



MARIYAM JAMEELAH GHAZALI
Department of Mechanical & Materials Engineering
Faculty of Engineering & Built Environment
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor Darul Ehsan
Tel: 03-89216418 Fax: 03-89259659
mariyam@vlsi.eng.ukm.my / mariyam.j.ghazali@gmail.com

BIODATA

PART A

- | | | |
|--------------------------|---|---|
| 1. Identity Card No. | : | 750316-08-6182 |
| 2. Date/ Place of Birth | : | 16hb. March, 1975/Taiping, Perak |
| 3. Date of First Service | : | 18 July 2005 |
| 4. Post of First Service | : | Tutor DA2 |
| 5. Current Post | : | Lecturer DS52 |
| a. Main | : | 1) Coordinator of Research Postgraduates |
| b. Administrative | : | Department of Mechanical & Materials Engineering. |
| | | 2) Coordinator of ICT (Materials Group) |
| | | Department of Mechanical & Materials Engineering. |

Date of Promotion to Current Post	25 September 2007
a. Main	1 January 2007 (1 & 2).
b. Administrative	:

- | | | |
|------------|---|---------------------------------|
| 6. Faculty | : | Engineering & Built Environment |
|------------|---|---------------------------------|

7. AREA OF EXPERTISE

- Wear of materials
- Surface engineering
- Materials processing

Other area:

- Engineering Education

PART B

1. Academic Qualifications

PhD. (Engineering Materials)	University of Sheffield, United Kingdom (July 2005)
MSc. (Materials & Minerals Resources Engineering)	Universiti Sains Malaysia (2000)
BEng. with honors (Materials & Minerals Resources Engineering)	Universiti Sains Malaysia (1999)



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

2. PROFESSIONAL BODY MEMBERSHIP

- Member, Working Group of PVC-Pipes & Fittings for SIRIM (2006-2009)
- Member, Technical Committee on Fine Ceramics for SIRIM (2007–to date)
- Member, Working Group of Eco-labelling criteria for adhesives and water-based adhesives (WG/Z/9-5) SIRIM (2010- to date)
- Graduate Member, Board of Engineers Malaysia (August 2008–to date) – ref: 70728
- Council Member, Asia Tribologists (ASIATRIB) (2007–to date)
- Member, Institute of Materials (IOM) UK (2003–2006)
- Member, Society of Tribology & Lubricant Engineers (STLE) (2005-2007)
- Associate Member, Institute of Materials Malaysia (IMM) (2006–to date) ref: 1187
- Life Member, Electron Microscopy Society of Malaysia (EMSM) (2006–to date)
- Secretary & Life Member, Malaysian Tribology Society (MYTRIBOS) (2007-to date)
- Member (Student Pilot), Malaysian Experimental Aircraft Association (MEAA) (2003-2004).
- Member, Advanced Materials Processing & Integrity (AMPI) Group, UKM (2007-to date).
- Committee, Scientific Research for Perbadanan Adat Melayu dan Warisan Negeri Selangor (PADAT) (2010 – to date).

3. AWARDS & RECOGNITION

Research Awards

- 2nd best poster competition: *Dry Sliding Wear Behaviour of Aluminium Alloys* at the 14th International Conference of Wear of Materials (WOM) by Elsevier Inc., Washington D.C., 2003.
- Travel Grants to attend and present: *Dry Sliding Wear Behaviour of some Wrought Rapidly Solidified Powder Metallurgy Aluminium Alloys* at the 15th International Conference of Wear of Materials (WOM) in San Diego, USA by the Royal Academy Engineering U.K., 2005.
- Best Paper Award, *Concurrent Approach in Design Synthesis: Application to the Engineering Design Project* at the National Conference on Design & Concurrent Engineering (DECON) in Melaka, Malaysia by KUTKM & IEM, 2006.
- Travel Grants to attend and present: *Work Hardening Effect of Worn Aluminium Alloys against Steel and Alumina: A Comparison at Nano-scale* at the International Nanotribology Forum: The Hoi An Discussion, Hoi An, Vietnam by Nanosurf AG Switzerland, 2007.
- 2nd Runner up in KIK Competition on Multi Purpose ENT Scope Storage, 27 October 2010, UNiversiti Kebangsaan Malaysia.

