

Curriculum Vitae

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1. WORKING EXPERIENCE

Post	Employer	Date/Duration
Technical Assistant	Public Work Department, Selangor	July 1977 – June 1985
Principal Researcher	SIRIM Berhad	July 1985 – Jan 2012
Associate Professor	Universiti Teknologi MARA	Nov 2013 – to date

2. RESEARCH

2.1 Research Grant (Project Leader)

(Project Title, Sponsorship), (Total Grant), (Date/Duration)

1. Research and Development in Coating Technology for High Speed machining Application. MOSTI 05-01-01-0012 EAR. RM 160,000.00. Jun 2001 – July 2004
2. Development of Diamond Coating on Steel Substrates Using Multiple Techniques for Tooling and Automotive Applications. MOSTI 05 0101 0032 EAR. RM 189,000.00. Jan 2003 - Dec 2005
3. Properties Enhancement of Indigenously Developed Brake Pad for Light Rail Transit (LRT). MOSTI IRPA 03 0101 0057 PR 0066/4-2. RM 2,486,000.00. Sept 2003 - Sept 2007
4. Nanostructured yttria stabilized zirconia (YSZ) coatings using plasma spray technique for thermal barrier coating applications. 03-03-02 SF0080, RM 189,000. Dec 2007 - Nov 2009
5. Pre-Commercialize Pilot Manufacturing Process of Producing Cutting Tool Inserts through Powder Metallurgy (PM) and Coating Process by Vapour Deposition Technique. MOSTI TF 0609D134, RM 2,930,000.00. Jan 2010 – Dec 2012

2.2 Research Grant (Co-Researcher)

(Project Title, Sponsorship), (Total Grant), (Project Leader), (Date/Duration)

1. Development of Sintered Hardmetal Alloy from Sub-micron Powder Particle for Mechanical Seal and Wear resistance Application through PM Routes, MOSTI 03 03 02 SF0016, Dr Mohd Asri Selamat, Jan 2007 - Dec 2008.
2. Development of high performance gear through warm compaction process. MOSTI Mazlan Mohamad, Jan 2008 - Dec 2009

3. Development of Sintered Tungsten-Copper Alloy from Sub-micron Powder Particle for Potential Electrical and Electronic Applications. MOSTI, (Dr Mohd Asri Selamat), Jan 2008 - Dec 2009

3. PATENT

3.1 Patent (Principal Investor)

(Patent No), (Title), (Inventor), (Date file), Date Granted) (Principal Inventor)

1. **MY-145523-A**, A Method for Producing Non-Asbestos Brake Friction materials, **Dr Talib Ria Jaafar**, Dr Mohd Asri Selamat, Dr Mohmad Soib Selamat, Ramlan Kasiran, Eliasidi Abu Othman, Prof. Ir. Dr Mohamad Nor Berhan, Prof. Madya Dr Mustafar Sudin, **10 Dec 2007, 29 Feb 2012**
2. PI 20085273, Hard Thin Film Coating on High Speed Drill, **Dr Talib Ria Jaafar**, Mansor Abdull Hamid, Mohd Zakuan Abdullah, Amin Morat, Abdul Hakim Hashim, 24 Dec, 2008.

3.1 Patent (Co-Inventor)

(Patent No), (Title), (Principal Inventor), (Date file), Date Granted) (Co-Inventor)

1. PI 2011006312, A Method For Processing Sub-Micron Wc-Co Hardmetal, 2011, Mohd Asri Selamat,
2. PI 20093372, Mixer for making Brake Lining Material, 13 Aug 2009, Dr Mohmad Soib Selamat,
3. PI 20072207, Non-asbestos Brake Friction materials, Dr Mohd Asri Selamat
4. **MY-148687-A**, Asbestos-Free Brake Friction Materials, 16 Dec 2004, 31 May 2013, Dr Mohmad Soib Selamat

4. PUBLICATION

4.1 Chapter in Book

(Author), (Title of Articles), (Name of Book), Publisher), (Year), (Page)

1. R. J. Talib, C. H. Azhari, Wear mechanism of semi-metallic friction materials and its relation to processing, Advances in Materials Processing, Institute of Malaysia, 2003. 93 – 130.
2. **R.J. Talib**, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin and R. Kasiran. Properties Enhancement of Indigenously Developed Brake Pad for Light Rail Transit. Brake Friction Materials. UPENA, 2006, 79-86.
3. **Wan Mohd Arif, Mohd Shakir, R.J. Talib**. Friction Analysis of Light Rail Transit (LRT) Brake Pad Through CHASE Dynamometer Test. Brake Friction Materials. UPENA, 2006, 69-78.
4. Mohd Shakir Shaari, Wan Mohd Arif Wan Ibrahim, Amin Morat, **Talib Ria Jaafar**. A Tribological Study of Brake Pads on Different Formulations. Brake Friction Materials. UPENA, 2006, 89-96.
5. Eliasidi Abu Othman , Wan Mohd. Arif Wan Ibrahim, **Talib Ria Jaafar**. Correlation of Friction and Wear with Hardness Properties of Friction Materials. Brake Friction Materials, UPENA, 2006, 107-112
6. **R.J. Talib**, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin, K. Ramlan. 2006. Suitability of Friction Materials for LRT Based on Friction and Wear Characteristics. Brake Friction Materials, UPENA, 2006, 97-106.
7. K. Ramlan, S. Kemin, **R.J. Talib**, On-Road Vehicle Braking Performance Evaluation, Brake Pad and Disc Materials, UPENA, 2007, 37- 46.
8. N. Roslani, E.A. Othman., **R.J. Talib**. 2007. TGA Analysis on Brake Pads Before and After Road Performance Test. Brake Pad and Disc Materials, UPENA, 109-114.
9. M. H. Saleh, Z. Me and **R. J. Talib**. 2007. Characterization of Brake Pad Materials by Scanning Electron Microscope. Brake Pad and Disc Materials, UPENA, 115-124.
10. **R.J. Talib**. 2007. Friction Material Test Procedures. Brake Pad and Disc Materials, UPENA, 15-28.

11. P. Hussain, **R. J. Talib** and M. Mohammad. 2007. Detection of Asbestos in Local Made Brake Shoes. Brake Pad and Disc Materials, UPENA, 189-196
12. K. Ramlan and **R.J. Talib**. 2007. Brake Pad Temperature during Long Downhill Drive. Brake Pad and Disc Materials, UPENA, 179-188.
13. **R.J. Talib**, E. A. Othman, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin, K. Ramlan. 2007. Evaluation of Friction Materials using Chase Machine and On-Road Performance Test. Brake Pad and Disc Materials, UPENA, 29-36.
14. Eliasidi A. Othman, W. M. A. Ibrahim, M. S. Shaari, **R.J. Talib**. 2006. Friction material Characteristics. Brake Pad and Disc Materials, UPENA, 143-150.
15. Talib Ria Jaafar, Mohmad SoibSelamat, Ramlan Kasiran, Selection of Best Formulation for Semi-metallic Brake Pads Development in Powder Metallurgy, INTEC Croatia, 2012, 1-30.
16. **RJ Talib**, MA Selamat, AA Mahaidin, SA Manaf, MF Fazira. Effect of Compaction Load and Heat Treatment in Manufacturing of HSS Cutting Inserts under Nitrogen-Based Atmospheren, , Advanced Materials Vol. 68, Trans Tech Publication, pp 313-319
17. R.J. Talib, A.A. Mahaidin, S.A. Manaf, M.A. Selamat. Mechanical Properties and Microstructures of WC-Co Cutting Tool Inserts With Addition of VC, Advanced Materials Research Vol 879, Trans Tech Publication, 213-217.
18. Ahmad Aswad Mahaidin, Mohd. Asri Selamat, Samsiah Abdul Manaf, Talib Ria Jaafar, Physical and Mechanical of WC-Co Submicron Powders using P/M Technique, Advanced Materials Research Vol 879, Trans Tech Publication, 2014, 12-15.
19. M.F. Fazira, A.M. Samsiah, M. Amin, M.A. Selamat, R.J. Talib, Optimization of TiAlN Coatings on HSS Inserts By Physical Vapour Deposition Process Using Taguchi Technique, Advanced Materials Research Vol 879, Trans Tech Publication, 2014, 27-31
20. Samsiah Abdul Manaf, Mohd Asri Selamat, Ahmad Aswad Mahaidin, Talib Ria Jaafar, Effect of Heat Treatment Process of Sintered M3/2 High Speed Steel Powder, Advanced Materials Research Vol 879, Trans Tech Publication, 2014, 180-183

