Dr. QASIM ZEESHAN

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Researchgate: www.researchgate.net/profile/Qasim_Zeeshan2 | WOS : https://www.webofscience.com/wos/author/record/1044971
Google Scholar: https://scholar.google.com.pk/citations?user=hxTq2AoAAAAJ&hl=en

PROFILE

Teaching and Research Experience:

- *More than 10 years of post-PhD research, course development and teaching experience, teaching variety of courses from a wide spectrum of disciplines including mechanical, aerospace & manufacturing engineering.*

Research Publications:

- *More than 30 (SCI, SCI-E and SSCI) papers, 5 ESCI papers, and 30 conference papers.*

Thesis Supervision:

- *Supervised and co-supervised 3 PhD and 12 Masters candidates.*
- *Supervised 12 Masters of Science students in Warwick Manufacturing Group, University of Warwick.*
- *Presently supervising 1 Masters candidate and co-supervising 1 PhD candidate.*

Thesis Defense and Jury Memberships:

- *Jury member for 15 PhD and 15 Masters Theses defense juries.*

Journal Referee:

- *Reviewer for international indexed journals. More than 50 verified reviews in Web of Science*

Departmental Work:

- *Program Review of Mechanical and Mechatronics BS Engineering Programs.*
- *Member of departmental committees including ABET Committee, Capstone Projects Committee, Graduate Committee, and Promotions Committee.*

Advisory Board Member:

- *Energy Research Center at EMU*
- *Nanotechnology & Multifunctional Structures Research Center*
- *Electrical Vehicle Development Center at EMU*
- *Industry 4.0 Research Center at EMU*

Industrial Work and Research Experience:

- *Over 10 years of interdisciplinary research experience for the design, analysis and development of Mechanical & Aerospace Systems; in collaboration with researchers from various faculties of engineering design. Project Management of Research & Development projects for all phases of system life cycle; Preparing project proposals, and feasibility studies for acquisition of funds, project supervision, implementation of design, manufacturing, quality and safety standards, collaboration with stakeholders, and delivery of products.*

EDUCATION

2009 **PhD in Flight Vehicle Design (Sep 2006 to Sep 2009)**
Supervisors: Prof. Dr. Dong Yunfeng, Late Prof. Dr. Xiao Yelun
Beijing University of Aeronautics and Astronautics (BUAA), Beijing, P.R.China

2006 **Masters in Flight Vehicle Design (Sep 2004 to Jul 2006)**
Supervisor: Late Prof. Dr. Xiao Yelun
Beijing University of Aeronautics and Astronautics (BUAA), Beijing, P.R.China

2000 **Bachelor of Engineering in Mechanical (Mar 1997 to Oct 2000)**
National University of Sciences and Technology (NUST), College of E&ME, Rawalpindi, Pakistan

RESEARCH INTERESTS

- Space Systems Engineering
- Aerospace Vehicle Design
- Meta-Heuristic Optimization Techniques
- Multidisciplinary Design Optimization
- Design of Experiments
- Machine Learning
- Manufacturing Systems Engineering
- Advanced Manufacturing Processes
- Industry 4.0
- Risk Management
- Failure Mode and Effect Analysis
- Composite Materials

TEACHING EXPERIENCE

Jun 2022 to date

Professor, Department of Mechanical Engineering
Eastern Mediterranean University, Famagusta, North Cyprus, via Mersin 10, Turkey

Sep 2015 to May 2022

Associate Professor, Department of Mechanical Engineering
Eastern Mediterranean University, Famagusta, North Cyprus, via Mersin 10, Turkey

Graduate Courses:

- *Applied Computational Methods for Engineers*
- *Manufacturing Systems Engineering*
- *Multidisciplinary Design Optimization**
- *Space Systems Engineering**

Undergraduate Courses

- *Computer Aided Engineering Design*
- *Dynamics*
- *Manufacturing Technology*
- *Systems Control*
- *Reliability Engineering*
- *Mechanical Vibrations*
- *Space Flight Dynamics**

*New courses initiated at EMU

Sep 2016 to date

Academic Project Supervisor, Master's Program
Warwick Manufacturing Group, The University of Warwick, Coventry, United Kingdom

