

## MUHAMMAD HISYAM LEE

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### PROFILE

Dr. Muhammad Hisyam LEE was born in Malacca, Malaysia in 1966. He holds a bachelor's and a master's degree in Statistics from Universiti Kebangsaan Malaysia and a Doctor of Philosophy in Mathematics from Universiti Teknologi Malaysia (UTM).

He is a Professor of Statistics at the Universiti Teknologi Malaysia. He currently holds an administrative position at the Office of Strategy and Corporate Affairs as the Director of Data Management and Analytics. He has had several managerial positions since 2008.

Dr. Lee has more than 25 years of experience in teaching undergraduate and postgraduate courses. He has supervised more than 25 Ph.D. and M.Sc. students and two post-doctoral students.

He has contributed more than 100 indexed Scopus articles. His current H-index is 20, with more than 1300 citations. 33/59 (55.9%) of his articles were published in the Q1/Q2 journal of WoS with a 98.100 journal impact factor for 5-year (2016-2020).

Dr. Lee was elected Universiti Senate for the three terms (2014-2023). He is actively involved and has experience in almost all Senate Standing Committees (JKTS) such as University Policy & Entity, Academic Quality & Curriculum, Examination & Graduation, Research & Innovation, Industry & Community Linkages, Library & Educational Resources. Also, he was appointed University Accreditation Committee (JKAU) for the two terms (2017-2021). Too, Dr. Lee is appointed Chairman of academic staff promotion and annual appraisal assessment committee (2020-2022). He chaired several university system development committees and technical evaluation committees. As well, he chaired Ph.D. and M.Sc. oral examinations.

Dr. Lee has been Malaysia Qualification Agency (MQA) auditor at the national level since 2012. He chaired more than 15 provision or final accreditation academic programs and audited more than 50 educational programs. The Ministry of Higher Education (MoHE) appointed him as Malaysia Research Assessment (MyRA) auditor in 2015, and he audited research universities in Malaysia almost every year. Recently, the MoHE appointed him as a Research Universiti Committee member (JKRU). MoHE appointed him as an auditor for the Ratings for Universities and University Colleges (SETARA) in 2017.

In 2020, Dr. Lee chaired a task force set up by MoHE to analyze Malaysia graduate employability for STEM and Education discipline, 2015-2019. The Institute for Youth Research Malaysia (IYRES) under the Ministry of Youth and Sports appointed him as a reference expert for a study on Malaysia Youth Index (IBM'21). He is a consultant for the UTM-MiGHT project on educational institution readiness in industry revolution 4.0.

Dr. Lee has been an external examiner for a Master's and Ph.D. thesis evaluation from local and overseas universities. He regularly received an invitation to evaluate academic staff for promotion to Professor or Associate Professor from local and abroad. Dr. Lee occasionally received an invitation as keynote/invited/guest speaker for conferences/seminars and facilitator workshops or short courses. He is an editor for Scopus and WoS indexed journals.

## Academic Qualification

- Doctor of Philosophy (Mathematics), Universiti Teknologi Malaysia. 2000 – 2003.
- Master of Science (Statistics), Universiti Kebangsaan Malaysia, Malaysia. 1992 – 1994.
- Bachelor of Science (Honours) in Statistics, Universiti Kebangsaan Malaysia. 1987 – 1991.

## Professional Membership

- Professional Technologist (Ts. title) from Malaysia Board of Technologists (MBOT). 28 Jan. 2020.

## Association Membership

- Fellow, Academy of Professors Malaysia (APM). FAPM0040. 2021.
- Life member, Institute Statistics of Malaysia (ISM). Vice President (2012 - 2014). ISM Council (2008 – 2010, 2010 – 2012).
- Life members, Malaysian Mathematical Sciences Society (PERSAMA), #LM99. 1999 – Present.
- Life members, Islamic Countries Society of Statistical Sciences (ISOSS). #L-121. 2010 – Present.
- Life member, Institute of Mathematical Statistics (IMS). Member ID: 25873.
- Life membership, Islamic Academic of Science Malaysia (ASASI). 2000 - Present.
- Institute of Business Forecasting & Planning (iBF). 2010 - 2012. Member.
- IEEE. #90849769, 2010. Member.
- Association for Computing Machinery (ACM). 2010. Member.
- IEEE Computer Society. 2008. Member.
- American Mathematical Society (AMS). 2008. Member.

## Administrative Experience

- Director (Data Management and Analytics), Office of Strategy and Corporate Affairs, UTM. Apr. 2021 – Feb. 2023.
- Deputy Director (Analytics and Institutional Research), Office of Strategy Management, UTM. Mar. 2018 – Feb. 2021.
- Manager (Information Technology), Office of the Deputy Vice-Chancellor (Academic and International), UTM. Apr. 2014 - Feb. 2018.
- Manager (Information Technology), Research Management Centre, UTM. Nov. 2008 - Nov. 2012.

## Work Experience

- University Senate, Universiti Teknologi Malaysia (UTM). Jan. 2014 – Jan. 2023.
- Adjunct Professor, Department of Statistics, Institut Teknologi Sepuluh Nopember (ITS), Surabaya. Jul. 2021 – Jun. 2022.
- Visiting Professor, Faculty of Applied Sciences and Technology, Universiti Tun Hussein Onn Malaysia (UTHM). 15 September 2021 – 14 September 2023.
- External Examiner, Faculty of Applied and Human Sciences. Master of Science (Engineering Mathematics) Mixed Mode Programme and Master of Science and Doctor of Philosophy (Research Mode) Programme. 2021/2022 & 2022/2023.

- External Examiner, Faculty of Science and Technology, Universiti Kebangsaan Malaysia (UKM). Master of Science (Data Science and Analytics). 1 February 2021 – 31 January 2023.
- Auditor, Malaysian Qualifications Agency (MQA). Sept. 2012 – Jul. 2024.
- Auditor, Malaysia Research Assessment (MyRA), MoHE. Jan. 2015 – Dec. 2022.
- Auditor, Ratings for Universities and University Colleges (SETARA), MoHE. 2017.
- Assessor for Programme Accreditation, Universiti Teknologi Petronas (UTP). 2019 – 2022.

## Research Grant

1. 2020. An Adaptive Homogenously Weighted Moving Average Control Chart based on Variable Sample Size Approach for Processing Monitoring. UTM Encouragement Research. Q.J130000.3801.19J38. RM56,000. Project Leader.
2. 2020. 10-Year Economic Impact and Investment Analysis for UTM Strategic Decision-making. Business Entity. S.J130000.5001.4Y233. RM50,000. Researcher.
3. 2019. Kajian Kesediaan Institusi Pendidikan bagi Mendepani Revolusi Perindustrian 4.0. R.J130000.7655.4C329. Contract Research. RM358,585. Researcher.
4. 2019. Hybrid Time Series Model Applied for Forecasting and as a Missing Values Imputation Method for Long Term Load. Q.J130000.2654.17J90. RM30,000. Researcher.
5. 2019. Seasonal GSTAR Model with Exogenous Variables for Forecasting Space-Time Data with Calendar Variation Effect. Industry-International Incentive Grant. Q.J130000.3001.01M30. 01/02/2019 - 31/01/2021. RM10,000. Project Leader.
6. 2019. Development of Lower Extremities Motion Capture Prototype for Sports Performance and Gait Analysis. PRGS/1/2019/SSI09/UPSI/02/2. Networking Grant. S.J130000.7301.4X529. 01/08/2019 - 31/07/2021. RM89,000. Researcher.
7. 2017. Spatial Modeling Of Climate Data Using Geographically Weighted Regression. Q.J130000.2526.17H95. Tier 1. RM40,000. Researcher.
8. 2016. Penalized Principal Component Analysis with Application in High Dimensional Data. GUP Tier-1 2016-2. Q.J130000.2508.15H64. 01/10/2016 – 30/09/2018. RM40,000. Project Leader.
9. 2016. Statistical Modelling for High-dimensional Generalized Linear Models in Computational Biology. FRGS 2016-1. Grant No: R.J130000.7808.4F822. 01/08/2016 – 31/07/2018. RM56,850. Project Leader.
10. 2016. Statistical Modelling of High-Dimensional Generalized Linear Models. Professional Development Research University. Q.J130000.21A2.03E12. RM69,854. Project Leader.
11. 2015. Governance for Disaster Risk Reduction: Performance Evaluation of River Basin Organizations in Controlling the Occurrence of Flood – A Case Study of Sungai Kelantan Basin. FRGS 2015. Grant No: R.J130000.7809.4F704. 01/04/2015 – 31/12/2015. RM63,000. Researcher.
12. 2011. New Hybrid Model for Forecasting Short Term Electricity Load Demand. Research University Grants. Tier 1. Grant No.: Q.J130000.2513.01H11. 01/04/2011 – 31/03/2013. RM130,000. Project Leader.
13. 2010. Pembangunan Modul Pengurusan Proposal dan Modul Pengurusan Rekod Penyelidikan Secara Online bagi Pengurusan Penyelidikan di UTM. Grant No.: 77030. 01/06/2010 – 31/07/2011. RM50,000. Project Leader.

14. 2010. Pembangunan Modul Aktiviti Penyelidikan dan Modul Perlantikan Penyelidikan Secara Online bagi Pengurusan Penyelidikan di UTM. Grant No.: 77031. 01/06/2010 – 31/07/2011. RM30,000. Researcher.
15. 2010. Pembangunan Modul Pemantauan Penyelidikan Secara Online bagi Pengurusan Penyelidikan di UTM. Grant No.: 77029. 01/06/2010 – 31/12/2011. RM30,000. Researcher.
16. 2009. An Improved Method for Prediction Based On Fuzzy Time Series. FRGS. Grant No.: R.J130000.7826.3F418. 15/11/2009 – 14/11/2011. RM28,000. Project Leader.
17. 2008. Development of an Intervention Model for Business Impact Analysis in the Implementation of the Business Continuity Management Process. Project Number: USIM/FRGS-FST-06-50508. 3 Oct. 2008 - 4 Apr. 2010. Researcher.
18. 2008. Molecular Modelling and Simulation of Nano Structures. FRGS. Grant No.: 78341. 01/11/2008 – 30/04/2011. RM95,500. Researcher.
19. 2007. Development of Software Tools for Performance Evaluation of Mobile Ad Hoc Networks using Taguchi Method. MOSTI: Science Fund. Grant No.: 79220. 01/09/2007 – 28/02/2009. RM140,600. Project Leader.
20. 2004. Prediction of Optimum Performance in Self-Organizing Networks with Dynamic Source Routing Protocol. Grant No.: 75185. 01/11/2004 – 31/10/2005. RM15,000. Project Leader.
21. 2000. The Development Of An Intelligent Project Estimating In An Integrated Construction Environment. Sciencefund. 72263. RM211,850. Researcher.
22. 2000. The Development Of A Process Model For Effective Implementation Of Quality Management System In Construction Phase. Sciencefund. 72371. RM101,650. Researcher.
23. 2000. The Development of an Intelligent Information Model for Construction Methods Assessment in an Integrated Construction Environment. Sciencefund. 72268. RM88,350. Researcher.
24. 1999. Qualitative Model with Binary Dependent Variables Approach for Modelling of Students Performance of Academic Achievement. Grant No.: 71390. 1/1/1999 – 31/12/2000. RM15,000. Project Leader.
25. 1999. An Investigation into the Implementation of a Quality Management System in a Mega Construction Project. IRPA. Grant No.: 72191. 01/07/1999 – 30/06/2003. RM118,750. Researcher.
26. 1999. Architectural Design Management : The Development Of Best Practices Model Based On The Quality Management System Requirements. Sciencefund. 72169. RM110,200. Researcher.
27. 1998. R&D Requirement of the Malaysia Construction Industry. Grant No.: 71231. 01/01/1998 – 31/12/1999. RM18,225. Researcher.
28. 1997. Kajian Mengenai Permintaan Dan Penawaran Gunatenaga Serta Keperluan Latihan Dalam Industri Pembinaan Di Malaysia Sehingga Tahun 2005 Balai Iktisas Malaysia. Contract Research. 68052. RM300,000. Researcher.
29. 1997. Study on High Radiation Area, Palong, Segamat. Grant No.: 71159. 01/06/1997 – 30/06/1998. RM20,000. Researcher.
30. 1996. A Guide to Statistical Resource on the Internet for Malaysia Higher Institutes of Learning. Grant No.: 71091. 01/10/1996 – 30/09/1997. RM13,300. Project Leader.
31. 1996. Menganalisis Pembolehubah Diskrit Dan Selanjar Secara Serentak. Short Term. 71090. RM6,000. Researcher.
32. 1995. TQM Application in Construction Project Management. Grant No.: 61811. 02/01/1995 – 29/01/1997. RM17,150. Researcher.

## PUBLICATIONS

### Referred Journals / Article

5-Year Total Articles (Year 2016 – 2020) = **59 articles**

5-Year Total Q1/Q2 Journal (Year 2016 – 2020) = **33 articles (55.9%)**

5-Year Journal Impact Factor (Year 2016 – 2020) = **98.100**

Year 2022: **1 articles**

1. Rashid Mehmood, Muhammad Riaz, Muhammad Hisyam Lee, Iftikhar Ali. (2021). Exact computational methods for univariate and multivariate control charts under runs rules. *Computer & Industrial Engineering*, Volume 163, Article number 107821. ISSN: 0360-8352. DOI: 10.1016/j.cie.2021.107821. 2020 JCR Impact Factor: 5.431. Journal Ranking in JCR: **Q1**. Published.