Service Award in UKM

- Excellent Service Award 2007
(ref: UKM(S)3.6/111/137 Jld. 25 dated 30 Jun 2008)

4. PUBLICATIONS

Books/Edited Books

1. A. Muchtar, A. Ismail, H. Husain, J.M. Jahim, **M.J. Ghazali** & M.F.I. Mohd. Nor, Proceedings of Graduate Research Seminar 2007 (eds.), Universiti Kebangsaan Malaysia Publisher, ISBN: 978-983-2982-15-9, Bangi, Selangor.
2. **M.J. Ghazali**, B.M. Deros, B. Bais, D.A. Wahab, F. Suja', H. Abdullah, J.M. Jahim, Proceedings of Engineering Postgraduate Conference 2008 (eds.), Universiti Kebangsaan Malaysia Publisher, ISBN: 978-983-2982-22-7, Bangi, Selangor.
3. C.H. Azhari, A. Muchtar, M.Z. Omar & **M.J. Ghazali**, Advances in Material Processing, Vol. 2, 2009, Universiti Kebangsaan Malaysia Publisher, Bangi, Selangor, ISBN 978-983-2781-01-1
4. **M.J. Ghazali**, A. Muchtar, T.I. Mohamad, W.A.W. Ghopa, W.F.H.W. Zamri, M.F.M. Tahir, M.A.M. Sabri, H. Hishamuddin, Z. Wahid & N.K. Khamis, Annual Report 08: Department of Mechanical & Materials Engineering, Universiti Kebangsaan Malaysia Publisher, ISSN: 1985-9848-9771-9859-8400-5, Bangi, Selangor.

Chapter in Books

1. **M.J. Ghazali** & S. Abdullah, Work Hardening of Worn Aluminium Alloys due to Dry Sliding in Brake Pad & Disc Materials, University Publication Centre (UPENA). 2007. ISBN: 9789833644919, Shah Alam, Selangor.



2. **M.J. Ghazali**, M.Z. Omar & A. Jalar, *Bilah Keris* in Malay Technology, 2009, Universiti Kebangsaan Malaysia Publisher, Bangi, Selangor, ISBN 978-983-2457-09-1.
3. **M.J. Ghazali**, *The Effect of Alloying Element & Slider Materials on Dry Sliding Wear Resistance of Commercial Wrought Aluminium Alloys* in Advances in Material Processing, Vol. 2, 2009, Universiti Kebangsaan Malaysia Publisher, Bangi, Selangor, ISBN 978-983-2781-01-1