- *Annual Workshop on Research Design and Methodology*

Feb 2013 to July 2015

Associate Professor (Adjunct), Department of Aeronautics & Astronautics
Institute of Space Technology (IST), Islamabad, Pakistan

Graduate Courses:

- *Multidisciplinary System Design Optimization **
- *Space Mission Analysis and Design **
- *Flight Dynamics*
- *Optimization Techniques in Structural Design*

Undergraduate Courses

- *Structural Dynamics*

* New courses initiated and taught for the first time in Pakistan

Mar 2010 to Feb 2013

Assistant Professor (Adjunct), Department of Aeronautics & Astronautics
Institute of Space Technology (IST), Islamabad, Pakistan

Graduate Courses:

- *Multidisciplinary System Design Optimization **
- *Space Mission Analysis and Design **
- *Spacecraft System Design **
- *Spacecraft Dynamics and Control*

* New courses initiated and taught for the first time in Pakistan

Sep 2012 to Jan 2015

Associate Professor, Visiting Faculty Member, Department of Mechanical Engineering
International Islamic University (IIU), Islamabad, Pakistan

Graduate Courses:

- *Advanced Numerical Analysis*
- *Computational Engineering Analysis*
- *Engineering Design Optimization*
- *Engineering Ergonomics and Work Study*
- *Production System Design and Analysis*
- *Technology Management*
- *Research Design*

Undergraduate Courses

- *Project Management*

Jun 2012 to Sep 2012

Visiting Faculty Member, School of Mechanical & Manufacturing Engineering, (SMME)
National University of Sciences and Technology (NUST), Islamabad, Pakistan
Graduate Course: *Design Optimization;* **Seminar on Research Design**

Feb 2013 to Jul 2013

Visiting Faculty Member, NUST Business School, (NBS)
National University of Sciences and Technology (NUST), Islamabad, Pakistan
Graduate Course: *Management Science*

Oct 2006 to Sep 2009

Teaching & Research Assistant, School of Astronautics
Beijing University of Aeronautics & Astronautics, BUAA, P.R.China

RESEARCH PUBLICATIONS

JOURNAL ARTICLES: (SCI, SCI Expanded List, SSCI)

[1] Safaei, B., Memarzadeh, A., Asmael, M., Sahmani, S., Zeeshan, Q. Jen, T.C., Qin, Z. **Challenges and Advancements in Additive Manufacturing of Nylon and Nylon Composite Materials: A Comprehensive Analysis of Mechanical Properties, Morphology, and Recent Progress**. J. of Materi Eng and Perform (2024). https://doi.org/10.1007/s11665-024-09368-9

[2] Gharibvand, V., Kolamroudi, M.K., Zeeshan, Q., Çınar, Z.M., Sahmani, S., Asmael, M., Safaei, B**. *Cloud based manufacturing: A review of recent developments in architectures, technologies, infrastructures, platforms and associated challenges.*** Int J Adv Manuf Technol 131, 93–123 (2024). https://doi.org/10.1007/s00170-024-12989-y

[3] Asmael. M., Kalaf, O., Safaei, B., Nasir,T., Sahmani, S., Zeeshan, Q,. ***Assessment of friction stir spot welding of AA5052 joints via machine learning***, Acta Mechanica, 2024. https://doi.org/10.1007/s00707-023-03841-7

[4] Elmoghazy, Y.H., Safaei, B., Asmael. M., Sahmani, S., **Zeeshan, Q.**, Z. Qin. ***Computational modelling and analysis of effect of viscoelastic materials on damping and vibrational behaviors of composite structures – An extensive review***, Arch Computat Methods Eng (2024). https://doi.org/10.1007/s11831-023-10057-4

[5] Al Mahmoud, Z., Safaei, B., Sahmani, S., Asmael. M., Shahzad, M.A, **Zeeshan, Q.,** Qin, Z. ***Implementation of different types of meshfree technique in computational solid mechanics: A comprehensive review across nano, micro, and macro scales***, Archives of Computational Methods in Engineering, 2023. https://doi.org/10.1007/s11831-023-09999-6

