
CURRICULUM VITAE

PERSONAL INFORMATION



Name : Muhammad Hanif Bin Ramlee
N.R.I.C. : 891008-23-5077
Ethnic / Sex / Nationality : Malay / Male / Malaysia
Height /Weight : 1.74 m / 70 kg
Office Address : School of Biomedical Engineering and Health Sciences,
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e-mail : muhammad.hanif.ramlee@biomedical.utm.my
Languages : 1. Malay (Speaking-Native; Writing-Native)
2. English (Speaking-Good; Writing-Good)
3. Spanish (Speaking-Beginner; Writing-Beginner)

EDUCATIONAL BACKGROUND

1. Doctor of Philosophy (Ph. D.)

- Field : Biomedical Engineering
- Institution : Universiti Teknologi Malaysia, UTM
- Research title : Biomechanical evaluation and new improvement on ankle external fixator
- Started - Graduated : September 2012 – November 2015

2. Bachelor Degree (B. Eng.)

- Field : Biomedical Engineering
 - Institution : Universiti Teknologi Malaysia, UTM
 - Final Year Project : Development of Computer Based X-ray Computed Tomography Training System
 - CGPA : 3.76 / 4.00
 - Started - Graduated : July 2008 – July 2012
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HONOURS AND AWARDS

1. Excellent Staff Award 2019, Universiti Teknologi Malaysia
2. Active Blended Learning, (course: Introduction to Biomedical Engineering, Statics & Dynamics, Solid Mechanics), awarded by UTMLead, 2018-2019
3. Best Poster Award “Biodegradable implant” (4th International Innovation Day 2019)
4. Gold Award “Biodegradable implant” (4th International Innovation Day 2019)
5. Bronze Award “Custom-made design of synthetic bone” (4th International Innovation Day 2019)
6. Active Blended Learning (course: Rehabilitation Engineering, Introduction to Biomedical Engineering, Statics & Dynamics, Solid Mechanics), awarded by UTMLead, 2017-2018
7. Best Presenter Award “Synthetic bone for medical implant testing” (3rd International FBME Innovation Day 2018)
8. Bronze Award “Synthetic bone for medical implant testing” (2nd International FBME Innovation Day 2018)
9. Best Student Award 2016 (Post-graduate) by School of Postgraduate Studies, UTM
10. Innovation and Design for Euro-Asian Scholars, IDEAS (PhD), 2014-2015
11. Government scholarship (Bachelor), 2008-2012
12. Government scholarship (PhD), 2012-2015
13. Bronze Award “A dual disc implant for total replacement of a spinal disc or disc in human body” (Seoul International Invention Fair, SIIF 2013)

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14. Bronze Award “Low cost motorized wheelchair controller” (International Engineering Invention & Innovation Exhibition, i-ENVEX 2013)
 15. Gold Award “A dual disc implant for total replacement of a spinal disc or disc in human body” (14th Industrial Art and Technology Exhibition, INATEX 2012)
 16. Board of Engineers Malaysia (BEM) Academic Excellence Award 2012
 17. Best Student Award 2012 (Faculty of Health Sciences and Biomedical Engineering)
 18. First Class Honours (Bachelor of Biomedical Engineering 2012)
 19. Dean’s Award 2008-2012 (Faculty of Health Sciences and Biomedical Engineering)
 20. Best Student Award (Matriculation 2008)
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WORKING EXPERIENCE

1. November 2016 – present Universiti Teknologi Malaysia, Johor Bahru
Position: Senior lecturer

 2. January 2019 – present Medical Devices and Technology Centre (MEDiTEC),
Universiti Teknologi Malaysia, Johor Bahru
Position: Deputy Director

 3. April 2016 – October 2016 Universiti Kebangsaan Malaysia, UKM Bangi
Position: Post-doctoral researcher

 4. September 2015 – April 2016 EURO Systems Sdn Bhd
Position: Sales coordinator

 5. September 2014 – June 2015 Technical University of Madrid, Spain
Position: Research trainee

 6. March 2012 – September 2012 Universiti Teknologi Malaysia, UTM Johor Bahru
Position: Research assistant

 7. June 2011 – August 2011 Technical University of Ilmenau, Germany
Position: Internship
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INTELECTUAL PROPERTY RIGHTS

1. Copyright: Development process of custom-made synthetic bone, LY2018006202.
 2. Copyright: Development process of ligaments via Mar Mentat, LY2019008930.
 3. Copyright: Easy-To-Go ETG vocabulary application for dysarthria patient, LY2019008929.
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PAPER PUBLICATIONS