Year 2021: **12 articles** (Q1 = 3, Q2 = 2, Q3 = 3, Scopus = 4) and CIF = 26.800

2. Mohammad Syazwan Mohd Sanusi, Ahmad Termizi Ramli, Suhairul Hashim, Muhammad Hisyam Lee. (2021). Radiological hazard associated with amang processing industry in Peninsular Malaysia and its environmental impacts. *Ecotoxicology and Environmental Safety*, Vol. 208. Article 111727. ISSN: 0147-6513. DOI: 10.1016/j.ecoenv.2020.111727. 2020 JCR Impact Factor: 6.291. Journal Ranking in JCR: **Q1**.
3. Zakariya Yahya Algamal, Maimoonah Khalid Qasim, Muhammad Hisyam Lee, Haithem Taha Mohammad Ali. (2021). Improving grasshopper optimization algorithm for hyperparameters estimation and feature selection in support vector regression. *Chemometrics and Intelligent Laboratory Systems*. ISSN: 0169-7439. DOI: 10.1016/j.chemolab.2020.104196. 2020 JCR Impact Factor: 3.491. Journal Ranking in JCR: **Q1**.
4. Muhammad Mashuri, Muhammad Ahsan, Muhammad Hisyam Lee, Dedy Dwi Prastyo, Wibawati. (2021). PCA-based Hotelling's  $T^2$  chart with fast minimum covariance determinant (FMCD) estimator and kernel density estimation (KDE) for network intrusion detection. *Computer & Industrial Engineering*, Volume 158, Article number 107447. ISSN: 0360-8352. DOI: 10.1016/j.cie.2021.107447. 2020 JCR Impact Factor: 5.431. Journal Ranking in JCR: **Q1**.
5. Ishaq Adeyanju Raji, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya and Nasir Abbas. (2021). A robust multivariate Shewhart chart for contaminated normal environments. *Quality and Reliability Engineering International*, 37: 2665-2684. DOI: 10.1002/qre.2882. ISSN: 0748-8017. 2020 JCR Impact Factor: 2.885. Journal Ranking in JCR: **Q2**.
6. Rashid Mehmood, Muhammad Hisyam Lee, Muhammad Rizwan Iqbal, Sajdah Hassan. (2021). New robust location control charts for unknown process distribution with practical significance. *Soft Computing*. ISSN: 1432-7643. DOI: 10.1007/s00500-021-06497-4. 2020 JCR Impact Factor: 3.643. Journal Ranking in JCR: **Q2**. Early Access.
7. Rashid Mehmood, Muhammad Hisyam Lee, Iftikhar Ali, Muhammad Riaz. (2021). Comparative analysis between FAR and ARL based control charts with runs rules. *Hacettepe*

- Journal of Mathematics and Statistics, 50(1): 275-288. ISSN: 1251-477X. DOI: 10.15672/hujms.758925. 2020 JCR Impact Factor: 0.929. Journal Ranking in JCR: **Q3**.
8. Rashid Mehmood, Muhammad Hisyam Lee, Iftikhar Ali, Muhammad Riaz. (2021). Generalized Hotelling T-2 control chart based on bivariate ranked set techniques with runs rules. Transactions of the Institute of Measurement and Control, 43(10): 2180-2195. ISSN: 0142-3312. DOI: 10.1177/0142331221992670. 2020 JCR Impact Factor: 1.796. Journal Ranking in JCR: **Q3**.
  9. Babar Zaman, Muhammad Riaz, Mu'azu Ramat Abujiya, Muhammad Hisyam Lee. (2021). Adaptive CUSUM location control charts based on score functions: An application in semiconductor wafer field. Arabian Journal for Science and Engineering. ISSN: 2193-567X. DOI: 10.1007/s13369-021-05878-z. 2020 JCR Impact Factor: 2.334. Journal Ranking in JCR: **Q3**. Early Access
  10. Sarijan S, Azman S, Lee, M.H., Said, M.I.M. (2021). Poisson Regression Model to Determine Factors of Microplastic Ingestion by African Catfish. Malaysian Journal of Mathematical Sciences, 15(1): 137-146. ISSN: 1823-8343. **Scopus**.
  11. Aiedh Mrisi Alharthi, Muhammad Hisyam Lee, Zakariya Yahya Algamal. (2021). Gene selection and classification of microarray gene expression data based on a new adaptive L1-norm elastic net penalty. Informatics in Medicine Unlocked, 24, Article number 100622. ISSN: 2352-9148. DOI: 10.1016/j.imu.2021.100622. **Scopus**.
  12. Nur A.B. Kamisan, Muhammad H. Lee, Siti F. Hassan, Siti M. Norrulashikin, Maria E. Nor, Nur H.A. Rahman. (2021). Forecasting Wind Speed Data by Using a Combination of ARIMA Model with Single Exponential Smoothing. Mathematical Modelling of Engineering Problems, 8(2): 207-212. ISSN: 2369-0739. DOI: 10.18280/mmep.080206. **Scopus**.
  13. Aiedh Mrisi Alharthi, Muhammad Hisyam Lee, Zakariya Yahya Algamal. (2021). Improving the diagnosis of breast cancer using regularized logistic regression with adaptive elastic net. Universal Journal of Public Health, 9(5): 317-323. ISSN: 2331-8880. DOI: 10.13189/ujph.2021.090514. **Scopus**.

Year 2020: **15 articles** (Q1 = 6, Q2 = 3, Q3 = 1, Q4 = 3, Scopus = 2) and CIF = 34.677

14. Zakariya Yahya Algamal, Maimoonah Khalid Qasim, Muhammad Hisyam Lee, Haithem Taha Mohammad Ali. (2020). High-dimensional QSAR/QSPR classification modeling based on improving pigeon optimization algorithm. Chemometrics and Intelligent Laboratory Systems. ISSN: 0169-7439. DOI:10.1016/j.chemolab.2020.104170. 2019 JCR Impact Factor: 2.985. Journal Ranking in JCR: **Q1**.
15. Muhammad Ahsan, Muhammad Mahsuri, Muhammad Hisyam Lee, Heri Kuswanto, Dedy Dwi Prastyo. (2020). Robust Adaptive Multivariate Hotelling's T2 Control Chart based on Kernel Density Estimation for Intrusion Detection System. Expert System with Applications, Vol. 145, Article 113105. DOI: 10.1016/j.eswa.2019.113105. ISSN: 0957-4174. 2019 JCR Impact Factor: 5.452. Journal Ranking in JCR: **Q1**.
16. Rashid Mehmood, Muhammad Hisyam Lee, Iftikhar Ali, Muhammad Riaz, Shahid Hussain. (2020). Multivariate cumulative sum control chart and measure of process capability based on bivariate ranked set scheme. Computers & Industrial Engineering, Volume, Article number 106891. ISSN: 0360-8352. DOI: 10.1016/j.cie.2020.106891. 2019 JCR Impact Factor: 4.135. Journal Ranking in JCR: **Q1**.

17. Ishaq Adeyanju Raji, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya and Nasir Abbas. (2020). Outliers Detection Models in Shewhart Control Charts; An Application in Photolithography: A Semiconductor Manufacturing Industry. *Mathematics*, 8(5): Article number 857. ISSN: 2227-7390. DOI: 10.3390/MATH8050857. 2019 JCR Impact Factor: 1.747. **Q1**.
18. Winita Sulandari, Subanar Subanar, Muhammad Hisyam Lee, Paulo Canas Rodrigues. (2020). Indonesian electricity load forecasting using singular spectrum analysis, fuzzy systems and neural networks, *Energy*, Volume 190, Article number 116408. DOI: 10.1016/j.energy.2019.116408. ISSN: 0360-5442. 2019 JCR Impact Factor: 6.082. Journal Ranking in JCR: **Q1**.
19. Babar Zaman, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya (2019). An improved process monitoring by mixed multivariate memory control charts: An application in wind turbine field. *Computer & Industrial Engineering*, Volume 142, Article number 106343. ISSN: 0360-8352. DOI: 10.1016/j.cie.2020.106343. 2019 JCR Impact Factor: 4.135. Journal Ranking in JCR: **Q1**.
20. Aiedh Mrisi Alharthi, Muhammad Hisyam Lee, Zakariya Yahya Algamal, Abdo M. Al-Fakih (2020). Quantitative structure-activity relationship model for classifying the diverse series of antifungal agents using ratio weighted penalized logistic regression. *SAR and QSAR in Environmental Research*, 30(6): 403-416. DOI: 10.1080/1062936X.2020.1782467. ISSN: 1062-936X. 2019 JCR Impact Factor: 2.053. Journal Ranking in JCR: **Q2**.
21. Zakariya Yahya Algamal, Maimoonah Khalid Qasim, Muhammad Hisyam Lee, Hafiz Tiomoko Ali. QSAR model for predicting neuraminidase inhibitors of influenza A viruses (H1N1) based on adaptive grasshopper optimization algorithm. *SAR and QSAR in Environmental Research*, 31(11): 803-814. DOI: 10.1080/1062936X.2020.1818616. ISSN: 1062-936X. 2019 JCR Impact Factor: 2.053. Journal Ranking in JCR: **Q2**.
22. Muhammad Ahsan, Muhammad Mashuri, Wibawati, Hidayatul Khusna, Muhammad Hisyam Lee (2020). Multivariate Control Chart based on Kernel PCA for Monitoring Mixed Variable and Attribute Quality Characteristics. *Symmetry*, 12(11), 1838. DOI: 10.3390/sym12111838. ISSN: 2073-8994. 2019 JCR Impact Factor: 2.645. Journal Ranking in JCR: **Q2**.
23. Rashid Mehmood, Muhammad Hisyam Lee, Ambreen Afzel, Sheraz Bashir, Muhammad Riaz. (2020). Generalized skewness correction structure of X-bar control chart for unknown process parameters and skewed probability distributions. *Journal of Statistical Computation and Simulation*, 90(8): 1349-1372 DOI: 10.1080/00949655.2020.1725812. ISSN: 1563-5163. 2019 JCR Impact Factor: 0.918. Journal Ranking in JCR: **Q3**.
24. Nur Haizum Abd Rahman, Muhammad Hisyam Lee. (2020). Air Pollutant Index Calendar-Based Graphics for Visualizing Trends Profiling and Analysis. *Sains Malaysiana*, 49(1): 201-209. DOI: 10.17576/jsm-2020-4901-24. ISSN: 0126-6039. 2019 JCR Impact Factor: 0.643. Journal Ranking in JCR: **Q4**.
25. Rashid Mehmood, Muhammad Hisyam Lee, Mujtaba Baqar, Muhammad Riaz. (2020). Application of Quality Control Charts for Early Detection of Flood Hazards. *Polish Journal of Environmental Studies*, 29(6): 4241-4248. DOI: 10.15244/pjoes/109028. ISSN: 1230-1485. 2018 JCR Impact Factor: 1.186. Journal Ranking in JCR: **Q4**.
26. Nur Arina Bazilah, Muhammad Hisyam Lee, Abdul Ghapor Hussin, Yong Zulina Zubairi. (2020). Imputation Techniques for Incomplete Load Data Based on Seasonality and Orientation of the Missing Values. *Sains Malaysiana*, 49(1): 201-209. DOI: 10.17576/

jsm-2020-4905-22. ISSN: 0126-6039. 2019 JCR Impact Factor: 0.643. Journal Ranking in JCR: **Q4**.

27. Nur Haizum Abd Rahman, Muhammad Hisyam Lee. (2020). Artificial neural network forecasting performance with missing value imputations. *IAES International Journal of Artificial Intelligence*, 9(1): 33-39. DOI: 10.11591/ijai.v9.i1.pp33-39. ISSN: 2089-4872. **Scopus**.
28. Aiedh Mrisi Alharthi, Muhammad Hisyam Lee, Zakariya Yahya Algamal, Abdo M. Al-Fakih (2020). Weighted L1-norm logistic regression for gene selection of microarray gene expression classification. *International Journal on Advanced Science, Engineering and Information Technology*, 10 (4): 1483-1488. DOI: 10.18517/ijaseit.10.4.10907. ISSN: 2088-5334. **Scopus**.

Year 2019: **16 articles** (Q1 = 3, Q2 = 2, Q3 = 2, Q4 = 2, Scopus = 4, WoS = 3) and CIF = 19.575.