4.2 Article in Magazine/Buletin

(Author), (Title of Articles), (Name of Journal), (Publisher), (Year), (Page)

1. Talib Ria Jaafar, Evaluation of Brake Lining Materials, *Teknologi Perindustrian, SIRIM, Mac 1990, 30*
2. Talib Ria Jaafar, Evaluation of Sugar Cane Crushing Machine, *Teknologi Perindustrian, SIRIM, Mac 1990, 34*
3. Talib Ria Jaafar, Analisa Satu Kemalangan Jalan Raya - Kemalangan Sebenar, *Teknologi Perindustrian, SIRIM, Dis 1991, 31*
4. Talib Ria Jaafar, Kesan Cuaca Luar Terhadap Prestasi Topi Keledar, *Buletin IEM, Institute of Engineers Malaysia Oktober 1994, , 18 – 23.*
5. Talib Ria Jaafar, Analisis of Passenger Vehicles Inspection, *Buletin IEM, Institute of Engineers Malaysia, Januari 1995. 19 – 21*
6. Talib Ria Jaafar, Kajian Kemalangan Jalanraya Membabit Penunggang Motosikal, *Buletin Jurutera, Institute of Engineers Malaysia, Mei 1995. 8 – 10.*
7. Talib Ria Jaafar, Analisis ke atas Pelepasan Ekzos Kenderaan Persendirian, *Buletin Jurutera, Institute of Engineers Malaysia, November 1995, 5 – 7.*
8. R.J. Talib, K. Ramlan, Effect of Catalytic Converter on Exhaust Emission, *Buletin Jurutera, Institute of Engineers Malaysia, March 1996*
9. R.J. Talib, Standard Topi Keledar, *Buletin Jurutera, Institute of Engineers Malaysia, March 1998, 39 – 48.*
10. R.J. Talib, Pemeriksaan Keselamatan Kenderaan, *Buletin Jurutera, Institute of Engineers Malaysia, September 1998, 46 – 51.*

11. R.J. Talib, Penentuan Kebolehsalingtukaran Bahan Geseran Brek, *Buletin Jurutera*, Institute of Engineers Malaysia, *March 2001*. 55 – 64.
12. R.J. Talib, M.F. Fazira, N. Roslani, M.S. Mariam, A.A. Nizam, S. Istikamah. Microstructure and Tribology of Nanostructured YSZ Coating. *MicroSom Vol 7(2)*, Electron Microscopy Society of Malaysia, Dec 2009, 3-6
13. M.F. Fazira, N. Roslani, S. Istikamah, M.S. Mariam, A. N. Abdullah, R.J. Talib, Friction and Wear Properties of Nanostructured YSZ Coatings, *MicroSom Vol 8(2)*, Electron Microscopy Society of Malaysia, Dec 2010. 8-10
14. Talib Ria Jaafar, Samsiah Abdul Manaf, Ahmad Aswad Mahaidin, Mohd Asri Selamat, Optimisation Of Manufacturing Parameters In Producing High Speed Steel Cutting Tool Inserts, *Micosom Vol. 9 No.1*, Electron Microscopy Society of Malaysia, June 2011. pg. 3-5.
15. Fazira Suriani Mohamed Fadzil, Mohd Asri Selamat, Amin Morat, Samsiah Abdul Manaf, Talib Ria Jaafar. Mechanical and Tribological Properties of HSS Inserts with TiAlN Coatings. *Micosom Vol. 10 No.1*, Electron Microscopy Society of Malaysia, June 2012. pg. 8-11

4.3 Journal

(Author), (Title of Articles), (Name of Journal), (Year), (Page)

1. **R.J. Talib.** & C. H. Azhari. 1997. Ciri Geseran dan Haus Pad Brek. *Jurnal Teknologi Perindustrian* **6** (1). 29 – 46.
2. C. H. Azhari & **R.J. Talib.** 1998. Mechanism of Wear in Semi-metallic pads. *Journal of Physical Science* **Vol. 9**. 51 – 78.
3. **R.J. Talib.** 1999. Kemalangan Jalan Raya di antara Motosikal dan Motokar - Keadaan sebenar. *Jurnal Teknologi* **32 A**. 63– 80.
4. **R.J. Talib.** & K. Ramlan. 1999. Ujian Prestasi Bahan Geseran Brek. *Jurnal Teknologi* **31A**. 13 –23.
5. **R.J. Talib** & C.H. Azhari. 2000. Morphology of Semi-metallic Automotive Lining Materials. *Jurnal mesin Teknik* **3** (3). 1-5. Universitas Sumatera Utara.
6. **R.J. Talib** & K. Ramlan. & C.H Azhari. 2002. Wear of friction materials for passenger cars. *Journal Solid State Science & Technology*, **10** (1, 2), 292-298.
7. **R.J. Talib**, A. Muchtar & C.H. Azhari. 2002. Semi-metallic brake pads for passenger cars: A study on the delamination process during braking. *Journal of Electron Microscopy Society of Thailand* **18** (1). 64-65.
8. **R.J. Talib**, A. Muchtar & C.H. Azhari. 2002. Pad brek kenderaan persendirian: kajian Ke atas mikrostruktur lapisan pindah. *Jurnal Teknologi* **36A**. 1– 12.
9. **R.J. Talib**, S.Saad & M.R.M. Toff , A.H. Hashim, S. Afandi & M.A. Rahman. 2003. Drilling performance of TiN-coated drill bits: A preliminary result. *Journal of the Institute of materials Malaysia* **4** (1). 61-72.
10. R.J. Talib, M.F. Mustafa, S. Kemin, & R. Kasiran. 2003. Kemalangan Jalan Raya: Analisis data membabitkan motosikal. *Jurnal Teknologi* 38 B, 1-14.
11. **R.J. Talib**, A. Muchtar and C.H. Azhari. 2003. Microstructural characteristics on the surface and subsurface of semi-metallic automotive friction materials during braking process. *Journal of Material Processing Technology* **140**, 694-699.
12. **R.J. Talib**, S. Saad, M.R.M. Toff, H. Hashim. 2003. Thermal spray coating technology – A Review. *Journal Solid State Science & Technology* **11** (1), 109-117.
13. **R.J. Talib**, A. Muchtar & C.H. Azhari. 2003. Wear Particles Generation on the Surface of Semi-metallic Brake Pads fro Passenger Car during Braking. *Journal Solid State Science & Technology Letters* **10** (2), 182-188.