2020

1. Hasan Basri, Akbar Teguh Prakoso, Mohd Ayub Sulong, Amir Putra Md Saad, **Muhammad Hanif Ramlee**, Dian Agustin Wahjuningrum, Susan Sipaun, Andreas Ochsner, Ardiyansyah Syahrom, “*Mechanical degradation model of porous magnesium scaffolds under dynamic immersion*”, Part L: Journal of Materials: Design and Application, 234(1), 175-185, 2020 (**Q3, IF:1.568**)
 2. **Muhammad Hanif Ramlee**, Mohd Ayub Sulong, Siti Asmah Daud, Asnida Abdul Wahab, Antonio Ros Felip, Mohammed Rafiq Abdul Kadir, “*Difference pathological problem influence stress distributions and micromovement of fragment bone of pilon fracture treated with external fixator: A finite element analysis study*”, Journal of Foot and Ankle Surgery, 2019 (**Accepted, Q4, IF=0.857**)
 3. Sity Aishah Mansur, Angzzas Sari Mohd Kassim, **Muhammad Hanif Ramlee**, Norjihada Izzah Ismail, Norhana Jusoh, “*Incretins-related therapy for bone health in diabetes*”, Clinical Medicine Insights: Endocrinology and Diabetes (**Correction submitted, Scopus indexed**)
 4. Mohamad Hafiz Mohamad Afandi, **Muhammad Hanif Ramlee**, Gan Hong Seng, Mohammed Rafiq Abdul Kadir, “*Biomechanical analysis of conventional and locking compression plate for treating fibula fracture: a finite element study*”, Malaysia Journal of Fundamental and Applied Sciences (**Accepted, ECSI ISI indexed**)
 5. **Muhammad Hanif Ramlee** “*The Use of Finite Element Method for Biomechanical Evaluation of Implant Design in The Orthopaedics Application- A Review*”, Malaysia Journal of Medicine and Health Sciences, 2020 (**Accepted, Scopus indexed**)
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2019

1. Abdul Hadi Abdul Wahab, Amir Putra Md Saad, Mohd Noor Harun, Ardiyansyah Syahrom, **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, “*Developing functionally graded PVA hydrogel using simple freeze-thaw method for artificial glenoid labrum*”, Journal of the Mechanical Behavior of Biomedical Materials, 91, 406-415, 2019 (**Q1, IF=3.239**)
2. Gan Hong Seng, KA Sayuti, **Muhammad Hanif Ramlee**, YS Lee, WMHW Mahmud, AHA Karim, “*Unifying the seeds auto-generation (SAGE) with knee cartilage segmentation framework: data from the osteoarthritis initiative*”, International Journal of Computer Assisted Radiology and Surgery, 14 (5), 755-762, 2019 (**Q2, IF=1.961**)
3. Gan Hong Seng, Bakhtiar Al-Jefri Adb Salam, Aida Syafiqah Ahmad Khaizi, **Muhammad Hanif Ramlee**, Wan Mahani Wan Mahmud, Yeng-Seng Lee, Khairil Amir Sayuti, Ahmad Tarmizi Musa “*Local mean based adaptive thresholding to classify the cartilage and background superpixels*”, Indonesian Journal of Electrical Engineering and Computer Science, 15 (1), 2019, (**Scopus indexed**)
4. Syakirah Mohamed Amin, **Muhammad Hanif Ramlee**, Hadafi Fitri Mohd Latip, Gan Hong Seng, Mohammed Rafiq Abdul Kadir, “*Finite element analysis of needle insertion angle in insulin therapy*”, International Journal of Automotive and Mechanical Engineering (IJAME), 16(4), 7512-7523, 2019, (**Scopus indexed**)
5. Nur Amalina Zainudin, **Muhammad Hanif Ramlee**, Hadafi Fitri Mohd Latip, Gan Hong Seng, Evelyn Garcia-Nieto, Mohammed Rafiq Abdul Kadir “*Biomechanical evaluation of pin placement of external fixator in treating tranverse tibia fracture: Analysis on first and second cortex of cortical bone*”, Malaysian Journal of Fundamental and Applied Sciences, 15 (1), 75-79, 2019, (**WoS indexed**).
6. Nur Afikah Zainal Abidin, Mohammed Rafiq Abdul Kadir, **Muhammad Hanif Ramlee**, “*Three dimensional finite element modelling and analysis of human knee joint- model verification*”, International Conference on Biomedical Engineering ICOBE 2019, IOP Journal of Physics: Conference Series (JPCS), (Accepted, **Scopus indexed**).
7. Aishah Umairah Abd Aziz, Gan Hong Seng, Ahmad Kafrawi Nasution, Mohammed Rafiq Abdul Kadir, **Muhammad Hanif Ramlee**, “*Development and verification of three-dimensional model of femoral bone: finite element analysis*”, International Conference on

