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Date of Birth: Aug. 29, 1979

**Field of Specialization**

- Powder metallurgy
- Coating technology
- Transmission Electron Microscopy (TEM)

**Education**

Masters of Science in Chemical Engineering (2007)  
*Universiti Teknologi PETRONAS, Tronoh, Malaysia*

Bachelor of Engineering Degree in Chemical Engineering (2003)  
*Universiti Teknologi PETRONAS, Tronoh, Malaysia*

**Memberships & Affiliations**

- Member, Malaysian Tribology Society (MYTRIBOS)
- Member, Malaysia Powder Metallurgy and Particulate Materials Association (MPM2A)
- Graduate Engineer, Board of Engineers Malaysia (BEM)

**Research Achievements***Research Grants and Projects*

- Project leader – Sciencefund Project funded by MOSTI (SF0243): Low strain rate upset forging of preformed CoCrMo alloy for load bearing application 2013-2015
- Project member – Development of wear resistance rubber tapper knife (Socio-Economy SIRIM Project) 2014
- Project member – Technofund Project funded by MOSTI (TFD134): Pre-commercialize pilot manufacturing process of producing cutting tool inserts through powder metallurgy and coating process by vapor deposition technique 2009-2012
- Project member – Sciencefund Project funded by MOSTI (SF0115): Development of sintered tungsten-copper alloy from submicron powder particle for potential electrical and electronic application 2009-2011
- Project member – Sciencefund Project funded by MOSTI (SF0080): Nanostructured yttria stabilized zirconia (YSZ) coatings using plasma spray technique for thermal barrier coating applications 2008-2010

*Research Awards and Recognition*

- Gold Award, Malaysia Technology Expo (MTE) 2011, Project title: Hard Thin Film Coating on Cutting Tools.
- Silver Award, International Invention Innovation Industrial Design & Technology Exhibition (ITEX) 2011, Project title: Cutting Tools Performance Enhancement through Hard Thin Film Coating
- Silver Award, Seoul International Invention Fair (SIIF) 2011, Project title: Hard Thin Film Coating on Cutting Tools

**Published Paper***Main author*

- Friction and Wear Properties of Nanostructured YSZ Coatings; MicroSom Dec 2010 Vol. 8 No. 2 p. 8
- Heat Treatment of Zirconia Thermal Barrier Coating; Solid State Science & Technology Letters, Volume 17, 2010
- Mechanical and Tribological Properties of HSS Inserts with TiAlN Coatings. MicroSom Vol. 10 No.1, June 2012. pg. 8-11
- Optimization of TiAlN Coatings on HSS Inserts by Physical Vapour Deposition Process using Taguchi Technique, Advanced Materials Research Vol 879 (2014) pp 27-31
- Low strain rate upset forging of preformed CrCrMo powder alloy for load bearing application : A review; Procedia Engineering 68 (2013) 405-410

*Co-Author*

- S. Istikomah, 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
- R.J. Talib, S. Istikomah, 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
- 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
- RJ Talib, AM Zaharah, MA Selamat, AA Mahaidin, MF Fazira; Friction and wear characteristics of WC and TiCN-coated insert in turning carbon steel workpiece; Procedia Engineering 68 (2013) 716-722

**Presented Paper**

- Nanostructured yttria stabilized zirconia (YSZ) coatings using atmospheric plasma spray technique, Malaysia Metallurgical Conference, Bangi, Malaysia 12/2008
- Heat treatment of plasma-sprayed zirconia coatings, Powder Metallurgy Symposium 2009, The Royale Bintang, Kuala Lumpur, Malaysia 08/2009
- Nanostructured and conventional yttria stabilized zirconia (YSZ) coatings via atmospheric plasma spray technique for thermal barrier coatings applications, 4<sup>th</sup> International Conference on Recent Advances in Materials, Minerals & Environment and 2<sup>nd</sup> Asian Symposium on Materials & Processing, Penang, Malaysia 06/2009
- Heat treatment of zirconia thermal barrier coatings, 25<sup>th</sup> Regional Conference on Solid State Science & Technology 2009 (RCSSST), Penang, Malaysia 06/2009
- TiAlN PVD coatings for high speed machining applications, World Engineering Congress, Kuching Sarawak, Malaysia 08/2010
- Wear Morphology of TiN and TiAlN-Coated Cutting Tool Inserts, 19<sup>th</sup> Scientific Conference of Electron Microscopy Society of Malaysia (EMSM), Langkawi, Malaysia 12/2010
- Investigations on friction and wear mechanisms of HSS cutting tool insert against steel and alumina, Regional Tribology Conference (RTC), Langkawi, Malaysia 11/2011
- Microstructure and tribological properties of TiAlN coated HSS cutting tool insert, 20<sup>th</sup> Scientific Conference of Electron Microscopy Society of Malaysia (EMSM), Port Dickson, Malaysia 11/2011
- Optimization of TiAlN coatings on HSS inserts by physical vapour deposition process using Taguchi technique, Advanced Materials Conference (AMC), Langkawi, Malaysia 12/2012
- Low strain rate upset forging of preformed CoCrMo alloy for load bearing application, Malaysia International Tribology Conference, Kota Kinabalu, Sabah, Malaysia 11/2013