14. M.R.M. Toff, S.Saad, A.H. Hashim, S. Afandi & M.A. Rahman, **R.J. Talib**. 2003. Mechanical and wear characteristics of TiN-coated drill bits. *Journal Solid State Science & Technology Letters* **10** (1), 209-215.
15. R.J. Talib and M.R.M. Toff. 2004. **Plasma-Sprayed Coating of Hydroxylapatite on Metal Implants - A Review**. *Med J Malaysia Vol 59 Supplement B May 2004*, 153-154.
16. **R.J. Talib**, A. Muchtar and C.H. Azhari. 2004. The Effect of Temperature on the Generation of Thermoinstability during Braking of Friction Lining Materials. *Jurnal Teknologi* **40A**. 51– 66.
17. **R.J. Talib**, S.Saad & M.R.M. Toff , A.H. Hashim. 2004. SEM Observation on Wear Mechanism of TiN-coated HSS Twist Drills. *Jurnal Teknologi* **41A**, 17 – 28.
18. **R.J. Talib**, M.R.M. Toff, M.Z. Abdullah, A.H. Hashim. 2006. Development of TiN Coatings using Cathodic Arc Physical Vapour Deposition Technique: A preliminary Result. *Journal Solid State Science & Technology Letters* **13** (1), 76-83.
19. **R. J. Talib**, M.Z. Abdullah, A.H. Hashim, S.H. Yunus. 2006. Plasma Nitriding of Stainless Steel Plate Using PECVD Technique – Effect of Deposition Time Time and Surface Finish. *Journal Solid State Science & Technology Letters* **13** (1), 68-75.
20. **R. J. Talib**, H.M. Ariff. 2006. Turning Performance of Diamond-Coated Insert. *Journal Solid State Science & Technology* **14** (1), 127-133.
21. **R. J. Talib**, A. Muchtar, and C.H. Azhari. 2006. Fatigue Mechanism in Operation during Braking Process of Semi-Metallic Brake Pads. *Journal of Industrial Technology*, **Vol 15** (1), 1 -10.
22. **R.J. Talib**, F.F. Zulkifli, M.A Hamid, A.H. Hashim, 2006. Effect of Temperature on TiCrN Films Prepared by Cathodic Arc Physical Vapour Deposition, *Malaysian Journal of Microscopy* (2): 86 – 91.
23. **R.J. Talib**, A.H. Hashim, M.Z. Abdullah, S. M Yunus 2007. Effect of N₂:H₂ Ratio on Surface Modifications of AISI 316 Plates by Plasma Nitriding Process. *Journal Solid State Science & Technology* **15** (1), 56-64.
24. **R.J. Talib**, M.R.M. Toff, H.M. Ariff. 2007. Wear Mechanism of TiN , TiAlN AND TiCN Coated Drills During Drilling of Medium Carbon Steel. *Physical Science*, **Vol 18** (1), 75-85.
25. **R.J. Talib**, M.S. Shaari, W.M.A.W. Ibrahim, and R. Kasiran, 2007. Characterisation and Analysis on Developed Brake Pad for Light Rail Transist. *J. Solid St. Sci. & Technol. Letters* **14** (2), 89-94.
26. **R.J. Talib**, J.J. Mohamed, A.H. Hashim, 2007. Synthesis of Diamond from Methane gas in Microwave Plasma Environment. *Journal Solid State Science & Technology* **15** (2), 22-27.
27. **R.J. Talib**, J.J. Mohamed, A.H. Hashim. 2007. Nucleation and Growth of Diamond Coating Using Microwave Plasma Enhanced. *Malaysia Journal Microscopy* Vol. 3, 222-226.
28. **R. J. Talib**, A. Muchtar, and C.H. Azhari. Performance of Semi-Metallic Friction Materials for Passenger Cars. *Jurnal Teknologi JTA* **46A**; June 2007, 53-72.
29. **R.J. Talib**, M.A.B. Azimah, J. Yuslina, S.M. Arif and K.Ramlan. 2008. Analysis on the Hardness Characteristics of Semi-metallic Friction Materials. *Journal Solid State Science & Technology* **16** (1), 124-129.
30. Mohd Asri Selamat, Norizan Izura Mansor, Noraizham Mohamad Diah and **Talib Ria Jaafar**. 2008. Powder Metallurgy and Applications of Hardmetals – The Opportunities for Malaysian Industries, *Journal of Industrial Technology*, Vol. 17, No.1.
31. **R.J. Talib**, M. H. Saleh, N. Roslani, E. A. Othman, K, Sutiman, K. Ramlan. Brake Pad Performances of Passenger Car, *Jurnal Teknologi JTA* **49A**; Dis 2008, 77-94.
32. **Talib Ria Jaafar**, Mohd Shafii Mohd Tahir, Ramlan Kasiran. Kajian Dan Analisis Kemalangan Jalan Raya. *Journal of Industrial technology* Vol 18(1), 2009, 41-66.
33. **R.J. Talib**, M.Z. Abdullah, A.H. Hashim, N. I. M. Shopee. Thermal Barrier Coatings of NiAl/Yttria-Stabilized Zirconia. *Journal Solid State Science & Technology Letters* **16** (1&2) 2009, 182-187
34. M.A. Selamat, S.A. Manaf, N. M. Diah and **T.R. Jaafar**, Powder Metallurgy Processing of Hardmetal Powder. *Solid State Science and Technology*, Vol. 18, No 1 (2010) 194-201

35. M.F. Fazira, S. Istikamah, N. Roslani, M.S. Mariam, A.N. Abdullah, **R.J. Talib**. Heat Treatment of Zirconia Thermal Barrier Coating. *Solid State Science & Technology Letters* 17, 201
36. A.A. Mahaidin, M.A. Selamat, S.A. Manaf, **R.J. Talib**. 2011. Sintering Behaviour, Microstructure and Mechanical Properties of WC-Co-C Hardmetals Processed in Nitrogen-Based Atmosphere. *Malaysian Journal of Microscopy* Vol. 7, pg. 203-209
37. S. Istikamah, M. F. Fazira and **R. J. Talib**. 2011. Atmospheric Plasma Spray of NiCrAl Bond Coat With Different Feed Rates, *Solid State Science and Technology*, Vol. 19, No 1 (2011) 32-39
38. **R.J. Talib**, S. Istikamah, N.Roslani, M.S. Mariam, M.F. Fazira. Nanostructured YSZ Coating Deposited By Atmospheric Plasma Spraying: Effect of Plasma Power. *Malaysian Journal of Microscopy* Vol. 7, pg. 170-175,
39. **R.J. Talib**, H.M. Ariff and M.F. Fazira Machining Performance And Wear Mechanism Of TiAlN-Coated Insert. *International Journal of Mechanical and Materials Engineering (IJMME)*, Vol.6 (2011), No.3, 414-418
40. **R. J. Talib**, A. H. Hashim, M. A. Hamid and J. J. Mohamed. 2011. The Effect of Methane and Nitrogen Ratio on the Mechanical and Tribological Properties of Plasma Carbonitrided Stainless Steel. *Journal of Engineering Science* 7. pp 63-75
41. Samsiah Abdul Manaf, Ahmad Aswad Mahaidin, Mohd Asri Selamat, Talib Ria Jaafar. 2010. A Study on Sintering Behavior and Mechanical Properties of High Speed Steel Powder Through Powder Metallurgy Route. *Solid State Science and Technology*, Vol. 19, No2 (2011) 170-183
42. A.M. Zaharudin, **R.J. Talib**, M.N. Berhan, S. Budin and M.S. Aziurah, 2011. Taguchi Method for Optimising the Manufacturing Parameters of Friction Materials. *International Journal of Mechanical and Materials Engineering (IJMME)*, Vol. 7 (2012), No. 1, 83–88.
43. A. Almaslow, M. J. Ghazali, **R. J. Talib**, C. T. Ratnam, S. M. Forghani and C. H. Azhari. Effects Of Sulfur Vulcaniazation Of Epoxidized Natural Rubber In Semi-Metallic Friction Materials On Friction Performance. *Engineering e-Transaction*, Vol. 7, No.1, June 2012, pp 44-47
44. Siow Ping Chuan, Jaharah A. Ghani, Mariyam Jameelah Ghazali, **Talib Ria Jaafar**, Mohamad Asri Selamat, Che Hassan Che Haron. Characterization of TiCN and TiCN/ZrN Coatings for Cutting Tool Application. *Ceramics International*, 39 (2013) 1293–1298
45. **R.J. Talib**, A.M. Zaharah, M. F. Fazira. Investigation on Wear Characteristics of Tungsten Carbide and TiAlN-Coated Tungsten Carbide Insert in Turning Carbon Steel. *Malaysian Journal of Microscopy* Vol. 8, 2012. pg. 76-81
46. **R.J. Talib**, A. A. Mahaidin, S. A. Manaf, M. A. Selamat. Effect of VC and C Addition on Mechanical Properties and Microstructures of WC-Co Hardmetals Processed in Nitrogen-Based Atmosphere. *Jurnal Teknologi* 59 (2) 2013, 219–223
47. A. A. Mahaidin, M. A. Selamat, S. A. Manaf and **R. J. Talib**. The Influence of Carbon Addition on the Physical and Mechanical Properties of WC-Co Sintered Powders. *Jurnal Teknologi* 59 (2) 2013, 235–238.
48. S. A. Manaf, M. A. Selamat, A. A. Mahaidin and **R. J. Talib**. Sintering Behavior and Mechanical Properties of High Speed Steel Powder Processed in Nitrogen-Based Atmosphere. *Jurnal Teknologi* 59 (2) 2013, 239–241.
49. M. A. Maleque, A. Atiqah, **R.J. Talib** and H. Zahurin. New Natural Fibre Reinforced Composite Brake Friction Material. *International Journal of Mechanical and Materials Engineering (IJMME)*, Vol. 7 (2012), No. 2, 166-170.
50. A Almaslow, MJ Ghazali, RJ Talib, CT Ratnam, CH Azhari. Effects of epoxidized natural rubber–alumina nanoparticles (ENRAN) composites in semi-metallic brake friction materials *Wear*, 2013
51. A Almaslow, MJ Ghazali, RJ Talib, CT Ratnam, CH Azhari. Effects of electron-beam and sulfur crosslinking of epoxidized natural rubber on the friction performance of semimetallic friction materials. *Composites Part B: Engineering* Volume 54, November 2013, 377–382.
52. R.J. Talib, A.M. Zaharah, M.A. Selamat, A. A. Mahaidin and M.F. Fazira, Friction and Wear characteristics of WC and TiCN-coated Insert in Turning Carbon Steel Workpiece, *Procedia Engineering* 68 (2013), 716-722