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- Biomedical Engineering ICOBE 2019, IOP Journal of Physics: Conference Series (JPCS), (Accepted, **Scopus indexed**).
8. Siti Adawiyah Zulkifli, Maryam Hanim Shaikhani, Ahmad Kafrawi Nasution, Asnida Abdul Wahab, Mohammed Rafiq Abdul Kadir, **Muhammad Hanif Ramlee**, “*Fabrication and biomechanical evaluation of polyurethane material for synthetic bone application*”, International Conference on Biomedical Engineering ICOBE 2019, IOP Journal of Physics: Conference Series (JPCS), (Accepted, **Scopus indexed**).
 9. Herman Tuminoh, Mohd Hafiz Mohd Afandi, Gan Hong Seng, Mohammed Rafiq Abdul Kadir, **Muhammad Hanif Ramlee**, “*Number of screws affecting the stability and stress distributions of conventional and locking compression plate: a finite element study*”, International Conference on Biomedical Engineering ICOBE 2019, IOP Journal of Physics: Conference Series (JPCS), (Accepted, **Scopus indexed**).
 10. Wan Muhammad Asyraf Wan Zaki, Muhammad Faiz Md Shakhir, **Muhammad Hanif Ramlee**, Asnida Abdul Wahab “*Smart medical chatbot with integrated contactless vital sign monitor*”, International Conference on Biomedical Engineering ICOBE 2019, IOP Journal of Physics: Conference Series (JPCS), (Accepted, **Scopus indexed**).
 11. Nur Amalina Zainudin, **Muhammad Hanif Ramlee**, “*In silico of the different pin size of unilateral tibia external fixator: a pilot study*”, EC Orthopaedics (Accepted)

2018

1. **Muhammad Hanif Ramlee**, Evelyn-Garcia Netto, Daniel-Angu, Antonio Ros Felip, Mohammed Rafiq Abdul Kadir, “*Biomechanical Feature of Six Configuration of Delta External Fixator for Treating Pilon Fracture: A finite element study*”, Medical & Biology Engineering & Computing, 2018 (**Q2, IF=1.857**)
2. **Muhammad Hanif Ramlee**, Gan Kok Beng, Mohd Nazri Bajuri, Mohammed Rafiq Abdul Kadir, “*Finite element analysis of the wrist in stroke patients: the effects of hand grip*”, Medical & Biology Engineering & Computing, 56(7), 1161-1171, 2018 (**Q2, IF=1.857**)
3. Asnida Abdul Wahab, Maheza Irza Mohd Salim, Jasmy Yunus, **Muhammad Hanif Ramlee**, “*Comparative evaluation of medical thermal image enhancement techniques for breast cancer detection*”, Journal of Engineering and Technology Sciences, 50(1), 40-52 (**Scopus indexed**).

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4. Aishah Umairah, **Muhammad Hanif Ramlee**, “*Relationship between strain and healing process for the use of external fixator: a short review*”, 2nd International Conference on Biosignal Analysis, Processing and Systems (ICBAPS), IEEE Explore, 87-92, 2018, (**Scopus indexed**).
 5. **Muhammad Hanif Ramlee**, Aishah Umairah, Gan Hong Seng, Hadafi Fitri Mohd Latip, Asnida Abdul Wahab, Mohammed Rafiq Abdul Kadir, “*Biomechanical analysis of different material of delta external fixator for ankle joint- the effect of standing*”, 2nd International Conference on Biosignal Analysis, Processing and Systems (ICBAPS), IEEE Explore, 81-86, 2018, (**Scopus indexed**).
 6. Laila Fadilah Ulta Delestri, Asnida Abdul Wahab, Nur Afikah Zainal Abidin, **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, “*Development of a low-cost wearable breast cancer detection device*”, 2nd International Conference on Biosignal Analysis, Processing and Systems (ICBAPS), IEEE Explore, 41-46, 2018, (**Scopus indexed**).
 7. Nur Afikah Zainal Abidin, Asnida Abdul Wahab, **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, “*A mini review on graft fixation devices for anterior cruciate ligament reconstruction- techniques, materials and complications*”, 2nd International Conference on Biosignal Analysis, Processing and Systems (ICBAPS), IEEE Explore, 93-98, 2018, (**Scopus indexed**).
 8. Nursyazana Ridzuan, Asnida Abdul Wahab, Aizreena Azaman, **Muhammad Hanif Ramlee**, Izwyn Zulkapri, “*Effect of ankle weight variation on skin surface temperature profile using thermography technique*”, 2nd International Conference on Biosignal Analysis, Processing and Systems (ICBAPS), IEEE Explore, 2018, (**Scopus indexed**).
 9. Gan Hong Seng, Rasqiyah Hanani, Haziqah Hamidun, **Muhammad Hanif Ramlee**, “*Binary seeds auto-generation model for greater medical image segmentation*”, 2018 International Conference on Intelligent and Advanced System (ICIAS), IEEE Explore, 2018, (**Scopus indexed**).