Journals

1. **M.J. Ghazali**, Effect of slider materials on the nano-characteristics of the mechanical mixed layer of worn wrought Al-alloys, *Jurnal Nanosains & Nanoteknologi*, Vol. 2, No. 1, 2009, pp. 32-37.
2. N.C. Hau, **M.J. Ghazali**, D. Mohd. & C.H. Azhari, Effects of electron beam irradiation doses on sugar cane bagasse fiber reinforced cement composites, *Malaysian Journal of Microscopy Electron*, Vol. 4, 2009, pp. 226-231.
3. A.S. Anasyida, A.R. Daud & **M.J. Ghazali**, Microstructural Study of Al-Si-Mg Containing Cerium, *Malaysian Journal of Microscopy Electron*, Vol. 4, 2009, pp. 170-174.
4. N. Mohamad, A. Muchtar, **M.J. Ghazali**, D. Mohd. & C.H. Husna, The Effect of Filler on Epoxidised Natural Rubber-Alumina Nanoparticles Composites, *European Journal of Scientific Research*, Vol. 24, Issue 4, 2009, 538-547.
5. N. Mohamad, A. Muchtar, **M.J. Ghazali**, D. Mohd. & C.H. Husna, Epoxidised Natural Rubber-Alumina Nanoparticles Composites (ENRAN): Effect of filler loading, *Research Buletin*, Vol. 2, 2009, 17-18.
6. R. Zulkifli, C.H. Azhari, S.A. Oshkovr & **M.J. Ghazali**, Effect of Surface Treatment and Number of Plies on Interlaminar Fracture Toughness of Multi-Layer Woven Silk Fibre/Epoxy Composites, *European Journal of Scientific Research*, Vol. 27, Issue 3, 2009, 454-462.
7. M.Z. Omar, H.V. Atkinson, A.A. Howe, E.J. Palmiere, P. Kapranos & **M.J. Ghazali**, Solid-liquid structural break-up in M2 tool steel for semi-solid metal processing, *Journal of Materials Science*, Vol. 44, Issue 3, 2009, 869-874.
8. J.A. Ghani, C.H. Che Hassan, **M.J. Ghazali**, A.B. Sulong, M.Z. Omar, M.Z. Nuawi, A.R. Ismail, Performance of uncoated carbide cutting tool when machining cast iron in dry cutting condition, *International Journal of Modern Physics B*, Vol. 23, No 6 & 7, 2009, 1796-1802.
9. **M.J. Ghazali**, R. Mustafa, A.A. Pauzi, C.H. Azhari, J.A. Ghani, A.B. Sulong, Effect of starch binders in alumina coatings on AISI 316L stainless steel for medical applications, *International Journal of Modern Physics B*, Vol. 23, No 6 & 7, 2009, 1034-1039.
10. A.B. Sulong, N. Muhamad, **M.J. Ghazali**, A.G. Jaharah, T.S. Huat, J.H. Park, Functionalised MWCNTs reinforced polyethylene fiber composites: mechanical strength characterisations, *International Journal of Modern Physics B*, Vol. 23, No 6 & 7, 2009, 1419-1424.
11. **M.J. Ghazali**, M.Z. Nuawi, N.I.I. Mansor, Low Cost Wear Monitoring of Bearing Shell in Connecting Rod via I-kaz Method, *Advanced Materials Research*, vol. 76-78, 2009, 702-707.
12. A.S. Anasyida, A.R. Daud, **M.J. Ghazali**, Dry Sliding Wear Behaviour of Al-4Si-4Mg Alloys by Addition of Cerium, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 25-28.
13. K.M. Adel, A.S. Dhia, **M.J. Ghazali**, The Effect of Laser Surface Hardening on the Wear and Friction Characteristics of Bainitic Ductile Iron, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 65-69.
14. H. Budiman, M.Z. Omar, A. Jalar, J. Syarif, **M.J. Ghazali**, S. Abdullah, Production of feedstock material for semi solid material processing by cooling slope casting process, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 74-78.
15. M.N. Wahab, A.R. Daud, **M.J. Ghazali**, Preparation and Characterisation of Stir cast Aluminium Nitride reinforced Aluminium Metal Matrix Composites, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 13-15.
16. S.H. Salleh, M.Z. Omar, J. Syarif, **M.J. Ghazali**, S. Abdullah, Z. Sajuri, Investigation of Microstructures and Properties of 440C Martensitic Stainless Steel, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 21-24.
17. N.I.I. Mansor, S.E.M. Kamal, **M.J. Ghazali**, M.Z. Nuawi, Monitoring Bearing Condition Using Airborne Sound, *International Journal of Mechanical & Materials Engineering*, Vol. 4, No. 2, 2009, 50-53.
18. H. Pratikno, A.K.A. Mohd Ihsan, **M.J. Ghazali**, Influence of Injection DC Current and Seawater Salinity to Performance Several Anodes on Impressed Current Cathodic Protection (ICCP) in Marine Environment, *International Journal of Material Science*, Vol. 4, 3, 2009, 177-189.