4.4 International Proceeding

(Author), (Title of Articles), (Name of Journal), (Year), (Page)

1. R.J. Talib & C.H. Azhari. 2000. A Quantitative Evaluation of Wear in Semi-metallic Automotive Friction Materials. Proc. 2nd International Conference on Advances in Strategic Technologies (ICAST). 859-868. Putra Jaya.
2. M.A. Hashim, R.J. Talib, M.R.M. Toff, S. Saad, & A. Idris. 2001. Surface Engineering and Coatings as a Supporting Industry in Malaysia. Workshop on Surface Engineering. 1 – 2 June 2001. Singapore.
3. S. Saad, M.R.M. Toff, R.J. Talib, M.A. Hashim & A. Idris. 2001. Current Status in Development and Studies of Polycrystalline Diamond Thin Film Coating Using MAPCVD Research in AMREC Workshop on Surface Engineering. 1 – 2 June 2001. Singapore
4. R.J. Talib. 2001. A study on friction and wear characteristics for automotive friction materials 6th Proc. Asean Science and Technology Conference, 17 – 19 September 2001. Bandar Seri Bangawan, Brunei.
5. R.J. Talib, K. Ramlan, M.A. Selamat, M. Mustapha. H. Mohamad, & M.S. Selamat. 2002. Development of Friction Materials for Automotive Applications. Proc. 2nd World Engineering Congress 22- 25 July 2002 Kucing Sarawak. 166 – 170.
6. R.J. Talib, S. Saad M.R.M. Toff , A.H. Hashim. XPS and AES Analysis on TiN-coated Twist Drill. 2003. Proc. 3rd International Conference on Advances in Strategic Technologies (ICAST), 12-14th August 2003. 393 – 398.
7. R.J. Talib and M.R.M. Toff. 2004. Failure mechanism of TiCN-coated Twist Drills. Proc. 4th International Materials Technology Conference & Exhibition, 23rd –26 March 2004, Kuala Lumpur. 619-626.
8. R.J. Talib, A.H. Hashim, H.M. Ariff, and M.R.M. Toff. 2004. AES Analysis and Drilling Performance of TiN-Coated HSS Drill Deposited Using a Cathodic Arc Physical Vapor Deposition Technique. Proc. 2nd International conference on Thin Films 2004, Singapore 13 – 17th July 2004.
9. R.J. Talib, A.H. Hashim, J.J. Mohamed, M.S. Shaari, M.A. Hamid. Carbonitriding of AISI 316 by Microwave Plasma Enhanced Chemical Vapour Deposition Process. Proc. JS Chem ITB-UKM VI, 17 & 18 May 2005, Bali, Indonesia
10. R.J. Talib, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin, K. Ramlan. Tribological Properties of Semimetallic Friction Materials for LRT Applications. 1st International Conference on Manufacturing and Material Processing (ICMM06), 14-16th March 2006, Kuala Lumpur
11. R.J. Talib, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin, K. Ramlan. Analysis of Friction and Wear Behaviour of Some Friction Materials Developed fro Light Rail Transist, 5th International Materials Technology Conference & Exhibition IMTCE 2006, 18 & 19th July 2006, Kuala Lumpur
12. R.J. Talib, M.S. Shaari, W.M.A.W. Ibrahim, S. Kemin, K. Ramlan. Selection of Friction Materials of Developed using CHASE Machine, The second International Conference Solid State Science and Technology 2006, 4 – 6th September 2006, Kuala Trengganu
13. R. J. Talib, E. Othman and R. Kasiran. Characterisation of Semi-metallic Brake Pads Using Brake Dynamometer. International Conference on Advancement of Materials and Nanomaterials. 30th May – 1st June 2007. Langkawi Island. AIP Coference Proceeedings Vol. 1217. 2010. ISBN 978-0-7354-0760-2.
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71. Samsiah Abdul Manaf, Mohd Asri Selamat, Ahmad Aswad Mahaidin, Talib Ria Jaafar, Effect of Heat Treatment Process of Sintered M3/2 High Speed Steel Powder, Advanced Materials Conference 2012, 12-13 Dec 2012, Bayview Hotel Langkawi

4.6 Invited Speaker

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1. Talib Ria Jaafar. Automotive Matters in Malaysia. Seminar on Automobile Engineering Administration. 11 Jan 1990. Tokyo
2. Talib Ria Jaafar. Standard and Certificate for NGV Conversion Kits for Malaysia. Asia Conference on Commercialisation of CNG/NGV. 1992. Jakarta
3. Talib Ria Jaafar. 1989. Method for Determining Gas Content in the Exhaust Emission of Motor Vehicles. Exhaust Motor Vehicle Seminar 13 June 1989. Shah Alam
4. Talib Ria Jaafar. Automotive Friction Materials. Kursus Pengujian Komponen Kenderaan untuk Bahagian Perolehan, Cawangan Teknik dan Pemeriksaan Pertahanan, 9 –10th Sepetember 2003. Seksyen Pengujian Produk Mekanikal, SQAS International Sdn Bhd
5. Talib Ria Jaafar, Standard Test Procedures for Friction Materials. 1st Malaysian Colloquium Brake for Friction Materials. 1st – 2nd March 2004, Kulim. Malaysia
6. **Talib Ria Jaafar.** Wear Performance of PVD-Coated HSS Twist Drills. Kolokium Fakulti Kejuruteraan UiTM. 28 April 2004, UiTM, Shah Alam.
7. **Talib Ria Jaafar.** Friction Materials for Braking Application. 2nd Colloquium on Postgraduate Research, National Postgraduate Colloquium on Materials, Minerals and Polimers 7 & 8th October 2004, Vistana Hotel, Penang
8. **Talib Ria Jaafar.** Plasma Spray Coating Technology. Hard Material Coating Workshop, 9th & 10th May 2005, Kulim.