29. Hossein Javedani Sadaei, Petrônio Cândidode Lima e Silva, Frederico Gadelha Guimarães, Muhammad Hisyam Lee. (2019). Short-term load forecasting by using a combined method of convolutional neural networks and fuzzy time series. *Energy*, 175: 365-377. DOI: 10.1016/j.energy.2019.03.081. ISSN: 0360-5442. 2018 JCR Impact Factor: 5.537. Journal Ranking in JCR: **Q1**.
30. Babar Zaman, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya (2019). An adaptive EWMA chart with CUSUM accumulate error-based shift estimator for efficient process dispersion monitoring. *Computer & Industrial Engineering*, 135: 236-253. ISSN: 0360-8352. DOI: 10.1016/j.cie.2019.06.012. 2018 JCR Impact Factor: 3.518. Journal Ranking in JCR: **Q1**.
31. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2019). A two-stage sparse logistic regression for optimal gene selection in high-dimensional microarray data classification. *Advances in Data Analysis and Classification*, 13(3): 753-771. DOI: 10.1007/s11634-018-0334-1. ISSN: 1862-5347. 2018 JCR Impact Factor: 2.098. Journal Ranking in JCR: **Q1**.
32. Abdo M. Al-Fakih, Zakariya Yahya Algamal, Muhammad Hisyam Lee, Madzlan Aziz. (2019). A QSAR model for predicting antidiabetic activity of dipeptidyl peptidase-IV inhibitors by enhanced binary gravitational search algorithm. *SAR and QSAR in Environmental Research*, 30(6): 403-416. DOI: 10.1080/1062936X.2019.1607899. ISSN: 1062-936X. 2018 JCR Impact Factor: 2.287. Journal Ranking in JCR: **Q2**.
33. Abdo M. Al-Fakih, Zakariya Yahya Algamal, Muhammad Hisyam Lee, Madzlan Aziz. (2019). QSAR classification model for diverse series of antifungal agents based on improved binary differential search algorithm. *SAR and QSAR in Environmental Research*, 30(2): 131-143. DOI: 10.1080/1062936X.2019.1568298. ISSN: 1062-936X. 2018 JCR Impact Factor: 2.287. Journal Ranking in JCR: **Q2**.
34. Babar Zaman, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya (2019). An Adaptive Approach to EWMA Dispersion Chart Using Huber and Tukey Functions. *Quality and Reliability Engineering International*, 35: 1542-1581. DOI: 10.1002/qre.2460. ISSN: 0748-8017. 2018 JCR Impact Factor: 1.409. Journal Ranking in JCR: **Q3**.
35. Rashid Mehmood, Muhammad Hisyam Lee, Muhammad Riaz. (2019). On efficient construction and evaluation of runs rules-based control chart for known and unknown parameters under different distributions. *Quality and Reliability Engineering International*,

- 35(2): 582-599. DOI: 10.1002/qre.2423. ISSN: 0748-8017. 2018 JCR Impact Factor: 1.409. Journal Ranking in JCR: **Q3**.
36. Rashid Mehmood, Muhammad Hisyam Lee, Muhammad Riaz, Babar Zaman, Iftikhar Ali. (2019). Hotelling T-2 control chart based on bivariate ranked set schemes. *Communications in Statistics - Simulation and Computation*. DOI: 10.1080/03610918.2019.1643885. ISSN: 1532-4141. 2018 JCR Impact Factor: 0.490. Journal Ranking in JCR: **Q4**. (Early Access)
37. Suhartono, Dimas Ewin Ashari, Dedy Dwi Prastyo, Heri Kuswanto, & Muhammad Hisyam Lee. (2019). Deep neural network for forecasting inflow and outflow in Indonesia. *Sains Malaysiana*, 48(8): 1787-1798. DOI: 10.17576/jsm-2019-4808-26. ISSN: 0126-6039. 2018 JCR Impact Factor: 0.540. Journal Ranking in JCR: **Q4**.
38. Shazani Sarijan, Shamila Azman, Mohd Ismid Mohd Said, Muhammad Hisyam Lee. (2019). Ingestion of Microplastics by Commercial Fish in Skudai River, Malaysia. *EnvironmentAsia*, 12(3): 75-84. DOI: 10.14456/ea.2019.47. ISSN 1906-1714. **Scopus**.
39. Mohd Yusof Baharuddin, Ahmad Hafiz Zulkifly, Lee Ai Choo, Siti Noor Azza Aminudin, Muhammad Hisyam Lee, Sheikh Hussain Shaikh Salleh. (2019). Fabrication of low-cost hip implant using direct metal laser sintering technique. *International Journal of Recent Technology and Engineering*, 8(4): 4544-4547. DOI: 10.35940/ijrte.D8472.118419. ISSN: 2277-3878. **Scopus**.
40. Nur Haizum Abd Rahman, Muhammad Hisyam Lee, Suhartono, Mohd Talib Latif. (2019). Hybrid seasonal ARIMA and artificial neural network in forecasting southeast Asia City Air Pollutant Index. *ASM Science Journal*, 12 (Special Issue 1): 215-226. ISSN: 1823-6782. **Scopus**.
41. Winita Sulandari, Subanar Subanar, Suhartono, Herni Utami, Muhammad Hisyam Lee. (2019). Estimating the function of oscillatory components in ssa-based forecasting model. *International Journal of Advances in Intelligent Informatics*, 5(1): 11-23. DOI: 10.26555/ijain.v5i1.312. ISSN: 2442-6571. **Scopus**.
42. Yusrina Andu, Muhammad Hisyam Lee and Zakariya Yahya Algamal. (2019). Non-transformed Principal Component Technique on Weekly Construction Stock Market Price. *Matematika*, 35(2): 139-147. ISSN: 0127-8274. DOI: 10.11113/matematika.v35.n2.1112. **WoS**.
43. Hidayatul Khusna, Muhammad Mashuri, Suhartono, Dedy Dwi Prastyo, Muhammad Hisyam Lee, Muhammad Ahsan. (2019). Residual-Based Maximum MCUSUM Control Chart for Joint Monitoring the Mean and Variability of Multivariate Autocorrelated Processes. *Production and Manufacturing Research-An Open Access Journal*, 7(1): 364-394. DOI: 10.1080/21693277.2019.1622471. ISSN: 2169-3277. **WoS**.
44. Rashid Mehmood, Muhammad Hisyam Lee, Muhammad Riaz, Iftikhar Ali (2019). Generalized performance measures of X-bar control charts based on different sampling schemes. *Journal of Probability and Statistics*. Article ID 5269357. DOI: 10.1155/2019/5269357. ISSN: 1687-952X. **WoS**.

Year 2018: **6 articles** (Q2 = 1, Q3 = 1, Scopus = 3) and CIF = 2.247

45. Abdo M. Al-Fakih, Zakariya Yahya Algamal, Muhammad Hisyam Lee, Madzlan Aziz. (2018). A penalized quantitative structure-property relationship study on melting point of energetic carbocyclic nitroaromatic compounds using adaptive bridge penalty. *SAR and QSAR in*

*Environmental Research*, 29(5): 339-353. DOI: 10.1080/1062936X.2018.1439531. ISSN: 1062-936X. 2017 JCR Impact Factor: 1.897. Journal Ranking in JCR: **Q2**.

46. Nur Arina Bazilah, Muhammad Hisyam Lee, Suhartono, Abdul Ghapor Hussin, Yong Zulina Zubairi. (2018). Load Forecasting using Combination Model of Multiple Linear Regression with Neural Network for Malaysia City. *Sains Malaysiana*, 47(2): 419-426. DOI: 10.17576/jsm-2018-4702-25. ISSN: 0126-6039. 2017 JCR Impact Factor: 0.350. Journal Ranking in JCR: **Q3**.
47. Dedy Dwi Prastyo, Suhartono, Agnes Ona Bliti Puka, Muhammad Hisyam Lee. (2018). Comparison between hybrid quantile regression neural network and autoregressive integrated moving average with exogenous variable for forecasting of currency inflow and outflow in bank Indonesia. *Jurnal Teknologi*, 80(6), pp. 61-68. DOI: 10.11113/jt.v80.11785. **Scopus**.
48. Suhartono, Dedy Dwi Prastyo, Heri Kuswanto, Muhammad Hisyam Lee. (2018). Comparison between VAR, GSTAR, FFNN-VAR and FFNN-GSTAR Models for Forecasting Oil Production. *Matematika*, 34(1): 103-111. DOI: 10.11113/matematika.v34.n1.1040. ISSN: 0127-8274. **Scopus**.
49. Winita Sulandari, Subanar Subanar, Suhartono Suhartono, Herni Utami, Muhammad Hisyam Lee. An Empirical Study of Error Evaluation in Trend and Seasonal Time Series Forecasting Based on SSA. *Pakistan Journal of Statistics and Operational Research*, 14(4): 945-960. DOI: 10.18187/pjsor.v14i4.2443. ISSN: 1816-2711. **Scopus**.
50. Suhartono, Salafiyah Isnawati, Novi Ajeng Salehah, Dedy Dwi Prastyo, Heri Kuswanto, Muhammad Hisyam Lee. (2018). Hybrid SSA-TSR-ARIMA for water demand forecasting. *International Journal of Advances in Intelligent Informatics*, 4(3). ISSN 2548-3161.

Year 2017: **11 articles** (Q1 = 5, Q2 = 4, Q3 = 1, Scopus = 1) and CIF = 24.758

51. Wan Muhammad Saridan Wan Hassan, Mohamad Syazwan Mohd Sanusi, Ahmad Termizi Ramli, Muhammad Hisyam Lee, Azril Izham, Mohd Nor Said, Husin Wagiran, Arien Heryanshah. (2017). Assessment of impact of urbannisation on background radiation exposure and human health risk estimation in Kuala Lumpur, Malaysia. *Environmental International*, 104: 91/101. DOI: 10.1016/j.envint.2017.01.009. ISSN: 0160-4120. 2016 JCR Impact Factor: 7.088. Journal Ranking in JCR: **Q1**.
52. Sanusi, M.S.M., Ramli, A.T., Basri, N.A., Heryanshah, A., Said, M.N., Lee, M.H., Wagiran, H., Saleh, M.A. (2017). Thorium distribution in the soils of Peninsular Malaysia and its implications for Th resource estimation. *Ore Geology Reviews*, 80: 522-535. DOI: 10.1016/j.oregeorev.2016.07.021. 2015 JCR Impact Factor: 3.819. Journal Ranking in JCR: **Q1**.
53. Hossein Javedani Sadaei, Frederico Gadelha Guimarães, Cidiney José da Silva, Muhammad Hisyam Lee, Tayyebah Eslami. (2017). Short-term load forecasting method based on fuzzy time series, seasonality and long memory process. *International Journal of Approximate Reasoning*, 83: 196-217. DOI: 10.1016/j.ijar.2017.01.006. ISSN: 0888-613X. 2016 JCR Impact Factor: 2.696. **Q1**.
54. Zakariya Yahya Algamal, Muhammad Hisyam Lee, Abdo M. Al-Fakih, Madzlan Aziz. (2017). High-dimensional QSAR Classification Model for Antihepatitis C Virus Activity of Thiourea Derivatives based on the Sparse Logistic Regression Model with a Bridge Penalty. *Journal of Chemometrics*, 30(2): 50-57. DOI: 10.1002/cem.2889. ISSN: 0886-9383. 2016 JCR Impact Factor: 1.884. Journal Ranking in JCR: **Q1**.

55. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2017). A novel molecular descriptor selection method in QSAR classification model based on weighted penalized logistic regression. *Journal of Chemometrics*, 31(10): e2915. DOI: 10.1002/cem.2915. ISSN: 0886-9383. 2016 JCR Impact Factor: 1.884. Journal Ranking in JCR: **Q1**.
56. Zakariya Algamal & Muhammad Hisyam Lee. (2017). A new adaptive L1-norm for optimal descriptor selection of High-dimensional QSAR Classification Model for Anti-hepatitis C Virus Activity of Thiourea Derivatives. *SAR and QSAR in Environmental Research*, 28(1): 75 - 90. DOI: 10.1080/1062936X.2017.1278618. ISSN: 1062-936X. 2015 JCR Impact Factor: 1.897. Journal Ranking in JCR: **Q2**.
57. Babar Zaman, Muhammad Riaz, Muhammad Hisyam Lee. (2017). On the Performance of Control Charts for Simultaneous Monitoring of Location and Dispersion Parameters. *Quality and Reliability Engineering International*, 33(1): 37-56. DOI: 10.1002/qre.1989. ISSN: 0748-8017. 2015 JCR Impact Factor: 1.457. Journal Ranking in JCR: **Q2**.
58. Babar Zaman, Muhammad Hisyam Lee, Muhammad Riaz, Mu'azu Ramat Abujiya (2017). An adaptive EWMA scheme-based CUSUM accumulation error for efficient monitoring of process location. *Quality and Reliability Engineering International*, 33(8): 2463-2482. DOI: 10.1002/qre.2203. ISSN: 0748-8017. 2015 JCR Impact Factor: 1.457. Journal Ranking in JCR: **Q2**.
59. Abdo M. Al-Fakih, Zakariya Yahya Algamal, Muhammad Hisyam Lee, Madzlan Aziz. (2017). A sparse QSRR model for predicting retention indices of essential oils based on robust screening approach. *SAR and QSAR in Environmental Research*, 28(8): 691-703. DOI: 10.1080/1062936X.2017.1375010. ISSN: 1062-936X. 2015 JCR Impact Factor: 1.897. Journal Ranking in JCR: **Q2**.
60. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, Muhammad Riaz. (2017). New EWMA S-2 control charts for monitoring of process dispersion. *Scientia Iranica*, 24(1): 378-389. ISSN: 1026-3098. 2015 JCR Impact Factor: 0.679. Journal Ranking in JCR: **Q3**.
61. Nur Arina Bazilah, Muhammad Hisyam Lee, Suhartono, Abdul Ghapor Hussin, Yong Zulina Zubairi. (2017). Functional Residual Plot for Model Validation. *Jurnal Teknologi (Sciences and Engineering)*, 79(1):91-95. DOI: 10.11113/jt.v79.8421. ISSN: 0127-9696. Scopus.

Year 2016: **11 articles** (Q1 = 3, Q2 = 6, Q3 = 1, Scopus = 1) and CIF = 16.843.

