

## LATEST BRIEF CV

### PROF. DR. JAHARAH A. GHANI



BEng (Leeds Polytechnics, UK), MSc (Warwick University, UK),  
PhD (Universiti Malaya, Malaysia)  
Jabatan Kejuruteraan Mekanik & Bahan  
Fakulti Kejuruteraan & Alam Bina, Universiti Kebangsaan Malaysia  
[www.eng.ukm.my/mrg](http://www.eng.ukm.my/mrg)



#### FIELD OF EXPERTISE:

Major: Machining (Metal Cutting)  
Minor: Manufacturing Process

#### TEACHING

##### Under-graduate level

Machine Workshop, Engineering Drawing, Advanced Manufacturing Process, Advanced Manufacturing Systems, Machine Tool Technology, Production Management, Machining Process, Production Planning and Control, and Manufacturing Project Management.

##### Post-graduate level

Introduction to Manufacturing Systems, Advanced manufacturing Systems

#### SUPERVISION

- Main supervisor PhD: (1 completed, 9 in progress).
- Co supervisor PhD: (4 completed, 9 in progress).
- Main Supervisor, master by research: (1 completed, 1 in progress).
- Main supervisor, master by taught course: (22 completed, 4 in progress).

#### ADMINISTRATIVE

- Coordinator for JKMB documentation (2011- now).
- Programme Head for manufacturing Engineering Programme (2007-2010).
- Coordinator; Projects Dissertation for Final Year students (2006 - now).
- Chairperson for JKMB EAC document.
- Secretary for UP3 JKMB.

#### COMMUNITY SERVICE

- Treasurer, Malaysian Tribology society (2008 till now)
- Technical Committee IEOM 2012 and IEOM2012,
- Technical Committee member for MTIB (CNC machining Centre)(2011)
- Secretary; National Seminar on Advanced Processes and Systems in Manufacturing (APSIM 2007).
- External Examiner and Advisory Panel MFI (2009-2011)
- External Examiner and Advisory Panel UniMap (2010-2012)

- Main supervisor, FYP undergraduate: (51 completed, 2 in progress)

#### PUBLICATIONS

- Editing two (4) books.
- A total eighty three (94) journals produced.
- Fifty two (52) papers presented at international conferences.
- Thirty seven (37) papers presented at national conferences.
- Produced one (1) technical report.
- Produced one (1) article in popular publication.
- Produced three (3) chapters in books

#### RESEARCH ACTIVITIES

Project Head for eleven (11) research topics with total grant amounting MYR1,126,532.00 and Project Member for more than (10) research topics with total grant amounting about MYR10 million.

Research activities in Machining; including, details study of cutting tool development, wear of cutting tool (including tool wear monitoring) and chip formation, and extensively used of Taguchi Design of Experiment.

- Chairperson, Advanced manufacturing Research Group Seminar 1 AMReG 1 2008.
- Session chair for international Conference such as ISSAT2010, and AsiaTrib 2010
- Secretary; National Seminar on Advanced Processes and Systems in Manufacturing (APSIM 2005).
- Committee member, Program Development for Master Degree in Manufacturing program for master degree in Manufacturing Engineering, Engineering Faculty, Universiti Kebangsaan Malaysia, 1995
- Invited speaker for Research Methodology Workshop- (2005-2012)
- External Examiner Group USM (Pemeriksa Luar Berkumpulan, USM)
- Fully responsible for Special Technician Examination J17, 1/2006
- Invited speaker and prepare examination questions for special Technical Assistant examination (J29) 1/2006.

### THESIS EXAMINER (MSc and PhD)

- External examiner for Master of Science and Doctor of Philosophy (UPM,UTP,UTM,UteM, UNIMAS).
- Internal examiner for Master of Science and Doctor of Philosophy

### PAPER REVIEWER

- Reviewer for international and local journals such as: Journal of Materials Processing Technology, Journal of Industrial Technology, Applied Soft Computing, Surface and Coating Technology, IEM Journal, IJMME , JMST etc.
- Reviewer for local and international conference proceedings such as 12th IFAC, SMST2011, ICMCTF2011, IEOM12 etc.

### AWARDS (selected)

- **Silver medal**, Nano-Oil For A Greener Future, BioMalaysia Bioeconomy Asia Pacific Conference and Exhibition, 21 - 23 Oktober 2013.
- Bronze Medal - Seoul International Invention Fair (SIIF 2012), Monitoring Machining Performance – Neo-Mo-Mac), December 2012.
- Bronze Medal - Seoul International Invention Fair (SIIF 2012), Jatropha Expeller MachineJE- Mac , December 2012.
- Excellence Service Awards, UKM, 16 June 2011
- Special Quality Awards, UKM, 15 April 2011
- Group Research Award, UKM, 30 April 2010
- Certificate of Merit for The 2010 IAENG International Conference on Industrial Engineering for Paper Title :Statistical Analysis for Detection Cutting Tool Wear Based on Regression Model.
- Silver medal (Low cost Monitoring Machining Performance – NeoMoMacI), ITEX2010
- Bronze Medal (Monitoring Machining Performance – MoMacIII), MTE 2010
- Silver medal (Monitoring Machining Performance – Mo-MacII), ITEX 2009
- Bronze Medal (Monitoring Machining Performance – MoMacI), MTE2009
- BRONZE medal (*Application of High Speed Cutting in Die and Mould Making Industries*), 16<sup>th</sup> International Invention, Innovation and Industrial Design Technology, ITEX, PWTC, 19<sup>th</sup> – 21<sup>st</sup> May 2005.
- ScienceDirect Top 25 hottest articles: Journal of Materials Processing Technology, J. A. Ghani, I.A. Choudhury and H. H. Hassan, 2004, Application Of Taguchi Method In The Optimization Of End Milling Parameters, Journal of Materials Processing Technology, Vol 145, (1), 84-92, July – September 2004.

