. M. Noor, M. R. M. Rejab, "Prediction of Chatter in CNC Machining Based on Dynamic Cutter Force for Ball End Milling," The 2009 IAENG International Conference on Industrial Engineering (**ICINDE 2009**), 18-20 March, Hong Kong, vol. 2, 1751~1756. ISBN 978-988-17012-7-5, 2009.
4. **R. Daud**, K. Kadirgama, M. M. Noor, Z. Ghazalli, Z. Hamedon, "Development of New Genetic Algorithm Software for Blow Mould Process", Proceeding in Malaysian Science and Technology Congress, (**MSTC08**), 16-17 Dec, KLCC, Malaysia, 2008.
5. **R. Daud**, M. A. Hassan, S. H. Tomadi, "Parameter Optimization of CNC Lathe Machine Using Adaptive Network-Fuzzy Inference System (ANFIS)", Malaysian Science and Technology Congress (**MSTC 2008**), 16-17 December, KLCC, Kuala Lumpur, 2008.
6. **R. Daud**, M. A. Hassan, S.H. Tomadi, A. Yusof "Conceptual Design of Two-Plate Injection Mold for UMP's Keychain", National Conference on Design and Concurrent Engineering (**DECON 2008**), 28-29 Oct, Melaka, 2008
7. S. H. Tomadi, M. A. Hassan, Z. Hamedon, **R.Daud**, M. A. A. Ismail, "Surface Roughness Evaluation of Tungsten Carbide as Electrode in EDM Process", International Conference on Advance Mechanical Engineering (**ICAME 2009**), 24-25 Jun, Concorde Hotel, Shah Alam, Selangor, 2009.
8. M. A. Hassan, **R. Daud**, S.S.M. Yunus, "The Effects of Flushing in Electro Discharge Machining on Tungsten Carbide" International Conference on Advance Mechanical Engineering (**ICAME 2009**), 24-25 Jun, Concorde Hotel, Shah Alam, Selangor, 2009.
9. M. M. Noor, K. Kadirgama, **R. Daud**, M. M. Rahman, M. R. M. Rejab, M.S. M. Sani, A. A. A. Rahman, "Optimize Parameter of Orthogonal and Oblique Cutting Using Adaptive Network-Fuzzy Inference System", International Conference on Advance Mechanical Engineering (**ICAME 2009**), 24-25 Jun, Concorde Hotel, Shah Alam, Selangor, 2009.
10. M. A. Hassan, N. S. Mehat, S. Sharif, **R. Daud**, S. H. Tomadi, M. S. Reza, "Study of the Surface Integrity of AISI 4140 Steel in Wire Electrical Discharge Machining", The 2009 IAENG International Conference on Industrial Engineering (**ICINDE'09**), 18-20 March, Hong Kong, vol. 2, 1666~1671. ISBN 978-988-17012-7-5, 2009.
11. M. A. Azmir, **R. Daud**, M. A. Hassan, S. H. Tomadi, M. M. Noor, M. R. M. Rejab, "Optimization Drilling Process of Glass Fiber Reinforced Plastics," The 2009 IAENG International Conference on Industrial Engineering (**ICINDE 2009**), 18-20 March, Hong Kong, 2009.
12. S. H. Tomadi, M. A. Hassan, Z. Hamedon, **R. Daud**, A. G. Khalid, "Analysis of the Influence of EDM Parameters on Surface Quality, Material Removal Rate and Electrode Wear of Tungsten Carbide," The 2009 IAENG International Conference on Industrial Engineering (**ICINDE 2009**), 18-20 March, Hong Kong, vol. 2, 1803~1808, ISBN 978-988-17012-7-5, 2009.
13. S. H. Tomadi, Z. Hamedon, **R. Daud**, M. A. Hassan, M. F. Wahab, "Optimum parameters for Surface Roughness Evaluation in Milling Process", 11<sup>th</sup> International Conference on Optimum Design of Structures and Materials in Engineering (**OPTI09**), 8-10 June, Algarve Portugal, 2009.

