CURRICULUM VITAE

| NAME | Dr. Mohd Afendi Bin Rojan | | | |
|------------------|--|--|--|--|
| ADDRESS (HOME) | 26, Jalan Tiga, Taman Pauh Indah, 02600 Arau, Perlis | | | |
| ADDRESS (OFFICE) | School of Mechatronic Engineering, Universiti | | | |
| | Malaysia Perlis, Pauh Putra Campus, 02600 Arau, | | | |
| | Perlis | | | |
| TEL NO. | +604-9885162 (OFFICE); +6013-4003531 (H/P) | | | |
| EMAIL | afendirojan@unimap.edu.my | | | |
| WEBSITE | www.afendirojan.wordpress.com | | | |
| AGE | 33 | | | |
| GENDER | Male | | | |
| NATIONALITY | Malaysia | | | |
| MARITAL STATUS | Married | | | |
| DATE OF BIRTH | 9 July 1981 | | | |
| IC NO. | 810709-03-5003 | | | |

EDUCATIONAL BACKGROUND

| DATE | April 2008 ~ June 2011 |
|----------------|---|
| INSTITUTE | Graduate School of Systems and Information Engineering, University of |
| | Tsukuba, Japan |
| FIELD OF STUDY | Engineering of Mechanics & Energy |
| LEVEL | PhD (Doctor of Philosophy of Engineering) |
| | |
| DATE | April 2006 ~ March 2008 |
| INSTITUTE | Graduate School of Systems and Information Engineering, University of |
| | Tsukuba, Japan |
| FIELD OF STUDY | Engineering of Mechanics & Energy |
| LEVEL | Master's Degree (Master of Engineering) |
| | |
| DATE | April 2001 ~ March 2006 |
| INSTITUTE | Faculty of Engineering System, University of Tsukuba, Japan |
| FIELD OF STUDY | Engineering Systems (Energy) |
| LEVEL | Bachelor's Degree (Bachelor of Engineering) |

PROFESSIONAL EXPERIENCES

2011 ~

Senior Lecturer, Mechanical Engineering Program Chair

Fellow

School of Mechatronic Engineering, Universiti Malaysia Perlis

2007~2011

School of Mechatronic Engineering, Universiti Malaysia Perlis

PUBLICATIONS

- 1. Mohd Afendi, Effect of Bond Thickness, LAP GmbH & Co. KG (ISBN 978-3-8465-1631-7), 2012.
- MM Khalil, AB Shahriman, Khairunizam Wan, MR Zuradzman, Mohd Afendi, EM Cheng, NB Shafriza, SK Zaaba, Development of gate opening decision support for Arau Canal water level control. Australian Journal of Basic & Applied Sciences 8 (4), 2014.
- ML Norzan, AB Shahriman, BMT Shamsul, BM Deros, AS Rambely, Khairunizam Wan, YG Ng, Mohd Afendi, EM Cheng, NB Shafriza, SK Zaaba, Overcoming Issues of Oil Palm Plantations Manual Work with Ergonomic and Engineering Considerations. Australian Journal of Basic & Applied Sciences 8 (4), 2014.
- MM Khalil, AB Shahriman, Khairunizam Wan, MR Zuradzman, Mohd Afendi, EM Cheng, NB Shafriza, SK Zaaba, Study of Northern Malaysia Canal monitoring and effect of automatic gate control system. Australian Journal of Basic & Applied Sciences 8 (4), 2014.
- Abu Bakar Shahriman, Siti Khadijah, Wan Khairunizam, Wan Ahmad, Syed Waseem Ahmad Sharifah Roohi, Desa Hazry, Abdul Karim Ahmad Helmy, Shafriza Nisha, Ee Meng Cheng, Mohd Afendi, CFD Analysis on Mismatched End-to-end Internal Diameter of RSVG Models. American-Eurasian Network for Scientific Information (AENSI), 2014.
- 6. Long Lee Hoi, Abu Bakar Shahriman, Yaacob Sazali, Mohamad Razlan Zuradzman, Wan Khairunizam, Wan Ahmad, IB Zunaidi, Ee Meng Cheng, Siti Khadijah, Shafriza Nisha, Mohd Afendi, Syed Waseem Ahmad Sharifah Roohi, In vitro evaluation of finger's hemodynamics for vein graft surveillance using electrical bio-impedance method. American-Eurasian Network for Scientific Information (AENSI), 2014.
- M.S. Abdul Majid, M. Afendi, R. Daud, A.G. Gibson, T.A. Assaleh, J.M. Hale & M. Hekman, Acoustic Emission Monitoring of Multiaxial Ultimate Elastic Wall Stress Tests of Glass Fibre-reinforced Epoxy Composite Pipes. Advanced Composite Materials. DOI:10.1080/09243046.2013.871175. JCR, IF (2012):0.358.
- Mohd Afendi, Nur Athirah, M.S. Abdul Majid, R. Daud and Tokuo Teramoto, Experimental and Numerical Investigation of V-Shaped Epoxy Adhesive Joint. *Journal of Mechanical Engineering & Sciences* (*JMES*). 2013. DOAJ Indexed. Accepted for publication.
- M.S. Abdul Majid, R. Daud, M. Afendi, E.M. Cheng, A.G. Gibson and M. Hekman. Stress-Strain Response Modelling of Glass Fibre Reinforced Epoxy Composite Pipes under Multiaxial Loadings. *Journal of Mechanical Engineering & Sciences (JMES)*. 2013. DOAJ Indexed. Accepted for publication.
- R. Daud, M.S. Abdul Majid , M. Afendi, A.K. Ariffin, S. Abdullah. Investigation of Elastic Stress Shielding Damage Interaction Based on Fitness For Service (FFS) Codes. *Journal of Mechanical Engineering & Sciences (JMES)*. 2013. DOAJ Indexed. Accepted for publication.