2017

1. **Muhammad Hanif Ramlee**, Abdul Hadi Abd Wahab, Asnida Abd Wahab, Hadafi Fitri Mohd Latip, Siti Asmah Daud, Mohammed Rafiq Abdul Kadir, “*The effect of stress distribution and displacement of open subtalar dislocation in using titanium alloy and*

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- stainless steel mitkovic external fixator- a finite element analysis*”, Malaysian Journal of Fundamental and Applied Sciences, 13, 2-4 (**WoS Indexed**)
2. **Muhammad Hanif Ramlee**, Abdul Hadi Abd Wahab, Asnida Abd Wahab, Hadafi Fitri Mohd Latip, Siti Asmah Daud, Mohammed Rafiq Abdul Kadir, “*Different materials of mitkovic external fixator influence the stability and stress concentration of open subtalar dislocation- A finite element study*”, Proceeding in International Medical Device and Technology Conference, 2017.
 3. Abdul Hadi Abdul Wahab, Mohammed Rafiq Abdul Kadir, Muhammad Noor Harun, Ardiyansyah Syahrom, **Muhammad Hanif Ramlee**, “*Different material properties of cancellous bone influencing glenoid component loosening: A finite element study*”, Proceeding in International Medical Device and Technology Conference, 2017.
 4. Mohd Ayub Sulong, Amir Putra Md Saad, **Muhammad Hanif Ramlee**, S Sipaun, A Syahrom, “*Mechanical degradation model of biodegradable scaffolds: A computational approach*,” Proceeding in International Medical Device and Technology Conference, 2017.
 5. **Muhammad Hanif Ramlee**, Jasmy Yunus, Eko Supriyanto, “*Computer based x-ray computed tomography training system for engineering education*” Sains Humanika, 2017
 6. **Muhammad Hanif Ramlee**, Gan Kok Beng, “*Function and biomechanics of upper limb in post-stroke patients- A systematic review*”, Journal of Mechanics in Medicine and Biology, 2017 (**Q4, IF=0.797**)
 7. **Muhammad Hanif Ramlee**, Azura Derus, Eko Supriyanto, “*Three-Dimensional Reconstruction of Cone Beam Computed Tomography Images using OSCAR- Analysis on 36 Projections*”, Nuclear Medicine and Biomedical Imaging, 2017
 8. **Muhammad Hanif Ramlee**, Muhammad Farhan Ishak, Azura Derus, Eko Supriyanto, “*Which Method is Providing Correct Geometry of Pancreas in Filtering and Segmenting Ultrasound Images*”, Nuclear Medicine and Biomedical Imaging, 2017

2016

1. **Muhammad Hanif Ramlee**, Azura Derus, “*The Use of External Fixator for Ankle and Foot Injuries Management- A Review on Biomechanical Perspective*”, Medical Devices and Diagnostic Engineering, 2016