14. M. M. Noor, A. Sulaiman, K.Kadrigama, M. R. M. Rejab, M.S.M. Sani, F.R.M. Romlay, **R. Daud**, Z. Ghazalli, R. Devarajan, M. F. Ghazalli, W.S.W. Harun, M.Y. Taib, "Finite Element Analysis for Corrosion at Crane Steel (AISI 1015) Structure Main Cord and Lattices", 2<sup>nd</sup> Engineering Conference on Sustainable Engineering Infrastructures Development & Management (**ENCON08**), 18-19 December, Crowne Plaza Riverside Hotel, Kuching, Sarawak, Malaysia, 33-38, 2008.
15. M. M. Noor, **R. Daud**, K. Kadrigama, N. M. Zuki, Z. Hamedon, M. R. M. Rejab, S. N. Azizan, "Development of Turret Punch Cutting Tool using Reverse Engineering Method", National Conference on Design and Concurrent Engineering (**DECON08**), 28-29th October, Avillion Legacy Hotel, Melaka, ISBN 978-983-2948-54-4, 2008.
16. K. Kadrigama, M. M. Noor, **R. Daud**, M. M. Rahman, N. M. Zuki, M. R. M. Rejab, B. Mohammad, "Design and Development of Blow Mold using Machining Optimization Parameters", National Conference on Design and Concurrent Engineering (**DECON08**), 28 - 29th October , Avillion Legacy Hotel, Melaka, 2008.
17. M. A. Hassan, H. Musa, S. Sharif, **R. Daud**, S. H. Tomadi, "Wire Electrical Discharge Machining of Tungsten Carbide", Malaysian Science and Technology Congress 2008 (**MSTC 2008**), 16-17 December, Kuala Lumpur Convention Centre, 551-557, 2008.
18. S. H. Tomadi, M. A. Azmir, Z. Hamedon, **R. Daud**, M. A. Hassan, Y. Mamat, "Modeling and Simulation of Wire Electrical Discharge Machine Process in Machining Aluminium Alloy T6 6061", Malaysian Science and Technology Congress (**MSTC 2008**), 16-17 December, KLCC, Kuala Lumpur, 2008.
19. M. R. M. Rejab, K. Kadrigama, M. M. Noor, M. S. M. Sani, **R. Daud**, "Modification and Testing of Four Axes Filament Winding Machine", International Conference on Science & Technology: Applications in Industry& Education (**ICSTIE 2008**), 12-13 December, Pulau Pinang, 2008.
20. Thet Thet Mon, **R. Daud**, Fazli Ismail, Mohd Shahrir Mohd Sani, "Dedicated Fixture Design for Polishing of Silicon using Finite Element Method", International Conference on Science & Technology: Applications in Industry& Education (**ICSTIE 2008**), 12-13 December , Pulau Pinang, 2008.
21. M. A. Azmir, S. H. Tomadi, **R. Daud**, A. Z. Mohsin, Y. Mamat, "Robust Experimental Methods In Predicting Surface Roughness In Electrical Discharge Machining Process", International Conference on Science & Technology: Applications in Industry& Education (**ICSTIE 2008**), 12-13 December, Pulau Pinang, 2008.
22. M. A. Azmir, Wan Azmi Wan Hamzah, **R. Daud**, S.H. Tomadi, A. Z. Mohsin, Y. Mamat, "Surface Roughness Prediction In Electrical Discharge Machining Process Using Artificial Neural Network", International Conference on Science & Technology: Applications in Industry& Education (**ICSTIE 2008**), 12-13 December , Pulau Pinang, 2008.
23. M. A. Hassan, H. Musa, **R. Daud**, S. Sharif, S. H. Tomadi, "Study of the Surface Integrity of the Machined Workpiece in the WEDM of Tungsten Carbide", Malaysian Metallurgical Conference, (**MMC 2008**), 3-4 December, Bangi, Selangor, 2008.
24. S. H. Tomadi, **R. Daud**, M. A. Yusuff, N. A. N. Mohamed, "Analysis of Reliability and Maintainability for Solder Printer in Surface Mount Technology System", National Conference on Design and Concurrent Engineering (**DECON 2008**), 28-29 Oct, Melaka, 2008.
25. M. A. Hassan, **R. Daud**, S. N. S.Jamaludin, "Design and Analysis for the Improvement of Electric Kettle Performance", National Conference on Design and Concurrent Engineering (**DECON 2008**), 28-29 Oct, Melaka, 2008.
26. Thet Thet Mon, **R. Daud**, Z. Ghazalli, R. A. Bakar, "Finite Element Modeling of Turret Punch Insert for Design Optimization", 9th Asean Pacific Industry & Engineering Management (**APIEM 2008**), 3-5 December, Bali, Indonesia, 2008

#### List of Appointment as a Reviewer/Committee for Conferences/Journal

1. Paper Reviewer for Journal of Advanced Research (Elsevier), 2017
2. Paper Reviewer for International Conference on Mechanical Engineering Research (ICMER), 2017
3. Oral Session Chairman for International Conference on Mechanical Engineering Research (ICMER), 2017



4. Paper Reviewer for International Conference on Engineering Technology, Vocational Education and Social Science (ICETVESS), 2017
5. Paper Reviewer for 29th Symposium of Malaysian Chemical Engineers (SOMChE), 2016