[6] G. Ozankaya, M. Asmael, M. Alhijazi; B. Safaei*, M. Y. Alibar, S. Arman, K. Kotrasova, V. Kvocak, M. Weissova, **Zeeshan, Q.**, D. Hui, ***Prediction of lap shear strength of GNP and TiO2/epoxy nanocomposite adhesives***, Nanotechnology Reviews, 12, 20230134, 2023. https://doi.org/10.1515/ntrev-2023-0134

[7] Nuhu, A.A., **Zeeshan, Q**., Safaei, B. et al. ***Machine learning-based techniques for fault diagnosis in the semiconductor manufacturing process: a comparative study***. Journal of Supercomputing (2023). https://doi.org/10.1007/s11227-022-04730-x

[8] Alhijazi, M., Safaei, B., **Zeeshan, Q**. Arman S., B., Asmael, M., **Prediction of Elastic Properties of Thermoplastic Composites with Natural Fibers**, The Journal of the Textile Institute, (2022). https://doi.org/10.1080/00405000.2022.2131352

[9] Alhijazi, M., Safaei, B., **Zeeshan, Q**., B., Asmael, M., Harb, M., Qin, Z., ***An Experimental and Metamodeling Approach to Tensile Properties of Natural Fibers Composites***. Journal of Polymers and the Environment, 30, 4377–4393 (2022). https://doi.org/10.1007/s10924-022-02514-1

[10] Sarkon, G. K., Safaei, B., Kenevisi M. S., Arman, S., **Zeeshan, Q**., ***State-of-the-Art Review of Machine Learning Applications in Additive Manufacturing; from design to manufacturing and property control***, Archives of Computational Methods in Engineering, 2022 https://doi.org/10.1007/s11831-022-09786-9

[11] **Zeeshan, Q**., Rafique A.F., Kamran A., Khan, M.I., and Waheed, A. ***Multidisciplinary design and optimization of expendable launch vehicle for microsatellite missions***, Aircraft Engineering and Aerospace Technology, Emerald Publishing Limited, (2021). https://doi.org/10.1108/AEAT-01-2021-0004

[12] Çınar, Z.M., **Zeeshan, Q**., Korhan, O. ***A Framework for Industry 4.0 Readiness and Maturity of Smart Manufacturing Enterprises: A Case Study***. Sustainability 2021, 13, 6659. https://doi.org/10.3390/su13126659

[13] M. Asmael, B. Safaei*, O. Kalaf, Q. Zeeshan, F. Aldakheel, T. Nasir, Z. Yang. ***Recent developments in tensile properties of friction welding of carbon fiber-reinforced composite: A review***, Nanotechnology Reviews, 11(1), 1408-1436, 2022 https://doi.org/10.1515/ntrev-2022-0083

[14] Asmael, M., Nasir, T., Zeeshan, Q., Safaei, B., Kalaf, O., Motallebzadeh, A. Hussain, G., ***Prediction of properties of friction stir spot welded joints of AA7075-T651/Ti-6Al-4V alloy using machine learning algorithms***. Archives of Civil and Mechanical Engineering ,22, 94 (2022). https://doi.org/10.1007/s43452-022-00411-x

[15] Alibar, M.Y., Safaei, B., Asmael, M., **Zeeshan, Q**., ***Effect of Carbon Nanotubes and Porosity on Vibrational Behavior of Nanocomposite Structures: A Review***. Archives of Computational Methods in Engineering (2022). https://doi.org/10.1007/s11831-021-09669-5

[16] Nasir, T., Kalaf, O., Asmael, M., **Zeeshan, Q**, Safaei, B., Hussain, G., and Motallebzadeh, A. ***The experimental study of CFRP interlayer of dissimilar joint AA7075-T651/Ti-6Al-4V alloys by friction stir spot welding on mechanical and microstructural properties***. Nanotechnology Reviews, vol. 10, no. 1, 2021, pp. 401-413. (2021). https://doi.org/10.1515/ntrev-2021-0032

[17] Kalaf, O., Nasir, T., Asmael, M., Safaei, B., **Zeeshan, Q**, Motallebzadeh, A. and Hussain, G. ***Friction stir spot welding of AA5052 with additional carbon fiber-reinforced polymer composite interlayer***. Nanotechnology Reviews, vol. 10, no. 1, 2021, pp. 201-209. (2021). https://doi.org/10.1515/ntrev-2021-0017

