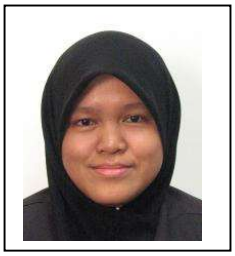

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Academic Qualifications

- Ph.D in Mechanical Engineering | Dublin City University, Ireland | *Jan 2008 - June 2011*
- Master in Mechanical Engineering | Universiti Teknologi Tun Hussein Onn | *Jan 2002 - June 2004*
- B.Sc. (Hons) in Mechanical Engineering | Universiti Teknologi Malaysia | *June 1997 – Nov 2001*

Working Experiences / Appointments

- Editor-in-Chief of International Journal of Automotive and Mechanical Engineering (IJAME) | UMP Publisher | *Feb 2018 - present*
- Assoc. Prof at Faculty of Mechanical Engineering, Universiti Malaysia Pahang | *May 2017 – present*
- Senior Lecturer at Faculty of Mechanical Engineering, Universiti Malaysia Pahang | *June 2011 – May 2017*
- Lecturer at Faculty of Mechanical Engineering, Universiti Malaysia Pahang | *Sept 2004 – June 2011*
- Manager of Industry Centre of Excellence (Automotive Cluster) at Universiti Malaysia Pahang | *15 Feb 2015 – 31 Dec 2017*
- Head of Industry Centre of Excellence (ICOE) Die & Mould at Universiti Malaysia Pahang | *1 Feb 2012 - 14 Feb 2015*
- Head of Diploma Programme at Faculty of Mechanical Engineering, Universiti Malaysia Pahang | *3 Nov 2011 - 2 Nov 2013*
- Research Fellow at Automotive Engineering Centre, Universiti Malaysia Pahang | *3 Oct 2011 - present*
- Postgraduate Coordinator at Faculty of Mechanical Engineering, Universiti Malaysia Pahang | *Oct 2011 - 30 Sept 2012*
- Part-time Tutor at Open University Malaysia | *Jan 2006 - Dec 2007*
- Temporary Tutor at Faculty of Mechanical and Manufacturing Engineering, Universiti Teknologi Tun Hussein Onn, Malaysia | *Nov 2002 - April 2003*

Areas of Expertise

- Laser processing and surface modification of engineering materials.
- Process optimisation using design of experiment (DOE).
- Materials characterisation including scanning electron microscopy (SEM) using back scattered detector, material's amorphous/crystalline phase analysis using x-ray diffraction (XRD) system, chemical analysis using energy dispersive x-ray spectroscopy (EDXS), macro/micro-hardness and thermal fatigue.
- Scopus H-index: 8

Research Interests

- Laser surface modification of metals, metallic glass & ceramic coatings.
- Material's stability and behaviour subjected to high temperature.

Research Projects / Grants

- RDU160141 Fundamental Research Grant Scheme (FRGS) by Ministry of Higher Education Malaysia | Integration of Fine Particles in Laser Modified Tool Steel Surface for Thermal Stability of Grain Boundary | June, 1st 2016 - May, 31st 2019 | RM112,800 | **Principal Researcher**
- RDU160132 Fundamental Research Grant Scheme (FRGS) by Ministry of Higher Education Malaysia | Investigation of Micro-Abrasion Behaviour of Nano-Ceramic in Magneto-Rheological Polishing Fluid | June, 1st 2016 - May, 31st 2019 | RM111,708 | **Co-Researcher**
- RDU160140 Fundamental Research Grant Scheme (FRGS) by Ministry of Higher Education Malaysia | Investigation on Initial Peak Force and Energy Absorption of High Strength Steel Crash Box Having Notch as Initial Trigger Mechanism | June, 1st 2016 - May, 31st 2019 | RM99,440 | **Co-Researcher**
- RDU160399 UMP Research Grant Scheme | Development of Hot Press Forming (HPF) Die With Laser Cladding Surface For Thermal Stability| June, 25th 2016 – June, 24th 2018 | RM 30,500 | **Principal Researcher**
- PGRS170358 Postgraduate Research Grant Scheme | Thermo-Mechanical-Metallurgical Modelling of Laser Modified Die Surface | March, 1st 2017 – March, 1st 2020 | RM3,500 | **Principal Researcher**
- GRS150306 Postgraduate Research Grant Scheme | Laser Assisted Process to Enhance Surface Integrity in Hot Press Forming Die | March, 15th 2015 – March, 14th 2018 | RM5,000 | **Principal Researcher**

