

Curriculum Vitae



Name	Dr. Abdul Halim Abdullah	Nationality	Malaysia
Date of Birth	05-02-1982	Gender	Male
Age	34	Marital Status	Married
Current Position	Senior Lecturer		
Office Address	Faculty of Mechanical Engineering, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, MALAYSIA		
Home Address	No. 37, Jalan Pulau Angsa U10/32G, Seksyen U10, 40170 Shah Alam, Selangor MALAYSIA		
Phone/Fax	Mobile: +60-16-6651052 Office: +60-3-5543-6468 Fax: +60-3-5543-5160		
E-mail: halim.fkm.uitm@gmail.com , halim471@salam.uitm.edu.my			
Academic Background			
Year	Contents		
2012- 2016	Interdisciplinary Graduate School of Engineering Sciences, Kyushu University Received the degree of Doctor of Engineering		
2007-2009	Faculty of Mechanical Engineering, Universiti Teknologi Malaysia Received the degree of Master of Engineering (Mechanical) – <i>by research</i>		
2001-2005	School of Mechanical Engineering, Universiti Sains Malaysia Received the degree of Bachelor of Engineering (Hons) Mechanical		
Working Experience(s)			
Year	Contents		
2008~Present	Universiti Teknologi MARA, Malaysia Senior Lecturer at the Faculty of Mechanical Engineering (2013-present) Lecturer at the Faculty of Mechanical Engineering (2009-2013) Junior Lecturer at the Faculty of Mechanical Engineering (2008-2009)		
2006	Department Standard of Malaysia, Ministry of Science, Technology and Innovation Science Officer (Accreditation Division)		
2005~2006	GG Circuit Industries Sdn. Bhd. Malaysia Pre-Production Engineer (Engineering Department)		

Professional Position / Professional Bodies / Member of Society

- Committee, Centre of Excellence for Design, Engineering and Manufacturing (CADEM), UiTM
- Committee, Biomechanical & Clinical Engineering (BioMEC) Research Interest Group UiTM
- Board of Engineers Malaysia (BEM)
- International Association of Engineers (IAENG).
- International Association of Computer Science and Information Technology (IACSIT)

Teaching and Supervising Experience

- Mechanical Engineering subjects: Finite Element Method, Numerical Method and Applications, CAD/CAM, Strength of Materials, Mechanical Engineering Design
- Supervision: Master student(s) – *by research* (1 graduated, 1 on-going)

Achievements & Awards

<i>Achievements/Awards</i>	<i>Year</i>	<i>Competition/Exhibition/Bodies</i>	<i>Level</i>
Silver Medal	2013	Invention, Innovation & Design Expo 2013 Project member – “Basic Database Program for Youth Anthropometry (A Case Study in Universiti Teknologi Mara)	National
Bronze Medal	2012	Invention, Innovation & Design 2012 Project Member – “A New Design of A Superbike Paddock Stand”	National
Silver Medal	2012	Pecipta 2012 Project member – “A New Design of A Superbike Paddock Stand”	International
Silver Medal	2011	Malaysia Technology Expo 2011 (MTE 2011), 17 – 19 February 2011, Kuala Lumpur Convention Centre, MALAYSIA Project member – “A New Design of A Superbike Paddock Stand”	International
Gold Medal	2010	Invention, Innovation & Design 2010-Special Edition (IID2010-SE), 12 – 14 October 2010, Universiti Teknologi MARA, MALAYSIA Project member – “A New Design of A Superbike Paddock Stand”	University