2014

1. **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, Malliga Raman Murali, and Tunku Kamarul, “*Biomechanical Evaluation of Two Commonly Used External Fixators in the Treatment of Open Subtalar Dislocation- A Finite Element Analysis*”, Medical Engineering and Physics, 2014, 36, 1358-1366 (**Q2, IF=1.839**)
2. **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, Malliga Raman Murali, and Tunku Kamarul, “*Finite Element Analysis of Three Commonly Used External Fixation Devices for Treating Type III Pilon Fractures*”, Medical Engineering and Physics, 2014, 36, 1322-1330 (**Q2, IF=1.839**)
3. **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, and Habibollah Harun, “*Three-Dimensional Modelling and Finite Element Analysis of an Ankle External Fixator*”, Advanced Materials Research, 2014, 845, 183-188 (**Scopus**, EI, and WoS CPCI indexed)
4. **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, and Habibollah Harun, “*Three-Dimensional Modeling and Analysis of Human Ankle Joint*”, IEEE Explore, 2014, 74-78 (**Scopus** indexed)
5. S.A. Daud, S.S. Mohd Sobani, **M.H. Ramlee**, N.H. Mahmood, P.L. Leow, F.K. Che Harun, “*Application of Infrared Sensor for Shape Detection*”, IEEE Explore, 145-147 (**Scopus** indexed)

BOOK CHAPTER

1. Siti Adawiyah Zulkefli, Maryam Hanim Mohamad Shaikhan, Ahmad Kafrawi Nasution, Gan Hong Seng, **Muhammad Hanif Ramlee**, “*Polyurethane material for synthetic tibia bone application*”, Penerbit UTHM, 2019.
2. Ahmad Kafrawi Nasution, Abdul Hakim Md Yusof, **Muhammad Hanif Ramlee**, “*Materials processing and characterization in biodegradable implants development*”, Penerbit UTHM, 2019.
3. Amir Mustakim Ab Rashid, Mohamad Hafiz Mohamad Afandi, Gan Hong Seng, Mohammed Rafiq Abdul Kadir, **Muhammad Hanif Ramlee**, “*Different materials of implant affecting the biomechanics behaviour of fibula fracture: a finite element study*”, Penerbit UTHM, 2019.

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4. **Muhammad Hanif Ramlee**, Evelyn Garcia-Nieto, Hadafi Fitri Mohd Latip, Gan Hong Seng, Siti Asmah Daud, Mohammed Rafiq Abdul Kadir, “*Development of ankle and foot bone model for finite element simulation*”, Penerbit UTM, 2019.
 5. Syakirah Mohamed Amin, **Muhammad Hanif Ramlee**, Mohammed Rafiq Abdul Kadir, “*Finite element study on different sizes of insulin needles*”, Penerbit UTM, 2019
 6. **Muhammad Hanif Ramlee**, Hadafi Fitri Mohd Latip, Eko Supriyanto, Jasmy Yunus, “*Computed tomography training system*”, Penerbit UTM, 2019
 7. Siti Asmah Daud, Nasuha Mohd Shaber, Nasrul Humaimi Mahmood, **Muhammad Hanif Ramlee**, “*Polygon 3D surface reconstruction using IR scanner*”, Communications in Computer and Information Science book series, volume 751, 2013 Springer.
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CONSULTATION

1. TNPI UTM Teambuilding Program 2018 (Leader) – RM 8000
 2. SPS UTM Teambuilding Program 2018 (Member) – RM 5510
 3. Perkhemahan Pelajar Unit Beruniform SMK Majidi Baru 2 2018 (Leader) – RM 8795
 4. Perkhemahan Pelajar Tingkatan 5 SMK Skudai 2017 (Leader) – RM 6500
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TEACHING COURSE

Biomedical Systems Design (SMBE 4313), Statics and Dynamics (SMBE 1313), Solid Mechanics (SMBE 3323), Research Methodology (UMBP 0010), Rehabilitation Engineering (SMBE 4513), Biomechanics (MMBC 1014), Introduction to Biomedical Engineering (SMBE 1012), Laboratory 2 (SMBE 3712), CDIO Laboratory (SMBE 3722), PBL Laboratory (SMBE4712)