- GRS140395 Postgraduate Research Grant Scheme | Development of Fe-Based Alloy with Enhanced Thermal Conductivity and Wear Resistance | July, 25th 2014 – July, 24th 2017 | RM5,000 | **Principal Researcher**
- RDU1403150 UMP Research Grant Scheme | Development of Thermal Wear Test System for Casting Die in Automotive Components Manufacturing | Dec, 25th 2014 –Dec, 24th 2016 | RM 32,160 | **Principal Researcher**
- RDU140506 Sciencefund by Ministry of Science, Technology and Innovation (MOSTI) | Deep Twist Drilling Technique for Increasing Cooling Channel Length in Hot Forming Die | July, 15th 2014 – July, 14th 2016 | RM274,153 | **Co-Researcher**
- RDU120105 Fundamental Research Grant Scheme (FRGS) by Ministry of Education (MOE) | Interface Bonding Properties Enhancement in Thermal Barrier Coating of Laser Hardened Die Steel | May, 1st 2012 - Oct, 30th 2015 | RM79,840 | **Principal Researcher**
- RDU120304 UMP Research Grant Scheme | Development of a new material with high wear resistant for automotive brake | April, 1st 2012 – March, 31st 2014 | RM40,000 | **Principal Researcher**
- RDU131402 Research Acculturation Grant Scheme (RAGS) by Ministry of Higher Education (MOE) | To Develop a Modified Ductile Ni-Resist Alloy using Casting Austempered Process for Elevated Temperature Components | Sept, 17th 2013 – Sept, 16th 2015 | RM 51,742 | **Co-Researcher**
- RDU130145 Fundamental Research Grant Scheme (FRGS) by Ministry of Education (MOE) | To Enhance Graphite Nodularity Of Modified Ductile Ni-Resist Using Direct Insertion Of Alloying Elements During Casting | Dec, 1st 2013 – Nov, 31st 2015 | RM98,000 | **Co-Researcher**
- RDU130343 UMP Research Grant Scheme | Development of Hot Press Forming Die for Ultra High Strength Steels in Automotive Component Application | June, 15th 2013 – June, 14th 2015 | RM 37,954 | **Co-Researcher**
- RDU110338 UMP Research Grant Scheme | New technique of drilling/cutting of polymer composite for automotive part by low power laser | Aug, 1st 2011 – March, 31st 2013 | RM38,000 | **Co-Researcher**
- COST-STSM-541-05971 Short Term Scientific Mission grant by COST (European Cooperation in Science and Technology) | Laser surface modification of H13 punch for semi-solid forming | a collaboration project between Dublin City University, Ireland and University of Liege, Belgium, 2010 | 24th - 28th May 2010 | **€750**
- COST-STSM-541-05234 Short Term Scientific Mission grant by COST (European Cooperation in Science and Technology), Thermal fatigue testing of laser treated steels | a collaboration project between Dublin City University, Ireland and Politecnico di Torino, Italy, 2009 | 27th Sept – 3rd Oct 2009 | **€915**
- Laser processing of thermal sprayed WC-CoCr coating, a collaboration project and joint publication between Dublin City University, Ireland and Universitat Politécnica de Catalunya, Spain, 2009.
- Laser processing of bulk metallic glass, a collaboration project and joint publication between Dublin City University, Ireland and University College of Dublin, Ireland, 2009.
- RDU070308 UMP Research Grant Scheme | Development of Laser Cutting and Engraving Machine Utilising PC-NC Controller | Jan, 4th 2007 – March, 30th 2008 | **Co-Researcher**.
- RDU070347 UMP Research Grant Scheme | Experimental Study on Fatigue Life of Spot Welded High Strength Steel Sheet for Automotive Components | Jan, 9th 2007 - Aug 31st 2008 | **Co-Researcher**.

