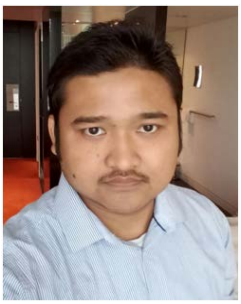

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Academic Qualification

1. PhD. Mechanical Engineering, Imperial College London, 2018
2. M.Eng. Mechanical Engineering (Mechanics), UKM, 2009.
3. B.Eng. (Hons) Mechanical Engineering, UTM, 2007.

Working Experiences / Appointment

1.	June 2018 – Present	Senior Lecturer, FKM, Universiti Malaysia Pahang
2.	May 2009 - June 2018	Lecturer, FKM, Universiti Malaysia Pahang.
3.	Jan 2018 – Dec 2018	EKSA Coordinator, FKM, Universiti Malaysia Pahang
4.	Jan 2018 – Jan 2019	Editor, Journal of Mechanical Engineering and Sciences (JMES), FKM, UMP
5.	Jun 2012 - May 2013	ISO Internal Auditor, Faculty of Mechanical Engineering, UMP
6.	Jan 2012 – Dec 2013	Industrial Training Coordinator, Faculty of Mechanical Engineering, UMP
7.	Dec 2009 - May 2011	Academic Coordinator of Biomechanical Engineering Program
8.	Jun 2011 - May 2012	Industrial Training Coordinator of Biomechanical Program
9.	Sept 2009 - Aug 2010	5S Coordinator, Universiti Malaysia Pahang
10.	May 2007 - May 2009	Tutor, FKM, Universiti Malaysia Pahang.
11.	May 2007 - July 2007	Trainee Janamanjung Power Station.

Expert Area/Research Interest

Creep, Fatigue, Damage Mechanics, Fracture Mechanics, Ductile Failure

Research Project / Grant

1. **Leader** for UMP Research Grant (Seed Money), “Overheating High-Temperature Components: Its Influence on Service Life”, RDU181104 – RM5,500 (15 April 2018 – 14 April 2019) – On-going
2. **Leader** for UMP Research Grant, “Multiscale Predictive modelling of Creep Rupture and Crack Growth”, RDU XXX (September 2018- September 2020) – RM 38,000 – Accepted (Waiting for Grant Number).
3. **Leader** for UMP Research Grant, “Local Fracture Criterion Model for Ductile Failure of API Steel Pipes”, RDU110370 – RM28,699 (1 Sept 2011 – 1 Sept 2013) - Completed
4. **Member** for UMP Research Grant, “Failure Prediction of Non Coplanar Cracks In API Spec 5L Line Pipe”, RDU120311 – RM25,000 (1 April 2012 – 31 March 2014) - Completed
5. **Member** for UMP Research Grant, “Investigation of Properties and Performance of Diamond Coated Cutting Tools”, RDU 100312 – RM39k (30 March 2010 – 29 February 2012) – Completed
6. **Member,** “Design and Development of Plug In Electric Vehicle for Proton Green Mobility Challenge (PGMC) 2012: The UMP-EV Team”, UIC120704 – RM20,000 (20 Jan 2012 – 20 Sept 2012) - Completed
7. **Member** for UMP Research Grant, “Development of Probabilistic Analysis for Cracked Structures Using Finite Element Methods”,RDU090362 – RM39k.(1st May 2009 – 30th September 2010) - Completed

Professional Qualification / Membership / Affiliation / Experience

Membership of Professional Body
Graduate Engineer, Board of Engineer (BEM), Malaysia

Teaching Experience

BMM1533 Strength of Materials I
BMM 2582 Strength of Materials II

BMM1511 Engineering Mechanics Lab I
BMM 2521 Engineering Mechanics Lab II
BMM4999 Industrial Training
BMM3623 Mechanical Design
BMF4703 Production Planning and Control
BMM3912 Final Year Project
DMM Final Year Project
BMM 1532 Statics
DMM 2513 Solid Mechanics
BMM 4912 Final Year Project (Degree)
BMM 1313 Computer Programming
BMM 2533 Fluid Mechanics II
DMM3914 Final Year Project (Diploma)
DMM3663 CNC Technology

Supervision

1. Mohamad Zulfadli Mohamad Rani, "*Determination of Burst Pressure of API Steel Pipes*", 2012
2. Wan Mohd Afiq Asyraf Wan Junoh, "*Determination of Fracture Strain using Stress Relaxation Methods*", 2012
3. Mohamed Zulqarnain Mohamed Akram, "*Determination of Fracture Strain using Stress Relaxation Methods*",2012
4. Mohd Fadzrul Hisyam Badarudin, "*Effect of Stress Ratio on Fatigue Crack Growth Behavior using Finite Element Analysis*", 2012
5. Zulqarnain Fuad, "*Effect of Heat Treatment on Fatigue Life*", 2012
6. Khairul Anwar Ibrahim, "*Finite Element Analysis on Burst Pressure of Steel Pipe with Corrosion Defect*", 2012
7. Ahmad Kamil bin Miskam, "*Effect of Surface Roughness on Fatigue Life*", 2011
8. Ahmad Azam Azizan bin Azlan, "Fatigue *Crack Growth Analysis of Stainless Steel under Mode 1 Loading*", 2011
9. Mohamad Shaffawi bin Zainon, "*Effect of Cyclic Stress Range on Crack Growth of Aluminium Alloy under Axial Loading*", 2011
10. Mohamad Nazri bin Ramli, "*Fatigue Life Prediction of Aluminium Alloys using Finite Element Analysis*", 2011
11. Khairulanwar bin Abd Rani, "*Design and Development of Gearing System for Car Simulator*", 2011
12. Mohd Khairi Azri bin Shapie, "*Design and Fabrication of Portable Basketball Hoop*", 2009.
13. Muhammad Hanif bin Abd Wahab, "Design and Fabrication of Foldable Football Goal", 2009.
14. Mohd Faisal bin Jasni, "Design and Development of Ceiling Fan Blades Cleaner", 2008.