RESEARCH GRANTS

Total allocation = **RM744,230**
Project leader = **RM270,830**

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1. National Grant from Ministry of Education (MoE) (**Project Leader**) – Fundamental Research Grant Scheme (FRGS): Fundamental investigation on the strength and corrosion properties of absorbable magnesium alloys reinforced with carbon nanofiber for medical implant application (1 Sept 2019 – 31 Aug 2021) – **RM107,200**
 2. UTM Research University Grant (**Project Leader**) – Tier 2 Scheme: Development of three-dimensional printed hand cast for treating broken bone (1 Aug 2019 – 31 July 2021) – **RM 30,000**
 3. National Grant from Ministry of Education (MoE) (**Member**) – Fundamental Research Grant Scheme (FRGS): Exploring the functions of real-time motion analysis and convolutional neural network for talent analysis in athletes (1 Sept 2019 – 31 Aug 2021) – **RM45,400**
 4. National Grant from Ministry of Education (MoE) (**Member**) – Fundamental Research Grant Scheme (FRGS): Graph transformed deep interactive learning framework in medical image segmentation (1 Jan 2019 – 30 June 2021) – **RM76,000**
 5. UTM Research University Grant (**Member**) – CCIN Scheme: Projek menambahbaik kaedah pencegahan dan kawalan denggi di Kangkar Pulai Johor (1 Jan 2020 – 31 Dec 2020) – **RM 20,000**
 6. Networking Grant (**Project Leader**) – Sub KTP RIG: Langkah Kawalan Pembiakan Nyamuk Aedes- Inovasi pasu dari bahan terbuang untuk penanaman sayur-sayuran (1 Jan 2020 – 31 Dec 2020) – **RM 11,630**
 7. UTM Research University Grant (**Member**) – IIIG Scheme: Sports performance analysis using visual light system for track & field SUKMA 2020 (1 Sept 2019 – 31 Aug 2020) – **RM 10,000**
 8. ICC-UTM Research University Grant (**Member**) – PRGS-ICC Scheme: Wheelchair assist device modular kit (31 Aug 2019 – 31 July 2020) – **RM 20,000**
 9. National Grant from Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC) (**Project Leader**) – Innofund scheme: Synthesis and characterization of polyurethane material for the development of synthetic bone (1 Jan 2019 – 30 June 2020) – **RM 42,000**
 10. ICC-UTM Research University Grant (**Project Leader**) – PRGS-ICC Scheme: Custom-made synthetic bone (1 Sept 2018 – 31 Aug 2019) – **RM 20,000**

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11. UTM Research University Grant (**Project Leader**) – Tier 1 Scheme: Biomechanical evaluation and optimisation of ankle external fixator (1 Feb 2018 – 31 Jan 2020) – **RM 40,000**
 12. UTM Research University Grant (**Member**) – Tier 1 Scheme: Structure and properties analysis of polyurethane material as a synthetic femur bone for medical implant testing (1 Feb 2018 – 31 Jan 2020) – **RM 50,000**
 13. UTM Research University Grant (**Member**) – Matching grant Scheme: Biomechanics study and pole mechanisations for oil palm harvesting using carbon fiber reinforced polymer (CRFP) and soft actuator (1 Feb 2018 – 31 Jan 2020) – **RM 72,000**
 14. UTM Research University Grant (**Member**) – Flagship Scheme: Investigating the effects of citric acid on the biomimetic hydroxyapatite growth ability of bacterial nanocellulose hydrogel for potential articular cartilage (15 Nov 2017 – 14 May 2019) – **RM 50,000**
 15. UTM Research University Grant (**Member**) – Tier 2 Scheme: Application of fit principle in injury prevention and exercise rehabilitation focusing on the most common sport injury using fibrod (1 Feb 2018 – 31 Jan 2019) – **RM 20,000**
 16. UTM Research University Grant (**Member**) – CoE grant Scheme: Investigation of biomechanical factor with influence of anthropometrics affecting optimum stroke technique for Malaysian elite rower (1 Feb 2018 – 31 Jan 2020) – **RM 50,000**
 17. UNIKL Networking Grant (**Member**) – NG grant scheme: An interactive segmentation model for enhanced knee cartilage manifestation (1 Oct 2017 - 30 Sept 2019) – **RM 20,000**
 18. UTM Research University Grant (**Member**) – Potential Academic Staff (PAS) Scheme: Acrylate-Based Shape Memory Foams Synthesized by Organo-Phase Cryo-Polymerization (1 July 2016 – 30 June 2017) – **RM 20,000**
 19. UTM Research University Grant (**Project Leader**) – Potential Academic Staff (PAS) Scheme: Development of A Low Cost Synthetic Tibia and Fibula bone (1 June 2017 – 31 May 2018) – **RM 20,000**
 20. UTM Research University Grant (**Member**) – Potential Academic Staff (PAS) Scheme: A Preliminary Study of Surface Heat Distribution on Asymmetrical Tumor Embedded in Three-Dimensional Breast Models with Various Tissue Densities (1 Jun 2017 – 31 May 2018) – **RM 20,000**

