

BRIEF CV



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Academic Qualification:

- Ph.D., University of Sheffield (Thesis: Manufacture of An Aerospace Part: An intelligent cutting tool path strategy)
- M.Sc. (Manufacturing Engineering), Universiti Putra Malaysia
- B.Eng. with Honor in Manufacturing System Engineering, Northumbria University, UK

Professional Qualification/ Membership/ Affiliation:

- Graduate Member, Board of Engineer (BEM), Malaysia since 1999
- ASME since 2006

Appointments:

August 2007 to date	Laboratory Coordinator, Mechanical and Manufacturing Engineering Department, Faculty of Engineering, UPM
October 2006 to date	Lecturer, Mechanical and Manufacturing Engineering Department, Faculty of Engineering, UPM
November 1999 to September 2006	Tutor, Mechanical and Manufacturing Engineering Department, Faculty of Engineering, UPM
1998 –1999	Instrumentation Engineer, Perwaja Steel, Kemaman, Terengganu

Areas of Interest:

Optimisation, Advanced Manufacturing Technology, Automation and Robotics, CAD/CAM

Research Topics (Project Leader);

Year	Topic/ Sponsor	Amount (RM)
007-2009	<i>Cutting Tool Path Optimisation Using Evolutionary Algorithm.</i> (With Dr. Faizal Mustapha, Dr Aidy Ali) Fundamental Research Grant	RM100,000
07-2009	<i>Development of Combinatorial Optimisation for Cutting Tool Path Strategy.</i> With Prof. Shamsuddin Sulaiman, Dr. Faizal Mustapha, Dr. Aidy Ali) Research University Grant Scheme.	RM75,000,
2007/2008	<i>Simulation of Cutting Tool Path Strategy for Thin Walled Section Part. New Lecturer Scheme Grant.</i>	RM10,000

Student Supervision

- 1 PhD students (Co- supervisor) – on-going
- 6 MS students (research as Main Supervisor) – 6 on-going
- 2 MS students (research as Co- Supervisor) – 2 on-going
- 4 MS projects – 1 completed, 3 on-going
- 6 BE projects – all completed

Research Products/ patent:

Product Name

Patent

None

Publications:

- Journals: 6 under review
- Conference/ proceedings more than 10.

Journals

1.	M.K.A. Ariffin ¹ , A.A. Faieza ² , S. Sulaiman ³ , Z.Leman ⁴ , N.Ismail ⁵ , Simulation of Flow for Manufacturing Plastic Injection Mould, UTM journal of technology submitted (18-02-2008)
2.	M.K.A. Ariffin , N.D.Sims, K.Worden, A.A.Faeiza, S.Sulaiman, Genetic Optimisation for Cutting Tool Path Strategy, Journal of Mechatronics, Submitted in April 2008. Under review
3.	M.I. M. Ali, N. Ismail, M.K.A. Ariffin and S.M. Sapuan, An optimised drilling process for an aircraft composite structure using design of experiments. Submitted April 2008, under review
4.	Faieza,A.A.,Pham, D.T., Ariffin, M.K.A , Sulaiman, S. ‘Using Virtual Reality technique to reduce lower back pain”, International Journal of Ergonomics (submitted), Under review
5.	Closed Die Forging Geometrical Parameters Optimization for Al-MMC, M. Jolgaf , S. B. Sulaiman, M. K. Anuar , F. Bt A. Aziz, Submitted, under review.
6.	Faieza, A.A., Sulaiman, S., N. Ismail, Ariffin, M.K.A , B.T.H.T. Baharuddin, Visual Feedback and Pseudo-Haptic Feedback Improve Manual Lifting Performance, Jurnal Teknologi, (submitted: 22-02-08).
7.	Plastic Flow Simulation of Plastic Injection Moulding Process, M.K.A Mohd Ariffin , S. Sulaiman, M.M. H.Megat Ahmad , The International Conference on Mechatronics, Kuala Lumpur, 2001
8.	Design, Analysis and Fabrication of Plastic Injection Mould for Tensile Test Specimen. M.K.A Ariffin , S. Sulaiman, M.M.Hamdan, Z.Leman, N Ismail, , 2 nd World Engineering Congress 2002. p329-332
9.	M.K.A Ariffin , N. D.Sims, and K.Worden, Genetic optimisation of machine tool paths. In 6 th International Conference on Adaptive Computing in Design and Manufacture. Bristol: 2004. Springer –Verlag p125-136
10.	Performance Optimization of Automated Guided Vehicles using Fuzzy Genetic Algorithm, M. Badakhshian ¹ , S. B. Sulaiman ² , M. K. A. Ariffin ³ , International Conference on Mechanical and Manufacturing Engineering 2008, 21-23 May 2008, Puteri Pan Pacific JB, page 24 (abstract)