- Mohd Afendi, M.S. Abdul Majid, Ruslizam Daud, A. Abdul Rahman and Tokuo Teramoto, Strength Prediction and Reliability of Brittle Epoxy Adhesively Bonded Dissimilar Joint, *International Journal of Adhesion and Adhesives*, 45, pp. 21-31, 2013. JCR, IF: 1.928 (5Y).
- Mohd Afendi, Tokuo Teramoto and Ruslizam Daud, Prediction of Strength and Failure for Brittle Epoxy Adhesive Joints of Dissimilar Adherends, *Journal of the Japanese Society for Experimental Mechanics*, **11**, pp. 181-186, 2011. ISSN: 1346-4930.
- Mohd Afendi, Tokuo Teramoto and Hairul Bin Bakri, Strength Prediction of Epoxy Adhesively Bonded Scarf Joints of Dissimilar Adherends, *International Journal of Adhesion and Adhesives*, **31**, pp. 402-411, 2011. JCR, IF: 1.928 (5Y).
- Mohd Afendi and Tokuo Teramoto, Fracture Toughness Test of Epoxy Adhesive Dissimilar Joint with Various Adhesive Thicknesses, *Journal of Solid Mechanics and Materials Engineering (JSME)*, 4 (7), pp. 999-1010, 2010. ISSN: 1880-9871.
- Mohd Afendi and Tokuo Teramoto, Effect of Bond Thickness on Fracture Behavior of Interfacial Crack in Epoxy Adhesive Joint of Dissimilar Materials, *Journal of The Adhesion Society of Japan*, 45 (12), pp. 471-477, 2009. ISSN: 0916-4812.

| No. | Name | Programme | Title | Academic | Status | Super |
|-----|-----------------------|-----------|-----------------------------------|-----------|----------|-------|
| | | | | Session | | visor |
| 1. | Mohd Mizan Bin Yob | MSc | Crashworthiness of an Energy | 2013/2014 | On-going | Co- |
| | | | Absorbing Structure | | | |
| 2. | Nurul Atikah Binti | MSc | Heat Treatment Effect on | 2013/2014 | On-going | Main |
| | Datu Derin | | Strength of Adhesive Joint | | | |
| 3. | Nor Bakyah Binti Abu | MSc | Effects of Bond Thickness on | 2013/2014 | On-going | Main |
| | | | Interfacial Fracture Toughness of | | | |
| | | | T-Joints in Fluidization Bed | | | |
| 4. | Muhammad | MSc | Mechanical Properties | 2013/2014 | On-going | Co- |
| | Haameem Bin Jameel | | Characterization Of A Novel | | | |
| | Ahamed | | Napier Grass Fibre Reinforced | | | |
| | | | Epoxy Composites Laminates | | | |
| 5 | Hawa Binti Ahmad | MSc | Effects Of Aging On Ultimate | 2013/2014 | On-going | Co- |
| | | | Elastic Wall Stress (UEWS) Test | | | |
| | | | Of Glass Fibre Reinforced Epoxy | | | |
| | | | (GFRE) Pipes Subjected To | | | |
| | | | Impact Loading | | | |
| 6. | Siti Nurhashima Binti | MSc | Humidity Effects On The | 2013/2014 | On-going | Main |
| | Mohd Isa | | Mechanical Characterization Of | | | |