POST-GRADUATE STUDENTS

Master = 4

PhD = 7

1. Abdul Hadi Bin Abdul Wahab (PhD) – (2011- 2017) – **Co SV**
 2. Aishah Umairah Binti Abd Aziz (PhD) – (2017 – present) – **Main SV**
 3. Nur Afikah Binti Zainal Abidin (PhD) – (2017 – present) – **Main SV**
 4. Herman Bin Tuminoh (PhD) - (2018 – present) – **Main SV**
 5. Adnan Afzal (PhD) – (2018 – present) – **Main SV**
 6. Kumravani a/p Santhirangathan (PhD) – (2018 – present) – **Co SV**
 7. Siti Adawiyah Binti Zulkefli (Master by research) – (2018 - present) – **Main SV**
 8. Amir Mustakim Ab Rashid (Master by research) – (2019 – present) – **Main SV**
 9. Nor Aqilah Binti Mohamad Azmi (Master by research) – (2019 – present) – **Main SV**
 10. Ala Abobakr Abdulhafidh Al-Dubai (PhD) – (2019 – present) – **Co SV**
 11. Ahmad Mubarak (Master by taught course) – (2019 – present) – **Main SV**
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FYP STUDENT

Total = 13

1. Muhammad Hanif Bin Baharuddin – Present – **Main SV**
 2. Nurnedilah Binti Mohammad Kata – Present – **Main SV**
 3. Muhammad Khairul Asyraf Bin Suami – Present – **Main SV**
 4. Ahmad Amirul Faiz Bin Mamat Hazri – Present – **Main SV**
 5. Muhammad Al Kahfi Bin Edrus – Present – **Main SV**
 6. Muhammad Sallehuddin Bin Mohd Azman – Present - **Main SV**
 7. Nur Amalina Binti Yassin – 2019 Graduated - **Main SV**
 8. Rifhan Natrisya Binti Razali – 2019 Graduated - **Main SV**
 9. Siti Nur Shakiroh Binti Safie – 2019 Graduated - **Co SV**
 10. Maryam Hanim Binti Mohamad Shaikhani – 2018 Graduated - **Main SV**
 11. Syakirah Binti Mohamed Amin – 2018 Graduated - **Main SV**
 12. Mohamad Hafiz Bin Mohamad Afandi – 2018 Graduated- **Co SV**
 13. Nur Amalina Binti Zainudin - 2018 Graduated- **Co SV**
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TASK FORCE MEMBER

1. Deputy Director – Medical Devices and Technology Centre (MEDITEC) 2019-present
2. Chair for Student Development – School of Biomedical Engineering and Health Sciences 2019-present
3. Head of Publication Unit – Medical Devices and Technology Conference (iMEDiTEC2020)
4. Laboratory Coordinator SMBE3712 - School of Biomedical Engineering and Health Sciences 2018 - 2019
5. Master thesis examiner (External) – Mohd Hazwan Mohammed Norli, UiTM (2018)
6. Master thesis examiner (Internal- UTM) – Zameera Ibrahim (2018); Mohd Syahir Anwar (2018)
7. Advisory – Biomedical Engineering and Health Science Society (BIOMEHS) 2018- present
8. Coordinator – Laboratory 2 SMBE 3722, Introduction to Biomedical Engineering SMBE1012, Statics & Dynamics SMBE1313, Solid Mechanics SMBE3323, Biomechanics MMBC1014
9. Leader - Executive Program for FBME 2018
10. Leader – Teambuilding for TNCPI UTM office 2018
11. Committee – Teambuilding for SPS UTM office 2018
12. Leader – Teambuilding camp for SMK Majidi Baru 2 2018
13. Editorial Board Member – Journal of Anatomical Science, EC Orthopaedics, Orthopaedic Surgery and Traumatology (ORTR), Journal of Biomedical Engineering and Research (JBER).
14. Manuscript Reviewer (ISI indexed journal) – Journal of Biomechanics (Q2), Medical & Biological in Engineering & Computing (Q2), Acta of Bioengineering and Biomechanics (Q4), Journal of Materials Science (Q1), Computer in Biology and Medicine (Q2), IEEE Transactions on Neural Systems and Rehabilitation Engineering (Q1).
15. Manuscript Reviewer (Scopus and WoS indexed) – Malaysian Journal of Fundamental and Applied Science, Applied and Mechanical Computational, International Journal of Automotive and Mechanical Engineering, IEEE
16. Manuscript Reviewer (Non-indexed) – BOAJ Orthopaedics, Clinical Interventions in Aging, EC Orthopaedics, International Conference on Biomedical Engineering and Biotechnology,