[18] Khatibi, K., Asmael, M., Safaei, B., **Zeeshan, Q, *Solidification and microstructure characterizations of eutectic aluminum-silicon casting alloy with the addition of tin***, Materialwissenschaft und Werkstofftechnik 52(8):871-878, (2021) DOI: https://doi.org/10.1002/mawe.202100040

[19] Alhijazi, M., Safaei, B., **Zeeshan, Q.**, Asmael M. ***Modeling and simulation of the elastic properties of natural fiber-reinforced thermosets***. Polymer Composites, (2021). https://doi.org/10.1002/pc.26075

[20] Asmael, M., Safaei, B., **Zeeshan, Q**. Zargar, O., Abdussalam Nuhu, A.. ***Ultrasonic machining of carbon fiber–reinforced plastic composites: a review***. The International Journal of Advanced Manufacturing Technology, 113, 3079–3120 (2021). https://doi.org/10.1007/s00170-021-06722-2

[21] Kalaf, O., Solyali, D.,, Asmael, M., **Zeeshan, Q**., Safaei, B. Askir, A.. ***Experimental and simulation study of liquid coolant battery thermal management system for electric vehicles: A review***. International Journal of Energy Research, 45-5, 2021, 6495-6517, (2021). https://doi.org/10.1002/er.6268

[22] Talebizadehsardari, P., Eyvazian, A., Musharavati, F., **Zeeshan, Q**., Mahani, R., Sebaey, T. ***Optimization of wire electrical discharge turning process: trade-off between production rate and fatigue life***. The International Journal of Advanced Manufacturing Technology, 112, 719–730 (2021). https://doi.org/10.1007/s00170-020-06351-1

[23] Çınar, Z.M.; Abdussalam Nuhu, A.; **Zeeshan, Q**.; Korhan, O.; Asmael, M.; Safaei, B. ***Machine Learning in Predictive Maintenance towards Sustainable Smart Manufacturing in Industry 4.0***. Sustainability 2020, 12(19), 8211, (2020). https://doi.org/10.3390/su12198211

[24] Alhijazi, M., Safaei, B. **Zeeshan, Q.**, Asmael M., Eyvazian, A., Qin, Zhaoye, ***Recent Developments in Luffa Natural Fiber Composites: Review***. Sustainability 2020, 12(18), 7683 (2020). https://doi.org/10.3390/su12187683

[25] Alhijazi, M., **Zeeshan, Q.**, Qin, Zhaoye, Safaei, B. , Asmael M., ***Finite element analysis of natural fibers composites: A Review***. Nanotechnology Reviews 2020; 9: 853–875 (2020). https://doi.org/10.1515/ntrev-2020-0069

[26] Alhijazi, M., **Zeeshan, Q.**, Safaei, B. , Asmael M., Qin, Zhaoye. ***Recent Developments in Palm Fibers Composites: A Review***. Journal of Polymers and the Environment, 28, 3029–3054, (2020). https://doi.org/10.1007/s10924-020-01842-4

[27] Kamran A., **Zeeshan, Q**., Rafique A.F., Guozhu L, ***A New Paradigm for Star Grain Design and Optimization***, Aircraft Engineering and Aerospace Technology, 87-5, 476-482, (2015). http://dx.doi.org/10.1108/AEAT-07-2013-0141

[28] Kamran A., Guozhu L, Rafique A.F., **Zeeshan, Q., *±3 - Sigma based Design Optimization of 3D Finocyl Grain***. Aerospace Science and Technology, 26-1, 29-37, (2013). https://doi.org/10.1016/j.ast.2012.02.011

[29] Rafique A.F., LinShu H., **Zeeshan, Q.**, Kamran A., Nisar K.,**. *Multidisciplinary Design and Optimization of Air Launched Satellite Launch Vehicle Using Hybrid Heuristic Search Algorithm***. Engineering Optimization, 43-3, 305 – 328, (2011), https://doi.org/10.1080/0305215X.2010.489608

[30] Rafique A.F., LinShu H., Kamran A., **Zeeshan, Q.**, ***Hyper Heuristic approach for Design and Optimization of Satellite Launch Vehicle***. Chinese Journal of Aeronautics, 24-2, 150 – 163, (2011). https://doi.org/10.1016/S1000-9361(11)60019-8