19. Rozli Zulkifli, Che Husna Azhari, **Mariyam J. Ghazali**, Ahmad Rasdan Ismail, Abu Bakar Sulong, Interlaminar Fracture Toughness of Multi-Layer Woven Silk/Epoxy Composites Treated with Coupling Agent, *European Journal of Scientific Research*, Vol 27, No. 3, 2009, 454-462.
20. A.S. Anasyida, A.R. Daud, **M.J. Ghazali**, Dry Sliding Wear Behaviour of Al-12Si-4Mg Alloys with Cerium Addition, *Materials & Design*, Vol. 31, No. 1, 2010, 365-374.
21. N. Mohamad, A. Muchtar, **M.J. Ghazali**, D. Mohd. & C.H. Husna, Epoxidised Natural Rubber-Alumina Nanoparticle Composites: Optimisation of Mixer Parameters via Response Surface Methodology, *Journal Of Applied Polymer Science*, Vol. 115, Issue 1, 2010, 183-189.
22. **Mariyam Jameelah Ghazali**, Mahamad Noor Wahab, Abdul Razak Daud and Jaharah Ab. Ghani, Effect of Aged AlN Reinforced Al-Si Alloys on Dry Sliding Wear Behaviour, *Advanced Materials Research*, Vol. 126-128:905-910.
23. Jaharah A. Ghani, Muhammad Rizal, Mohd Zaki Nuawi, Che Hassan Che Haron, **Mariyam Jameelah Ghazali**, and Mohd Nizam Ab Rahman, Online Cutting Tool Wear Monitoring using I-kaz Method and New Regression Model, *Advanced Materials Research*, Vol. 126-128:738-743.
24. Noraiham Mohamad, Andanastuti Muchtar, **Mariyam Jameelah Ghazali**, Dahlan Hj. Mohd and Che Husna Azhari, Correlation of filler loading and silane coupling agent on the physical characteristics of epoxidized natural rubber-alumina nanoparticles composites, *Journal of Elastomers and Plastics*, Vol. 42(4):331-346.
25. **MJ Ghazali**, SE Mat Kamal & S. Abdullah, Characterisations of Cu based Coated Al7075 via Plasma Spray Technique, *Key Engineering Materials*, 462-463:313-318.
26. M.N. Wahab, **M.J. Ghazali** & A.R. Daud, Effect of AlN Addition on Wear and Mechanical Properties of Al-Si Alloy Composites Fabricated by Stir Casting Process, *Key Engineering Materials*, 462-463:307-312.
27. N. Hassanuddin, **MJ Ghazali**, A. Muchtar, MC Isa, AR Daud, Effects of Al₂O₃-13%TiO₂ Coating Particle Size on Commercial Mild Steel via Plasma Spray Method, *Key Engineering Materials*, 462-463:645-650.
28. MN Wahab, **MJ Ghazali**, AR Daud, Effect of Aging Treatment on Microstructure and Mechanical Properties of Al-Si Matrix Alloy Reinforced with Reinforced with High Purity Aluminium Nitride (AlN), *Key Engineering Materials*, 462-463:967-971.
29. SE Mat Kamal, **MJ Ghazali**, S. Abdullah, Effect of Plasma Spray Variables on Cu-Ni Coated A7075, *Key Engineering Materials*, 462-463:692-697.

Proceedings/Postceedings

50 – International, 35 – Regional/National

Reports/Others

1. **M.J. Ghazali**, *My Hoi An Experience*, Department of Mechanical & Materials Engineering Bulletin, Vol. 1(Buletin JKMB Vol.1), p. 6, 2007.
2. **M.J. Ghazali**, *The 7th International Conference on Fracture and Strength of Solids, Urumqi, China (26th-31st August 2007)*, Department of Mechanical & Materials Engineering Bulletin, Vol. 3(Buletin JKMB Vol.3), p. 3, 2007.
3. **M.J. Ghazali**, A. Muchtar, T.I. Mohamed, Z. Wahid, N.K. Khamis, H. Hishamuddin, M.A.M. Sabri, M.F.M. Tahir, W.F.H.W. Zamri, W.A.W. Ghopa, Department of Mechanical & Materials Engineering Annual Report 2008.