Professional Qualifications / Memberships / Affiliations / Experiences

- ARGS research grant evaluator | Jabatan Pendidikan Politeknik dan Kolej Komuniti | 20th July 2018
- Graduate Member | The Institution of Engineers Malaysia | G54061 | since 13 August 2012
- Graduate Member | Board of Engineers Malaysia | 2007-present
- Member | European Scientific Association for Material Forming (ESAFORM) | 2009-2015
- Affiliate member of Adv. Processing Technology Group, Dublin City University, Ireland | since 17 Feb 2012
- Journal reviewer | **Materials Research Ibero-American Journal of Materials** | Associação Brasileira de Cerâmica | 2016
- Journal reviewer | **Optics and Lasers in Engineering** | Elsevier | 2013
- Journal reviewer | ***Applied Physics A: Materials Science & Processing*** | Springer | 2012
- Journal reviewer **| *Journal of Composite Materials*** | SAGE | 2004-2006
- Journal reviewer and editor | **Journal of Industrial Technology** | SIRIM Malaysia | 2013
- Journal reviewer | ***Journal of Mechanical Engineering and Sciences*** | UMP | 2011-2012
- International conference proceeding reviewer **| *5th International Conference on Material Science and Engineering Technology (ICMSET 2016)*** | 2016
- International conference proceeding / journal reviewer **| *International Conference on Mechanical Engineering Research (ICMER)*** | 2013 & 2015
- International conference proceeding reviewer **| *Advances in Materials and Processing Technologies (AMPT) conference*** | 2009 & 2011
- International conference proceeding / journal reviewer | **Automotive Innovation Green Energy Vehicle Conference (AiGEV)** | 2014
- Reviewer panel | **Research Seminar for East Coast Region Community College** | Nov 27th 2014.

Postgraduate Student Supervision / Thesis Examiner

Graduated

Zulhishamuddin Abdul Rahman | Development On Fe-Based Alloy With Enhanced Thermal Conductivity and Wear Resistance | 9th Sept 2013- 25th July 2018 | Ph.D | **Main Supervisor**

Hassan Abdulrassoul Abdulhadi | Thermal Wear Behaviour of H13 Tool Steel in Die Casting Process | since 17th Feb 2014-15th December 2017 | Ph.D | **Main Supervisor**

Fazliana Fauzun | Experimental and Statistical Analysis for Surface Modification of Steel and Cast Iron Using Nd:YAG Laser | 3rd Sept 2012 – 13th Feb 2015 | Master | **Main Supervisor**

Nuraini binti Aziz | Experimental Investigation of Hot Press Forming on 22MnB5 Boron Steel Employing Response Surface Methodology (RSM) | 1st Oct 2012 – 10th February 2017 | Master | **Main Supervisor**

Muhammad Hafiz Idris | Malaysia-Japan International Institute of Technology (MJIIT), UTM | A New Construction of Concentric Bypass MR Damper | Master | **Thesis External Examiner**

Norzilawati Mohamad | Malaysia-Japan International Institute of Technology (MJIIT), UTM | The Dynamic Viscoelastic Properties of Carbonyl-Iron Particles based Magnetorheological Grease | Master | **Thesis External Examiner**

Md Rafiqul Islam | UMP | An Experimental Study and Modeling of Gas Metal ARC Welded Lap Joint of A7075 T651 Aluminium Alloy to AZ31B Magnesium Alloy | Master | **Thesis Internal Examiner**

Hemarani a/p Dorairaju | UTHM | Characterisation of Mist Flow of Minimal Quantity Lubrication Technique in Turning Process | Master | **Thesis External Examiner**

Khairul Ihsan bin Yaakob | UMP | A Study of Fiber Laser Welding on AHSS (Boron Steel) | Master | **Thesis Internal Examiner**

Hardinnawirda Kahar | UMP | Master | **Thesis Internal Examiner**

Mohd Fawzi Bin Zamri | UMP | Heuristic Optimization of Cooling Channel Design for Hot Stamping Tool Process | UMP | Master | **Thesis Internal Examiner**

On-going

Fazliana Fauzun | Thermo-Mechanical-Metallurgical Modeling Of Hot Press Forming Die Wear | since 3rd March 2016 | Ph.D | **Main Supervisor**

Norhafzan Bariman | Laser Assisted Process to Enhance Surface Integrity in Hot Press Forming Die | since 8th September 2014 | Ph.D | **Main Supervisor**

Mohamed Reza Zalani Mohamed Suffian | Interface Bonding Properties Enhancement in Thermal Barrier Coating of Laser Hardened Die Steel | since 1st Nov 2012 | Ph.D | **Main Supervisor**

Ghusoon Rdha Mohammed Ali | The Study Of Welding Effect On Micro Structure And Properties In Stainless Steel | since 8th May 2014 | Ph.D | **Co-Supervisor**