Silver Medal	2010	Invention, Innovation & Design 2010-Special Edition (IID2010-SE), 12 – 14 October 2010, Universiti Teknologi MARA, MALAYSIA Project leader – “Innovation In Prosthesis Stem Design Of Total Hip Arthroplasty For Asian Population”	University
Anugerah Khidmat Cemerlang UiTM	2010	Anugerah Khidmat Cemerlang 2010	University
Consultancy(s)			
<ul style="list-style-type: none"> • DreamEDGE Sdn. Bhd. Malaysia : CATIA V5 Fundamental Training, 2011 • Cytron Technologies Sdn. Bhd. Malaysia: Microchip Workshop, 2010-2011 			
Thesis / Dissertation / Project			
<i>Degree</i>		<i>Title / Supervisor</i>	
Doctor of Engineering Kyushu University, Japan, 2016		Biomechanical Analysis of Lower Limbs with Hip Arthroplasties using CT-based Finite Element Method Supervisor: Assoc. Prof. Dr. Mitsugu Todo	
M.Eng (Mechanical) Universiti Teknologi Malaysia, 2009		Effects of Prosthesis Stem Lengths and Tapers on Stress Distribution in Cemented Hip Arthroplasty Supervisor(s): Prof. Dr. Mohd Nasir Tamin, Dr. Mohammed Rafiq Abdul Kadir	
B.Eng (Hons) Mechanical Universiti Sains Malaysia, 2005		Design and Fabrication of Biomass Fluidized Bed Gasifier System Supervisor: Assoc. Prof. Dr. Zainal Alimuddin Zainal Alauddin	
Research Grant(s)			
<ol style="list-style-type: none"> 1. Exploratory Research Grant Scheme (ERGS), Malaysia, Investigation of Binaural Beats and Isochronic Tones on Brain Wave Frequency Patterns, 2011, RM 77,000.00 (Project Member) 2. Excellent Fund Grant, UiTM, Development of Anthropometric Database of Malaysian Youth, 2011, RM6,500.00 (Project Member) 3. Excellent Fund Grant, UiTM, Effects of Screw Length on The Primary Stability Of Anterior Cruciate Ligament Reconstruction, 2011, RM6,000.00 (Project Member) 4. Fundamental Research Grant Scheme (FRGS), Malaysia, Basic Study of Interference Screw Fixation Stability in Anterior Cruciate Ligament Reconstruction, 2010, RM 50,740.00 (Project Leader) 5. Excellent Fund Grant, UiTM, Primary Stability of Cemented Hip Arthroplasty: Effects of Cement Mantle Thickness, 2010, RM6,000.00 (Project Leader) 			

Publication(s)