5. PATENT SINCE CURRENT POST

None



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

6. RESEARCH SINCE CURRENT POST

Research In Progress

Role	Research Title	Period
Leader	Structural and Tribological Characterisations of Cu-based Alloys as Coating Materials for Connecting Rod Bearings in Automotive Engine (ScienceFund 03-01-02-SF0375, RM 128,000)	1 st August 2007 – 1 st August 2009
	Development of Ceramic Coating for Marine Structure Application (ScienceFund 04-01-02-SF0527, RM 220,720)	1 st August 2008 – 31 st July 2010
	Development of Alumina Micro-Coated Stainless Steel for Surgical Tools (UKM-KK-02-FRGS0031-2006, RM 24,296)	1 st March 2007 – 28 th February 2009
	Development of Low Cost Technique For Wear Monitoring of Connecting Rod Bore (UKM-GUP-BTT-07-25-160, RM 200,000)	1st Oct. 2007 – 30 th June 2010
	Corrosion Resistance Performance of Submerged nanostructured Ceramic Coated Metallic Components Tropical Seawaters (UKM-KK-03-FRGS0120-2010, RM 40,000)	15 March 2010 – 15 March 2013
Member	Rolling Contact Fatigue (RCF) Studies Of Railway Track In Malaysia (ScienceFund 03-01-02-SF0053)	Dec. 2006-Dec. 2008
	Development Of Novel Beta Titanium Alloys For Biomaterials (ScienceFund 03-01-02-SF0263)	Dec. 2006-Dec. 2008
	Development Of A Fatigue Life Characterisation Of Composite Materials Under Spectrum Loadings (ScienceFund 03-01-02-SF0051)	Dec. 2006-Dec. 2008
	Tool Life and Wear Mechanism of Carbide Tool during Machining of Aerospace Materials under Minimum Quantity Lubrication Condition (ScienceFund 03-01-02-SF0506)	Jan. 2008 –Dec. 2009
	Tool Life and Wear Mechanism of Coated and Uncoated Carbide Tool During Machining of Titanium Alloys under Minimum Quantity Lubrication Condition (ScienceFund 03-01-02-SF0406)	
	Development of Degassing Treatment of Cast Al-Si-Mg Alloy (ScienceFund 03-03-02-SF0099) – Collaboration with SIRIM	Feb. 2007-Dec. 2008
	Development of A New Solid Hydrogen Fuel Material for Automotive Industries (ScienceFund 03-02-03-SF0164) – Collaboration with UNITEN	Jun2 2008-Dec. 2009
	Development of Nano-Polymer Fibers Through Electrospinning for Biomedical and Engineering Applications (ScienceFund 03-01-02-SF0580)	Jan. 2009-Dec. 2010
	Development and Microstructural Mapping of High Strength Steel (SS440C) for Automotive (UKM-KK-02-FRGS0011-2006)	
	Impact of Attenuation in Expoxidised Natural Rubber-Alumina Nanocomposites (ENRAN) Soft Body Armour (UKM-RS-02-FRGS0003-2007)	Jan. 2009-Dec. 2010
	Heat Treatments and Microstructural Mapping of High Performance Steel for Automotive Components (UKM-KK-02-FRGS0011-2006)	Nov. 2006-Oct. 2009
	Non contact online monitoring and measurement of cutting tool wear development during milling operation (UKM-GUP-BTT-07-25-025)	Sept. 2007-Aug. 2009
	Design of CNG-DI Piston for Extreme Temperature and Pressure (UKM-GUP-BTT-07-25-024)	



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

Malay Watermill for Watering Technology (UKM-GUP-BTT-07-25-049)	Nov. 2006-Oct. 2009
Improvement of Strength and Workability of Dual-Phase Ti-6%Al-4%V Alloys through Alloy Design Technique and Artificial Neural Network (UKM-GUP-BTT-07-25-166)	
Research University Operational Fund: Technology and Sustainability of Malay Culture (UKM-OUP-JKKBG-06-21/2008)	Oct. 2007-Sept. 2010
Research University Operational Fund: Advanced Materials (UKM-OUP-NBT-26-115/2008)	Oct. 2007-Sept. 2010
	Oct. 2007-Sept. 2010
	Oct. 2007-June 2010
	June 2008 – March 2009
	June 2008 – March 2009

Completed Research

Role	Title	Amount	Period
Member	Research University Operational Fund: Advanced Materials Research Group (UKM-OUP-BTT-35/2007)	RM 77,000	June-Dec. 2007
	Research University Operational Fund: Malay Technology Group (UKM-OUP-TKS 7/2007)	RM 164,000	June-Dec. 2007
	Heat treatment and thermo-mechanical processes of SS440C steel for automotive components – under a research program Failure Analysis of Automotive components (UKM Research Grant KK02/2006/S1)	RM 9,000	2006-2007