Teaching Experiences

Universiti Malaysia Pahang

- Teaching subject: Advanced Manufacturing Processes (2017/18-Master level), Mechanics of Materials (2013-2015-UMP/HsKA Germany dual degree), Statics (2011-2017-degree level), Manufacturing Processes (2017/18 – UMP/HsKA Germany dual degree, 2011/12_2016/17_2017/18-degree level), Computer Aided Mechanical Design (2007/08-degree level), Engineering Materials (2005/06_2006/07-degree level), Engineering Mechanics Lab (2006/07-degree level), Engineer and Society (2005/06-degree level), Occupational Safety and Health (2005/06-degree and diploma level), Engineering Drawing (2005/06-diploma level), Strength of Materials (2004/05-degree level).

Dublin City University, Ireland

- Teaching subject: Advanced Engineering Materials and Manufacturing Processes (spring 2010-degree level), Project and Quality Management (spring 2010-degree level).

Open University Malaysia

- Teaching subject: Strength of Materials (06/07-degree level), Materials Science (06/07-degree level).

List of Publications

Book chapters

1. Aqida, S. N., Shah, L. H., Naher, S. and Brabazon, D., Rapid Solidification Processing and Bulk Metallic Glass Casting. In *Comprehensive Materials Processing;* McGeough, J., Ed.; Elsevier Ltd. (16 April 2014) Vol. 5, pp 69–88.
2. Ahmad, A.H., Naher, S., Aqida, S. N. and Brabazon, D., Routes to Spheroidal Starting Material for Semisolid Metal Processing. In *Comprehensive Materials Processing;* McGeough, J., Ed.; Elsevier Ltd. (16 April 2014) Vol. 5, pp 135–148
3. Hartwig J.B., Härtwig J., and Aqida S.N., X-Ray Topography. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; (28 Oct 2015). pp. 1-9, ISBN: 978-0-12-803581-8 (doi:10.1016/B978-0-12-803581-8.01228-5)
4. Mattei G., and Aqida S.N., Optical Properties of Surface Layers Enhanced Raman Scattering. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; (18 March 2016) ISBN: 978-0-12-803581-8. (doi:10.1016/B978-0-12-803581-8.01171-1)
5. Brubaker, C.E. Messersmith, P.B. and Aqida, S.N., Biological Adhesion, In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; (20 May 2016) pp. 1-22, (doi:10.1016/B978-0-12-803581-8.09257-2)
6. Wintermantel, E., Mayer, J., Goehring, T.N. and Aqida, S.N., Composites for Biomedical Applications, In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; (15 June 2016) pp 1-8, ISBN: 978-0-12-803581-8 (doi:10.1016/B978-0-12-803581-8.01735-5)
7. Taguchi, S., Iwata, T., Abe, H., Doi, Y., Aqida, S.N., Poly(hydroxyalkanoate)s, In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier, (16 July 2016) pp.1-28 (doi:10.1016/B978-0-12-803581-8.09806-4)
8. Henke, M. Tessmar, J. Göpferich, A. and Aqida, S.N., Biomimetic Polymers (for Biomedical Applications), In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; Elsevier; (available online 14 October 2016).
9. Murthy N., Wilson S., Sy J.C., and Aqida S.N., Biodegradation of Polymers. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; 17 March 2017. pp. 1-15.
10. Swain Michael V., Dorin-Ruse N., and Aqida S.N., Dental Materials: Fracture Mechanics. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; 2017. pp. 1-9. (doi:10.1016/B978-0-12-803581-8.01737-9)
11. Rostami Sam, and Aqida Syarifah N., Polymer Blends: Structure and Properties. In: Saleem Hashmi (editor-in-chief), Reference Module in Materials Science and Materials Engineering. Oxford: Elsevier; 30 July 2018. pp. 1-6. (doi.org/10.1016/B978-0-12-803581-8.11301-3)
12. Mahadzir Ishak, Siti Rabiatull Aisha Idris, Syarifah Nur Aqida Syed Ahmad, Siti Haryani Tomadi, Mohd Rashidi Maarof, BMM3611 Manufacturing Process Laboratory, Penerbit UMP; 2016 (ISBN: 978-967-0691-97-8).