[31] **Zeeshan, Q.**, Yunfeng D., Nisar K., Kamran A., Rafique A.F., ***Multidisciplinary Design and Optimization of Multistage Ground Launched Boost Phase Interceptor using Hybrid Search Algorithm***, Chinese Journal of Aeronautics, 23-2, 170 – 178, (2010) https://doi.org/10.1016/S1000-9361(09)60201-6

[32] Rafique A.F., LinShu H., Kamran A., **Zeeshan, Q.**, ***Multidisciplinary Design of Air Launched Satellite Launch Vehicle: Performance Comparison of Heuristic Optimization Methods***. Acta Astronautica, 67, 7-8, 826 – 844, (2010). https://doi.org/10.1016/j.actaastro.2010.05.016

[33] Nisar K., Guozhu L, **Zeeshan, Q.**, ***A Hybrid Optimization Approach for SRM Finocyl Grain Design***. Chinese Journal of Aeronautics, 21-6, 481-487, (2008) https://doi.org/10.1016/S1000-9361(08)60164-8

JOURNAL ARTICLES: (ESCI)

[1] Cinar Z.M., Asmael M., **Zeeshan, Q.,** Safaei B., ***Effect of Springback on A6061 Sheet Metal Bending: A Review***, Jurnal Kejuruteraan (Journal of Engineering) 33(1) 2021: 13-26 https://doi.org/10.17576/jkukm-2020-33(1)-02

[2] Glaissa M., Asmael M., **Zeeshan, Q.,** ***Recent Applications of Residual Stress Measurement Techniques for FSW Joints: A Review***. Jurnal Kejuruteraan (Journal of Engineering). ISSN: 0128-0198 e-ISSN: 2289-7526, August 2020 Jurnal Kejuruteraan 32(3):1-15 DOI: 10.17576/jkukm-2020-32(3)-01

[3] Nasir T., Asmael M., **Zeeshan, Q.,** Solyali S., ***Applications of Machine Learning to Friction Stir Welding Process Optimization***. Jurnal Kejuruteraan (Journal of Engineering). ISSN: 0128-0198 e-ISSN: 2289-7526, Jurnal Kejuruteraan 32(2) 2020: 171-186 https://doi.org/10.17576/jkukm-2020-32(2)-01

[4] Akinlabi A. H., Solyali S., Asmael M., **Zeeshan, Q.,** ***Smart Manufacturing for Industry 4.0 using Radio Frequency Identification (RFID) Technology***. Jurnal Kejuruteraan (Journal of Engineering). ISSN: 0128-0198 e-ISSN: 2289-7526, Jurnal Kejuruteraan 32(1) 2020: 31-38 https://doi.org/10.17576/jkukm-2020-32(1)-05

[5] Cinar Z.W., Asmael M., **Zeeshan, Q.,** ***Developments in Plasma Arc Cutting (PAC) of Steel Alloys: A Review***. Jurnal Kejuruteraan (Journal of Engineering). 30(1) 2018: 7-16, https://doi.org/10.17576/jkukm-2018-30(1)

JOURNAL ARTICLES: (International Refereed Journals)

[1] M. D. Baig, A. M. A. Saif, O. Mbah, U. Yildirim, G. Ozankaya, and Q. Zeeshan, **Development and evaluation of an economical Arduino-based uniaxial shake table for earthquake and wave simulation**, J. Eng. Manag. Syst. Eng., vol. 3, no. 2, pp. 82–92, 2024. https://doi.org/10.56578/jemse030203.