RESEARCH GROUP MEMBERSHIP (RESEARCH UNIVERSITY OPERATIONAL FUND)

Role	Research Group	Period
Member	Research University Operational Fund: Technology and Sustainability of Malay Culture (UKM-OUP-JKKBG-06-21/2008)	June 2008 – March 2009
	Research University Operational Fund: Advanced Materials (UKM-OUP-NBT-26-115/2008)	June 2008 – March 2009



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

7. CONSULTATION SINCE CURRENT POST

Role	Research Title	Collaborator	Period
Project Leader	Dry wear characterisations of automotive brake pad.	Malaysian Institute for Nuclear Technology Reseach (MINT)	2006-2007 (Completed)
		Eurapipe (M) Sdn Bhd.	2007-2008 (Completed)
	Accelerated weathering effects on commercial CPVC (Chlorinated Polyvinyl Chloride) pipes	Malaysia Nuclear Agency (MNA)	2007-2008 (Completed)
	Low cost technique of micro- alumina coating on 316L stainless steel		
	Coatings for Mg-Alloys	Motorola Technology (M) Sdn. Bhd.	2008-2009 (Completed)
	Design of horizontal drilling test rig	Baker Hughes (M) Sdn Bhd.	2008-2009 (Pending)

8. Academic Reviewer

Journal Papers Reviewer

Year	Name of Journal and Title of Paper
2005	<p>Special Edition, Journal of Engineering, UKM</p> <ul style="list-style-type: none"> Application of BEM to Evaluate The Potential Mapping Technique for Corrosion Monitoring A Computational Study on the Structural Merit of Egg-Shape Shell Numerical Modelling of Cyclic Stress-Strain Behaviour of Sn-Pb Solder Joint During Thermal Fatigue <p>Journal of Engineering, UKM</p> <ul style="list-style-type: none"> The Implementation of ER Damper to Improve Vehicle Road handling and Ride Comfort for Malaysian Road Condition
2006	<p>Special Edition, Journal of Engineering, UKM</p> <ul style="list-style-type: none"> Evaluation of Stress Intensity Factor using Displacement Correlation Technique Classification of Human Abnormality Using Time-Frequency and Image Processing Technique <p>Journal of Engineering, UKM</p> <ul style="list-style-type: none"> A Study on Microstructures and Joining Strength of Welded Metal in Fusion and Heat Affected Zone <p>Journal of Solid State Science and Technology/Letters</p>
2008	<ul style="list-style-type: none"> Stacked Die Leadframe Analyses using Thermomechanical Approach Effect of High Temperature Reliability to Intermetallics (Au/DI) Uniformity Minimise Warpage Occurrence Through FEA and Statistical Method Effects of Parameter Match on Bondability and reliability in Thermosonic Gold Bonding Optimisation Process Parameter for Die Attach Process Characterisation of Free Air Ball for Wire Bonding <p>International Journal of Mechanical & Materials Engineering</p>



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

- Analysis of Stress Concentration Factor in bolted Joint Using FEM

Proceedings Manuscripts Reviewer

Year	Name of Proceeding / Postceeding
2008	<ul style="list-style-type: none"> • Proceedings of Malaysian Metallurgical Conference 2008 (MMC 2008) • Proceedings of Engineering Postgraduate Conference 2008 (EPC 2008). • Proceedings of The 2nd Regional Conference on Vehicle Engineering & Technolgy (RIVET 2008)
2007	<ul style="list-style-type: none"> • Proceedings of Graduate Research Seminar 2007 (SPS 2007)
2006	<ul style="list-style-type: none"> • Proceedings of Graduate Research Seminar 2006 (SPS 2006)