### List of Consultancy

6. Consultation for **FPG Oleochemicals Sdn. Bhd.**: Provision of Design and Analysis of Reactor R501A Inlet Flange and Gasket Modification" thru UMP CT Sdn. Bhd, RM13000, Vot No. UCTQ17-036, Main Researcher, April-July 2017. (Completed)
7. Consultation for **PETRONAS Carigali Sdn. Bhd.**: The Provision of Fitness for Service through Finite Element Analysis for V-5425 Flare Scrubber, thru UIE-Solution Sdn Bhd, RM9,900, Vot No. UIC080102, Main Researcher, Nov 2008, (Completed)
8. Consultation for **PETRONAS Carigali Sdn. Bhd.**: Angsi-B Crane B-7020 Structural Analysis, thru RIA-Solution Sdn Bhd, RM12, 000. Vot No. UIC080102, Apr ~ Dec 2008. (Completed)

### List of Taught Short courses/Training

1. CAD/CAM training for Faculty of Mechanical, Universiti Malaysia Pahang students organised by MechaPro (18-19 November 2017)
2. 3D Injection Mold Design for Faculty of Mechanical, Universiti Malaysia Pahang final year students organised by Graduate Employability Team (4 November 2017)
3. CNC Milling Advanced using Mastercam Software training for Kolej Komuniti Kuantan (20-21 January 2006).

### List of Books/Research Module

1. **Rosdi Daud** and Mas Ayu Hassan, "New Approach of Ankle Morphometric Measurements for Total Ankle Arthroplasty (TAA) Design", 2017, status: submitted to Penerbit UMP.
2. Mas Ayu Hassan, **Rosdi Daud** and Siti Rabiattul Aisha Idris , "BMM3643:Manufacturing Process Module, 2017 status: submitted to Penerbit UMP.
3. Arman Shah Abdullah, Mas Ayu Hassan and **Rosdi Daud**, "Surface Modification of Titanium Alloy for Biomedical Purposes", status: submitted to Research Module in Materials Science & Materials Engineering, Elsevier.

### Awards / Research / Achievements

1. **Research Award: Silver** – Title: Smart Innovative Assistive Medical Kit for Visually Impair Individuals, Creation, Innovation, Technology & Research Exposition (**CITREX 2017**), Project Researcher, UMP Gambang, 15-16 March 2017.
2. **Research Award: Bronze** – Title: Ergonomical Smart Innovative White Cane, Creation, Innovation, Technology & Research Exposition (**CITREX 2017**), Project Researcher, UMP Gambang, 15-16 March 2017.
3. **Research Award: Silver** - Title: Innovative Assistive Medical Kit for Visually Impaired People, **UMP TVET Exposition 2017**, Project Researcher, UMP Gambang, 19-20 September 2017.
4. Merrit Award 2013, awarded by Cendekia Bitara Committee, UMP, 2014.
5. **Research Award: Bronze** – Title: CarJack Using Internal Car Power, 20<sup>th</sup> International Invention, Innovation, Industrial Design & Technology Exhibition (**ITEX09**), Project Researcher, PWTC Kuala Lumpur, 15~17 May 2009.
6. **Research Award: Silver** – Title: A New Machining Mould Algorithm Based on Response Ant Colony (RACA), 20<sup>th</sup> International Invention, Innovation, Industrial Design & Technology Exhibition (**ITEX09**), Project Researcher, PWTC Kuala Lumpur, 15~17 May 2009.
7. **Research Award: Bronze** – Title: Machining Optimization Parameters (RSM) and Genetic Algorithms (GA) Application for Blow Mould Development, Malaysia Technology Expo (**MTE 2009**), Project Researcher, 19~21 Feb 2009, PWTC, Kuala Lumpur.
8. Anugerah Cendekia Bitara 2008, awarded by UMP, 2008.
9. Anugerah Malam Aspirasi Kecemerlangan University Bersama Industri, awarded by UMP, 2008
10. Anugerah Perkhidmatan Cemerlang, awarded by Faculty of Mechanical, UMP, 2008

11. **Research Award: Bronze** – Title: Design and Development of Blow Mould using Machining Optimization Parameters, 19<sup>th</sup> International Invention, Innovation, Industrial Design & Technology Exhibition (**ITEX08**), PWTC Kuala Lumpur, 9<sup>th</sup> – 11<sup>th</sup> May 2008.
12. Anugerah Perkhidmatan Cemerlang, awarded by Faculty of Mechanical, UMP, 2007
13. **Research Award: Silver** – Title: Open Architecture PC-NC for Laser Cutting Application, Ministry of Higher Education, International Exposition of Research and Development of Institute of Higher Learning 2007 (**PECIPTA07**).
14. Anugerah Perkhidmatan Cemerlang, awarded by UMP, 2006

