Curriculum Vitae

Name	**Ts. Dr. Abdul Halim Abdullah**	Nationality	Malaysia
Current Position	Senior Lecturer		
Office Address	School of Mechanical Engineering, College of Engineering, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, MALAYSIA		
Phone/Fax	Mobile: +60-16-6651052 Office: +60-3-5543-6468 Fax: +60-3-5543-5160		
E-mail: halim471@uitm.edu.my, halim.fkm.uitm@gmail.com			
ORCID : https://orcid.org/0000-0002-8377-329X Scopus ID : https://www.scopus.com/authid/detail.uri?authorId=55886098400			

Academic Background

Year	Contents
2012- 2016	**Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Japan** Received the degree of Doctor of Engineering
2007-2009	**Faculty of Mechanical Engineering, Universiti Teknologi Malaysia** Received the degree of Master of Engineering (Mechanical) – *by research*
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 of Standards Malaysia, Ministry of Science, Technology and Innovation** Science Officer (Accreditation Division)
2005~2006	**GG Circuit Industries Sdn. Bhd. Malaysia** Pre-Production Engineering (PPE) Assistant Engineer

Professional Position / Professional Bodies / Member of Society

- Professional Technologist (Ts.) Biotechnology – PT17120022
- Graduate Technologist, Malaysia Board of Technologists (MBoT)
- Member, Board of Engineers Malaysia (BEM) (57196A)
- Member, International Association of Engineers (IAENG)
- Member, International Association of Computer Science and Information Technology (IACSIT)
- Editorial Board Member for International Journal of Current Research in Engineering and Technology (IJCRET), India (Dec 2017 – Dec 2019)
- Industrial Advisor (Penasihat Industri) for Diploma in Mechanical Engineering (Petrochemical), Politeknik Tun Syed Nasir Syed Ismail, Malaysia (since May 2017)
- Member, Centre of Excellence for Design, Engineering and Manufacturing (CADEM), UiTM
- Member, Biomechanical & Clinical Engineering (BioMeC) Research Group UiTM

Administration & Management Experience(s)

- Head, Biomechanical & Clinical Engineering (BioMeC) Research Group, Universiti Teknologi MARA
  12 July 2021 - present
- Head, Department of Strategic Partnership, UiTM Global, UiTM
  01 April 2021 - present
- Coordinator of Marketing Arms & Industry Liaison Officer, Academic Collaboration, Community & Alumni Network, Faculty of Mechanical Engineering, UiTM
  01 January 2020 – 31 March 2021
- Liaison Officer (Faculty of Mechanical Engineering), Office of International Affair, UiTM
  01 January 2020 – 31 March 2021
- Head, Center of Studies (Dynamics, Control & System Engineering), Faculty of Mechanical Engineering, UiTM
  01 April 2018 – 31 March 2019
- Coordinator of Student Development, Faculty of Mechanical Engineering, UiTM
  01 August 2016 – 31 July 2017
- Coordinator of Industrial Training & Local Networking, Faculty of Mechanical Engineering, UiTM
  01 August 2011 – 31 July 2012
- Coordinator of Industrial Training, Faculty of Mechanical Engineering, UiTM
  01 August 2010 – 31 July 2011

Achievements & Awards

Achievements/Awards	*Year*	*Competition/Exhibition/Bodies*	*Level*
Silver Award	2021	**Malaysia Technology Expo 2021 (MTE2021), International Expo on Inventions and Innovations, 22-26 February 2021** Project Member – "MyErat: Malaysia Exoskeleton Robotic Assisted Therapy"	International