POSTGRADUATES SUPERVISION

ID: IJENS-1049-Afendi

| | | | Adhesive T-Joint In Fluidization | | | |
|-----|-----------------------|---------|----------------------------------|-----------|-----------|------|
| | | | Bed | | | |
| 7. | Izzawati Binti | MSc | Mechanical Characterization Of | 2013/2014 | On-going | Main |
| | Basirom | | Adhesive T-Joint In Fluidization | | | |
| | | | Bed At Elevated Temperatures | | | |
| 8. | Mohd Faizi Bin | MSc | Mechanical Characterization Of | 2013/2014 | On-going | Main |
| | Baharudin | | Adhesive T-Joint In Fluidization | | | |
| | | | Bed At Elevated Temperatures | | | |
| 9. | Azri Hafizi Bin Adnan | MSc | Mechanical Characterization of | 2013/2014 | On-going | Co- |
| | | | Adhesive T-Joint In Fluidization | | | |
| | | | Bed At Elevated Temperatures | | | |
| 10. | Muhammad Azrie | MSc | Mechanical Properties and | 2013/2014 | On-going | Main |
| | Husainy bin Mohd | | Fracture of Friction Stir Welded | | | |
| | Jasri | | Aluminium Alloy 5083 | | | |
| 11. | Prenesh Krishnan | PhD | Design and Development of a | 2012/2013 | On-going | Co- |
| | | | Performance Monitoring System | | | |
| | | | for Composite Pipes Under | | | |
| | | | Multiaxial Loadings | | | |
| 12. | Ku Hafizan Bin Ku | MSc | Durability & Microwave | 2012/2013 | On-going | Main |
| | Bahaudin | | Non-destructive Evaluation of | | | |
| | | | Composite/Aluminum Hybrid | | | |
| | | | Joints for Light-weight | | | |
| | | | Automotive Structures. | | | |
| 13. | Nur Athirah Binti Mat | MSc | Closed-form Solutions and | 2012/2013 | On-going | Main |
| | Nawi | | Stress Analysis of Adhesively | | | |
| | | | Bonded Dissimilar Joint | | | |
| 14. | Abdullah Bin Abdul | MSc/PhD | Adhesive Bonding of Urea | 2011/2012 | On-going | Main |
| | Rahman | | Granulator Fluidization Bed | | | |
| 15. | Masniezam Bin | MSc | An Energy Absorption | 2011/2012 | Completed | Co- |
| | Ahmad | | Characterization of Improved | | | |
| | | | Thin-walled Tube Under | | | |
| | | | Dynamic Impact Loading | | | |
| | | | | | | |

AWARDS

2013

- Gold medal: Prototype of Compact Micro-flexural Fatigue Testing Machine, UniMAP 2013 Invention & Research Expo.
 - Gold medal: New Adhesive from Recycle Polystyrene, UniMAP 2013

Invention & Research Expo.

- Silver medal: i-Harvester: Cost Effective and No More Back Pain, an Initiative to Ensure Food Security by Ease and Efficiency, Malaysia Technology Expo 2013
- Bronze medal: Prototype of Compact Micro-flexural Testing Machine, i-ENVEX 2013
- 2012
- Anugerah Kecemerlangan Penyelidikan 2012: Intelligent Irrigation and Flood Management System Using renewable Hybrid Powered and Wireless Control System.
 - Bronze medal: Intelligent Irrigation and Flood Management System Using renewable Hybrid Powered and Wireless Control System, Malaysia Technology Expo 2012.
 - Silver medal: Prototype of Compact Micro-flexural Testing Machine, UniMAP 2012 Invention & Research Expo.

TEACHING

- 1. 2013/2014 Academic Session
 - ENT 347/3 Finite Element Methods (FEM)
- 2. 2012/2013 Academic Session
 - ENT 347/3 Finite Element Methods (FEM)
 - ENT 144/2 Machining Skills
- 3. 2011/2012 Academic Session
 - ENT 352/3 Computer Aided Engineering Design (CAED)
 - ENT 467/3 Finite Element Analysis (FEA)

CONSULTATION AND SERVICES

| 2013 | Internal Examiner (PhD): Riyadh Azzawi Badr, <i>Study the Effect of Surface Roughness on the</i> |
|-----------|--|
| | Friction Coefficient and Wear between the Surfaces Sliding. |
| 2011 | External Examiner for Bengkel Pemasangan dan Penilaian Soalan Peperiksaan Akhir Bagi |
| | Jabatan Kejuruteraan Mekanikal Tahap 1, Tahap 2 & Tahap 3 Politeknik, MOHE, June 2011. |
| 2011-2013 | External Examiner for Penaksiran Program Jabatan Politeknik, MOHE. |