### List of Course / Conference Attended

No.	Date	Program	Level
1.	21-24 Nov. 2017	Ansys Workbench Training (with certificate)	External Training
2.	6-7 Dec. 2016	Inventor Professional Mold Design Training (with certificate)	External Training
3.	29-30 Nov. 2016	Artificial Intelligence-Neural Network & Fuzzy Logic Fundamental (with certificate)	External Training
4.	25-27 Jan. 2016	Autodesk Certified Professional:AutoCAD 2015 training (with certificate)	External Training
5.	22~23 Dec 2009	Introduction and Awareness Training ISO 9001:2008 (with certificate)	University
6.	4~5 June 2009	MS ISO/IEC 17025:2005 "General Requirements for the Competence of Testing and Calibration Laboratories" (with certificate)	University
7.	21~23 May 2009	MS ISO/IEC 17025:2005 "General Requirements for the Competence of Testing and Calibration Laboratories" (with certificate)	University
8.	5 May 2009	FKM EAC Self Assessment Report Workshop	Faculty
9.	30~1 Feb 2009	Workshop of Preparation Sciencefund Proposal, The Legend Cherating Resort	University
10.	10 Jan 2009	Basic MSC Patran / Nastran Training, UMP (with certificate)	Faculty
11.	21~23 Dec 2008	EAC Lead Trainer Workshop	University
12.	1~3 Dec 2008	FKM OBE Workshop: Curriculum Transformation and Teaching Plan Review, Selesa Hilhomes, Bukit Tinggi.	Faculty
13.	16 Aug 2008	Bloom Taxonomy and OBE CQI Workshop. UMP	Faculty
14.	25-27 June 2008	Motivation and Caunseling Skills, UMP. (with certificate)	University
15.	9~11 Jun 2008	FKM Continuous Quality Improvement(CQI) in OBE Training by Prof. Ir. Dr. Riza UKM, De Rhu, Balok, Kuantan.	University
16.	28~29 Apr 2008	Training on Application for Sc Fund Grant by Prof. Dr Ahmad Fauzi (UTM), PBMSK Mini Theater Room, UMP.	University
17.	21-23 April 2008	Algor Basic Software Training (with certificate)	Faculty
18.	29 Feb ~2 Mar 2008	FKM Outcome Base Education Training, Holiday Villa, Cherating.	Faculty
19.	4-5 Feb 2008	"Contract Administration for Construction and Engineering Contracts", Board of Engineer Malaysia (BEM) mandatory training for professional engineer (PE) by Ir. Harban Singh. (with certificate)	University
20.	29-30 Dec 2007	"Safety and Health at Work", Board of Engineer Malaysia (BEM) professional engineer (PE) mandatory training by CMD(R) Ir. Raymond Sua. (with certificate)	University
21.	27-28 Dec 2007	Engineering Management Practice, Board of Engineer Malaysia (BEM) mandatory training for PE by CMD(R) Ir. Raymond Sua. (with certificate)	University
22.	6 Jul 2007	Outcome Base Education Training, Sg Tembling Resort, Kuantan.	Faculty
23.	21-25 May 2007	Solidworks Customized Training Course (with certificate)	Faculty
24.	3 May 2007	Engineering Education Conference 2007, MS Garden, Kuantan (with certificate)	University

25.	2007	Teaching and Learning Course, Module 1 (with certificate)	University
26.	2007	Induction Course, UMP Special Module – UMP. (with certificate)	University
27.	2007	Induction Course. Overall Module – Summerset Beach Resort, Rompin. (with certificate)	University
28.	14-18 May 2007	Research Methodology (SLAB) Course (with certificate)	University
29.	May 2007	Master CAM Training (with certificate)	Faculty
30.	21-25 May 2007	Solidwork Training	Faculty
31.	10-11 Dec 2007	CAE & Failure Analysis Training	Faculty
32.	17-21 Apr 2006	Blow Moulding Fabrication Training 1	Faculty
33.	6-10 Mac 2006	CNC Simulator Training	Faculty
34.	5-7 Apr 2006	CNC Milling (FANUC Controller) Training	Faculty
35.	2-5 May 2006	Blow Moulding Fabrication Training 2	Faculty
36.	20-22 Jun 2006	CIMATRON Software (Electrode Design) Training	Faculty
37.	10~14 July 2006	CNC Tuning (FANUC Controller) Training	Faculty
38.	3-10 Okt 2006	Close Loop Hydraulic Training	Faculty
39.	1214 Apr 2006	Website Development Training	Faculty
40.	3-4 Okt 2005	3R System for EDM Training	Faculty
41.	26-29 Sept 2005	Electrohydraulic Training	Faculty
42.	5-9 Sept 2005	EDM Die Sinking Training	Faculty