Gold Award	2020	**31st International Invention, Innovation & Technology Exhibition (ITEX'20), 20-21 November 2020** Projek Leader – "RehabMaker: Assistive Device Prescription through Social Innovation"	International
Gold Award (Social Innovation Asia Awards)	2020	**Malaysia Technology Expo 2020 (MTE2020), The 19th International Expo on Inventions and Innovations, 20-22 February 2020** Project Leader – "Customized Orthothics in Assistive Adaptive Device Prescription for Disability Management"	International
Gold Award	2019	**Invention, Innovation & Design Exposition 2019 (IID 2019), 10-15 September 2019** Project Leader – "Development of Customized Prosthetics & Orthoses using 3D Printing Technology"	International
Silver Award	2019	**International Invention & Innovation Competition 2019 (InIIC 2019), 27 April 2019** Project Leader – "Customized Ankle Foot Orthosis for Cerebral Palsy & Stroke Patient"	International
Silver Award	2019	**International Invention & Innovation Competition 2019 (InIIC 2019), 27 April 2019** Project Leader – "Customized 3D printed Lower Limb Socket for Prosthetic Leg"	International
Bronze Award	2019	**International Student Affairs Invention, Innovation & Design Competition 2019 (ISAIID 2019), 26 March 2019** Project Leader – "3D Printed Lower Limb Socket for Prosthetic Leg"	International
Gold Medal Best of The Best	2018	**International Creative Design Competition 2018 (ICDC 2018), 29-30 October 2018** Project Leader – "Adjustable Ankle Foot Orthosis for Cerebral Palsy"	International
Innovative & Dedicated Research Technologist (Mechanical Engineering)	2018	**International Convention on Innovative Scientific Research Strategies**, 10-12 October 2018	International
Silver Medal	2018	**The 4th International Innovation, Design and Articulation 2018 (i-IDEA 2018), 24-26 April 2018** Project Leader – "Adjustable Ankle Foot Orthosis for Cerebral Palsy Patient"	International

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** 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** 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** 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

Research Grant(s)

1. Strategic Research Partnership (SRP) UI-UITM BISA 2021 Grant, Development of A Smart Bed Resting Ankle Foot Orthosis, 15 July 2021 – 14 July 2023, RM 17,850.00 (Project Leader) *100-RMC 5/3/SRP (037/2021)*
2. TVET Applied Research Grant Scheme (T-ARGS), Smart Adjustable Headrest for Total Body Involvement in Cerebral Palsy Children using 3D Printer, 1 July 2021 – 30 June 2022, RM 74,500.00 (Project Member) *KPT.JPP.PPPP.700-1 Jld 31 (91) - 1007/21.*
3. Geran Penyelidikan Kolaborasi Entiti Penyelidikan UiTM (KEPU), Study of Design for Additive Manufacturing (DfAM) for Coated Hip Implant, 15 July 2021 – 14 July 2023, RM 40,000.00 (Project Member) *600-RMC/KEPU 5/3 (009/2021)*
4. Strategic Research Partnership (SRP) Grant, Development of Life-Size Flexible Jig for Handheld 3D Scanner, 21 December 2020 – 20 December 2021, RM 20,000.00 (Project Leader) *100-RMC 5/3/SRP PRI (021/2020)*