9. Other Expert Task Related

Task	Activity and Level
Engineering Accredited Council (EAC)	<ul style="list-style-type: none"> • Succesfully completed the EAC Lead Trainer Course (University) • Reviewer for EAC Appendix Report 2007 (Department)
Student Service	<ul style="list-style-type: none"> • Organising committee for Student Enhancement Camp for Mechanical Engineering Undergraduates with CGPA <2.50 (Department) • Organise a short course on nanoindenter for postgraduates students (Department) • Organise a short course on tribotester for postgraduates students (Department) • Organise the Graduate Student Research Proposal Presentation (2006 – 2008) • Examiner in Personal & Professional Enhancement program for graduating undergraduates (Faculty) • Advisor for ROBOCON competition team 2006-2007 (University) • Advisor for School Enrichment Module project – MRSM Pengakalan Chepa (University) • Academic Advisor to 29 undergraduates (2006 – to date)
Teaching	<ul style="list-style-type: none"> • Revision on the curriculum and the notional credit hour for Department of Mechanical & Materials Engineering courses based on Malaysian Qualifications Framework (Department) • Examiner for the Graduate Student Research Proposal Presentation (2006 – 2008)(Department) • A part time lecturer for Tribology course in the Department of Mechanical & Manufacturing Engineering, Universiti Putra Malaysia (UPM) (University)



Technical & Industrial Visit	<ul style="list-style-type: none"> • Manage and accompany undergraduates for industrial visit to: <ul style="list-style-type: none"> ◦ Selangor Pewter (2006) ◦ SKF Bearings Industries (2007) ◦ Perodua Sdn Bhd (2007) ◦ Euratech Sdn Bhd (2007) ◦ Clay Expression (2007) ◦ Malaysian Nuclear Agency (2007-2008) ◦ Gardenia Bakery (KL) Sdn Bhd (2008) ◦ SIRIM Sdn Bhd (2007 & 2008) ◦ Guocera Tile Industries Sdn Bhd (2008) • A research visit to research universities in United Kingdom: Loughborough University, Imperial College and University of Sheffield (2008) • Technical & research visit to PT. Gunanusa Utama Fabricators, Banten, Indonesia (2008) • Technical & research visit to Indian Institute of Science, Bangalore (2008) • A research visit to Brunei Technology Institute (2007) • A research visit to Baker Hughes (M) Sdn Bhd
Representative of UKM	<ul style="list-style-type: none"> • Research Collaboration with University of Malaya (UM) in Tribology area (2006) • In drafting Asia Tribology Council Constitution (2007 to date) • Founder of Malaysian Tribology Society (1193-08-WKL) (2008) • In giving opening remarks in Synthesis and Functionalisation of Nanomaterial in Bandung, Indonesia (2008). • Working Group member of PVC-pipes & Fittings for SIRIM (2006-to date) • Technical Committee member on Fine Ceramics for SIRIM (2007–to date) • External Examiner for MSc candidate from Universiti Malaysia Perlis. • External Examiner for MSc candidate from Universiti Malaysia Perlis. • In giving welcome remarks for FEOFS 2010 in Urumqi, China (2007) • Guest Editor for Key Engineering Materials by Trans Tech Publications (2008) • Guest Editor for Journal of Solid State Science & Technology, Vol. 16, No. 2 (2008)
Session Chair	<ul style="list-style-type: none"> • Engineering Postgraduate Conference (EPC) 2008 • Graduate Research Seminar (SPS) 2007 • Graduate Research Seminar (SPS) 2006 • Seminar on Synthesis and Fuctionality of Nanomaterials 2008 • 6th Asean Microscopy Conference 2007 • 4th Int. Conference on Recent Advances in Materials, Minerals & Environment and 2nd Asian Symposium on Materials & Processing
Master of Ceremony	<ul style="list-style-type: none"> • Advanced Materials Research Group Seminar (UKM-UI-LIPI) • Engineering, Mathematics, Architecture Regional Conference Dinner 2007 (EMARC 2007)