9. Talib Ria Jaafar. Analysis of Friction Material Characteristics for Light Train Application. 8th (Beijing) International Technical Exchange and Products Exhibit on Friction and Sealing Materials, 9 - 11 Jun 2006, Beijing.
10. Talib Ria Jaafar . Plasma Spray: Conventional and Nanostructured, Nanostructured Coating Technology Workshop, 26 & 27th July 2006, Kulim.
11. Talib Ria Jaafar. Development of Brake Pads for Automotive Applications. The National Metallurgical Conference. 9th a& 10th Dec 2006, Kangar
12. Talib Ria Jaafar. Asbestos-free Brake Friction Materials For Automotive And LRT Applications, 6th ASEAN Microscopy Conference, 10 – 12 December 2007 Cherating, Pahang
13. Talib Ria Jaafar. Plasma Spray Coating for Thermal Barrier Applications. Plasma Spray Coating Training 2007. 13 & 14 Nov. 2007. AMREC, Kulim, Kedah.
14. Talib Ria Jaafar. Tribology of Hard Thin Film Coatings. National Tribology Conference. 4 & 5 Mei 2009. Rimba Ilmu, Universiti Malaya Kuala Lumpur
15. Talib Ria Jaafar. Microwave Plasma Assisted Chemical Vapor Deposition Technique. CVD/PVD Nanotechnology Coating Workshop, 1&2 June 2010, Kulim.
16. Talib Ria Jaafar. Testing and Evaluations of Friction Materials, Training on Powder Metallurgy Technology, Malaysia Technology Cooperation Program, 31st May – 11th June 2010, Bayview Hotel, Batu Peringi, Penang.
17. Talib Ria Jaafar. Thin Film Coating By Vapour Deposition Process, Workshop on Processing, Surface Modification & Characterization Technique of Powder Metallurgy Component (PSMCT-PMC 2011) , 15th – 16th Nov 2011

4.7 Paper Technical Reports

(Title of Reports), (Year), (Number of Pages)

1. End Of Project Report on Research And Development On Coating Technology For High Speed Machining Application, July 2004, 05-01-01-0012, 26
2. End Of Project Report on Development of Diamond Coating on Steel Substrates by Multi Technique for Tooling and Automotive Applications **05-01-01-0012**, Jan 2006, 26
3. Technical Report on Properties Enhancement Of Indigenously Developed Brake Pad For LRT .03 0101 0057 PR 0066/4-2, (2007), 115
4. End Of Project Report on Properties Enhancement Of Indigenously Developed Brake Pad For Lrt September 2007, 40
5. End Of Project Report on Development of Friction Materials For Light Rail Transit03 0101 0000 PR 0066/04, 2007, 59

4.8 Research & Development Proposal

1. Research and Development on Coating Technology for High Speed Machining Application' 2004. Submitted to MOSTI
2. Development of Diamond Coating on Steel Substrates by Multi Technique for Tooling and Automotive Applications' December 2005. Submitted to MOSTI
3. Properties Enhancement Of Indigenously Developed Brake Pad for LRT' September 2007. Submitted to MOSTI
4. Development of Friction Materials For Light Rail Transit' September 2007. Submitted to MOSTI
5. Nanostructured yttria stabilized zirconia (YSZ) coatings using plasma spray technique for thermal barrier coating applications. Submitted to MOSTI

6. Plasma Nitriding and carbonitriding of Titanium and Titanium Alloy for Biomedical Applications. Feb 2009. Submitted to MOSTI
7. Commercialize Pilot Manufacturing Process of Producing Cutting Tool Inserts through Powder Metallurgy (PM) and Coating Process by Vapour Deposition Technique'. Dec 2012. Submitted to MOSTI

5 Teaching and Supervision

5.1 Under Graduate Teaching

(Course Title), (Semester)

1. Statics, MEC111, Semester 2 Diploma
2. Strength of Materials, MEC 211, Semester 3 Diploma
3. Dynamics, MEC 221, Semester 3 Diploma
4. Mechanics and Materials Lab MEC291, , Semester 3 Diploma
5. Dynamics, MEC 420, Semester 3 Degree
6. Applied Mechanics Lab, MEC424, Semester 3 Degree

5.2 Graduate Supervision

(Student Name), (Category), (Thesis Title), (Year Graduate)

1. Aznifa Mahyam Binti Zaharudin. A Study on the Effect Of Ingredients on the Friction Performance and Wear Particles of Friction Materials. 13 Dec 2008 - till now.
Supervisor - Prof. Ir. Dr. Mohamad Nor Berhan Fakulti Kejuruteraan Mekanikal, UiTM.
2. Siow Ping Chuan. Developemt and Performance of mono and multilayer coated carbide tools for precision/hard cutting of ferrous materials. Marc 2010 - till now
Supervisor - Assoc. Prof. Jaharah Abd Ghani. Fakulti Kejuruteraan dan Bina Alam , UKM
3. Almaslow. Effect of rubber vulcanisation on the mechanical and tribological properties of semi-metallic brake friction matterails. May 2010 - till now
Supervisor - Prof. Che Husna Azhari. Fakulti Kejuruteraan dan Bina Alam , UKM

5.3 External Examiner for Postgraduate Studies

(Student Name), (Category), (Thesis Title), (Year Graduate), (University)

1. Abdul Munir Hidayat Shah Lubis, MSc (Mechanical Engineering), Tribological Studies of Brake Pad Materials: Effect of Contact Pressure, Sliding Speed, and Relative Humidity, 2008. University Technology Petronas.
2. Mohd Zaki Baharom, Thermal Characteristic of Light Rail Transist Brake Pad, MSc (Mechanical Engineering), 2009. Universiti Teknologi MARA.
3. Nor Azrina Resali. Convert MSc to PhD, Corrosion Study on Cobalt Nickle Iron Nanoparticles Electrodeposited on Different Metals. 2013, Universiti Teknologi MARA

5.4 Under Graduate Supervision

(Student Name), (Thesis/Project Title), (Year Graduate)

1. Mohd Sahfii Md Tahir and Zulkifli Mohd Sahalan, 1993, Technical Investigations and Analysis of Motor Vehicles Accident, School of Engineering, Institute Teknologi MARA
2. Azlee Paiman.1999. Model Gagal Secara Haus Bahan Gelinciran Separa Loga Automotif, Fakulti Kejuruteraan Mekanik dan Bahan, UKM

3. Mohd Faisal Ibrahim. 2001. Kajian Mikroretak Bahan Geseran Pad Brek Separa Logam, Fakulti Kejuruteraan Mekanik dan Bahan, UKM
4. Saufi Affandi Jamaluddin & Rosdi Samsuddin. 2002. A Study on Titanium Nitride Coating of Drill Bits and Their Characteristics, Department of Mechanical Engineering, Kulliah of Engineering, IIUM Rusila
5. Zamani Jusoh and Tiqah @ Abd Rashid. 2011. Development of Al-based Friction Materials using Powder Metallurgy Process. Universiti Islam Antarabangsa Malaysia
6. Atiqah Mohd Afdzaluddin. 2011. New Natural Fiber Reinforcement Brake Pad Material Formulation and Characterisation. Universiti Islam Antarabangsa Malaysia
7. Siti Najihah Bt Abu Bakar. Mechanical and Tribological Characteristics of Semi-Metallic Brake Lining Materials, 2012, School of Materials Engineering, UniMAP
8. Wan Masku Binti Wan Mohamd. Effect of Heat Treatment The Mechanical and Microstrutucres of High Speed Steel Cutting Tool Inserts through Powder Metallurgy Route, 2012, School of Materials Engineering, UniMAP

5.5 Under Graduate Supervision on Final Year Practical

(Student Name), (Thesis/Project Title), (Year Graduate)