Journals

1. AR Zulhishamuddin, SN Aqida, M Mohd Rashidi, A comparative study on wear behaviour of Cr/Mo surface modified grey cast iron, Optics & Laser Technology 104 (2018); 164-169
2. B Norhafzan, SN Aqida, F Fazliana, MS Reza, I Ismail, CM Khairil, Laser melting of groove defect repair on high thermal conductivity steel (HTCS-150), Applied Physics A 124 (2) (2018); 169
3. AR Zulhishamuddin, RM Suffian, SN Aqida, MM Rashidi, Microstructural Evolution and Phase Transformation in Laser Cladding of Cr and Mo Powder on Grey Cast Iron: Mixture Design of Experiment (DOE), Materials Research, 0-0 (2017)
4. HA Abdulhadi, SNAS Ahmad, I Ismail, M Ishak, GR Mohammed, Thermally-induced crack evaluation in H13 tool steel, Metals 7 (11) (2017); 475
5. MSA Rahim, I Ismail, SB Choi, WH Azmi, SN Aqida, Thermal conductivity enhancement and sedimentation reduction of magnetorheological fluids with nano-sized Cu and Al additives, Smart Materials and Structures 26 (11) (2017); 115009
6. AFM Tahir, SN Aqida, An investigation of laser cutting quality of 22MnB5 ultra high strength steel using response surface methodology, Optics & Laser Technology 92 (2017); 142-149
7. HA Abdulhadi, SN Aqida, M Ishak, GR Mohammed, Fatigue Mechanical Behavior of (PMMA) Poly (methacrylate) Under Shot Peening Treatment, Journal of Computational and Theoretical Nanoscience 14 (6) (2017); 2927-2930
8. HA Abdulhadi, SN Aqida, I Ismail, M Ishak, GR Mohammed, Experimental Investigation of Thermal Fatigue Die Casting Dies by Using Response Surface Modelling, Metals, 7 (6) (2017); 1-13.
9. GR Mohammed, M Ishak, SN Aqida, HA Abdulhadi, Effects of Heat Input on Microstructure, Corrosion and Mechanical Characteristics of Welded Austenitic and Duplex Stainless Steels: A Review, Metals 7 (2) (2017); 39
10. B. Norhafzan, S.N. Aqida, E. Chikarakara, D. Brabazon, Surface modification of AISI H13 tool steel by laser cladding with NiTi powder, Applied Physics A 122(4) (2016); 384.