• JOURNAL

1. Mitsugu Todo, **Abdul Halim Abdullah**, Yasuharu Nakashima and Yukihide Iwamoto, "Prediction of Bone Resorption in Lower Limbs with Osteoarthritis and Hip Arthroplasty," *The Bone & Joint Journal*, vol. 98, supp. 1, pp. 4-4, Jan. 2016.
2. Mitsugu Todo, **Abdul Halim Abdullah**, Yasuharu Nakashima and Yukihide Iwamoto, "Risk of Femoral Fracture in Hip Arthroplasties during Falling and Twisting Configurations: A Finite Element Study," *The Bone & Joint Journal*, vol. 98, supp. 1, pp. 5-5, Jan. 2016.
3. **Abdul Halim Abdullah** and Mitsugu Todo, "Effects of Hip Arthroplasties on Bone Adaptation in Lower Limbs: A Computational Study," *Journal of Biosciences and Medicines*, vol. 3, pp. 1-7, Apr. 2015.
4. **Abdul Halim Abdullah** and Mitsugu Todo, "Stress Evaluation of Lower Limbs with Hip Osteoarthritis and Hip Arthroplasty," *Journal of Medical and Bioengineering*, vol. 4, no. 2, pp. 100-104, Apr. 2015.
5. **Abdul Halim Abdullah** and Mitsugu Todo, "Effects of Total Hip Arthroplasty on Stress Adaptation and Bone Remodeling in Lower Limbs," *Evergreen*, vol. 2, issue 1, pp. 6-11, Mar. 2015.
6. **Abdul Halim Abdullah** and Mitsugu Todo, "Prediction of Damage Formation in Total Hip Arthroplasty using Finite Element Method," *Engineering Sciences Reports, Kyushu University*, vol. 36, no. 2, pp. 6-9, Feb. 2015.
7. **Abdul Halim Abdullah** and Mitsugu Todo, Yasuharu Nakashima and Yukihide Iwamoto, "Risk of Femoral Bone Fractures in Hip Arthroplasties during Sideway Falls," *International Journal of Applied Physics and Mathematics*, vol. 4, no. 4, pp. 286-289, July 2014.
8. Shahrul Hisyam Marwan, **Abdul Halim Abdullah** and Jamaluddin Mahmud, "Frontal Impact Analysis of Human Skull for Accident Reconstruction", *International Journal of Enhanced Research in Science Technology & Engineering*, vol. 2, iss. 7, pp. 58-64, 2013.
9. Muhamad Firdaus Selamat, **Abdul Halim Abdullah**, Helmi Rashid, Alias Mohd Saman and Giha Tardan, "Computational Analysis of Cementless Hip Arthroplasty for Different Prosthesis Stem Tapers", *Advanced Science Letter*, vol. 19, no. 12, pp. 2931-2934, 2013.
10. **Abdul Halim Abdullah**, Muhamad Fauzi Othman, Helmi Rashid, Jamaluddin Mahmud, Alias Mohd Saman and Ahmad Zainalabidin Zolkepli, "Effects of Interference Screw Lengths on the Primary Stability of Anterior Cruciate Ligament Reconstruction", *Advanced Science Letter*, vol. 19, no. 3, pp. 873-876, 2013.
11. Mohd Hafiz Mohd Noh, Nik Mohamad Amirudin Nik Lah, Helmi Rashid, Ahmad Hussein Abdul Hamid and **Abdul Halim Abdullah**, "Design and Development of a Portable Paddock Stand using CAD and CAE Tools", *Advanced Science Letter*, vol. 19, no. 3, pp. 775-779, 2013.
12. Shahrul Hisyam Marwan, **Abdul Halim Abdullah**, Jamaluddin Mahmud and Helmi Rashid, "Dynamic Analysis of Frontal Human Skull Using Finite Element Simulation", *Advanced Materials Research*, vol. 647, pp. 418-423, 2013.
13. Shahrul Hisyam Marwan, **Abdul Halim Abdullah**, Jamaluddin Mahmud, Muhammad Israr Abu Hasan and Nur Hanis Arzami, "The Development Of Three Dimensional Of Human Skull Model For Computational Analysis", *Advances In Biomedical Engineering*, vol. 14, pp. 75-80, 2012.