1. Mohamad Ashry Bin Jusoh, Characteristion of plasma-sprayed titanium and hydroxapatite on titanium substrate and TiN-coated twist drill, Material Sciences Bahan, UPM. 7th Oct – 26th Dec 2004
2. Hadibah Mohd Darus, TiAlN Coating on Tool Steel Substrates, Material Sciences, UPM, 20th Oct 2003 – 9th Jan 2004
3. Syarizad Bt Mohd Yunus, A study Plasma Nitriding on Stainless Steel Substrates, Department of Mechanical Engineering, University Malaya, 22nd March – 29th May 2004
4. Fara Fazreena Zulkifli, TiCrN Coating on M2 Tool Steels using CAPVD Technique, Chemical and Processing Department, Faculty of Engineering, UKM. 8th March – 4th June 2005
5. Nursyarafina Shafie, Plasma Carbonitriding on M2 Tool Steel Substrates, Department of Physics, UPM. 14th Apr – 30th June 2005
6. Ruhaida Din, Plasma Nitriding on D2 Tool Steel Substrates, Department of Physics, UPM, 14th April – 30th June 2005
7. M. Hamdi Khosran, Characterisation and Analysis of Brake Pad and TiZrN Coating, Department of Mechanical Engineering and Manufacturing, KUITTHO, 19th April – 26th June 2005
8. Mohd Arif Saburdin, Titanium Chromium Nitride Coating on M2 Tool Steel using Cathodic Arc Physical Vapor Depostion Technique and Characterisation of LRT Friction Materials. School of Materials Engineering, KUKUM. 2nd Jan – 30th April 2005
9. Ainah Abu Bakar, Plasma Nitriding and Carbonitriding on Titanium Substrate using CVD Technique, School of Material Engineering, USM. 2nd May – 7th July 2006
10. Nurul Izza Md Shopee, Hydroxyapatite Coating by Plasma Spray System on Tool Steel Substrate, Chemistry Department KUSTEM. 8th May – 14th July 2006
11. Tan Jenn Hwa, Hydroxyapatite Coating by Plasma Spray System on Stainless Steel Substrate, Faculty Science and technology, department of Applied Physics, UKM. 8th May – 14th July 2006
12. Noorazimah Mohd Ab.Illah. Al₂O₃ 3% TiO₂ Coating on Gray Cast Iron using Plasma Spray Process Characterisation of Brake Pads.. 4th Jan – 30 April 2007
13. Yuslina Jaafar. Al₂O₃ 3% TiO₂ Coating on Gray Cast Iron using Plasma Spray Process and Characterisation of Brake Pads., School of Materials Engineering, UniMAP. 4th Jan – 30 April 2007

14. Mohd Husnul Fikkri Mohamed Jamil. A study on Effects of Compaction Load and Time in the Development of Brake pads. School of Materials and Mineral Resources Engineering, USM. 3rd May – 6th July 2007.
15. Nurzirah Abd Majid. Development of Brake pads. School of Materials and Mineral Resources Engineering, USM. 3rd May – 6th July 2007.
16. Mohd Mazlan Jaafar. Effects of Material Composition in the Development of Brake Pads for Passenger Cars. Politeknik Tuanku Sultanah Bahyah, Kulim. 12 Januari 2009 - 12 Jun 2009
17. Norshahidaton Ain Muhamad. Effect of Bamboo Powder on the Development of Friction Materials. Politeknik Tuanku Sultanah Bahyah, Kulim 12 Januari - 12 Jun 2009
18. Siti Nur Bt Hasan. Effect of Plasma Power and Helium Gas Flowrate on the Mechanical and Tribological Properties of plasma-sprayed WC-8Co coating. Universiti Islam Antarabangsa Malaysia. 22 Apr - 8 July 2009
19. Noor Fatin Roslan. Development of Friction Materials using Bamboo Fibers as Filler Materials Universiti Kuala Lumpur Malaysia Spanish Institute. 4th Jan – 25th Apr 10
20. Rusila Zamani Jusoh @ Abd Rashid. Fabrication of Cu-Based Friction Materials using Powder Metallurgy Process. 12 Apr – 2 July 2010, Universiti Islam Antarabangsa Malaysia
21. Safiah Sakinah Mohd Asri. Deposition of Diamond on WC-6%Co by MAPCVD, 12 Apr – 2 July 2010 Universiti Islam Antarabangsa Malaysia
22. Siti Najihah Bt Abu Bakar. Effects of Ingredients on Mechanical and Tribological Characteristics of Semi-Metallic Brake Lining Materials, 3/05/10 – 31/07/11, School of Materials Engineering, UniMAP
23. Wan Masku Binti Wan Mohamd, Optimization of Manufacturing Parameters in Developing of High Speed Steel Cutting Tool Inserts through Powder Metallurgy Route, 3/05/10 – 31/07/11, School of Materials Engineering, UniMAP
24. Zulhamizan Zakaria. Effect of VC and C on Mechanical Properties and Microstructures on WC-Co Hardmetal. Politeknik Tuanku Sultanah Bahyah, Kulim .19 Dec 2011 – 20 Mei 2012.
25. Nur Nabila Binti Mahazid, Effect of Sintering Temperature on the Physical and Mechanical Properties Tungsten Carbide Universiti Teknologi Melaka 25 June 2012 Hingga 1 September 2012,

6. ACADEMIC RECOGNITION AND LEADERSHIP

6.1 Academic Awards

(Name of Award), (Awarding Institution), (Year), (Level)

1. Anugerah Khidmat Bakti, Electron Microscopy Society of Malaysia, 2006
2. **Best Poster Presentation (Physical Science)** at 20th Scientific Conference Microscopy Society of Malaysia 2011, 20th & 22nd December 2011, Permaisuri resort, Port Dickson
3. **Best Poster Presentation** at International Conference on Materials and Metallurgical Technology 2009 (ICOMET09), 24th & 25th Jun 2009, Surabaya, Indonesia
4. **Best micrograph** (Material Science: SEM) at 3rd ASEAN Microscopy Conference and The 19th Annual Conference of the Electron Microscopy Society of Thailand, 30th Jan – 1st Feb 2002, Chiang Mai, Thailand
5. **Silver Award ITEX 12**
High-Performance WC Tool Insert Developed through Powder Metallurgical Route. Ahmad Aswad Mahaidin, Samsiah Abdul Manaf, **Dr Talib Ria Jaafar**, Mohd Asri Selamat

6. **Bronze Award MTE 12**
High-Performance HSS and WC Tool Insert Developed through Powder Metallurgical Route. Samsiah Abdul Manaf, **Dr Talib Ria Jaafar**, Mohd Asri Selamat, Ahmad Aswad Mahaidin
7. **Silver Award SIIF 2011**
Hard Thin Film Coatings on Cutting Tools.
Seoul International Invention Fair (SIIF) , 1st- 4th December 2011, Seoul, Korea. Fazira Mohamed Fadzil, **Dr Talib Ria Jaafar**, Abdul Hakim Hashim, Mansor Abdul Hamid, Mohd Zakuan Abdullah, Norazlan Roslani dan Amin Morat
8. **Gold Award MTE 11**
Hard Thin Film Coating on Cutting Tools.
Fazira Suriani Mohamed Fadzil, **Dr Talib Ria Jaafar**, Abdul Hakim Hashim, Mansor Abdul Hamid, Mohd Zakuan Abdullah, Norazlan Roslani dan Amin Morat
9. **Silver Award MTE 11**
Chopper Mixer for Making Brake Lining Material.
Norazlan Roslani, Yusli Mohd Junus, Dr Mohd Asri Selamat, Dr Mohd Soib Selamat, **Dr Talib Ria Jaafar** dan Chong Fah Ming
10. **Silver Award ITEX 11**
High-Performance HSS and WC Tool Insert Developed through Powder Metallurgical Route. **Dr Talib Ria Jaafar**, Mohd Asri Selamat, Ahmad Aswad Mahaidin, Samsiah Abdul Manaf dari SIRIM AMREC
11. **Silver Award ITEX 11**
Cutting Tools Performance Enhancement through Hard Thin Film Coating. Fazira Suriani Mohamed Fadzil, **Dr Talib Ria Jaafar**, Abdul Hakim Hashim, Mansor Abdul Hamid, Mohd Zakuan Abdullah, Norazlan Roslani dan Amin Morat
12. **Bronze Award ITEX 11**
Hybrid Mixer for Brake Lining Materials. Norazlan Roslani, **Dr Talib Ria Jaafar**, Dr Mohamad Soib Selamat, Dr Mohd Asri Selamat, Chong Fah Ming dan Yusli Mohamad Junus dari SIRIM AMREC
13. **Silver Award ITEX 08**
Non-Asbestos Brake Friction Materials For Heavy Duty Application
Dr. Talib Ria Jaafar, Dr. Mohd Asri Selamat, Dr. Mohamad Soib Selamat, Eliasidi Othman, Norazlan Roslani, Sutiman Kemin, Ramlan Kasiran, Rrof. Ir. Dr. Mohamd Nor Berhan, Assoc. Prof. Dr. Mustafar Sudin
14. **Gold Award MTE 08 and Best Award**
Asbestos-Free Friction Materials For Heavy-Duty Brake Application.
Dr. Mohd Asri Selamat, **Dr. Talib Ria Jaafar**, Dr. Mohamad Soib Selamat, Mohd Izha Ishak, Yusli Mohd Junus, Prof. Ir. Dr. Mohamd Nor Berhan, Dr. Mohd Asri Selamat, Assoc. Prof. Dr. Mustafar Sudin
15. **Gold Award MTE 07**
Asbestos-Free Brake Friction Materials.
Dr Mohamad Soib Selamat, **Dr Talib Ria Jaafar**, Dr Mohd Asri Selamat, Mazli Mustapha, Mohd Izhar Ishak, Yusli Mohd Yunus
16. **Gold Award ITEX 06**
Asbestos-Free Brake Friction Materials.
Dr Mohamad Soib Selamat, **Dr Talib Ria Jaafar**, Dr Mohd Asri Selamat, Mazli Mustapha