11. MS Reza and SN Aqida, Interface bonding of NiCrAlY coating on laser modified H13 tool steel surface, Applied Physics A, 122(6) (2016); 611
12. A.R. Zulhishamuddin and S.N. Aqida, Development of High Thermal Conductivity Tool Steel in Hot Press Forming: An Overview, Journal of Mechanical Engineering and Sciences 9 (2016); 1686-1694.
13. Reza, M. S., Aqida, S. N. and Mohd Toff, M. R., An Investigation of Phase Crystallinity in Laser Modified Yttria Stabilized Zirconia (YSZ) Thermal Barrier Coating, Key Engineering Materials 611-612 (2014); 1601-1607.
14. F Fauzun, SN Aqida, W Saidin, Optimisation of Pulsed Nd: YAG Laser Processing of Gray Cast Iron for Enhanced Surface Properties, Advanced Materials Research 1024 (2014); 215-218.
15. N Aziz, SN Aqida, Hot Press Forming of 22MnB5 Steel Using Full Factorial Design of Experiment (DOE), Advanced Materials Research 1024 (2014); 243-246.
16. Fazliana Fauzun, S.N. Aqida, S. Naher, D. Brabazon, F. Calosso and M. Rosso, Effects of Thermal Fatigue on Laser Modified H13 Die Steel, Journal of Mechanical Engineering and Sciences 6 (2014); 975-980.
17. Ismail, I. and Aqida, S.N., Fluid-Particle Separation of Magnetorheological (MR) Fluid in MR Machining Application, Key Engineering Materials 611-612 (2014); 746-755.
18. Fazliana Fauzun, Aqida, S.N and Md. Saidin Wahab, Laser Surface Modification of AISI 1025 Low Carbon Steel using Pulsed Nd:YAG Laser for Enhanced Surface Properties, Key Engineering Materials 554-557 (2013); 596-602.
19. Reza, M.S., Aqida, S.N, Mohd Radzi Mohd Toff and Brabazon, D., Thermal barrier coatings on laser surface modified AISI H13 tool steel using Atmospheric Plasma Spray Technique, Key Engineering Materials 554-557 (2013); 603-610.
20. Ismail, I., Mazlan, S.A., Aqida, S.N. and Olabi, A.G., Full Factorial Design to Study Material Parameters of Magnetorheological Fluid, Key Engineering Materials, 543 (2013); 511-514.
21. Aqida, S. N., Brabazon, D., Naher, S, An investigation of phase transformation and crystallinity in laser surface modified H13 steel, Applied Physics A: Materials Science & Processing A110 (2013); 673-678.
22. Aqida, S. N., Brabazon, D., Naher, S, Atomic diffusion in laser surface modified AISI H13 steel, Applied Physics A: Materials Science & Processing A112 (2013); 139-142.
23. Aqida, S.N., Naher, S. and Brabazon, D., Thermal Simulation of Laser Surface Modification of H13 Die Steel, Key Engineering Materials 504-506 (2012); 351-356.
24. Aqida, S. N., Calosso, F., Brabazon, D., Naher, S., & Rosso, M., Thermal fatigue properties of laser treated steels at semi-solid processing temperature. International Journal of Material Forming 3 (1) (2010); 797-800.
25. Chikarakara, E., Aqida, S.N., Brabazon, D., Naher, S., Picas, J.A., Punset, M. & Forn, A. Surface modification of HVOF of thermal sprayed WC-CoCr coatings by laser treatment. International Journal of Material Forming 3 (1) (2010); 801-804.
26. Aqida, S.N., Brabazon, D., Naher, S., Kovacs, Zs., & Browne, D.J., Laser micro-processing of amorphous and partially crystalline $Cu_{45}Zr_{48}Al_7$ alloy, Applied Physics A: Materials Science & Processing 101 (2) (2010); 357-360.
27. Aqida, S. N., Maurel, M., Brabazon, D., Naher, S., & Rosso, M., Thermal stability of laser treated die material for semi-solid metal forming. International Journal of Material Forming 2 (1) (2009); 761-764.
28. Ahmad, S.N.A.S., Hashim, J. & Ghazali, M.I. The effects of porosity on tensile properties of cast particle reinforced MMC, Journal of Composite Materials 41 (5) (2007); 575-589.
29. Ahmad, S.N.A.S., Hashim, J. & Ghazali, M.I. The effects of porosity on mechanical properties of cast discontinuous reinforced metal-matrix composite, Journal of Composite Materials 39 (2005); 451-466.
30. Aqida, S.N., Ghazali, M.I. & Hashim, J. Effects of porosity on mechanical properties of metal matrix composite: an overview, Jurnal Teknologi 40 (2004); 17-32.
31. Aqida, S.N., Ghazali, M.I. & Hashim, J. The effects of porosity on fatigue for cast metal matrix composites, Journal of the Institute of Materials Malaysia 4(1) (2003); 147-159.
32. Aqida, S.N., Ghazali, M.I. & Hashim, J. The effect of stirring speed and reinforcement particles on porosity formation in cast MMC, Jurnal Mekanikal 16 (2003); 22-30.

Proceedings

33. B Norhafzan, SN Aqida, F Mifthal, AR Zulhishamuddin, I Ismail, Effect of Heating Time on Hardness Properties of Laser Clad Gray Cast Iron Surface, IOP Conference Series: Materials Science and Engineering 319 (1) (2018); 012068.
34. MS Reza, SN Aqida, I Ismail, Laser surface modification of Yttria Stabilized Zirconia (YSZ) thermal barrier coating on AISI H13 tool steel substrate, IOP Conference Series: Materials Science and Engineering 319 (1) (2018); 012067.
35. AL Sheng, I Ismail, SN Aqida, Effect of laser parameters on surface roughness of laser modified tool steel after thermal cyclic loading, IOP Conference Series: Materials Science and Engineering 319 (1) (2018); 012002.
36. N Bariman, SN Aqida, F Fauzun, Laser Melting of High Thermal Conductivity Steel (HTCS) Surface, Materials Science Forum 890 (2017); 380-383.
37. A Rahim, M Salleh, I Ismail, SN Aqida, Effects of Nano Copper Additive on Thermal Conductivity of Magnetorheological Fluid at Different Environment Temperature, Materials Science Forum 890 (2017); 108-111.