List of Publications

1. **N.A.Alang**, K.Nikbin, "An Analytical and Numerical Approach to Multiscale Ductility Constraint Based Model to Predict Uniaxial/Multiaxial Creep Rupture and Cracking Rates", International Journal of Mechanical Sciences, 135, 342-352, (2018).
2. L.Zhao, **N.A.Alang**, K.Nikbin, "Investigating Creep Rupture and Damage Behaviour in Notched P92 Steel Specimen using a Microscale Modelling Approach", Fatigue and Fracture of Engineering Material and Structures, 41 (2), 456-472, (2018).
3. **N.A.Alang**, K.Nikbin, "A Numerical Approach to a Multiaxial Ductility Constraint Based Model to Predict Uniaxial and Multiaxial Rupture in Engineering Alloys", 4th International ECCC Creep and Fracture Conference, Germany, (2017).
4. **N.A.Alang,** C.M.Davies, K.M.Nikbin, "Low Cycle Fatigue Behaviour of Ex-Service P92 Steel at Elevated Temperature", Procedia Structural Integrity, 2:3177-3184, (2016).
5. **N.A.Alang**, C.M.Davies, K.Nikbin, "Numerical Investigation of Creep Crack Growth Behaviour in P92 Steel Weldment", Structural Materials in Reactor Technology (SMiRT23), United Kingdom, (2015).
6. **N.A.Alang,** N.A.Razak, K.A.Shafie' and A.Sulaiman, " Finite Element Analysis on Burst Pressure of Steel Pipes with Corrosion Defect", 13th International Conference on Fracture (ICF13), Beijing, China, (2013).
7. **N.A.Alang**, N.A.Razak, M.R.Zulfadli, "The Influence of Gouge Defects on Failure Pressure of Steel Pipes", IOP Conference Series, Materials Science and Engineering, 50 (1), (2013).
8. N.A.Razak, **N.A.Alang**, M.A.Murad, "Burst Pressure Prediction of Multiple Cracks in Pipelines", IOP Conference Series, Material Science and Engineering, 50, (2013).
9. **N.A.Alang**, N.A.Razak, K.A.Shafie and A.Sulaiman, "Finite Element Analysis on Burst Pressure of Defective Steel Pipe", 19th European Conference on Fracture (ECF19)", (2012).
10. D.N.Awang Shri, J. Ramli, **N.A. Alang**, M.M. Mahat, "Effect of Surface Pretreatment on Morphology and Microhardness on Carbon Coating Using PVD", Advanced Materials Research Vols. 472-475 (2012) pp 50-54
11. J. Ramli, D. N. Awang Sh'ri, **N. A. Alang**, N. I. Yusof, M. M. Mahat, "Effects of Surface Pretreatment to the Properties of Aluminum Oxide (Al_2O_3) Cutting Tool Coated Amorphous Graphite", Advanced Materials Research Vols. 463-464 (2012) pp 369-374
12. Z.Sajuri, **N.A.Alang**, N.A. Razak and M.A.Aziman, "Fracture Toughness and Fatigue Crack Growth Behaviour of Rail Track Material", Fracture and Strength of Solids VII, Key Engineering Materials Vols. 462-463 (2011) pp 1109-1114.

13. **N.A.Alang**, N.A.Razak, and A.K.Miskam, "Effect of Surface Roughness on Fatigue Life of Notched Carbon Steel", International Journal of Engineering & Technology IJET-IJENS Vol: 11 (2011) pp 203-206.
14. **N.A.Alang,** N.A.Razak and A.S.Sulaiman, "Determination of Burst Pressure of API Steel Pipe using Stress Modified Critical Strain Model", 1st International Conference on Mechanical Engineering Research, ICMER, (2011).
15. N.A.Razak, A.S.Sulaiman, **N.A.Alang**, "Interaction Effect of Pressurized Lamination Pipe by Using 2D Finite Element Analysis", 1st International Conference on Mechanical Engineering Research, ICMER, (2011).
16. M.F.Hassan, M.Mailah, R.Junib, and **N.A.Alang**, " Vibration Suppression of a Handheld Tool Using Intelligent Active Force Control (AFC)", Proceedings of the World Congress on Engineering 2010 Vol II (WCE), 30th June 2010, London, UK.

List of Research / Project

1. Theoretical Study of Forced Ventilation of Passenger Vehicle Exposed to Tropical Climate, 2007. (Final Year Project Bachelor Degree Thesis)
2. Fatigue Crack Growth of Railway Track Materials, 2009 (Final Year Project Master Thesis)
3. Prediction of Long Term Static and Cyclic Creep Rupture and Crack Growth of Grade 92 Steel under Different Stress States (PhD Thesis)

Awards / Research / Achievements

1. Academic Excellent Award - Bachelor of Engineering (Mechanical)− UTM, 2007
2. Academic Excellent Award – Matriculation Program, Ministry of Higher Education, 2002
3. Handy Disc Coconut Palm Collector, TechRural 2012, Gold Medal