62. Hossein Javedani Sadaei, Rasul Enayatifar, Muhammad Hisyam Lee, Maqsood Mahmud. (2016). A hybrid model based on differential fuzzy logic relationships and imperialist competitive algorithm for stock market forecasting. *Applied Soft Computing*, 40: 132-149. DOI: 10.1016/j.asoc.2015.11.026. 2015 JCR Impact Factor: 2.857. Journal Ranking in JCR: **Q1**.
63. Zakariya Yahya Algamal, Muhammad Hisyam Lee, Abdo M. Al-Fakih. (2016). High-dimensional quantitative structure-activity relationship modeling of influenza neuraminidase a/PR/8/34 (H1N1) inhibitors based on a two-stage adaptive penalized rank regression. *Journal of Chemometrics*, 30(2): 50-57. DOI: 10.1002/cem.2766. ISSN: 0886-9383. 2015 JCR Impact Factor: 1.873. Journal Ranking in JCR: **Q1**.
64. Abdo M. Al-Fakih, Zakariya Y. Algamal, Muhammad H. Lee, Hassan H. Abdallah, Hasmeriya Maarof, Madzlan Aziz. (2016). Quantitative structure-activity relationship model for prediction study of corrosion inhibition efficiency using two-stage sparse multiple linear

- regression. *Journal of Chemometrics*, 30(7): 361-368. DOI: 10.1002/cem.2800. ISSN: 0886-9383. 2015 JCR Impact Factor: 1.873. Journal Ranking in JCR: **Q1**.
65. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, Muhammad Riaz. (2016). Combined application of Shewhart and cumulative sum R chart for monitoring process dispersion. *Quality and Reliability Engineering International*, 32(1): 51-67. DOI: 10.1002/qre.1725. ISSN: 0748-8017. 2015 JCR Impact Factor: 1.457. Journal Ranking in JCR: **Q2**.
66. Mohammad Syazwan Mohd Sanusi, Ahmad Termizi Ramli, Husin Wagiran, Muhammad Hisyam Lee, Arien Heryanshah, Mohd Nor Said. (2016). Investigation of geological and soil influence on natural gamma radiation exposure and assessment of radiation hazards in Western Region, Peninsular Malaysia. *Environmental Earth Sciences*, 75(6), Article Number: 485. DOI 10.1007/s12665-016-5290-5. ISSN: 1866-6280. 2014 JCR Impact Factor: 1.765. Journal Ranking in JCR: **Q2**.
67. Zakariya Yahya Algamal, Muhammad Hisyam Lee, Abdo M. Al-Fakih, Madzlan Aziz. (2016). High-dimensional QSAR modelling using penalized linear regression model with L-1/2-norm. *SAR and QSAR in Environmental Research*, 27(9): 703-719. DOI: 10.1080/1062936X.2016.1228696. ISSN: 1062-936X. 2015 JCR Impact Factor: 1.897. Journal Ranking in JCR: **Q2**.
68. Mu'azu Ramat Abujiya, Muhammad Riaz, Muhammad, Hisyam Lee. (2016). A New Combined Shewhart-Cumulative Sum S Chart for Monitoring Process Standard Deviation. *Quality and Reliability Engineering International*, 32(3): 1149-1165. DOI: 10.1002/qre.1822. ISSN: 0748-8017. 2015 JCR Impact Factor: 1.457. Journal Ranking in JCR: **Q2**.
69. Ahmad Termizi Ramli, Mohammad Syazwan Mohd Sanusi, Muhammad Hisyam Lee, Sallehuddin Sahrone, Nor Zati Hani Abu Hanifah. (2016). Spatial distribution of natural gamma radiation exposure and its relationship to soil types. *Natural Hazards*, 84(3): 1859-1872. DOI: 10.1007/s11069-016-2524-5. ISSN: 0921-030X. 2015 JCR Impact Factor: 1.746. Journal Ranking in JCR: **Q2**.
70. Babar Zaman, Nasir Abbas, Muhammad Riaz, Muhammad Hisyam Lee. (2016). Mixed CUSUM-EWMA chart for monitoring process dispersion. *International Journal of Advanced Manufacturing Technology*, 86(9-12): 3025-3039. DOI: 10.1007/s00170-016-8411-0. ISSN: 0268-3768. 2015 JCR Impact Factor: 1.568. Journal Ranking in JCR: **Q2**.
71. Nur Haizum Abd Rahman, Muhammad Hisyam Lee, Suhartono, Mohd Talib Latif. (2016). Evaluation Performance of Time Series Approach for Forecasting Air Pollution Index in Johor, Malaysia. *Sains Malaysiana*, 45(11): 1625-1633. ISSN: 0126-6039. 2014 JCR Impact Factor: 0.350. Journal Ranking in JCR: **Q3**.
72. Maria Elena Nor, Azme Khamis, Sabariah Saharan, Mohd Asrul Affendi Abdullah, Rohayu Mohd Salleh, Norhaidah Mohd Asrah, Kamil Khalid, Fazlina Aman, Mohd Saifullah Rusiman, Harliana Halim, Muhammad Hisyam Lee, Eliza Nor. 2016. Malaysia tourism demand forecasting by using time series approaches. *Social Science (Pakistan)*, 11(12): 2938-2945. DOI: 10.3923/sscience.2016.2938.2945. ISSN: 1818-5800. Scopus.

Year 2015: **14 articles** (Q1 = 3, Q2 = 3, Q3 = 2, Scopus/ERA = 6) and CIF = 14.986.

73. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). Penalized logistic regression with the adaptive LASSO for gene selection in high-dimensional cancer classification. *Expert Systems With Applications*, 42(23): 9326-9332. DOI: 10.1016/j.eswa.2015.08.016. ISSN: 0957-4174. 2014 JCR Impact Factor: 2.240. Journal Ranking in JCR: **Q1**.

74. Zakariya Yahya Algamal, Muhammad Hisyam Lee, Abdo M. Al-Fakih, Madzlan Aziz. (2015). High Dimensional QSAR Prediction of Anticancer Potency of Imidazo[4,5-B]pyridine Derivatives Using Adjusted Adaptive LASSO. *Journal of Chemometrics*, 29(10): 547-556. DOI: 10.1002/cem.2741. ISSN: 0886-9383. 2014 JCR Impact Factor: 1.500. Journal Ranking in JCR: **Q1**.
75. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, Muhammad Riaz. (2015). Enhanced cumulative sum charts for monitoring process dispersion. *PLOS ONE*, 10(4), Article Number: e0124520. DOI: 10.1371/journal.pone.0124520. ISSN: 1932-6203. 2014 JCR Impact Factor: 3.234. Journal Ranking in JCR: **Q1**.
76. Nur Haizum Abd Rahman, Muhammad Hisyam Lee, Suhartono, Mohd Talib Latif. (2015). Artificial Neural Networks and Fuzzy Time Series Forecasting: An Application to Air Quality. *Quality & Quantity*, 49(6): 2633-2647. DOI: <http://10.1007/s11135-014-0132-6>. ISSN: 0033-5177. 2014 JCR Impact Factor: 0.720. Journal Ranking in JCR: **Q2**.
77. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, Muhammad Riaz. (2015). Increasing the Sensitivity of Cumulative Sum Charts for Location. *Quality and Reliability Engineering International*, 31(6): 1035-1051. DOI: 10.1002/qre.1661. ISSN: 0748-8017. 2014 JCR Impact Factor: 1.191. Journal Ranking in JCR: **Q2**.
78. Osamah Basheer Shukur and Muhammad Hisyam Lee. (2015). Daily wind speed forecasting through hybrid KF-ANN model based on ARIMA. *Renewable Energy*, 76: 637-647. DOI: <http://dx.doi.org/10.1016/j.renene.2014.11.084>. ISSN: 0960-1481. 2013 JCR Impact Factor: 3.361. Journal Ranking in JCR: **Q2**.
79. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). Regularized logistic regression with an adjusted adaptive elastic net for gene selection in high dimensional cancer classification. *Computers in Biology and Medicine*, 67: 136-145. DOI: 10.1016/j.combiomed.2015.10.008. ISSN: 0010-4825. 2014 JCR Impact Factor: 1.240. Journal Ranking in JCR: **Q3**.
80. Abdo M. Al-Fakih, Madzlan Aziz, Hassan H. Abdallah, Zakariya Y. Algamal, Muhammad H. Lee, Hasmerya Maarof. (2015). High Dimensional QSAR Study of Mild Steel Corrosion Inhibition in acidic medium by Furan Derivatives. *International Journal of Electrochemical Science*, 10: 3568-3583. ISSN: 1452-3981. ISI. 2014 JCR Impact Factor: 1.500. Journal Ranking in JCR: **Q3**.
81. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). High dimensional logistic regression model using adjusted elastic net penalty. *Pakistan Journal of Statistics and Operation Research*, 11(4): 667-676. DOI: 10.18187/pjsor.v11i4.990. ISSN: 1816-2711. Scopus.
82. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). Applying Penalized Binary Logistic Regression with Correlation Based Elastic Net for Variables Selection. *Journal of Modern Applied Statistical Methods*, 14(1): 168-179. ISSN: 1538-9472. Scopus.
83. Osamah Basheer Shukur and Muhammad Hisyam Lee. (2015). Daily wind speed forecasting through hybrid AR-ANN and AR-KF models. *Jurnal Teknologi*, 72(5): 89-95. DOI: 10.11113/jt.v72.3946. ISSN: 0127-9696. Scopus.
84. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). Penalized Poisson regression model using adaptive modified elastic net penalty. *Electronic Journal of Applied Statistical Analysis*, 8(2): 236-245. DOI: 10.1285/i20705948v8n2p236. ISSN: 2070-5948. Scopus.

85. Zakariya Yahya Algamal, Muhammad Hisyam Lee. (2015). Adjusted Adaptive LASSO in High-dimensional Poisson Regression Model. *Modern Applied Science*, 9(4): 170-177. DOI: <http://dx.doi.org/10.5539/mas.v9n4p170>. ISSN: 1913-1844. ERA.
86. Osamah Basheer Shukur, Muhammad Hisyam Lee. (2015). Imputation of missing values in daily wind speed data using hybrid AR-ANN method. *Modern Applied Science*, 9(11): 1-11. DOI: 10.5539/mas.v9n11p1. ISSN: 1913-1844. ERA.
87. M. Baharuddin, S.-H. Salleh, M. Lee, A. Mohd Noor. (2015). Development of Asian hip stem 2 - Computational analysis using 3D finite element method. *Osteoarthritis and Cartilage*, 23(2): A124-A126. DOI: 10.1016/j.joca.2015.02.851. ISSN: 1063-4584. 2013 Impact Factor: 4.663. Journal Ranking in JCR: Q1.
88. M. Baharuddin, S.-H. Salleh, M. Lee, A. Mohd Noor. (2015). Development of Asian hip stem 1 - Three dimensional morphology study. *Osteoarthritis and Cartilage*, 23(2): A231-A232. DOI: 10.1016/j.joca.2015.02.436. ISSN: 1063-4584. 2013 Impact Factor: 4.663. Journal Ranking in JCR: Q1.
89. M. Baharuddin, S.-H. Salleh, M. Lee, A. Mohd Noor. (2015). Development of Asian hip stem 4 - Experimental validation for stress distribution and micromotion. *Osteoarthritis and Cartilage*, 23(2): A118-A119. DOI: 10.1016/j.joca.2015.02.840. ISSN: 1063-4584. 2013 Impact Factor: 4.663. Journal Ranking in JCR: Q1.
90. M. Baharuddin, S.-H. Salleh, M. Lee, A. Mohd Noor. (2015). Development of Asian hip stem 3 - Fabrication using investment casting technique. *Osteoarthritis and Cartilage*, 23(2): A126-A127. DOI: 10.1016/j.joca.2015.02.852. ISSN: 1063-4584. 2013 Impact Factor: 4.663. Journal Ranking in JCR: Q1.
91. M. Baharuddin, S.-H. Salleh, M. Lee, A. Mohd Noor. (2015). Development of Asian hip stem 5 - Primary stability classification using time domain features and support vector machine. *Osteoarthritis and Cartilage*, 23(2): A127-A128. DOI: 10.1016/j.joca.2015.02.853. ISSN: 1063-4584. 2013 Impact Factor: 4.663. Journal Ranking in JCR: Q1.

Year 2014: **9 articles** (Q2+Q3+Scopus+Misc = 4+2+2+1) and CIF = 9.139.

92. Hossein Javedani Sadaei and Muhammad Hisyam Lee. (2014). Multilayer Stock Forecasting Model Using Fuzzy Time Series. *Scientific World Journal*. Volume 2014, Article ID: 610594, 10 pages. DOI: <http://dx.doi.org/10.1155/2014/610594>. ISSN: 1537-744X. 2013 JCR Impact Factor: 1.219. Journal Ranking in JCR: **Q2**.
93. Mohd Yusof Baharuddin, Sh-Hussain Salleh, Andril Arafat Suhasri, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Mohd Afian Omar, Ab Saman Abd Kader, Alias Mohd Noor, Arief Ruhullah A. Harris, Norazman Abdul Majid. (2014). Fabrication of Low Cost Cementless Femoral Stem 316L Stainless Steel Using Investment Casting Technique. *Artificial Organs*, 38(7): 603-608. DOI: <http://10.1111/aor.12222>. ISSN: 1525-1594(0160-564X). 2013 JCR Impact Factor: 1.870. Journal Ranking in JCR: **Q2**.
94. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, and Muhammad Riaz. (2014). Improving the performance of exponentially weighted moving average control charts. *Quality and Reliability Engineering International*, 30(4): 571-590. DOI: 10.1002/qre.1509. ISSN: 0748-8017. 2013 JCR Impact Factor: 0.994. Journal Ranking in JCR: **Q2**.
95. Mohd Yusof Baharuddin, Sh-Hussain Salleh, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Alias Mohd Noor, Arief Ruhullah A Harris, Norazman Abdul Majid, Ab Saman Abd Kader. (2014). Design process of cementless femoral stem using a nonlinear three dimensional

finite element analysis. *BMC Musculoskeletal Disorders*, 15:30. DOI: <http://dx.doi.org/10.1186/1471-2474-15-30>. ISSN: 1471-2474. 2013 Impact Factor: 1.898. Journal Ranking in JCR: **Q2**.