38. N Aziz, SN Aqida, I Ismail, Microstructural analysis of hot press formed 22MnB5 steel, AIP Conference Proceedings 1896 (1) (2017); 020015.
39. GR Mohammed, M Ishak, SN Aqida, HA Abdulhadi, Weld bead profile of laser welding dissimilar joints stainless steel, IOP Conference Series: Materials Science and Engineering 257 (1) (2017); 012072.
40. F Fauzun, SN Aqida, I Ismail, N Bariman, Micro-Bulges Investigation on Laser Modified Tool Steel Surface, MATEC Web of Conferences 95, 02007, International Conference on Materials Science Technology ICMSET (2017)
41. MSA Rahim, I Ismail, SA Wahid, S Aid, SN Aqida, Magnetic field simulation of a thermal conductivity measurement instrument for magnetorheological fluid, MATEC Web of Conferences 90, 01061 (2017)
42. GR Mohammed, M Ishak, SN Aqida, HA Abdulhadi, The effect of fiber laser parameters on microhardness and microstructure of duplex stainless steel, MATEC Web of Conferences 90, 01024, International Conference on Mechanical Engineering Research (2017)
43. A.R. Zulhishamuddin and S.N. Aqida, Optimization of Pulsed Nd:YAG Laser Melting of Gray Cast Iron at Different Spot Sizes for Enhanced Surface Properties, AIP Conference Proceeding, 1769 (1) (2016); 030004.
44. Hassan A Abdulhadi, SN Aqida, Thermal Fatigue of Die-Casting Dies: An Overview, International Conference on Mechanical Engineering Research 2015, MATEC Web of Conferences, 74 (2016); 00032.
45. Nuraini Aziz and Aqida, S. N., Optimization of quenching process in hot press forming of 22MnB5 steel for high strength properties, IOP Conf. Series: Materials Science and Engineering, Vol . 50, 2013, pp 012064
46. Fatimah, S., Ishak, M. and Aqida, S.N. CO_2 Laser Cutting of Glass Fiber Reinforced Polymer Composite, International Conference on Mechanical and Engineering Research, IOP Conf. Series: Materials Science and Engineering 36 (2012).
47. Aqida, S.N., Naher, S. and Brabazon, D., Laser Surface Modification of H13 Die Steel using Different Laser Spot Sizes, 14th International ESAFORM Conference on Material Forming, AIP Conference Proceedings, 1353 (2011); 1081-1086.
48. Aqida, S.N., Brabazon, D. and Naher, S., Designing Pulse Laser Surface Modification of H13 Steel using Response Surface Method, Advances in Materials and Processing Technologies, AIP Conference Proceedings 1315 (2011); 1371-1376.
49. Kovacs, Zs., Aqida, S.N., Naher, S., Brabazon, D., Stratton, D., and Browne, D.J., Laser microchannel inscription on Cu-Zr-based bulk metallic glass, Proc. WPI-INPG-Europe Workshop on Metallic Glass, (2009); 45-51.
50. Aqida, S.N., Naher, S., Maurel, M., and Brabazon, D. An overview of laser surface modification of die steels. 25th International Manufacturing Conference Proceedings (2008); 120-128.
51. Aqida, S.N., Brabazon, D. and Naher, S.,Laser Surface Modification of Die Steels, UK-Malaysia-Ireland Engineering Science Conference (2010); 4.

International Magazine

- Covered by Medical Devices and Surgical Technology Week, 'Researchers from Dublin City University Report on Findings in Applied Physics', January 16th, 2011, p 108.

Awards / Research / Achievements

- Received *Cendekia Bitara* prizes for journal publication category 2017 from Universiti Malaysia Pahang
- Received appreciation prize for journal publication category 2016 from Universiti Malaysia Pahang
- Received excellence of service award 2013 from Universiti Malaysia Pahang.
- Received appreciation prize for journal publication category 2012 from Universiti Malaysia Pahang
- Received student grant from 10th Conference on Laser Ablation (COLA), November, 22nd-27th 2009.
- Awarded as top presenter in Faculty of Computing and Engineering Research Day 2010 at Dublin City University, Ireland.
- Awarded as top presenter in Symposium for Mechanical Engineering Research Postgraduates 2009 at Dublin City University, Ireland.
- Received SLAB scholarship from UMP & Ministry of Education to pursue Ph.D in Mech. Eng. | Jan 2008 - June 20011
- Received KUiTTHO-MOSTE fellowship from UTHM to pursue M.Eng | Jan 2002- Dec 2003
- Received scholarship from Ministry of Education to pursue B.Sc in Mech. Eng. | June 1997- Nov 2001