5. Geran Penyelidikan Khas (GPK) UiTM, Design Optimization of Customized 3D Printed Socket for Transtibial Prosthetic Leg, 21 December 2020 – 20 December 2022, RM 20,000.00 (Project Leader) *600-RMC/GPK 5/3 (113/2020)*
6. Strategic Research Partnership (SRP) Grant, Assessment Analysis and Evaluation of 3D Scanner Flexible Jig, 21 December 2020 – 20 December 2021, RM 20,000.00 (Project Leader) *100-RMC 5/3/SRP (005/2020)*
7. Strategic Research Partnership (SRP) Grant, Manufacturing of Optimized Hip Implant System through Additive Manufacturing Technology, 21 December 2020 – 20 December 2021, RM 50,000.00 (Project Member) *100-RMC 5/3/SRP(012/2020)*
8. Geran Penyelidikan UMP-IIUM-UiTM Sustainable Research Collaboration 2020, IoT-Based Visually Impaired Community (VIC) Geospatial Tracking with Swarming RoVision (SR), 23 December 2020 – 22 December 2022, RM 20,000.00 (Project Member)
9. Geran Penyelidikan MyRA, Multilevel Digital Microfluidics Device Employing Polymide Film as Both Substrate and Dieletric Components, 21 December 2020 – 20 December 2022, RM 20,000.00 (Project Member) *600-RMC/MyRA 5/3/LESTARI (010/2020)*
10. Geran Penyelidikan Khas (GPK), UiTM, Biodynamics Modeling of Human Lower Limbs Implanted with Knee Prosthesis under Ambient Condition, 21 December 2020 – 20 December 2022, RM 20,000.00 (Project Member) *600-RMC/GPK 5/3 (098/2020)*
11. Fundamental Research Grant Scheme (FRGS), Malaysia, Identifying New Hyperelastic Constitutive Model via Integration of Multiple Models in Medical Hybrid Biomaterials, 1 September 2019 – 31 August 2021, RM109,700.00 (Project Member) *600-IRMI/FRGS 5/3 (363/2019)*
12. Fundamental Research Grant Scheme (FRGS), Malaysia, Numerical Synthesis and Rheological Characterization of Complex Biofluid, 1 September 2019 – 31 August 2021, RM87,200.00 (Project Member) *600-IRMI/FRGS 5/3 (435/2019)*
13. Fundamental Research Grant Scheme (FRGS-RACER), Malaysia, Fundamental Process Analysis of 3D-Printing Technology in Customization of Assistive Adaptive Device Prescription in Rehabilitation Medicine, 1 September 2019 – 31 August 2021, RM51,200.00 (Project Member) *600-IRMI/FRGS-RACER 5/3 (106/2019)*
14. Fundamental Research Grant Scheme (FRGS-RACER), Malaysia, Prediction on the Biomechanical Performance of Posterior Lumbar Interbody Fusion using CT-Based Finite Element Model, 1 September 2019 – 31 August 2021, RM70,000.00 (Project Member) *RACER/1/2019/TK03/UMP//2*
15. Fundamental Research Grant Scheme (FRGS-RACER), Malaysia, Parameters optimization of Porous Architected Posterior Lumbar Interbody Fusion Cage based on Finite Element Approach for Minimized Subsidence, 1 September 2019 – 31 August 2021, RM40,000.00 (Project Member) *RACER/1/2019/TK03/UTHM//1*
16. Sinergi Research Fund (Sinergi), Malaysia, Prototype Development of Wireless Transmission System for Surface Electromyography (sEMG), 1 May2019 – 30 April 2020, RM35,000.00 (Project Member) *600-IRMI/DANA 5/3/SINERGI (004/2019)*
17. Fundamental Research Grant Scheme (FRGS), Malaysia, Characterizing polymerization shrinkage surface displacement in the presence of debonding and voids in resin composite restoration, 1 January 2019 – 31 December 2021, RM185,300.00 (Project Member) *600-IRMI/FRGS 5/3 (030/2019)*

18. Prototype Research Grant Scheme (PRGS), Malaysia, Prototyping of Customized High Flexion Femoral Component for Total Knee Arthroplasty, 1 January 2019 – 31 December 2020, RM138,000.00 (Project Member) *600-IRMI/PRGS 5/3 (010/2019)*
19. Fundamental Research Grant Scheme (FRGS), Malaysia, Mathematical Modelling Theory of Metal Doped Hydroxyapatite Artificial Cranium Impact Behaviour, 1 January 2019 – 31 December 2020, RM88,000.00 (Project Member) *600-IRMI/FRGS 5/3 (162/2019)*
20. Bestari Perdana Research Grant Scheme (Bestari Perdana), UiTM, Bone Remodeling and Adaptation in Operated and Non-Operated Limbs after Hip Arthoplasty, 2018, RM25,000.00 (Project Leader) *600-IRMI/PERDANA 5/3 BESTARI (103/2018)*
21. Bestari Perdana Research Grant Scheme (Bestari Perdana), UiTM, Tool Performance Verification in Friction Stir Welds by Finite Element Modeling, 2018, RM30,000.00 (Project Member) *600-IRMI/PERDANA 5/3 BESTARI (073/2018)*
22. Lestari Research Grant Scheme (Lestari), UiTM, Prediction of Femoral Bone Fractures in Hip Arthroplasties, 2017, RM20,000.00 (Project Leader) *600-IRMI/MyRA 5/3/LESTARI (025/2017)*
23. 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) *600-RMI/ERGS 5/3 (15/2011)*
24. Excellent Fund Grant, UiTM, Development of Anthropometric Database of Malaysian Youth, 2011, RM6,500.00 (Project Member) *600-RMI/ST/DANA 5/3/Dst (143/2011)*
25. Excellent Fund Grant, UiTM, Effects of Screw Length on The Primary Stability of Anterior Cruciate Ligament Reconstruction, 2011, RM6,000.00 (Project Member) *600-RMI/ST/DANA 5/3/Dst (147/2011)*
26. 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) *600-RMI/ST/FRGS 5/3/Fst (162/2010)*
27. Excellent Fund Grant, UiTM, Primary Stability of Cemented Hip Arthroplasty: Effects of Cement Mantle Thickness, 2010, RM6,000.00 (Project Leader) *600-RMI/ST/DANA 5/3/Dst (229/2009)*