6.2 Advisory/Industrial Panel

(Name of panel), (Institution), (Year)

1. Member of Board of Studies: Master of Science in Materials Engineering Program, Kulliyah of Engineering, UIAM. 2006
2. Ahli Panel Mesyuarat Pemampatan Program Akademik Pusat Pengajian Kejuruteraan Bahan, UniMAP 2007.
3. Ahli Lembaga Penasihat Industri Bagi Pusat Pengajian Kejuruteraan Bahan, UniMAP 2007-2011.
4. Advisory Panel for National Conference on Advances in Mechanical Engineering 2005, organised by UiTM
5. Advisory Panel for The National Metallurgical Conference 06, organized by KUKUM
6. Editorial Board Member of Journal of Mechanical Engineering (JmechE), UiTM, 2007- 2008

6.3 Judges

1. Perak Expo for young Scinetists peringkat Negeri Perak 2011, 10th September 2011, Ipoh
2. Invention, Innovation & Design (IID) Kedah 2011 di UiTM cawangan Kedah 19-20 Novemembr 2011
3. Poster Presentation at 20th Scientific Conference of the Microscopy Society of Malaysia & 21st Annual General Meeting, 22-24 Nov 2011, Port Dickson.
4. Invention, Innovation & Design (IID) Kedah 2012 di UiTM cawangan Perlis 7 April 2012

6.4 Editor/Reviewer

1. Brake Pad and Disc Materials. - co-editor
2. Journal of Physical Science - reviewer
3. Journal of Industrial Technology- reviewer
4. Journal of Institute of Material Malaysia- reviewer
5. Journal of Mechanical Engineering - Editorial Board Member 2007-2008
6. 4th Malaysian Powder Metallurgy Symposium & Malaysian Metallurgical Conference 2010. Co-editor
7. Journal Teknologi – reviewer
8. Malaysian International Tribology Conference - reviewer

6.5 Chairman of Conferences/Qolloquim/Workshop

1. Chairman, Coating Technology Workshop, 27th & 28th Sept 2004, Kulim, organised by Coating Materials Programme, AMREC, SIRIM Berhad.
2. Chairman, Hard Material Coating Workshop, 9th 10th Oct 2005, Kulim, organised by Coating Materials Programme, AMREC, SIRIM Berhad .
3. Chairman, 4th Malaysian Friction Materials Colloquium 2006, 20th & 21st December 2006, Langkawi organised by Structural Materials Programme, AMREC, SIRIM Berhad.
4. Chairman, 5th Malaysian Friction Materials Colloquium 2007, 6th & 7st June 2007, Bukit Merah Laketown Resort organised by Structural Materials Programme, AMREC, SIRIM Berhad.

5. Co-Chairman, 19th Scientific Conference of Electron Microscopy Society of Malaysia, 14-16 December, 2010 Bayview Hotel Langkawi.
6. Moderator Jemputan, National Conference on Engineering Technology (Ncet) 2011, 11-12 April 2011, Sunway Carnival Convention Centre, Seberang Jaya, Penang.
7. Chairman, Hard Material Coating Workshop, 19 & 20th June 2012, Kulim, organised by Structural Materials Programme, AMREC, SIRIM Berhad .
8. Co-Chairman, Advanced Materials Conference, 11-12 December, 2012 Bayview Hotel Langkawi.

6.6 Organising Committee of Conference/Symposium

1. 12th Scientific Electron Microscopy Conference Malaysia, 15th – 17th Dec, 2003 Langkawi
2. 1st Malaysian Brake Friction Materials Colloquium. 1st & 2nd March 2004, Kulim, Kedah
3. Nanostructured Coating Technology Workshop, 26 & 27th July 2006, Kulim, Kedah
4. 1st Malaysian Powder Metallurgy Symposium and Exhibition 2006. 29 & 30 August 2006, Kulim, Kedah.
5. 6th ASEAN Microscopy Conference, 10th – 12th December 2007, Cherating, Pahang
6. National Tribology Conference. 4 & 5 Mei 2009. Rimba Ilmu, Universiti Malaya Kuala Lumpur.
7. 3rd Powder Metallurgy Symposium & Exhibition 2009, 12th & 13th Aug 2009, Kuala Lumpur
8. Training on Powder Metallurgy Technology, Malaysia Technology Cooperation Program, 31st May – 11th June 2010, Bayview Hotel, Batu Peringi, Penang.
9. 4th Malaysian Powder Metallurgy Symposium & Malaysian Metallurgical Conference 2010, 22 & 23 November 2010, Parkroyal Hotel, Penang
10. Regional Tribology Conference Bayview Hotel, Langkawi Island, Malaysia, 22-24 November 2011
11. Malaysian Tribology Conference, Kota Kinabalu, Malaysia, 18-20 November 2013

6.7 Chairperson of Invited/Parallel Sessions

1. Chairperson, Regional Conference and Workshop on Solid State Science and Technology, 10th –13th Oct. 2002, Kucing
2. Chairperson, Coating technology Workshop 27 & 28 Sept. 2004, AMREC, Kulim Kedah.
3. Chairperson Session Experimental Methods (EM1), XXI Regional Conference and Workshop on Solid State Science and Technology, 10th –13th Oct. 2004, Kota Kinabalu
4. Chairperson, 2nd Malaysian Brake Friction Materials Colloquium 2004, 13-15th December 2004
5. Chairperson Session Metals & Ceramics Oral Presentation. 13th Electron Microscopy Society of Malaysia Conference, 13-15th December 2004, Bangi
6. Chairperson Hard Material Coating Workshop, 9 & 10th May 2005, Kulim.
7. Chairperson for keynote address II and Session 2 Metal/Alloy II. 14th Electron Microscopy Society of Malaysia Conference, 5-7th December 2005, Vistana Hotel Penang.
8. Chairperson Parallel Session Other Materials 3. XXII Regional Conference and Workshop on Solid State Science and Technology, 19th –21st December 2005, Kuantan.
9. Chairperson 3rd Malaysian Brake Friction Materials Colloquium, 23rd & 24th Feb 2006, Lumut

10. Chairperson International Conference on Manufacturing and Material Processing 2006, 14th – 16th March 2006, Kuala Lumpur
11. Chairperson 15th Electron Microscopy Society of Malaysia Conference, 4-6th December 2006, Kuala Terengganu
12. Chairperson Session Metal/Alloy III, 6th Asean Microscopy Conference, 10-12th December 2006, Cherating, Pahang
13. Chairperson 15th Electron Microscopy Society of Malaysia Conference, 4th -6th December 2006, Kuala Terengganu
14. Chairperson 3rd Powder Metallurgy Symposium & Exhibition 2009, 17th & 18th Aug 2009
15. Chairperson Reginal Tribology Conference 2011, 22-24 Nov 2011, Bayview Hotel, Langkawi
16. Chairperson Asian International Conference on Materials, Minerals And Polymer (MAMIP 2012), 22 & 23 March 2012, Vistana Hotel Penang