14. **Abdul Halim Abdullah**, Helmi Rashid, Jamaluddin Mahmud, Muhammad Fauzi Othman and Muhamad Widad Al-Jefri Ibrahim, "Effects of Screw Materials in Anterior Cruciate Ligament Reconstruction using Finite Element Analysis", *Procedia Engineering*, vol. 41, pp. 1614-1619, 2012.
15. Helmi Rashid, Mohd Khairol Anuar Mohd Ariffin, Mohd Hafiz Mohd Noh, **Abdul Halim Abdullah**, Ahmad Hussein Abdul Hamid, Mohammad Azzeim Mat Jusoh and Akbar Othman, "Design Review Of Scissors Lifts Structure For Commercial Aircraft Ground Support Equipment Using Finite Element Analysis", *Procedia Engineering*, vol. 41, pp. 1696-1701, 2012.
16. Helmi Rashid, **Abdul Halim Abdullah**, Mohd Hafiz Mohd Noh, Ahmad Hussein Abdul Hamid and Nur Marini Zainal Abidin, "Design Of A Superbike Paddock Stand Using CAD And CAE Tools", *International Journal of Automotive and Mechanical Engineering*, vol. 5, pp. 670-679, 2012.
17. **Abdul Halim Abdullah**, Nur Hanis Arzami, Helmi Rashid, Muhammad Israr Abu Hassan and Muhammad Adil Khattak, "Impact Biomechanics Analysis of Frontal Skull Fracture", *Advances in Biomedical Engineering*, Volume 13, pp. 263-267, 2012.
18. **Abdul Halim Abdullah**, Muna Salsabila Abdullah, Mohd Hafiz Mohd Noh, Ahmad Hussein Abdul Hamid and Muhammad Adil Khattak, "Biomechanical Analysis Of Buttress Screw Dental Implant", *Advances in Biomedical Engineering*, Volume 13, pp. 256-262, 2012.
19. Ishkrizat Taib, Shahrin Hisham Amirnordin, Rais Hanizam Madon, Norrizal Mustafa and **Abdul Halim Abdullah**, "The Flow Modeling in Stented Aneurysm under Hypertension Condition", *IERI Computers Letters*, vol. 1, no. 2, pp. 53-58, 2012.
20. H. Rashid, M.A.M Jusoh, M.H.M Noh, **A.H. Abdullah**, A.H.A. Hamid, A.M Saman, M.F.F.M Roslan and A. Othman, "Computer Aided Design and Engineering Simulation Opportunity in Design Optimization of a Superbike Paddock Stand", *IERI Computers Letters*, vol. 1, no. 2, pp. 75-81, 2012.
21. **Abdul Halim Abdullah**, Emmi Farisa Jaafar, Nursalbiah Nasir, Eli Nadia Abdul Latip and Giha Tardan, "Influences of Prosthesis Stem Lengths in Cementless Total Hip Arthroplasty", *Applied Mechanics and Materials*, vol. 52-54, 2011, pp. 2088-2093, 2011.
22. **Abdul Halim Abdullah**, Alias Mohd Saman, Mohd Asri Mohd Nor, Ishrizat Taib and Giha Tardan, "Effects of Prosthesis Stem Materials on Stress Distribution of Total Hip Replacement", *Advanced Materials Research*, vol. 129-131, pp. 343-347, 2010.
23. Alias Mohd Saman, **Abdul Halim Abdullah**, Mohd Asri Mohd Nor, Hasbullah Idris, "The Effects of Nodularity Distribution on Vertical Configuration Mould for Automotive Ductile Iron Casting" *Advanced Materials Research*, vol. 129-131, pp. 1059-1063, 2010.
24. **Abdul Halim Abdullah**, Mohd Asri Mohd Nor, Alias Mohd Saman, Mohd Nasir Tamin and Mohammed Rafiq Abdul Kadir, "Effects of Prosthesis Stem Tapers on Stress Distribution of Cemented Hip Arthroplasty", *IAENG Transaction on Engineering Technology Volume 5: Special Edition of the International Multiconference of Engineers and Computer Scientists 2010*, AIP Conf. Proc., vol. 1285, pp. 561-575, 2010.

- **CONFERENCE PROCEEDINGS**

1. **A.H. Abdullah** and M. Todo. Biomechanical Analysis of Femoral Fracture after Resurfacing Hip Arthroplasty. *Proceeding of the JSME 26th Biofrontier Symposium*, Fukuoka, Japan, 2-3 October 2015.