Publication(s)

JOURNAL(S)

1. Nurnedilah Mohammad Kata, Nur Afikah Zainal Abidin, Aishah Umairah Abd Aziz, **Abdul Halim Abdullah**, Ng Bing Wui, Ahmad Kafrawi Nasution, Mohammed Rafiq Abdul Kadir, Muhammad Hanif Ramlee, "Finite Element Analysis of External Fixator for Treating Femur Fracture: Analysis on Stainless Steel and Titanium as Material of External Fixator," *Malaysian Journal of Fundamental and Applied Sciences*, vol. 17, pp. 274-284, 2021.
2. Nor Aiman Nor Izmin, Fatin Hazwani, Mitsugu Todo and **Abdul Halim Abdullah**, "Risk of Bone Fracture in Resurfacing Hip Arthroplasty at Varus and Valgus Implant Placements," *International Journal of Technology*, vol. 11, No. 5, pp. 1025-1035, 2020.
3. Maizatul Afirah Ahmad, Nurul Nadhirah Mohamed Elias Zulkifli, Solehuddin Shuib, Shahrul Hisham Sulaiman and **Abdul Halim Abdullah**, "Finite Element Analysis of Proximal Cement Fixation in Total Hip Arthroplasty," *International Journal of Technology*, vol. 11, No. 5, pp. 1046-1055, 2020.
4. Muhammad Hazli Mazlan, Mitsugu Todo, Ida Laila Ahmad, Hiromitsu Takano, Ikuho Yonezawa, **Abdul Halim Abdullah**, Muhammad Hilmi Jalil and Nur Dalilah Diyana Nordin, "Biomechanical

Evaluation of Two Different types of Interbody Cages in Posterior Lumbar Interbody Fusion," International Journal of Emerging Trends in Engineering Research, vol. 8, Iss 11.2, 2020.