7. PROFESSIONAL AFFILIATION/MEMBERSHIP

<i>No.</i>	<i>Institution / Authority</i>	<i>Position</i>	<i>Year</i>
1.	Board of Enginners Malaysia	Member	1985 till date
2.	Institute of Materials Malaysia (IMM - F493)	Fellow Member	2005 till date
3.	Electron Microscopy Society of Malaysia (EMSM – T 010)	Life Member EXCO member	2001 till date 2005 - 2008
4.	The Malaysian Solid State Science & Technology Society (MASS- 158/03)	Life Member EXCO member	2003 till date 2007-2009
5.	Malaysian Tribology Society (L0509)	Life member Vice President EXCO member	2008 till date 2006-2013 2013-2015
6.	Malaysian Powder Metallurgy and Powder Materials Association	Member Exco member	2009 till date 2009- 2011

8. INDUSTRIAL CONSULTANCY

8.1 Commercial Achievement

<i>No.</i>	<i>Title</i>	<i>Year</i>
1.	Independent Market Feasibility Research on Brake Friction Materials in Malaysia – Portege Associates	August 2007
2.	Techno-Economy Feasibility Study Report on Asbestos-Free Friction Materials For Heavy Duty Brake Application - Techno-Economic Analysis Techno-Economy & Commercialization Centre, SIRIM Berhad	2008
3.	Techno-Economy Feasibility Study Report on Cutting Tools Insert using Powder Metallurgy Method- Techno-Economic Analysis Techno-Economy & Commercialization Centre, SIRIM Berhad	

4.	Technology licencing for producing brake pad for passenger to Kejuruteraan Emas Sdn Berhad	
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8.2 Industrial Consultancy

1. Consultation on brake-pad and brake-lining process and development to:
 - Delta Filter (M) Sdn Bhd, Klang, Selangor
 - Zihan Sdn Bhd
 - Rangkaian Pengangkutan Integrasi Deras Sdn Bhd
 - KMD MARKETING SDN. BHD
 - Melt-Cast (M) Sdn Bhd, Sungai Petani, Kedah
2. JARIZ Technologies Sdn Bhd - To Design, Develop and Produce an Advanced Technology of Sickle and Blade

9. OTHER CONTRIBUTIONS

9.1 National/SIRIM Committee

1. Malaysia Standard Technical Committee on Motocylce helemt 2000-2002
2. Malaysia Standard Technical Committee on Braking, Suspension Systems & Mechanical Support, 2002 – 2012
3. Malaysian Standard Working Group on Water Meter, 2003 – 2007.
4. AMREC Accident Investigation Team, 2005-2006
5. Internal Auditor for ISO 9001: 2000; AMREC 2006-2009. audited more than 18 projects
6. Jawatan Kuasa Teknikal AMREC. 2005 – 2012

9.2 Committee in the Community

Bil	Contribution	<i>Year</i>
1.	Ahli Jawatan Kuasa PIBG Sek Men Keb Sungai Karang,	2005 - 2009
2.	Ahli Jawatan Kuasa Surau AlHuda, Taman Desa Aman	2007-2009
3.	Ahli Jawatan Kuasa Rukun Tetanga Desa Aman	2008-2010
4.	Pengerusi Rakan Warga Emas Rukun Tetangga Desa Aman	2009 - 2010
5.	Timbalan Bendahari merakap ketua biro pembangunan Surau AlHuda, Taman Desa Aman	2009 - 2011
6.	Internal Auit, Koperasi penduduk Islam Desa Aman, Padang Serai kedah	2010 till date
7.	Juru Audit Surau AlHuda, Taman Desa Aman	2011- 2013
8.	Bendahari Jawatan Kuasa Penaja Masjid Al-Huda Qaryah Padang Meiha, Desa Aman, Padang Serai	2010 - 2013
1.	Bendahari Koperasi Penduduk Islam Taman Desa Aman, Padang Serai Kedah	2011-2013

9.3 Technical Committee Involvement in the Development of Malaysian Standard

1. MS 1169:1989 Method of Test and General Requirements for starter for motor vehicles.
2. MS 1166:1989 Method of Test and General Requirements for alternators (with regulators) for motor vehicles.
3. MS 1167:1989 Method of Test for Vibration Testing of Automotive Components
4. MS 1168:1989 Method of Test for Dip, Rain, Spray and Splash for Automotive Components.
5. MS 595:1989 Part 1&2 Specification for Safety Glass for Motor Vehicles (Revision).
6. MS 1175:1989 Specification for Seat Belts for Motor Vehicles (Revision).
7. MS 1154:1989 Webbing for Car Seat Belts.
8. MS 1217:1989 Specification for Flasher Units for Motor Vehicles.
9. MS 1164:1989 Technical Requirement for the Interchangeability of Brake Lining Materials.
10. MS 1207:1989 Method of Test for the Determination of Exhaust Carbon Monoxide Concentration at idle speed for Motor Vehicles.
11. MS 1211:1991 Method of Test for the Determination of Burning Behaviour of Interior Materials of Motor Vehicles.
12. MS 1212:1991 Glossary of Terms Relating to Braking of Motor Vehicles and their Trailers.
13. MS1213:1991 Method of Test for the Measurement of Noise Emitted by Accelerating Motor Vehicles- Engineering Methods.
14. MS 1214:1991 Method of Test for the Measurement of Noise Emitted by Stationary Motor Vehicles.
15. MS 474: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 1: Specific gravity (First Revision)
16. MS 474: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 2: Rockwell Hardness Test (First Revision)
17. MS 474: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 3: Crossbreaking Strength (Drum Brake Linings) (First Revision)
18. MS ISO 6310: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 4: Compressive Strain Test Method
19. MS ISO 6311: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 5: Internal shear strength of lining material – Test Procedure
20. MS ISO 6312: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 6. Shear test procedure for disc brake pad and drum brake shoe assemblies
21. MS ISO 6313: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 7. Effect of heat on dimensions and form of disc brake pads – Test Procedure
22. MS ISO 6314: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 8. Resistance to water, saline solution, oil and brake fluid – Test Procedure

23. MS ISO 6315: 2003 Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 9. Seizure to ferrous mating surface due to corrosion – Test Procedure
24. MS 474: 2003. Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 10. Assessment of friction material and wear
25. MS 474. 2003. Methods of Test for Automotive Friction materials (Brake Linings, Disc Pads and Bonded Shoe): Part 11. Disc brake pads – Evaluation of surface and materials flaws after testing
26. MS ISO 4064-2 Measurement of water flow in closed conduits Part 2: Installation requirement and selection.
27. MS ISO 4064-3 Measurement of water flow in closed conduits Part 3: Test methods and equipment.
28. MS ISO 7858-1 Measurement of water flow in closed conduits - Combination meters for cold potable water - Part 1: Specification.
29. MS ISO 7858-2 Measurement of water flow in closed conduits - Combination meters for cold potable water - Part 2: Installation requirements.
30. MS ISO 7858-3 Measurement of water flow in closed conduits - Combination meters for cold potable water - Part 3: Test methods.
31. MS 10385-1 Measurement of water flow in closed conduits - Meter for hot water - Part 1: Specifications.
32. MS ISO 4006 Measurement of fluid flow in closed conduits – Vocabulary and symbols^{5*}
33. MS ISO 4064-1 Measurement of water flow in closed conduits – Meters for cold portable water. Part 1: Specifications
34. MS ISO 11835:2004 Road vehicles – Motor vehicle with antilocking braking systems (ABS) – Measurement of braking performance
35. MS ISO 611:2004 Road vehicles – Braking of automotive vehicle and their trailers - vocabulary
36. MS ISO 6120 : 2005 Road vehicles – Brake hose assemblies for hydraulic braking systems used with petroleum-base brake fluid
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