96. Mohd Yusof Baharuddin, Sh-Hussain Salleh, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Alias Mohd Noor. (2014). Morphological study of the newly cementless femoral stem. *BioMed Research International*. Volume 2014, Article ID: 692328, 11 pages. DOI: <http://dx.doi.org/10.1155/2014/692328>. ISSN: 2314-6133. 2014 Impact Factor: 1.579. Journal Ranking in JCR: **Q3**.
97. Mohd Yusof Baharuddin, Sh-Hussain Salleh, Mahyar Hamedi, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Alias Mohd Noor, Arief Ruhullah A. Harris, Norazman Abdul Majid. (2014). Primary stability recognition of the newly designed cementless femoral stem using digital signal processing. *BioMed Research International*, Volume 2014, Article ID 478248, 9 pages. DOI: <http://dx.doi.org/10.1155/2014/478248>. ISSN: 2314-6133. 2014 Impact Factor: 1.579. Journal Ranking in JCR: **Q3**.
98. Osamah Basheer Shukur, Naam Salem Fadhil, Muhammad Hisyam Lee, Maizah Hura Ahmad. (2014). Electricity load forecasting using hybrid of multiplicative double seasonal exponential smoothing model with artificial neural network. *Jurnal Teknologi (Sciences and Engineering)*, 69(2): 65-70. DOI: <http://dx.doi.org/10.11113/jt.v69.3109>. ISSN: 0127-9696. Scopus.
99. Hazura Mohamed, Muhammad Hisyam Lee, Shaharuddin Salleh. (2014). Grey-based Taguchi Method in Multi-objective Optimisation of the Routing Process in Mobile Ad-hoc Networks. *Journal of Applied Sciences*, 14(4): 396-400. DOI: <http://dx.doi.org/10.3923/jas.2014>. ISSN: 1812-5654. Google Scholar.
100. Mu'azu Ramat Abujiya, Muhammad Hisyam Lee, Muhammad Riaz. (2014). An improved combined Shewhart-EWMA chart based on double median ranked set sampling. *Journal of Computer Science & Computational Mathematics*, 4(2): 23-28. eISSN: 2231-8879. Ulrich.

Year 2013: **12 articles** (Q2+Q3+Q4+Scopus+Misc = 2+2+1+5+2) and CIF = 4.359.

101. Mu'azu Ramat Abujiya, Muhammad Riaz, and Muhammad Hisyam Lee. (2013). Improving the Performance of Combined Shewhart-Cumulative Sum Control Charts. *Quality and Reliability Engineering International*, 29(8): 1193-1206. DOI: 10.1002/qre.1470. ISSN: 0748-8017. 2013 JCR Impact Factor: 0.994. Journal Ranking in JCR: **Q2**.
102. Mu'azu Ramat Abujiya, Muhammad Riaz, and Muhammad Hisyam Lee. (2013). Enhancing the Performance of combined Shewhart-EWMA Charts. *Quality and Reliability Engineering International*, 29(8): 1093-1106. DOI: 10.1002/qre.1461. ISSN: 0748-8017. 2013 JCR Impact Factor: 0.994. Journal Ranking in JCR: **Q2**.
103. Muhammad Hisyam Lee, Hossein Javedani Sadaei and Suhartono. (2013). Introducing polynomial fuzzy time series. *Journal of Intelligent & Fuzzy Systems*, 25(1): 117-128. DOI: 10.3233/IFS-2012-0619. ISSN: 1064-1246. 2013 Impact Factor: 0.939. Journal Ranking in JCR: **Q3**.
104. Rosdi Daud, Mohammed Rafiq Abdul Kadir, Sudin Izman, Amir Putra Md Saad, Muhammad Hisyam Lee, Aminudin Che Ahmad. (2013). Three-Dimensional Morphometric Study of the Trapezium Shape of the Trochlea Tali. *Journal of Foot & Ankle Surgery*, 52(4): 426-431. DOI: 10.1053/j.jfas.2013.03.007. ISSN: 1067-2516. 2013 JCR Impact Factor: 0.979. Journal Ranking in JCR: **Q3**.

105. Muhammad Hisyam Lee, Hossein Javedani Sadaei, and Suhartono. (2013). Improving TAIEX Forecasting Using Fuzzy Time Series with Box-Cox Power Transformation. *Journal of Applied Statistics*, 40(11): 2407-2422. DOI: 10.1080/02664763.2013.817548. ISSN: 0266-4763. 2013 JCR Impact Factor: 0.453. Journal Ranking in JCR: **Q4**.
106. Nur Haizum Abd Rahman, Muhammad Hisyam Lee, Mohd Talib Latig, Suhartono. (2013). Forecasting of Air Pollution Index with Artificial Neural Network. *Jurnal Teknologi (Science & Engineering)*, 63(2): 59-64. DOI 10.11113/jt.v63.1913. ISSN: 0127-9696. Scopus.
107. Mohd Yusof Baharuddin, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Mohammed Rafiq Abdul Kadir, Azlin Saat, and Azian Abdul Aziz. (2013). Three Dimensional of Proximal Femoral Medullary Canal in Malays. *Advanced Science Letters*, 19(12): 3582-3587. DOI: 10.1166/asl.2013.5181. ISSN: 1936-6612. Scopus.
108. Mohd Yusof Baharuddin, Ahmad Hafiz Zulkifly, Muhammad Hisyam Lee, Mohammed Rafiq Abdul Kadir, Azlin Saat, and Azian Abdul Aziz. (2013). Three Dimensional Morphometry of the Femur to Design the Total Hip Arthroplasty for Malay Population. *Advanced Science Letters*, 19(10): 2982-2987. DOI: <http://dx.doi.org/10.1166/asl.2013.5085>. ISSN: 1936-6612. Scopus.
109. Ghanim Mhmood Dhaher, Muhammad Hisyam Lee. (2013). A Comparison between the Performance of kriging and cokriging in Spatial Estimation with Application. *Matematika*, 29(1b), 33-41. ISSN: 0127-8274. (Google Scholar, DOAJ, EBSCO).
110. Mu'azu Ramat Abujiya, Abbas Umar Farouk, Muhammad Hisyam Lee, and Ismail Mohamad, 2013. On the Sensitivity of Poisson EWMA Control Chart. *International Journal of Humanities and Management Sciences (IJHMS)*, 1(1): 18-22. ISSN 2320-4044. Google Scholar.
111. Ghanim Mhmood Dhaher, Muhammad Hisyam Lee. (2013). Robust Estimation for Two Different Sets of Spatial Data with Application. *Australian Journal of Basic and Applied Sciences*, 7(10): 562-569. ISSN: 1991-8178.
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- Muhammad Hisyam Lee, Izman Sudin and Goh Eng Ken. Application of Taguchi Method in the Optimization of Cutting Parameters for Surface Roughness. Research Monograph. 2008. ISBN: 978-967-353-874-4.
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  35. Mazalan Sarahintu & Muhammad Hisyam Lee. Performance Evaluation on Mobile Ad Hoc Networks with Dynamic Source Routing Protocol. Simposium Kebangsaan Sains Matematik ke XIV. UM & PERSAMA. 6 - 8 June 2006.
  36. Muhammad Hisyam Lee. Formulation of Properties for Motion Prediction in Wireless and Simulation Analysis of Dynamic Destination-Sequenced Distance-Vector Protocol. Seminar of Department of Mathematics, Faculty of Science, UTM. 24 Dec. 2003.
  37. Muhammad Hisyam Lee, Shaharuddin Salleh, Bahrom Sanugi. Penghitungan Kebarangkalian Ketersediaan Laluan dalam Rangkaian Bergerak Tergesa. Simposium Kebangsaan Sains Matematik Ke-9 (SKSM-9). UKM & PERSAMA. 18 - 20 July 2001.
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41. Muhammad Hisyam Lee. S-System Analysis of the Central and Non-central Chi Square Distributions. The VI National Symposium of Mathematical Science, Universiti Malaya. 3 - 5 May 1994.
42. Muhammad Hisyam Lee. Introduction to S-System Modeling Methods. Mathematics Colloquium, Faculty of Science, UTM. 22 March 1994.
43. Muhammad Hisyam Lee & Mohamad Amir Manap. Guideline, Selection and Fitting in Multiple Regressions. Course and Workshop on Statistics, Faculty of Science, UTM. 14 - 16 June 1992.
44. Muhammad Hisyam Lee. Pengurangan Kepincangan Penganggar Menerusi Tatacara Jackknife. Kolokium Matematik, Fakulti Sains, UTM. 15 Mac 1992.

## TEACHING COURSES

- Statistics, Engineering Statistics, Experimental Design, Statistical Process Control, Multivariate Statistical Analysis, Generalized Linear Models, Research Methodology.

## SUPERVISION

### Post-Doctoral

- Dr Zakariya Yahya Algamal (1 July 2016 - 30 June 2017)
- Dr Suhartono (2010)

### Doctor of Philosophy (Ph.D)

- Rashid Mehmood (2018 - Present). Efficient Extension of Control Charts for Normal and Non-Normal Distributions. Main supervisor.
- Aiedh Mrisi Alharthi (2018 - Present). Embedded Feature Selection Methods with High Dimensionality for Generalized Linear Models. Main supervisor.
- Ishaq Adeyanju Raji (2017 - Present). Main supervisor. Nigeria and working in KFUPM Dahrn. *On Developing Efficient and Robust Designs of Univariate and Multivariate Control Charts*. Main supervisor.
- Babar Zaman (2016 - 2021). *On Efficient Approaches for Control Charts for Process Monitoring*. Main supervisor.
- Nor Adhahah binti Rashid. (2017 - Present). *Predicting Refined Bleached Deodorized Palm Oil Quality in The Palm Oil Refineries Using Multivariate Statistical Process Control*. Co-supervisor.
- Alireza Firouzi. . (2015 - Present). *Change Point Estimation for Multivariate Quality Process*. Co-supervisor.
- Yusrina Andu (2016 - 2020). *Modeling of Air Pollution based in Advabced Statistical Methods and Artificial Neural Network*. Main supervisor.
- Mohamad Syazwan Mohd Sanusi. (2016 - 2017). *Kajian Radiologi Alam Sekitar Semenanjung Malaysia dan Anggaran Implikasi Radiologi Menggunakan Kod-kod Simulasi Monte Carlo MCNP5*. Co-supervisor.
- Nur Arina Bazilah binti Kamisan (2010 - 2017). Multiple Linear Regression and Neural Network for Electric Load Forecasting. Main supervisor.
- Nur Haizum binti Abd Rahman (2010 - 2017). Profiling and Forecasting Air Pollutant Index for Malaysia. Main supervisor.

- Zakariya Yahya Algamal (2013 – 2016). Adaptive Penalized Likelihood Methods in High Dimensional Generalized Linear Models. Main supervisor. Received Pro-Chancellor Award and Postgraduate Best Student Award 2016, 56th UTM Convocation.
- Mua'zu Ramat Abujiya (2012 – 2015). On Efficient Rank Monitoring Techniques for Statistical Quality Control. Main supervisor. Received Postgraduate Best Student Award 2015, 55th UTM Convocation.
- Osamah Basheer Shukur (2012 – 2015). Artificial Neural Network and Kalman Filter Approaches Based on ARIMA for Daily Wind Speed Forecasting. Main supervisor.
- Maria Elena binti Nor (2010 – 2014). Error Magnitude and Directional Accuracy for Time Series Forecasting Evaluation. Main supervisor.
- Ghanim Mhmood Dhaher (2011 – 2014). Bayesian and Fuzzy Kriging in Interpolation Techniques for Spatial Estimation in Mining Fields. Main supervisor.
- Hussein Javedani Sadaei (2010 – 2013). Improved Models in Fuzzy Time Series for Forecasting. Main supervisor.
- Hazura Mohamed (2005 – 2013). Taguchi Method in Performance Evaluation of Routing Protocols for Mobile Ad-hoc Networks. Main supervisor.

### Master of Science (M.Sc.)

- Mohd Aiman bin Mohd Noor (2017 – Present). *Refined Bleached Deodorized Palm Oil Quality Prediction by Using Non Linear Iterative Partial Least Square Technique*. Co-supervisor.
- Tengku Salbiah binti Tengku Mohamed. (2017 – 2020). *Penalized Logistic Regression Model: A Comparative Study*. Main supervisor.
- Nur Atikah Rosely (2017 – 2020). *Quality Prediction of Refined Bleached Deodorized Palm Oil Using Kernel Partial Least Squares Regression*. Co-supervisor.
- Azfar Hilmi Baharudin (2019). Global Panel Data Modelling of Industrial Output. Main supervisor.
- Naam Saleem Fadhil (2013). Electricity Load Forecasting using Hybrid of Multiplicative Double Seasonal Exponential Smoothing Model with Artificial Neural Network. Main supervisor.
- Rasidah Hussin (1998 – 1999). Co-supervisor.
- Abdul Wahab Mohamed Ali Hussein (1997 – 1999). Co-supervisor.
- Ahmad Taufek Abdul Rahman (2001 – 2003). Main supervisor.
- Sallehudin Sahrone (2003 – 2005). Co-supervisor..
- Ahmad Zia Ul-Saufie Mohd Jeperi (2006 – 2007). Classification Groups of Terrestrial Gamma Radiation in Malacca State. Main supervisor.
- Mazalan bin Sarahintu (2005 – 2007). Analyze Factors Affecting the Performance of Dynamic Source Routing Protocol in Mobile Ad Hoc Networks using Taguchi Approach. Main supervisor.