5. Nabila Aznan, Muhammad Syahmi Yusof, **Abdul Halim Abdullah**, Shahrul Hisham Sulaiman and Mitsugu Todo, "Effects of Retroversion and Anteversion Alignment in Cemented Hip Arthroplasty," *Journal of Mechanical Engineering*, vol. SI 9, Iss. 1, pp. 25-41, 2020.
6. Wan Fatimatul Aifaa Wan Fadzil, Mohammad Azeeb Mazlan, **Abdul Halim Abdullah**, Fazah Akhtar Hanapiah and Azizah Intan Pangesty, "Effects of Infill Density on 3D Printed Socket for Transtibial Prosthetic Leg," *Journal of Mechanical Engineering*, vol. SI 9, Iss. 1, pp. 229-238, 2020.
7. Nor Aiman Nor Izmin, Fatin Hazwani, Mitsugu Todo, and **Abdul Halim Abdullah**, "Development of Inhomogeneous Femoral Bone Model for CT-based Finite Element Analysis," *Journal of Scientific and Engineering Research*, vol. 7, No. 6, pp. 98-103, 2020.
8. Rusnani Yahya, Muhammad Hazli Mazlan, Solehuddin Shuib, **Abdul Halim Abdullah**, "Biomechanical Analysis of Spinal Fusion Cage for Lumbar Vertebrae," *International Journal of Recent Technology and Engineering*, vol. 8, Iss. 4, pp. 6859-6863, 2019.
9. Mohammad Azeeb Mazlan, Wan Fatimatul Aifaa Wan Fadzil, Helmi Rashid and **Abdul Halim Abdullah**, "Development of 3D Printed Symbrachydactyly Prosthetic Hand," *International Journal of Engineering and Advanced Technology*, vol. 9, Iss. 1, pp. 5943-5947, 2019.
10. Nor Aiman Nor Izmin, Mitsugu Todo and **Abdul Halim Abdullah**, "Prediction of Bone Damage Formation in Resurfacing Hip Arthroplasty," *International Journal of Engineering and Advanced Technology*, vol. 9, Iss. 1, pp. 5879-5885, 2019.
11. Siti Rasyidah Hamzah, Nor Aiman Nor Izmin, Giha Tardan, and **Abdul Halim Abdullah**, "Design and Analysis of Adjustable Headrest for Total Body Involvement Cerebral Palsy," *International Journal of Recent Technology and Engineering*, vol. 8, Iss. 1, pp. 3208-3211, 2019.
12. Wan Fatimatul Aifaa Wan Fadzil, Mohammad Azeeb Mazlan, Fazah Akhtar Hanafiah and **Abdul Halim Abdullah**, "3D Printed Lower-Limb Socket for Prosthetic Legs," *International Journal of Engineering Research and Management*, vol. 6, Iss. 3, pp. 14-18, 2019.
13. Shahrul Hisyam Marwan, Nor Aiman Nor Izmin, Muhaimin Berhan, **Abdul Halim Abdullah**, "Biomechanical Analysis of Stem Malalignment in Resurfacing Hip Arthroplasty," *International Journal of Engineering & Technology*, vol. 7, no. 4.42, pp. 168-171, 2018.
14. **Abdul Halim Abdullah**, Nik M. Mohsien, Muhammad Syahmi Yusof, Nabila Aznan and Shahrul Hisyam Marwan, "Effects of Stem Malalignment in Cementless Hip Arthroplasty: A Computational Study," *International Journal of Engineering & Technology*, vol. 7, no. 4.27, pp. 137-140, 2018.
15. Eka Noorul Amanina Darwin, Giha Tardan and **Abdul Halim Abdullah**, "Computational Analysis of Adjustable Ankle Foot Orthosis for Cerebral Palsy Children," *International Journal of Engineering & Technology*, vol. 7, no. 4.26, pp. 83-88, 2018.
16. Mohd Hazwan Mohamed Norli, Mohammad Al Faiz Hilmi Mohd Al Zahari, Shahrul Hisyam Marwan, **Abdul Halim Abdullah**, "Computational Analysis on Skull Fractures and Brain Injury using Finite Element Analysis," *International Journal of Engineering & Technology*, vol. 7, no. 4.26, pp. 119-122, 2018.
17. Luqman Hakim Noordin, Shahrul Hisyam Marwan, **Abdul Halim Abdullah**, "Effects of Screw and Plate Positions in the Dual Plating of Distal Humerus Fixation," *International Journal of Engineering & Technology*, vol. 7, no. 4.26, pp. 123-127, 2018.
18. Helmi Rashid, Anis Salwa Ahmad, Abdul Rahman Omar, Wan Muhammad Syahmi Wan Fauzi, **Abdul**

Halim Abdullah, Shahfuan Hanif Ahmad Hamidi, "Advanced Motorcycle Riding Simulation: A Case Study of Sleep Deprivation Effects on Motorcyclist Muscle Fatigue," International Journal of Engineering & Technology, vol. 7, no. 4.27, pp. 144-147, 2018.

