

CURICULUM VITAE

Name : Mohd Akramin Bin Mohd Romlay

Designation : Senior Lecturer

Research Group: Structural Materials and Degradation (SMD)

Department : Fakulti Kejuruteraan Mekanikal, Universiti Malaysia Pahang, Malaysia.

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ACADEMIC QUALIFICATION

Universiti Kebangsaan Malaysia, Bangi, MALAYSIA, Mechanical Engineering, DOCTORAL DEGREE, 2016

Universiti Kebangsaan Malaysia, Bangi, MALAYSIA, Mechanical Engineering, MASTERS DEGREE, 2008

Universiti Teknologi Malaysia (Skudai), MALAYSIA, Mechanical-Automotive Engineering, BACHELOR DEGREE, 2004

EXPERTISES

Finite Element Method/Analysis

Structural Integrity Analysis

Probabilistic Finite Element Method

Fatigue Analysis

Numerical Analysis

LIST OF RESEARCH GRANTS

List of Research Project as Principle Research

1. RDU170124 Formulation of Initial Flaw Size for New Crack Growth under Fatigue Loading
2. RDU170383 Development Of The Overlay Formulation In Finite Element Model
3. RDU090362 Development of Probabilistic Analysis for Cracked Structures Using Finite Element Method

List of Research Projects as Co-Researcher

1. RDU1803120 Fluid-Structure Interaction Of Human Left Ventricle And Blood Flow During Myocardial Infarct Extension
2. RDU100373 Development of Probabilistic Finite Element Analysis for Lumbar Spine Biomechanics
3. RDU090364 Development of Aneurysm Rupture Prediction Method Using Fracture Mechanics Analysis

LIST OF PUBLICATIONS

High Impact Journal

1. M.S. Shaari, A.K. Ariffin, Akiyuki Takahashi, S. Abdullah, Masanori Kikuchi and **M.R.M. Akramin**. 2017. Fatigue crack growth analysis on square prismatic with embedded cracks under tension loading. Journal of Mechanical Engineering and Sciences (JMES). Volume 11, Issue 1, pp. 2511-2525.

2. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M. & Abdullah, S. 2016. Sampling method in probabilistic S-version finite element analysis for initial flaw size. *Journal of the Brazilian Society of Mechanical Sciences and Engineering* (1-9). (Journal Ranking: Q3)
3. M.S. Shaari, **M.R.M. Akramin**, A.K. Ariffin, S. Abdullah and Masanori Kikuchi. 2016. Prediction of fatigue crack growth for semi-elliptical surface cracks using S-version fem under tension loading. *Journal of Mechanical Engineering and Sciences (JMES)*. Volume 10, Issue 3, pp. 2375-2386.
4. **Akramin, M. R. M.**, Shaari, M. S., Ariffin, A. K., Kikuchi, M. & Abdullah, S. 2015. Surface Crack Analysis under Cyclic Loads Using Probabilistic S-Version Finite Element Model. *Journal of the Brazilian Society of Mechanical Sciences and Engineering* 37(6): (1851-1865). (Journal Ranking: Q3)
5. **Akramin, M. R. M.**, Alshoaibi, A., Hadi, M. S. A., Ariffin, A. K. & Mohamed, N. a. N. 2007. Probabilistic Analysis of Linear Elastic Cracked Structures. *Journal of Zhejiang University: Science A* 8(11): 1795-1799. (Journal Ranking: Q2)

Published Journal Papers

1. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2014. Fatigue Crack Growth Analysis of Semielliptical Surface Crack. *Applied Mechanics and Materials* 471(293-298).
2. Zulkifli, A., Ariffin, A. K. & **Akramin, M. R. M.** 2014. Probabilistic Model of Surface Crack on the Lumbar Vertebra. *Applied Mechanics and Materials* 471(299-305).
3. **Akramin, M. R. M.**, Zulkifli, A. & Mazwan Mahat, M. 2011. Reliability Analysis of Uncertain Input Variables for Cracked Structures. *Applied Mechanics and Materials*. 52-54: 1358-1363.
4. **Akramin, M. R. M.**, Ariffin, A. K., Alshoaibi, A., Hadi, M. S. A., Huszni, S. & Mohamed, N. a. N. 2008. Probabilistic Finite Element for Fracture Mechanics. *HKIE Transactions* 15(2): 1.
5. Ariffin, A. K., **Akramin, M. R. M.**, Huszni, S., Abdullah, S. & Ghazali, M. J. 2008. Probabilistic Analysis of Cracked Structures with Uncertainty Parameters. *Advanced Materials Research*. 33-37 PART 1: 223-228.

Presented Papers in International and National Conference

1. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Shaari, M. S. 2015. Probabilistic Life Assessment of Semi-Elliptical Surface-Cracks under Cyclic Tension and Bending. *9th International Conference on Numerical Analysis in Engineering*. Batam, Kepulauan Riau-Indonesia, 27th - 29th August 2015.
2. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2013. Coupled Reliability and S-Version Finite-Element Model for Probabilistic Distribution of Surface Crack Growth under Constant Amplitude Loading. *5th Asia Pacific Congress On Computational Mechanics & 4th International Symposium On Computational Mechanics, Singapore*.
3. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2013. Probabilistic Distribution of Surface Crack Growth Analysis with Uncertain Parameters. *8th International Conference on Numerical Analysis in Engineering*. Pekanbaru, Riau, Indonesia, 13 - 14 May 2013.

4. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S., Nikabdullah, N. & Shaari, M. 2012. Probabilistic Analysis Based on S-Version Finite Element Method of Surface Crack Growth. *10th International Probabilistic Workshop, Germany*.
5. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2012. Fatigue Crack Growth Analysis of Semielliptical Surface Crack. *4th International Conference on Noise, Vibration and Comfort (NVC). Kuala Lumpur, Malaysia, 26-29 November 2012*.

Awards

1. **Best Paper Award: Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Shaari, M. S. 2015. Probabilistic Life Assessment of Semi-Elliptical Surface-Cracks under Cyclic Tension and Bending. *9th International Conference on Numerical Analysis in Engineering. Batam, Kepulauan Riau-Indonesia, 27th - 29th August 2015*.
2. **Excellent PhD thesis award.** Akramin, M. R. M. 2016. Analysis of Fatigue Surface Crack Using the Probabilistic S-Version Finite Element Model. PhD Thesis, Mechanical & Materials Engineering, Universiti Kebangsaan Malaysia.