List of Courses Attended / Conference Presentations

Conferences

1. Laser modification of YSZ thermal barrier coating on AISI H13 tool steel substrate, **The 4th Asia Pacific Conference on Manufacturing Systems and The 3rd International Manufacturing Engineering Conference** at EastParc Hotel, Yogyakarta, Indonesia, December 7th -8th, 2017
2. Microstructural Analysis of Hot Press Formed 22MnB5 Steel, **20th International ESAFORM Conference on Material Forming** at Dublin City University, Ireland, April 26th-28th, 2017
3. Micro-Bulges Investigation on Laser Modified Tool Steel Surface, **International Conference on Material Science and Engineering Technology (ICMSET2016)** at Tokyo University, Japan, 29th -31st Oct 2016.

4. Microstructural Evolution and Phase Transformation in Laser Cladding Of Cr And Mo Powder On Gray Cast Iron, **Asia Joint Symposium On Die & Mould Technology** at Iwate University, Japan, 13th -14th Oct 2016.
5. Surface morphology of laser modified Yttria Stabilized Zirconia (YSZ) thermal barrier coating, **Asia Joint Symposium on Die & Mould Technology and Technology Commercialization** at Hanbat National University, Korea, Sept 16th-17th 2014.
6. An Investigation of Phase Crystallinity in Laser Modified Yttria Stabilized Zirconia (YSZ) Thermal Barrier Coating, **17th International ESAFORM Conference on Material Forming** at Dipoli Congress Centre, Espoo, Finland, May 7th-9th, 2014.
7. Laser Surface Modification of Die Steel for Semi-Solid Forming, **Asian Joint Symposium on Die & Mould Technology at Dalian University of Technology,** Dalian, China, Sept 25th-27th 2013.
8. Laser Surface Modification of AISI 1025 Low Carbon Steel using Pulsed Nd:YAG Laser for Enhanced Surface Properties, **16th International ESAFORM Conference on Material Forming** at Aveiro University, Portugal from 22nd-24th April, 2013.
9. Laser Surface Modification of H13 Die Steel using Different Laser Spot Sizes, **14th International ESAFORM Conference on Material Forming** at Queen's University Belfast, Northern Ireland, United Kingdom, April 27th-29th, 2011
10. Laser Surface Modification of Die Steels, **UK-Malaysia-Ireland Engineering Science Conference 2010** at Queen's University Belfast, Northern Ireland, United Kingdom, June 23rd -25th, 2010.
11. Thermal fatigue properties of laser treated steels at semi-solid processing temperature. **13th International ESAFORM Conference on Material Forming** at University of Brescia, Brescia, Italy, April 7th-9th, 2010.
12. Laser micro-machining of Cu45Zr48Al7 bulk metallic glass, **10th International Conference on Laser Ablation** at Furama Riverfront Hotel, Singapore, November 22nd-27th, 2009.
13. Effect of laser parameters on temperature distribution of glazed die steel, **International Conference on Advances in Materials and Processing Technologies 2009** at Legend Hotel, Kuala Lumpur on October 26th-29th, 2009.
14. Thermal stability of glazed die material for semisolid metal forming, **12th International European Scientific Association for Material Forming (ESAFORM) Conference on Material Forming**, University of Twente, Netherlands, April 27th-29th, 2009.
15. An overview of laser surface modification of die steels. **25th International Manufacturing Conference** at Dublin Institute of Technology, Dublin, Ireland, September 3rd-5th, 2008.
16. Symposium for Mechanical Engineering Research Postgraduates 2008, Dublin City University, Ireland.
17. Symposium for Mechanical Engineering Research Postgraduates 2009, Dublin City University, Ireland.

Courses

- Seminar on X-ray Diffraction (XRD) by Bruker AXS Singapore | Universiti Malaysia Pahang | May 15th 2017
- Autodesk Certified Professional – Inventor 2015 | Universiti Malaysia Pahang | Jan 2016
- A Short Course On Tribology In Mould & Die Technology | Universiti Malaysia Pahang | Oct 13th-15th 2014
- Signal Analysis Course | Universiti Malaysia Pahang | April 9th-10th 2013
- Research Management Workshop | Universiti Malaysia Pahang | Jan, 5th-6th 2012
- Alicona software (3D surface profiling) training | Dublin City University| Feb, 11th 2009
- X-ray diffraction training by Bruker AXS | Dublin City University | Feb, 11th-12th 2009