### PATENT/ INDUSTRIAL DESIGN/ TRADEMARKS

- PI 2011004389 Neo-Mo-Mac, 2011

- PI 2010002773 Monitoring Of Machining System Performance, 2010
- PI 2010002772 Portable Jatropha Expeller Machine, 2010
- 09-00750-0101 Machine For Pressing Seeds, 2010
- MY 09-00752-010 Je-Mac, 2009
- 09010495 Mo-Mac, 2009

### SELECTED JOURNAL PUBLICATIONS

- Salah Al-Zubaidi, Jaharah A. Ghani , Che Hassan Che Haron, Optimization of cutting conditions for end milling of Ti6Al4V Alloy by using a Gravitational Search Algorithm (GSA), DOI 10.1007/s11012-013-9702-2, Meccanica: Volume 48, Issue 7 (2013), Page 1701-1715. (**Q1 IF 1.747**).
- Muhammad Rizal, **Jaharah A. Ghani**, Mohd Zaki Nuawi, Che Hassan Che Haron, 2013. Online tool wear prediction system in the turning process using an adaptive neuro-fuzzy inference system, Applied Soft Computing 13: 1960–1968 (**Q1**).
- Jaharah A. Ghani, Che Hassan Che Haron, Siti Hartini Hamdan, Ahmad Yasir Md Said, Siti Haryani Tomadi, 2013. Failure mode analysis of carbide cutting tools used for machining titanium alloy, Ceramics International , 39(4):4449-4456(**Q1**).
- S.K. Kamarudin, N.S. Shamsul, **J.A. Ghani** , S.K. Chia, H.S. Liew, A.S. Samsudin, 2013. Production of methanol from biomass waste via pyrolysis, Bioresource Technology, 129: 463–468. (**Q1**)
- Siow Ping Chuan, **Jaharah A. Ghani**, Mariyam Jameelah Ghazali, Talib Ria Jaafar, Mohamad Asri Selamat, and Che Hassan Che Haron, Characterization of TiCN and TiCN/ZrN Coatings for Cutting Tool Application, Ceramics International 39 (2013) 1293–1298 (**Q1**).
- Aminah Ishak, **Jaharah A. Ghani**, dan Che Hassan Che Haron, Kajian Faktor Yang Mempengaruhi Daya dan Taburan Tegangan Semasa Pemesinan FCD 500 Menggunakan Kaedah Unsur Terhingga, Sains Malaysiana ISSN 0126-6039/ 0126-6039, 41(12)(2012): 1605–1612 (**Q3**).
- **Jaharah A. Ghani**, Poh Siang Jye, Che Hassan Che Haron, Muhammad Rizal, Mohd Zaki Nuawi, Determination of sensor location for cutting tool deflection using finite element method simulation, Proceedings of the Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science. Volume 226 Issue 9 September 2012 ,pp. 2373 – 2377. (**Q3**)
- **J.A. Ghani**, M. Rizal, M.Z. Nuawi, M.J. Ghazali, C.H.C. Haron, Monitoring online cutting tool wear using low-cost technique and user-friendly GUI, Wear 271 (2011) 2619– 2624, doi:10.1016/j.wear.2011.01.038 (**Q1**)
- **Jaharah A. Ghani**, Goh Geok Yong, Che Hassan Che Haron, Ahmad Rasdan Ismail, Baba Md Deros,2010, Keutuhan Permukaan AISI H13

Keluli Terkeras Dalam Proses Pemesinan Nyahcas Elektrik (EDM), Journal- The Institution of Engineers Malaysia, Vol 71, No.2, June 2010, pp. 27-34, ISSN 0126-513X.

- Che Haron, C.H., **Ghani, J.A.**, Burhanuddin, Y., Seong,, Y.K., Swee, C.Y., Copper and graphite electrodes performance in electrical-discharge machining of XW42 tool steel, Journal of Materials processing technology 201 (2008) 570–573. ISSN: 0924-0136 **(Q1)**
- S.M. Tasirin, S.K. Kamarudin, **J.A. Ghani**, K.F. Lee, 2007, Optimization of drying parameters of bird's eye chilli in a fluidized bed dryer, Journal of Food Engineering 80 (2007) 695–700. **(Q1)**
- **J. A. Ghani**, I. A. Choudhury and H. H. Hassan, 2004, Application Of Taguchi Method In The Optimization Of End Milling Parameters,, Journal of Materials Processing Technology, Vol 145, (1),2004, 84-92. **(Q1)**
- **J.A. Ghani**, I.A. Choudhury, and H.H. Masjuki, 2004, Performance Of P10 Tin Coated Carbide Tools When End Milling AISI H13 Tool Steel At High Cutting Speed, Journal of Materials Processing Technology, Vol 153-154, pp.1062-1066. **(Q1)**
- **J.A. Ghani**, I.A. Choudhury, and H.H. Masjuki, 2004, Wear Mechanism of TiN Coated Carbide and Uncoated Cermets Tools At High Cutting Speed Applications,, Journal of Materials Processing Technology, Vol 153-154, pp.1067-1073. **(Q1)**