2. **A.H. Abdullah**, M. Todo and Y. Nakashima. Prediction of Bone Remodeling Mechanism in Lower Limbs with Different Hip Arthroplasties. *Proceeding of the 8th Asia-Pacific Conference on Biomechanics (AP Biomech 2015)*, Sapporo, Japan, 16-19 September 2015.
3. **A.H. Abdullah** and M. Todo. Analysis of Periprosthetic Fracture after Total Hip Arthroplasty under Different Falling Configurations. *Proceeding of the JSME 26th Computational Mechanics Division Conference (CMD 2013)*, Saga, Japan, 2-4 November 2013.
4. **Abdul Halim Abdullah**, Helmi Rashid, Mohd Nasir Tamin, Mohammed Rafiq Abdul Kadir and Giha Tardan, "A Review on Anthropometric Study of Total Hip Replacement for Asian Population", *2011 International Journal Conference on Engineering and Technology (CET 2011)*, 16 – 17 July 2011. Kota Kinabalu, MALAYSIA.
5. Nursalbiah Nasir, **Abdul Halim Abdullah**, Helmi Rashid and Mohd Fitri Shuib, "Anthropometric Study of Malaysian Youth (A Case Study in Universiti Teknologi MARA)", *2011 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2011)*, 05-06 December 2011. Pulau Pinang, MALAYSIA.
6. **Abdullah, A.H.**, Mohd Asri M.N., Alias M.S., Giha T., "Finite Element Analysis of Cemented Hip Arthroplasty: Influence of Stem Tapers", *Lecture Notes in Engineering and Computer Science: Proceedings of the International MultiConference of Engineers and Computer Scientists 2010*, IMECS 2010. Vol. III.17-19 March, 2010, Hong Kong.
7. Mohd Asri Mohd Nor, Alias Mohd Saman, **Abdul Halim Abdullah**, "Pitch-axis Robust Control Design for MIMO System Using Internal Model Control PID," *International Symposium on Robotics and Intelligent Sensors (IRIS 2010)*, Nagoya Japan.
8. **Abdul Halim Abdullah**, Alias Mohd Saman, Mohd Asri Mohd Nor and Giha Tardan, "Computational Analysis of Cemented Hip Arthroplasty using Triple Taper Prosthesis Stem," *1st National Postgraduate Seminar (NAPAS 2010)*, 6th – 7th July 2010. Shah Alam, Malaysia.
9. Alias Mohd Saman, **Abdul Halim Abdullah**, Mohd Asri Mohd Nor, Hasbullah Idris, "Microstructure and Hardness Study of Vertical Parted Ductile Iron Automotive Casting," *World Engineering Congress (WEC 2010)*, 2nd – 5th August 2010. Kuching, Malaysia.
10. Nor Azali Azmir, Ishkrizat Taib, **Abdul Halim Abdullah**, Mohammed Rafiq Abdul Kadir, "The Effect of Press Fit on Osseointegration of Acetabular Cup," *2010 International Conference on Advances in Mechanical Engineering (ICAME 2010)*, 2nd – 5th December 2010. Shah Alam, Malaysia
11. **Abdul Halim Abdullah**, Mohd Asri Mohd Nor and Alias Mohd Saman, "Stress and Strain Distribution in Cemented Total Hip Arthroplasty for Walking Load Case," *International Conference on Computer Technology and Development (ICCTD 2009)*, vol 2. 13th –15th November 2009, Kota Kinabalu Malaysia.
12. Alias Mohd Saman, **Abdul Halim Abdullah** and Mohd Asri Mohd Nor, "Computer Simulation Opportunity in Plastic Injection Mold Development For Automotive Part", *International Conference on Computer Technology and Development (ICCTD 2009)*, vol 1. 13th –15th November 2009, Kota Kinabalu Malaysia.

13. Mohd Asri Mohd Nor, **Abdul Halim Abdullah**, Alias Mat Saman, “Harmonic Balance Simulation for the Nonlinear Vibration Isolation System Using Negative Stiffness,” *The 2nd International Conference in Machine Vision (ICMV 2009)*, Dubai UAE.

14. **Abdul Halim Abdullah**, Mohammed Rafiq Abdul Kadir and Mohd Nasir Tamin, “Effects of Stem Lengths on Stress and Strain Distribution of Cemented Hip Arthroplasty,” *International Conference on Ergonomics (ICE 2007)*, 3rd – 5th December 2007, Kuala Lumpur Malaysia.

References

- Professor Dr Salmiah Kasolang
Dean
Faculty of Mechanical Engineering
Universiti Teknologi MARA
40450 Shah Alam, Selangor MALAYSIA
Tel: 603-55435161 Fax: +60-3-5543-5160
Email: salmiahk@salam.uitm.edu.my
- Associate Professor Dr. Mitsugu Todo
Research Institute for Applied Mechanics
Kyushu University
Kasuga 816-8580 Japan
Tel/Fax: +81-92-583-7762
Email: todo@riam.kyushu-u.ac.jp