11.	Automated Guided Vehicles Scheduling Optimization by Fuzzy Genetic Algorithm. Ariffin, M. K. A. ; Badakhshian, M.; Sulaiman, S. B.; Faeiza, A. A. (Malaysia), The 12th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2008, Jointly with The 14th International Conference on Information Systems Analysis and Synthesis: ISAS 2008, June 29 th - July 2 nd , 2008 – Orlando, Florida, USA
12.	S.Sulaiman, M.K.A.Ariffin , A.A.Faieza and Elfetori F.Abdewi. “Optimisation of Die Casting Design”, The international Conference on ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES (AMPT 2008), Manama, Bahrain, 2 -5 November, 2008.
13.	S.Sulaiman, M.K.A.Ariffin , A.A.Faieza and Elfetori F.Abdewi. “Manufacturing of Radial Corrugated Composite Tubes for Crushing Behaviour and Energy Absorption, The international Conference on ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES (AMPT 2008), Manama, Bahrain, 2 -5 November, 2008.
14.	S. Sulaiman, Elfetori F. Abdewi, M.K.A.Ariffin and A.A.Faieza. “Effects of shape and geometry on the energy absorption of fiberglass composite tubes”. International Community for Composites Engineering (ICCE) 16, Kunming, China, 20-26 July 2008.
15.	B.T.H.T. Baharudin, S. Sulaiman, M.K.A. Ariffin and A.A. Faieza. “Coating Performance in High Speed Machining, The international Conference on ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES (AMPT 2008), Manama, Bahrain, 2 -5 November, 2008.
16.	B.T.H.T. Baharudin, S. Sulaiman, M.K.A. Ariffin and A.A. Faieza. “Coating Performance in High Speed Machining, The international Conference on ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES (AMPT 2008), Manama, Bahrain, 2 -5 November, 2008.
17.	A.A. Faieza, S. Sulaiman, M.K.A. Ariffin , B.T.H.T. Baharuddin. “Virtual Training Enhances User Performance”, ARCS 2008, Orlando, FL, USA, 7-10 July 2008.

Awards & Recognitions:

1. Silver Medal, Faieza,A.A.,Pham, D.T.,Dimov, S., **Ariffin, M.K.A** ‘Virtual Reality Simulation to reduce lower back pain”, Buku Abstrak, Pameran reka cipta, Penyelidikan & Inovasi (PRPI 2007), p87, 27-29 Nov. 2007, UPM
2. National Robot Competition, ROBOCON 2008: 3rd. Prize Award

Professional Training Attended

1. Procast, IME Training Center, 14-16 May 2008
2. Introduction to Abaqus and Abaqus CAE (19 to 23 November 2007)
3. Training on trainers for Solidworks competition (27 July 2007)
4. Internal Quality Auditor, May 2007

5. CGI/PERL, Programming, UPM, 2002.
6. Programmable Logic Controller (PLC) Training Course (Basic and Advanced Level), 2001, University Putra Malaysia
7. AUTOCAD Introduction Course (Lecturer), UPM, Organise by (M²EC) Club. January 2007.
8. TQM Awareness Level 4, Perwaja Steel Terengganu, 1998.