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- International Medical Device and Technology Conference, Journal of Novel Physiotherapy and Rehabilitation, Conference on Biomedical and Advanced Materials, Journal of Biomedical Engineering and Research (JBER)
17. Interviewer - How to get yourself employed (HTGYE) professional skill 2018
 18. Secretary General – International Medical Device and Technology Conference (iMEDITEC) 2017
 19. Advisory – Post Graduate Student Society FBME 2017 & 2018
 20. Committee – Academic Staff Excellence Program (A-StEP) 2017
 21. Committee – FBME Annual Report Book 2017
 22. Leader – Teambuilding camp for SMK Skudai 2017
 23. Committee – Engineering Accreditation Council (EAC) for Biomedical Programme FBME
 24. Reviewer – Final examination paper FBME
 25. Advisory – Visiting programme from SMK Skudai Johor 2017
 26. Task Force Income Generation – Institute of Human Centered Engineering (IHCE)
 27. Internal Panel – Undergraduate final year project FBME
 28. Internal Panel – Master proposal first assessment FBME
 29. Internal Panel – PhD proposal first assessment FBME
 30. Moderator – FBME Alumni Forum 2017
 31. Research fellow – Sports Innovation and Technology Center (SITC)
 32. Speaker – How to get yourself employed (HTGYE) professional skill
 33. Interviewer - How to get yourself employed (HTGYE) professional skill 2017
 34. Speaker – Research methodology for post graduate students
 35. Advisory – FBME Innovation Day 2017
 36. Advisory – Innoscience Research Sdn. Bhd.
 37. Committee – Biomedical Engineering Student Conference 2017
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COMPUTER SKILLS

Microsoft Office, SolidWorks, Marc.Mentat, Abaqus, Mimics, 3-Matic, Amira, Cura Slicer, 3D scanner, Adobe Photoshop, LabVIEW, Matlab, Fortran, Goldwave, Micro-Vishay Measurement software

PROFESSIONAL MEMBERSHIP

1. Member of Institute of Engineering and Technology (MIET), United Kingdom, 2020-present, Registration No.: 1100863844.
 2. Graduate Technologist registered with the Malaysia Board of Technologist (MBOT), 2019-present, Registration No.: GT19100518.
 3. Graduate Engineer (B. Eng.) registered with the Board of Engineers Malaysia (BEM), 2013-present, Registration No.: 84690A.
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COURSES/SEMINARS/WORKSHOPS/CONFERENCES ATTENDED

- | | |
|--|------|
| 1. International Conference on Biomedical Engineering (iCOBE) | 2019 |
| 2. Supervisory Orientation Course AS104 | 2019 |
| 3. Sijil Pengajaran dan Pembelajaran Tinggi Malaysia (SPPT) | 2018 |
| 4. Advanced e-Learning @ UTM | 2018 |
| 5. Service Learning Course | 2018 |
| 6. Instron Workshop | 2018 |
| 7. Synthetic Bone Workshop | 2018 |
| 8. Moulding Workshop | 2018 |
| 9. Supervisory Orientation Course AS103 | 2018 |
| 10. Intellectual Property Workshop | 2017 |
| 11. Book Chapter Writing Workshop | 2017 |
| 12. BEM Course: Engineering Management Practise | 2017 |
| 13. Engineering Accreditation Council Workshop | 2017 |
| 14. International Medical Devices and Technology Conference (iMEDITEC) | 2017 |
| 15. Biomedical and Healthcare Industry Engagement Day | 2017 |
| 16. Constructive Alignment Course 1 | 2017 |
| 17. Constructive Alignment Course 2 | 2017 |
| 18. Supervisory Orientation Course AS102 | 2017 |
| 19. Supervisory Orientation Course AS101 | 2016 |

20. International Conference on Bioscience and Medical Engineering (ICBME)	2016
21. Publication Workshop for Post-Doctoral Researcher	2016
22. Thomson Reuters Seminar on High Impact Publication	2016
23. Spanish Courses	2015
24. Project Management	2014
25. LyX Workshop	2014
26. Clinical MicroCT Seminar	2014
27. IEEE Student Conference on Research & Development (SCOREd 2013)	2013
28. 1 st International Materials, Industrial and Manufacturing Engineering Conference (MIMEC 2013)	2013
29. Publication Workshop	2013
30. Finite Element Course	2013
31. ISO 9001:2008 Quality Management System Requirement	2012
32. Occupational Safety and Health Awareness	2012
33. Matlab Workshop for Signal Processing	2010
34. 2 nd Malaysia Tissue Engineering and Regenerative Medicine Scientific Meeting	2008

REFERENCES

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