19. Muhammad Hazli Mazlan, **Abdul Halim Abdullah**, Mitsugu Todo, Ikuho Yonezawa and Hiromitsu Takano, "Biomechanics of Thoracolumbar Spine with Vertebral Compression Fractures," *Advanced Science Letters*, vol. 24, no. 11, pp. 8770-8773(4), 2018.
20. S.H. Marwan, M.A.M. Wahi, **A.H. Abdullah** and M.H. Mazlan, "Finite Element Analysis of Protective Bicycle Helmet & Dummy Head under Dynamic Loading," *Journal of Fundamental and Applied Sciences*, vol. 10, iss. 4S, pp. 870-881, 2018.
21. Nor Fazli Adull Manan, Abdul Hakeem Abdul Aziz, Jamaluddin Mahmud and **Abdul Halim Abdullah**, "Analysis of Dryness Effect on Skin by Adapting Hyperelastic Constitutive Model," *Journal of Mechanical Engineering*, vol. SI 5, Iss. 3, pp. 123-140, 2018.
22. Shahrul Hisyam Marwan, Giha Tardan, Muhammad Syafiq Zainal and **Abdul Halim Abdullah**, "Effects of Stem Mal-alignment in The Primary Stability of Total Hip Arthroplasty," *Journal of Mechanical Engineering*, vol. 4, iss. 4, pp. 79-91, 2017.
23. **Abdul Halim Abdullah**, Mitsugu Todo and Yasuharu Nakashima, "Stress and Damage Formation Analysis in Hip Arthroplasties using CT-based Finite Element Method," *Journal of Engineering and Applied Sciences*, vol. 12, Iss. 10, pp. 2715-2719, 2017.
24. **Abdul Halim Abdullah**, Mitsugu Todo and Yasuharu Nakashima, "Prediction of Damage Formation in Hip Arthroplasties by Finite Element Analysis using Computed Tomography Images," *Medical Engineering and Physics*, vol. 44, pp. 8-15, June 2017.
25. **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.
26. **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.
27. **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.
28. **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.
29. **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.
30. 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.
31. 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.
32. **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.

33. 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.
34. 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.
35. 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.
36. **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.
37. 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.
38. 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.
39. **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.
40. **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.
41. 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.
42. 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.
43. **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.
44. **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.
45. 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.
46. **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

47. Wan Nur Fatini W. Dagang, Jamaluddin Mahmud, Nor Fazli Adull Manan and **Abdul Halim Abdullah**, "The Reconstruction of Three-Dimensional (3D) Model of the Right Parietal-Temporal Implant," AIP Conference Proceeding, vol. 2344, 050018, 2021.
48. Nur Nabila Mohd Nazali, Nor Fazli Adull Manan, Jamaluddin Mahmud and **Abdul Halim Abdullah**, "Integrating Hyperelastic Constitutive Models in Natural Biopolymer for Healing Patch Technology," AIP Conference Proceeding, vol. 2344, 020024, 2021.
49. Rusnani Yahya, Muhammad Lukman Shudin, Muhammad Hazli Mazlan, Solehuddin Shuib and **Abdul Halim Abdullah**, "Effects of Material Properties in Spinal Fusion Cage for Lumbar Vertebrae," *IOP Conference Series: Materials Science and Engineering,* vol. 834, 012073, 2020.
50. Wan Fatimatul Aifaa Wan Fadzil, Mohammad Azeeb Mazlan, Fazah Akhtar Hanapiah and **Abdul Halim Abdullah**, "Development of 3D Printed Socket for Transtibial Prosthetic Leg," *Proceeding of International Exchange and Innovation Conference on Engineering & Sciences (IEICES2019)*, vol. 5, pp. 44-46, October 2019.
51. Mohammad Azeeb Mazlan, Wan Fatimatul Aifaa Wan Fadzil,, Helmi Rashid and **Abdul Halim Abdullah**, "Design and Analysis of 3D Printed Prosthetic Hand for Symbrachydactyly Patients," *Proceeding of International Exchange and Innovation Conference on Engineering & Sciences (IEICES2019)*, vol. 5, pp. 87-88, October 2019.
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References

Professor Sr. Ir. Dr Suhaimi Abdul-Talib
Assistant Vice-Chancellor
College of Engineering
Universiti Teknologi MARA
40450 Shah Alam, Selangor MALAYSIA
Email: ecsuhaimi@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