### Bachelor of Science (B.Sc.)

- Siew Li Joo (2013 – 2014)
- Koh Chee Chung (2013 – 2014)
- Low Kee Hong (2011 – 2012)
- Joanne Kirubalini A/P Jeyaseelan John (2009 – 2010)
- Siti Hajar binti Arbain (2009 – 2010)
- Lim Zi Ying (2009 – 2010)

- Deeviya Mogan (2009 - 2010)
- Umamageswary a/p Tharenpalan (2008 - 2009)
- Tng Ai Peng (2008 - 2009)
- Mohammad Faiz bin Abdul Shukur (2007 - 2008)
- Suryati bt Kamaruddin (2007 - 2008)
- Goh Eng Ken (2007 - 2008)
- Tan Beng Ling (1994 - 1995)
- Mohamad Yazid bin Esmail (1994 - 1995)
- So Kean Thong (1994 - 1995)
- Wan Norazlan Wan Din (1995 - 1996)
- Lim Poh Tee (1996 - 1997)
- Tay Kim Gaik (1996 - 1997)
- Latha a/p Muthusamy (1996 - 1997)
- Ooi Cui Ling (1996 - 1997)
- Chua Choon Yan (1996 - 1997)
- Wong Swee Min (1996 - 1997)
- Wong Mu Lin (1996 - 1997)
- Tham Han Leong (1998 - 1999)
- Low Pei Chin (1998 - 1999)
- Liao Li Yun (1998 - 1999)
- Kamarul Faizul bin Che Yaacob (2002 - 2003)
- Aini Maria binti Razali (2003 - 2004)
- Nurazreen binti Mohd Tahir (2003 - 2004)
- Mohd Suhairi bin Ahmad (2003 - 2004)
- Normaliza bt Jamaluddin (2003 - 2004)
- SM Elizabeth Rani a/p Allapan (2004 - 2005)
- Lim Yai Fung (2005 - 2006)
- Mohd Saiful Adli bin Mohamad (2005 - 2006)
- Nurul Asyikin bt Mohd Noah (2005 - 2006)
- Siti Normah bte Hasan (2006 - 2007)
- Nurul Aidha bt Mohd Tarimizi (2006 - 2007)

## ACCLAIMED ACADEMIC AND ACADEMIC LEADERSHIP

### Keynote/Plenary/Invited

- Keynote Speaker, the 17th ICMSA 2021: International Conference on Mathematics, Statistics and their Applications. 12-14 December 2021. Prince of Songkla University.
- Invited Speaker, ICITMME 2021: International Conference of Innovation and Technology in Mathematics and Mathematics Education. 13-14 October 2021. Universitas Islam Negeri Sunan Kaijaga,
- Keynote Speaker, International Symposium on Advanced Statistical Data Analysis & Operational Research (iADORE 2020). 7-8 December 2020. Universiti Teknologi Malaysia.
- Keynote Speaker, International Conference on Mathematics and Mathematics Education (ICMMEd) 2020. 26 November 2020. Pattimura University.

- Invited Speaker, International Conference on Mathematics, Statistics and Data Science. 11-12 November 2020. IPB University.
- Keynote Speaker, International Seminar : Research Methods in Practice. 10-11 June 2019. Prince of Songkla University, Thailand.
- Invited Speaker, Workshop on Collaboration Statistics UB, Statistics ITS and FORSTAT in WCP, 2018. Universitas Brawijaya, Indonesia.
- Guest Lecturer, the Prospect of Actuary in Asia. 2018. Department of Actuarial, Institut Teknologi Sepuluh Nopember, Indonesia.
- Invited Speaker, Researcher & Research Student Enrichment Program, 2018. Institut Teknologi Sepuluh Nopember, Indonesia.
- Invited Panel Forum, Simposium Kebangsaan Sains Matematik Ke-25. 28-29 Ogos, 2017. Persatuan Sains Matematik Malaysia (PERSAMA). Kuantan, Pahang.
- Invited Speaker, Data Analysis: Accurate respondents. Seminar Penulisan & Penerbitan Saintifik dan Bengkel 2017. 21-23 March 2017. Nuclear Malaysia, Ministry of Science, Technology and Innovation (MOSTI).
- Invited Session, Statistical Modelling. The Regional Conference on Statistical Sciences 2010.
- Invited Session, Statistical Forecasting. The Regional Conference on Statistical Sciences 2010.

### Professional Body - International (Committee Member)

*(Professional Committee, Conferences, Editorial Board Member, Panel Assessor)*

- Editor, Jurnal Teknologi (Science & Engineering). 2018 - 2020, 2020 - 2022. UTM Press. Scopus.
- Editor, Communication in Science & Technology. 2016 - present. Komunitas Ilmuwan dan Profesional Muslim Indonesia. Scopus.
- Editor, Malaysian Journal of Industrial and Applied Mathematics (MATEMATIKA). UTM Press. 2007 - present. WoS.
- Editor, Transaction in Mathematical and Computational Sciences. University of Sargodha. 2020 - present.
- Editor, Data Analytics and Applied Mathematics. Universiti Malaysia Pahang. 2020 - present.
- Editor, International Journal of Statistics and Data Science. (2018 - 2019).
- Associate Editor, ACTA Press. (2011 - 2014).
- Editor, ADVANCES IN INDUSTRIAL AND APPLIED MATHEMATICS: Proceedings of 23rd Malaysian National Symposium of Mathematical Sciences (SKSM23), 24-26 November 2015, Vol. 1750. ISBN: 978-0-7354-1407-5. Published: 21 June 2016. Johor Bahru, Malaysia.
- Journal Reviewer of Computers & Industrial Engineering. Q1. Since 2016.
- Journal Reviewer of Applied Energy. Q1. Since 2015.
- Journal Reviewer of Tourism Management. Q1. Since 2012.
- Journal Reviewer of Computers & Industrial Engineering. Q2. Since 2014.
- Journal Reviewer of SAR and QSAR in Environmental Research. Q2. Since 2016.
- Journal Reviewer of International Journal of Production Research. Q2. Since 2015.
- Journal Reviewer of Journal of Applied Statistics. Q3. Since 2013.
- Journal Reviewer of Computational Statistics and Data Analysis. Q3. Since 2013.
- Journal Reviewer of Journal of Statistical Computing and Simulation. Q3. 2017.
- Journal Reviewer of Sains Malaysiana. Q3. Since 2014.
- Journal Reviewer of the Journal of Supercomputing. Q3

- Journal Reviewer of Pakistan Journal of Statistics. Q4. 2015.
- Journal Reviewer of Iranian Journal of Fuzzy Systems. Q4. Since 2012.
- Journal Reviewer of Journal of the Chinese Institute of Engineers. Q4. Since 2015.
- Journal Reviewer of Pertanika Journal. Scopus 2015.
- Journal Reviewer of Jurnal Teknologi. Scopus. Since 2006.
- Journal Reviewer of ASM Journal of Science, Akademi Sains Malaysia. Scopus.
- Journal Reviewer of Hacettepe Journal of Mathematics and Statistics. Scopus. Since 2010.
- Journal Reviewer of ACTA Press. Since 2008.
- Journal Reviewer of World Applied Sciences Journal.
- Journal Reviewer of Int. J. Simulation and Process Modelling.
- Journal Reviewer of International Conference on Computer Science and Information Technology.

### Committee in National/University Level (Chairperson)

#### National

- Pengerusi Pasukan Petugas Analisis Kebolehpasaran Graduan Kementerian Pendidikan Malaysia (KPT). 2020.
- Pengerusi bagi Audit Pematuhan Syarat-Syarat Akreditasi Penuh Program Pascaijazah, Universiti Malaysia Sabah (UMS). Agensi Kelayakan Malaysia (MQA). 2020.
- Pengerusi bagi Audit Program Doktor Falsafah (MQA/FA 14324), Universiti Malaysia Pahang (UMP). 2020.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Industrial Mathematics), Universiti Malaysia Pahang (UMP). MQA/FA 9029. 29-30 Jan. 2020.
- Pengerusi bagi Audit Pematuhan Program Berstatus 'Deemed Accredited' Sarjana Muda Sains dengan Kepujian (Statistik Industri), Universiti Utara Malaysia (UUM). 26-27 Nov. 2018.
- Pengerusi bagi Audit Program Pasca Ijazah Baharu Fast-Track. MQA/FA 10910. Universiti Sultan Zainal Abidin (UniSZA). 18-20 Sept. 2018.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master of Education Mathematics with Information Technology, Universiti Malaysia Terengganu (UMT). MQA/PA 9122. 6 July 2017.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Statistics with Education, Universiti Pendidikan Sultan Idris (UPSI). MQA/PA 9384. 1 June 2017.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master in Marine Statistics, Universiti Malaysia Terengganu (UMT). MQA/PA 9120. 10 Apr. 2017.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Hons) Operational Research with Data Science, Universiti Pertahanan Nasional Malaysia (UPNM). MQA/PA 9126. 14 Feb. 2017.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master in Mathematics, Universiti Malaysia Terengganu (UMT). MQA/PA 9121. 26 Jan. 2017.

- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Industrial Statistics), Universiti Tun Hussein Onn (UTHM). MQA/FA 0728. 4 March 2017.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science in Statistical Modeling, Heriot-Watt University Malaysia. MQA/PA 8513. 16 February 2016.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Diploma Quantitative Science, Universiti Selangor (UniSel). MQA/FA 1119. 29-30 March 2016.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Master of Science (Applied Mathematics), Universiti Tun Hussein Onn (UTHM). MQA/FA 1349. 26-27 January 2016.
- Chairman of Panel Assessor of Malaysia Qualification Agency (MQA) for Final Accreditation of Master of Science (Engineering Mathematics), Universiti Malaysia Perlis (UniMAP), Arau Perlis. MQA/FA0510. Schedule: 13-14 August 2015.
- Chairman of Panel Assessor of Malaysia Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Hons) Mathematics and Economics, College of Arts and Technology HELP, Kuala Lumpur. 3+0 External with Univesity of London. MQA/FA2395. 2015.
- Chairman of Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Diploma Quantitative Science, Universiti Selangor (UNISEL), Kampus Berjuntai Bestari, Batang Berjuntai. (#PA 1119, 2011)
- Head of Judges of the Pre-World Statistics Day 2010.

## University

- Pengerusi Jawatankuasa Pemantauan Penilaian Prestasi dan Peningkatn Kerjaya Staf Akademik Universiti, UTM. UTM.J.02.02/12.11/1/21(3). 6 Mei 2020 - 5 Mei 2022.
- Pengerusi bagi pembangunan sistem Differentiated Career Pathways (DCP) Staf Akademik, UTM. 1 June 2017 - 2019.
- Pengerusi bagi Jawatankuasa Pembangunan Sistem Pentadbir Akademik Universiti, UTM. 2016 - 2018.
- Pengerusi bagi Jawatankuasa Perolehan Teknikal Sebutharga Pejabat Timbalan Naib Canselor (Akademik dan Antarabangsa). 1 Jan 2015 - 31 Dis 2016.
- Chairman of the Oral Examination. Doctor of Philosophy (Mathematics) Muhamad Alias bin Md. Jedi. 2015. Ref.: UTM.J.10.01/14.14/1/6/1/9 Jld.10 (186). 21 June 2015.
- Chairman of Panel Assessor of Swa Accreditation of Master of Professional Science. December 2015.
- Chairman of the Oral Examination. Master of Science program, Nor Hidayah Binti Ismail. 2014. Ref.: UTM.J.26/14.14/6 Jld.12 (105).
- Chairman of Technical Evaluation Committee, RMC. 1 Jan. 2011 - 30 Apr. 2013.
- Chairman of Technical Evaluation Committee, RMC. 1 Jan. 2010 - 31 Dis. 2011.
- Chairman of Quotation Evaluation Technical Committee, RMC, UTM. 1 May 2011 - 31 April 2013.
- Chairman of Judges Committee of 13th Industrial Art and Technology Exhibition (INATEX) 2011, UTM.