10. PUBLIC SERVICES

Activity	Level	Period
Trainee, assembly and test fly of a 9M-EYB kit plane in Malaysian Experiment Aircraft Association (MEAA)	National	1998-1999
Gold Medal, UNITEN Volleybal Competition 2001	Department	2001
Chief Editor, Department of Mechanical & Materials Engineering Annual Report 2008	Department	2008-2008
Welfare Committee, Sheffield Malaysian Association, Sheffield, United Kingdom (recognised by Malaysian Students Department and Malaysian High Commissioner Office)	NGO	2002-2005
Alumni, Sheffield Malaysian Association, Sheffield, United Kingdom	NGO	2005 – to date
Alumni, University of Sheffield, United Kingdom	NGO	2005 – to date
Registration of Malaysian Tribology Society (MYTRIBOS) Organisation to Malaysian Registrar of Society (ROS)	NGO	2007 -2008
Teacher (Mathematics), Al-Mahad-Al-Islam Primary School, Sheffield, United Kingdom	Individual	2004-2005
Jury, Sri Ayesha Montessori Sport Day	NGO	2006
Bronze Medal (Double), Faculty's Annual Badminton Competition	Faculty	2006
First runner up (Individual), Department of Mechanical & Materials Engineering Bowling Competition	Department	2006
Auditor, Faculty of Engineering & Built Environment Welfare and Sport Club (KESUTRA)	Faculty	2008 to date
Participant, Congkak and Dart Competition by KESUTRA	Faculty	2006
Best Theme Invention Award, Faculty of Engineering & Built Environment Dinner 2006	Faculty	2006
Best Theme Invention Award, Faculty of Engineering & Built Environment Dinner 2007	Faculty	2007
Choir member, Faculty of Engineering & Built Environment Dinner 2007	Faculty	2007
Participant, UKM Maulidur Rasul Parade 2007 & 2009	University	2007 2009
Liaison officer, Advanced Materials Processing & Integrity (AMPI) and (Universiti Lambung Mangkurat) UNLAM Group Research Collaboration	University	2008

11. NETWORK AND INTERNATIONAL RELATION

Industrial Network

- Malaysian Nuclear Agency (MNA) - Final year research project - *Characterisations of Dry Sliding of Brake Pads* - (Completed: 2007)
- Eurapipe (M) Sdn Bhd. - (Final year research project - *Accelerated weathering effects on commercial CPVC (Chlorinated Polyvinyl Chloride) pipes* (Completed: 2008)
- Malaysia Nuclear Agency (MNA) - Final year research project - *Low cost technique of micro- alumina coating on 316L stainless steel* (Completed: 2008)
- Motorola Technology (M) Sdn. Bhd. - Final year research project - *Coatings for Mg-Alloys* (In progress)
- Baker Hughes (M) Sdn Bhd. - Research project on the *Design of horizontal drilling test rig* (In progress)
- Ducom Instrument Pvt Ltd, India - Material supplies for research purposes
- Advanced Materials Research Centre (AMREC) SIRIM Berhad - MSc research project – *Structural and tribological characterisations of Cu-based Alloys as coating materials for connecting rod bearings in automotive engine* (In progress)
- Science and Technology research Institute of Defense (STRIDE) - MSc research project - *Development of New Ceramic Coating For Marine Structure Applications* (In progress)



Dr. Mariyam Jameelah Ghazali
Faculty of Engineering & Built Environment
2010

- Proton Bhd – *Concept Car Project Proposal for Techno Fund 2009* (In progress)

Academic Network

- Bandung Technology Institute (ITB), Indonesia - *Seminar on Synthesis and Fuctionality of Nanomaterials 2008*
- Brunei Technology Institute (ITB), Brunei Darussalam – *Malay Keris Research*
- Imperial College, UK – *Research visit 2008*
- Loughborough University, UK – *Research visit 2008*
- University Of Sheffield, UK – *Joint publication & research visit 2008*
- Indonesian Institute of Sciences (LIPI) – *Joint seminar in UKM and LIPI (2007 & 2008)*
- Nagaoka University of Technology (NUT) –*Memorandum of Understanding (MOU) & Joint seminar in NUT in 2009 between AMPI and NUT Material Research Group*
- School of Applied Physics, Faculty of Science & Technology (FST) – *Joint conference, workshops & research collaboration*
- Malacca Technical University, Malaysia (UTeM) – *MSc. Research project*
- University of Science, Malaysia (USM) – *Joint conference (RAMM & ASMP 2009)*
- Malaya University (UM) – *Joint seminar & publication*
- Universiti Tenaga Malaysia (UNITEN) – *Research project*
- Universiti Putra Malaysia (UPM) – *Joint conference*
- University of Technology, Malaysia (UTM) – *Joint conference*
- Dyala University, Iraq – *Joint publication*
- Universiti Lambung Mangkurat, Banjarmasin (UNLAM) – *Research collaboration & joint seminar*