## Committee in National/University Level (Committee Member)

## National Level

1. Pelantikan sebagai Penilai Luar bagi Program Sarjana Sains (Sains Data dan Analitik), Universiti Kebangsaan Malaysia (UKM). 1 Feb. 2021 - 31 Jan. 2023.
2. Juruaudit bagi Sesi Penilaian Semula Institut Penyelidikan Matematik (INSPEM), Universiti Putra Malaysia (UPM). 2020.
3. Panel Penilai Audit Pematuhan Syarat-Syarat Akreditasi Penuh Program Pascaijazah, Universiti Malaysia Perlis (UniMAP). 21-22 Okt. 2019.
4. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Mathematics with Computer Graphics). MQA/FA 10961. 12 Nov. 2019.
5. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Mathematics with Economics). MQA/FA 10962. 12 Nov. 2019.
6. Panel Penilai bagi Penilaian Pencapaian MyRA Tahun 2018 IPTS Secara Berpusat Sesi Ketiga. 18-22 Nov. 2019.
7. Panel Penilai bagi Penilaian Pencapaian MyRA Tahun 2018: Universiti Teknologi Petronas (UTP). 19-20 Sept. 2019.
8. Panel Penilai bagi Penilaian Pencapaian MyRA Tahun 2018: Universiti Sains Malaysia (USM). 8-10 Jul. 2019.
9. Panel Penilai bagi Penilaian Pencapaian MyRA Tahun 2018: Universiti Malaya (UM). 3-5 Jul. 2019.
10. Panel Penilai bagi Penilaian Pencapaian MyRA Tahun 2018: Universiti Kebangsaan Malaysia (UKM). 19-21 Jun 2019.
11. Ahli Panel Penilai bagi Audit Pematuhan Program Berstatus 'Deemed Accredited' Sarjana Muda Sains dengan Kepujian (Sains Pemutusan). 26-27 Nov. 2018.
12. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Actuarial Science), Universiti Sains Islam Malaysia (USIM). 22-23 Nov. 2018.
13. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Mathematics) with Education, Universiti Pendidikan Sultan Idris (UPSI). MQA/FA 10543. 2-4 Oct. 2018.
14. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Doctor of Philosophy (Mathematical Sciences), Kolej Universiti Tunku Rahman (KUTAR). MQA/PA 10773. 1 Feb. 2018.
15. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Master of Science (Mathematical Sciences), Kolej Universiti Tunku Rahman (KUTAR). MQA/PA 10771. 31 Jan. 2018.
16. Panel Penilai bagi Penilaian Tapak MyRA Tahun 2017: Universiti Putra Malaysia (UPM). 26-27 Jun. 2018.
17. Panel Penilai bagi Penilaian Tapak MyRA Tahun 2017: Universiti Kebangsaan Malaysia (UKM). 2-4 May 2018.
18. Panel Penilai bagi Penilaian Tapak MyRA Tahun 2017: Universiti Malaya (UM). 23-25 Apr. 2018.
19. Panel Penilai bagi Penilaian Tapak MyRA Tahun 2017: Universiti Sains Malaysia (USM). 17-19 Apr. 2018.
20. Appointment as Auditor of Malaysia Research Assessment (MyRA) for the period of 2 years (1 Januari 2017 - 31 December 2018). JPT.S(BPKI)2000/021/023/09 Jld. (44).

21. Pelantikan sebagai Ahli Jawatankuasa Pemeringkatan Ahli Panel Penilai Agensi Kelayakan Malaysia. 1 Mac 2017 - 28 Feb 2019. MQA.600-2/15/2 Jld. 2 (16).
22. Appointment as Auditor of Ratings for Universities and University Colleges (SETARA) 2017.
23. Pelantikan sebagai Ahli Jawatankuasa bagi Kajian Impak sistem Kajian Pengesanan Graduan dan sistem MyMoheS, Kementerian Pendidikan Tinggi. 3 Ogos 2017.
24. Appointment as Panel Assessor of Malaysian Qualification Agency (MQA) in Mathematics and Science Statistics for the period of 3 years (August 2015 - August 2018). MQA(S)10/03/2 Jld.86(14).
25. Panel Penilai bagi Penilaian Tapak bagi Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2016: Universiti Kebangsaan Malaysia. 23-24 Mei 2017.
26. Panel Penilai bagi Penilaian Tapak bagi Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2016: Universiti Putra Malaysia. 16-17 Mei 2017.
27. Panel Penilai bagi Penilaian Tapak bagi Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2016: Universiti Malaya. 8-9 Mei 2017.
28. Panel Penilai bagi Penilaian Tapak bagi Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2016: Universiti Sains Malaysia. 3-4 Mei 2017.
29. Panel Penilai bagi Penilaian Dokumen bagi Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2016 bagi semua Universiti Awam serta UTP, UNITEN dan MMU. 10-14 April 2017.
30. Appointment as Auditor of Malaysia Research Assessment (MyRA) Year 2016. JPT.S(BPKI)2000/021/023/09 Jld.4(32).
31. Pelantikan sebagai Ahli Panel Penilai Program Akademik Universiti Malaya (UM) bagi Pengakreditasi Semula Program Sarjana Muda Sains Statistik, Fakulti Sains, UM. 9 Mac 2017. Ref.: UM.C/QMEC3/607/SAINS/35-17.
32. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master of Science (Industrial Computing), Universiti Malaysia Pahang (UMP). MQA/PA 9029. 2 March 2017.
33. Panel Penilai bagi Penilaian Tapak Berkala Setiap 3 Tahun untuk Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2013 dan 2015 di Universiti Kebangsaan Malaysia. 21-23 March 2016.
34. Panel Penilai bagi Penilaian Tapak Berkala Setiap 3 Tahun untuk Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2013 dan 2015 di Universiti Sains Malaysia. 11-13 April 2016.
35. Panel Penilai bagi Penilaian Tapak Berkala Setiap 3 Tahun untuk Pencapaian Universiti Penyelidikan dengan Instrumen MyRA bagi tahun 2013 dan 2015 di Universiti Malaya. 18-20 April 2016.
36. Panel Penilai bagi Penilaian Pencapaian Malaysia Research Assessment (MyRA) Tahun 2015 secara berpusat sesi pertama (UiTM, UTeM, UPM, UMP& UNITEN). 25-29 April 2016.
37. Penilai Makalah Jurnal bagi Anugerah MAPIM-KPT 2015. 17 Feb. 2016.
38. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Doctor of Philosophy (PhD) of Science, Universiti Teknologi Petronas (UTP). MQA/FA 2065. 23 February 2016.
39. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Science (Technology Mathematics), Universiti Tun Hussein Onn (UTHM). MQA/FA 0723. 1 February 2016.

40. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Master of Science (Industrial Statistics), Universiti Tun Hossien Onn Malaysia. MQA/FA1350. Schedule: 26-27 January 2016.
41. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Education in Primary School (Mathematics), Universiti Pendidikan Sultan Idris. MQA/FA8047. Schedule: 9-10 January 2016.
42. Panel Site Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Sains Malaysia (USM) for Year 2014. 22-24 April 2015.
43. Panel Site Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Tun Hussein Onn Malaysia (UTHM) for Year 2014. 26-28 April 2015.
44. Panel Site Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Sains Islam Malaysia (USIM) for Year 2014. 5-7 May 2015.
45. Panel Site Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Teknikal Malaysia Melaka (UTeM) for Year 2014. 18-20 May 2015.
46. Panel Site Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Malaysia Pahang (UMP) for Year 2014. 25-27 May 2015.
47. Appointment as Panel Assessor of Star Rating for Malaysia Research Assessment (MyRA) Year 2014. JPT.S(BPKI)2000/021/023/013(26).
48. Panel Assessor of Malaysian Qualification Agency (MQA) for area of Mathematical and Statistical Sciences, 3 September 2012 - 2 September 2015.
49. Panel Assessor of Malaysian Qualification Agency (MQA) for area of Mathematical and Statistical Sciences, 27 August 2009 - 26 August 2012.
50. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Education (Primary School) with Honour (Mathematics), Universiti Teknologi MARA. MQA/FA8173. 14-15 November 2015.
51. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Education (Primary School) with Honour (Mathematics), Universiti Pendidikan Sultan Idris (UPSI), franchise to USM, Penang. MQA/FA7486. 8-11 May 2015.
52. Panel Assessor of Malaysian Qualification Agency (MQA) for Final Accreditation of Bachelor of Education (Mathematics) with Honour, Universiti Pendidikan Sultan Idris (UPSI), Tanjung Malim, Perak. MQA/FA6126. 3-5 April 2015.
53. Panel Assessor of Malaysia Qualification Agency (MQA) for Audit and Accreditation Postgraduate Program at Faculty of Science and Technology, UKM. 2014.
54. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Hons) Mathematics and Economics 3+0 External with University of London, Kolej Seni dan Teknologi HELP, Kuala Lumpur. (MQA/PA 2395).
55. Appointment as Panel Assessor of Malaysian Qualification Agency (MQA) in Mathematics and Science Statistics for the period of 3 years (August 2012 - August 2015). MQA.600-2/15/1 Jld.36(78).
56. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Hons) Statistical Computing and Operations Research, Universiti Tunku Abdul Rahman (UTAR), Kampus Perak. (#KA 10094, 2009).
57. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Doctor of Philosophy (Science), Universiti Tunku Abdul Rahman (UTAR), Kampus Perak. (#KA 11018, 2009).

58. Panel Assessor of Malaysian Qualification Agency (MQA) for Accreditation of Bachelor of Science (Hons) Mathematics with Statistics, Universiti Industri Selangor, Berjantai Bestari, Selangor. (#A 7402, 2010).
59. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Applied Sciences (Hons) Industrial Mathematics, Universiti Malaysia Pahang (UMP). (#PA 0008, 2010).
60. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master of Science (Applied Mathematics), Universiti Teknologi MARA (UiTM Shah Alam). (#PA 0393, 2010).
61. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Hons) Mathematics Technology, Universiti Tun Hussein Onn Malaysia, Batu Pahat. (#PA 0723, 2011).
62. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Hons) Industrial Statistics, Universiti Tun Hussein Onn Malaysia, Batu Pahat. (#PA 0728, 2011).
63. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Master of Science (Industrial Statistics), Universiti Tun Hussein Onn Malaysia, Batu Pahat. (#PA 1350, 2011).
64. Panel Assessor of Malaysian Qualification Agency (MQA) for Provisional Accreditation of Bachelor of Science (Actuarial Science) by Mixed Mode, Universiti Sains Islam Malaysia (USIM), Nilai, Negeri Sembilan. (#PA 1508, 2012).
65. Panel member of the Scientific Committee of the 23rd National Symposium on Mathematical Sciences (SKSM23). 2015.
66. Panel member of the Scientific Committee of the 22nd National Symposium on Mathematical Sciences (SKSM22). 2014.
67. Elected as Vice President of Institute Statistics of Malaysia (ISM). 2012 - 2014.
68. Council member of Institute Statistics of Malaysia (ISM). 2010 - 2012.
69. Council member of Institute Statistics of Malaysia (ISM). 2008 - 2010.
70. Panel Assessor of PERSAMA Awards (Original Book Works Category), 2011.
71. Panel Assessor of Research and Intellectual Property Award, UTM. 2010.
72. National Organising Committee of World Statistics Day 2010.
73. National Scientific Committee of World Statistics Day 2010.
74. External Examiner of Jyothi U. Doctor of Philosophy Thesis, Department of Statistics, Bharathiar University, India. 2017.
75. External Examiner of Siti Nur Zahrah Amin Burhanuddin. Doctor of Philosophy (Statistics) Thesis, UiTM. 2017.
76. External Examiner of Habib Nawaz Khan. Doctor of Philosophy in Science Thesis, Universiti Teknologi Petronas. 17 Feb. 2017.
77. External Examiner of Nor Hasliza binti Mat Desa. Doctor of Philosophy (Statistics) Thesis, UKM. 14 Dec. 2016.
78. External Examiner of Mohd Norsyarizad bin Razali. PhD (Statistics) Thesis, UKM. 2016.
79. External Examiner of Aida Shafawati Ismail. Master of Science (Statistics) Thesis, UKM. 2010.
80. Panel Assessor of PERSAMA Awards (Original Book Works Category), 2009.
81. Examiner of IEM/BEM Graduate Examination. Part 1 Paper No 101A - Mathematics. Year 1997.

82. Examiner of IEM/BEM Graduate Examination. Part 1 Paper No 101A – Mathematics. Year 1996.
83. Examiner of IEM/BEM Part I Examination. Paper No 105 – Presentation of Engineering Information. Year 1995.

## University

1. Elected University Senate Member of Universiti Teknologi Malaysia for duration 2 May 2017 - 19 Jan. 2020. UTM(S).J.08.02.02/10.14/200 Jld.2(146).
2. Elected University Senate Member of Universiti Teknologi Malaysia for duration 23 Jan. 2014 - 22 Jan 2017. Ref.: UTM(S).J.02.04/10.14/200 Jld.4 (50).
3. Appointment as a Representative in the Senate Standing Committee of the Senate for Academic Policy and Entity (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Dasar dan Entiti Akademik). 2 May 2017 - 19 Jan. 2020. UTM(S).J.08.02.02/10.14/200 Jld.2(146).
4. Appointment as a Representative in the Senate Standing Committee of the Senate for Academic Curriculum and Quality Assurance (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Kurikulum dan Kualiti Akademik). 2 May 2017 - 19 Jan. 2020. UTM(S).J.08.02.02/10.14/200 Jld.2(146).
5. Appointment as a Representative in the Senate Standing Committee of the Senate for Library and Educational Resources (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Perpustakaan dan Sumber Pendidikan). 2 May 2017 - 19 Jan. 2020. UTM(S).J.08.02.02/10.14/200 Jld.2(146).
6. Appointment as a committee member of Research Strategy, UTM. 1 July 2017 - 30 June 2018.
7. Appointment as a Representative in the Senate Standing Committee of the Senate for Examination and Graduation (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Peperiksaan dan Pengijazahan). 15 Feb. 2015 - 22 Jan. 2017. Ref.: UTM(S).J.02.08.02.02/10.14/200 Jld.4 (107).
8. Appointment as a Representative in the Senate Standing Committee of the Senate for Research and Innovation (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Penyelidikan dan Inovasi). 23 Jan. 2014 - 22 Jan. 2017. Ref.: UTM(S).J.02.04/10.14/200 Jld.4 (125).
9. Appointment as a Representative in the Senate Standing Committee of the Senate for Library and Educational Resources (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Perpustakaan dan Sumber Pendidikan). 23 Jan. 2014 - 22 Jan. 2017. Ref.: UTM(S).J.02.04/10.14/200 Jld.4 (135).
10. Appointment as a Representative in the Senate Standing Committee of the Senate for Industry and Community Linkages (Pelantikan sebagai Wakil Senat dalam Mesyuarat Jawatankuasa Tetap Senat Jaringan Industri dan Masyarakat). 23 Jan. 2014 - 22 Jan. 2017. Ref.: UTM(S).J.02.04/10.14/200 Jld.4 (141).
11. Ahli Jawatankuasa Pemantauan Sistem Differentiated Career Pathway (DCP) Staf Akademik UTM. UTM.02.02/10.13/63/1 Jld2(89). 1 September 2018 - 31 Ogos 2021.
12. Ahli Jawatankuasa Kerja Sistem Penilaian Prestasi Staf Akademik (e-LPPT) Tahun 2018 - 2020. UTM.J.02.02/12.21/1/4/2JID.2(4).
13. Panel Audit Bahan Bukti RU UTM. 2016.

14. Panel Mock Audit for the Star Rating Assessment of Malaysia Research Assessment Instrument (MyRA) Universiti Teknologi Malaysia (UTM) for Year 2014. 29-30 April 2015
15. Appointment as Internal Examiner of Noraziah binti Aszhar. Doctor of Philosophy (Mathematics) Thesis, UTM. 17 June 2015.
16. Internal Examiner of Nur Atikah binti Salahudin. Doctor of Philosophy (Mathematics) Thesis, UTM. 2016.
17. Internal Examiner of Olayonwa Ganiyu Onatunde. Doctor of Philosophy (Built Environment) Thesis, UTM. 2012.
18. Internal Examiner of Rahaini Mohd Said. Master of Science (Mathematics) Thesis, UTM. 2011.
19. Internal Examiner of Rafidah Ali. Master of Science (Mathematics) Thesis, UTM. 2011.
20. Internal Examiner of Gan Siew Lee. Master of Science (Mathematics) Thesis, UTM. 2011.
21. Internal Examiner of Norizan bint Mohamed. Parametric and Artificial Intelligence Based Methods for Forecasting Short Term Electricity Load Demand. Doctor Philosophy (Mathematics) Thesis, UTM. 2011.
22. Internal Examiner of Shazirawati binti Mohd Puzi. Towards Information Integration in Sensor Networks. Doctor of Philosophy (Mathematics) Thesis, UTM. 2010.
23. Internal Examiner of Oh Yit Leng. Master of Science (Mathematics) Thesis, UTM. 2010.
24. Internal Examiner of Gan Long Fatt. Master of Science (Mathematics) Thesis, UTM. 2009.
25. Internal Examiner of Norliana Mohd Lip. Master of Science (Mathematics) Thesis, UTM. 2009.
26. Internal Examiner of Rajjama Zainordin. Master of Science (Mathematics) Thesis, UTM. 2009. Journal Reviewer of Journal of Fundamental Sciences, UTM.
27. Journal Reviewer of Malaysian Journal of Civil Engineering (MJCE), UTM.
28. Journal Reviewer of Jurnal Teknologi, UTM.
29. Reviewer of the First ISM International Statistical Conference 2012, UTM.
30. Reviewer of the 2nd International Conference on Software Engineering and Computer Systems, UTM.
31. IT Technical Committee (JATIT), UTM.
32. Working Committee of Graduate Studies Management System (GMSM), UTM. 2010.
33. Panel Audit, Anugerah Teknologi Maklumat 2011, CICT, UTM. 2012.
34. Panel Anugerah Penyelidikan dan Harta Intelek 2008, Pendaftar, UTM. 2009.
35. Ahli Jawatankuasa Pemurnian Semula Polisi ICT Universiti, CICT, UTM. 2009.
36. Jawatankuasa Penilai Tender bagi Lab Upgrade di Pusat Perkhidmatan ICT Pelajar, CICT, UTM. 2009.
37. Panel Penilai Bengkel Penilaian Proposal FRGS bagi RMK9 bagi Kluster Fundamental Sains dan Matematik, RMC, UTM. 2009.
38. Main Committee of Occupational Safety, Health and Environment (OSHA), UTM. 2009 - 2011.
39. Main Committee of Industrial Art and Technology Exhibition (INATEX), UTM. 2009.
40. MyMoheS: Data Quality Monitoring of the Main Committee, UTM. 2009.
41. MyMoheS: Committee on the Preparation and Submission of Data UTM. 2009.
42. Penilaian Anugerah Buku Karya Asli 2009 (Penilai Pakar Bidang Kategori Anugerah Buku Karya Asli), Penerbit, UTM.
43. Information Technology Awards Panel: Content Development Category, UTM. 2008.

## Recognition and Awards Received

- World Class Professor (WCP), Ministry of Research, Technology, and Higher Education of the Republic of Indonesia. 2018 and 2020.
- UTM Excellent Service Award Year (Anugerah Perkhidmatan Cemerlang UTM) Tahun 2006, 2009, 2012, 2020.
- Information Technology Awards, RMC, UTM, 2012.
- Finalist of Information Technology Awards, UTM. 2010.
- PERSAMA Awards 2009: Scientific paper. Application of Taguchi method to investigate several network parameters affecting the performance of dynamic source routing protocol in a self-organizing network.
- Best Poster Award for the Second International Conference and Workshop on Basic and Applied Sciences and Regional Annual Fundamental Science Seminar 2009.
- Lecturer Excellence Award 2008. SAS Forum 2008. SAS Malaysia. 15 - 16 July 2008. Kuala Lumpur.
- Letter of Appreciation and Congratulation: Top 5% Best Lecturer of Part-Time Study Programme in SPACE UTM, Semester I, 2006/2007 Session. Ref.: UTM(S) 01.08/10.14/22 (15) dated 5 September 2007.
- Letter of Appreciation and Congratulation: Top 5% Best Lecturer of Part-Time Study Programme in SPACE UTM, Semester II, 2005/2006 Session. Ref.: UTM(S) 01.08/10.14/22 (10) dated 19 December 2006.

## Task Force

- Ahli Task Force Audit Institusi bagi Tujuan Pengekalan Status Swaakreditasi, UTM. UTM.01.06/10.13/124Jld.10(80). UTM. 2 Apr. 2017 - 1 Apr. 2018.
- Jawatankuasa Kerja bagi Cadangan Penambahbaikan eLPPT Staf Akademik Kearah Agihan dan Penilaian Lebih Adil dan Secara Langsung Mampu Mengekalkan Universiti Penyelidikan, UTM. 2012 - Present.
- Jawatankuasa Kerja UTM Research Computing. 10/11/2016 - present.
- Ahli Jawatankuasa bagi Jawatankuasa Pelaksanaan *Integrated*-CGPA (iCGPA) Universiti Teknologi Malaysia. 20 July 2016 - 19 July 2017.
- Ahli Jawatankuasa bagi Jawatankuasa Pemandu Sistem UTMACAD. 2016 - present.
- Ahli Jawatankuasa Kerja bagi Differentiated Career Pathways (DCP), UTM. 2015 - Present.
- Ahli Task Force bagi Pelan Pengantian Pentadbir Akademik, UTM. 1/12/2016 - 30/11/2018.
- Ahli Jawatankuasa Kerja bagi Kaedah Pengiraan Beban Tugas Staf Akademik Universiti Teknologi Malaysia. 2014 - 2016.
- Ahli Jawatankuasa Kerja bagi Pembangunan Sistem Beban Tugas Staf Pengurusan dan Profesional, UTM. 2016.
- Task Force Siasatan Kes Perubahan Markah Peperiksaan Akhir Sem II Ses 2015/2016 Pelajar Program Kerjasama. 25/5/2016 - 30/6/2016.
- Jawatankuasa Kerja Siasatan Kes Kursus Tamadun Islam dan Tamadun Asia (TITAS). 14/6/2016 - 31/7/2016.
- Ahli Jawatankuasa Kerja bagi Kajian Kaedah Pelaksanaan Autonomi Pengambilan Pelajar Prasiswazah Universiti Teknologi Malaysia. 2015.

## SERVICES TO UNIVERSITY AND SOCIETY

### Academic Committee/Community Service

- Elected Committee Member of Parent-Teacher Association, Secondary School of Bandar Putra, Kulaijaya, Johor. Session 2015/2016.
- Elected Chairman of Parent-Teacher Association, Primary School of Putra Utama, Kulaijaya, Johor. Session 2014/2015.
- Elected Committee Member of Parent-Teacher Association, Secondary School of Bandar Putra, Kulaijaya, Johor. Session 2014/2015.
- Elected Vice Chairman of Parent-Teacher Association, Primary School of Putra Utama, Kulaijaya, Johor. Session 2012/2013.
- Elected Hon. Secretary of Jalan Kempas Residents Association, Bandar Putra, Kulaijaya, Johor. Session 2012/2013.
- Elected Committee member of Parent-Teacher Association, Sekolah Menengah Kebangsaan Bandar Putra, Kulaijaya, Johor. Session 2012/2013.
- IT Committee, Department of Mathematical Sciences, Universiti Teknologi Malaysia. 1 Jan. 2012 - 31 Dis. 2013.
- Committee member of Jalan Kempas Residents Association, Bandar Putra, Kulaijaya, Johor. Session 2011/2012.
- Committee member of Parent-Teacher Association, Sekolah Menengah Kebangsaan Bandar Putra, Kulaijaya, Johor. Session 2011/2012.
- Committee member of Parent-Teacher Association, Primary School of Putra Utama, Kulaijaya, Johor. Session 2011/2012.
- Webmaster Committee, Department of Mathematics, Universiti Teknologi Malaysia. 17.4.2008 - 31.12.2009.
- Chairman of Parent-Teacher Association, Primary School of Senai, Johor. Session 2007/2008.
- IT Committee, Department of Mathematics, Universiti Teknologi Malaysia. 17 Apr. 2008 - 16 Apr. 2009.
- Chairman of Parent-Teacher Association, Primary School of Senai, Johor. Session 2006/2007.
- Vice Chairman of Parent-Teacher Association, Primary School of Senai, Johor. Session 2005/2006.
- Webmaster of the Journal of Matematika, Faculty of Science, Universiti Teknologi Malaysia. 2006 - 2008.
- Vice Chairman of Parent-Teacher Association, Primary School of Senai, Johor. Session 2003/2004.
- Vice Chairman of Parent-Teacher Association, Primary School of Senai, Johor. Session 2002/2003.
- Head of the Mathematics Laboratory, Universiti Teknologi Malaysia. 2002 - 2004.
- Academic Adviser, Faculty of Science, Universiti Teknologi Malaysia. 1994 - 1996.

### Resource Person on Short Courses or Training

- Bengkel Pengurusan Bajet Berhemah dan ROI, Perpustakaan Tun Seri Lanan, UKM. 19-20 Nov. 2014. Penceramah/Fasilitator.
- Research Methodology Workshop for Post Graduate Students. 2010/2011-2. Speaker.

- Research Methodology Workshop for Post Graduate Students. 2010/2011-1. Speaker.
- Research Methodology Workshop for Post Graduate Students. 2008/2009-2. Speaker.
- Strategic Planning Workshop 2011, RMC, 2011. Facilitator.
- LaTeX Workshop, Faculty of Science, UTM. 2010. Facilitator.
- Statistics and System Thinking as Applied in Agro-Biotechnology Workshop. Agro-Biotechnology Institute, MOSTI. 2009. Speaker.
- Course in Hydrographic (HYDRO I). FIG/IHO Category B. Year 1996. Lecturer.

### Intellectual Properties of Copyrights

- Electrical Load Forecasting Software - H+ (24/7/2012)
- Research Record Reporting System (Sistem Pelaporan Rekod Penyelidikan)
- Research Activity Reporting System (Sistem Pelaporan Aktiviti Penyelidikan)
- Research Appointment Reporting System (Sistem Pelaporan Lantikan Penyelidikan)
- Intellectual Property Management System (IPSM)

### Consultation and Industry Linkages

- Enhancement of Environmental Performance Index (EPI) for Malaysia, 2014. Ministry of Natural Resources and Environment. 2014. RM286,948. Consultant.
- Pemetaan Isodos Sinaran Mengion Semenanjung Malaysia (Isotopes Mapping Ionizing for Peninsular Malaysia). Atomic Energy Licensing Board, Ministry of Science, Technology and Innovation (MOSTI). 2012. Total RM400,000. Consultant.
- Customer - Public Preference of Energy Conservation Technology. Tenaga National Berhad. Vote 26-63100. (1992 - 1994). Consultant.
- Kajian Mengenai Permintaan dan Penawaran Gunatenaga serta Keperluan Latihan dalam Industri Pembinaan di Semenanjung Malaysia sehingga Tahun 2005. Economic Planning Unit (EPU). (1996). Consultant.
- The Variation of Total Weight of Polyethylene Bag. UTSA.PER/TWP 096. (1995). Consultant.

### Links

- [ResearchGate](#)
- Scopus Author ID: [56943557500](#)
- Web of Science ResearcherID: [C-9063-2011](#)
- ORCID ID: [orcid.org/0000-0002-3700-2363](http://orcid.org/0000-0002-3700-2363)