[2] Mbah, O. & Zeeshan, Q. (2023). **Optimizing Path Planning for Smart Vehicles: A Comprehensive Review of Metaheuristic Algorithms**. J. Eng. Manag. Syst. Eng., 2(4), 231-271. https://doi.org/10.56578/jemse020405

[3] Durrani, O. & Z **Zeeshan, Q**.,. (2023). **An Assessment of Risks in Oil and Gas Construction Projects in Pakistan: A Quantitative Approach Using Failure Modes & Effects Analysis**. J. Eng. Manag. Syst. Eng., 2(3), 180-195. https://doi.org/10.56578/jemse020305

[4] Korhan, O., Fallaha, M., Murat Çınar, Z., & **Zeeshan, Q**.,. (2023). ***The Impact of Industry 4.0 on Ergonomics***. IntechOpen. doi: 10.5772/intechopen.108864 https://www.intechopen.com/chapters/85481

[5] Haroon S. and **Zeeshan, Q**., **The impact of the COVID-19 pandemic on software business enterprises in Pakistan: Analysis and implications**, J. Eng. Manag. Syst. Eng., vol. 2, no. 2, pp. 123–133, 2023. https://doi.org/10.56578/jemse020204

[6] Karaoğlu, U., Mbah, O., and **Zeeshan, Q**., ***Applications of machine learning in aircraft maintenance***, J. Eng. Manag. Syst. Eng., vol. 2, no. 1, pp. 77-96, 2023. https://doi.org/10.56578/jemse020105

[7] Ghasemian, H., **Zeeshan, Q**., ***Failure Mode and Effect Analysis (FMEA) of Aeronautical Gas Turbine using the Fuzzy Risk Priority Ranking (FRPR) Approach***. International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-7 Issue-1, March 2017 81. https://www.ijsce.org/wp-content/uploads/papers/v7i1/A2955037117.pdf

[8] Sabir R., Abid A, Junaid H., **Zeeshan, Q**., Yousuf, ***A Survey of Recent Developments in Optimization of Iso-Grid Cylinders***, Journal of Space Technology 5(1):103 - 115, (2015), ISSN 2077-3099 (Print); ISSN 2411-5029 (Online) http://www.ist.edu.pk/jst/previous-issues/july-2015

[9] **Zeeshan, Q.**, Yunfeng D., Kamran A., Rafique A.F., Nisar K., ***Stealth Considerations for Aerodynamic Configuration Design***. Journal of Computer Aided Drafting, Design and Manufacturing, Vol 19, No. 1, 2009, ISSN: 1003-4951 en.cnki.com.cn/Article_en/CJFDTOTAL-CADD200901002.htm

[10] Rafique A.F., LinShu H., **Zeeshan, Q.**, ***Multidisciplinary Design and Optimization of Satellite Launch Vehicle using Latin Hypercube Design of Experiments***. Journal of Computer Aided Drafting, Design & Manufacturing, Vol 19, No.1, (2009)., ISSN:1003-4951. caod.oriprobe.com/articles/24781596/multidisciplinary_design_and_optimization_of_satellite_launch_vehicle_.htm

[11] Saleem W., Yu-qing F., Hu L., **Zeeshan, Q.,** ***Topology Optimization for Manufacturable Configuration Design of Aircraft Tail Rib***. Journal of Computer Aided Drafting, Design and Manufacturing, Vol 19, No. 1, (2009), ISSN: 1003-4951.
caod.oriprobe.com/articles/24786811/topology_optimization_for_manufacturable_configuration_design_of_aircr.htm

[12] **Zeeshan, Q.**, Momtaz M., Yunfeng D.. ***Conceptual Design Architecture Modeling and Simulation for Boost Phase Ballistic Missile Defense***. Journal of Computer Aided Drafting, Design and Manufacturing, Vol 18, No. 1, (2008)., ISSN: 1003-4951. en.cnki.com.cn/Article_en/CJFDTOTAL-CADD200801008.htm

[13] Moatasem Momtaz, **Zeeshan, Q.**, Yunfeng D.. ***GPS Navigation Using Adaptive Kalman Filter for Maneuvering Vehicle***. Journal of Computer Aided Drafting, Design and Manufacturing, Vol 18, No. 1, (2008). (**CNKI**), ISSN: 1003-4951.caod.oriprobe.com/articles/24784213/gps_navigation_using_adaptive_kalman_filter_for_maneuvering_vehicle.htm

[14] Nisar K., Guozhu L, **Zeeshan, Q.,** ***Finocyl Grain Design and Optimization of Propellant Mass for SRM using SQP***. . Journal of Computer Aided Drafting, Design and Manufacturing, Vol 18, No. 1, (2008). (**CNKI**), ISSN: 1003-4951

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CONFERENCE PAPERS:

[1] Zhou, D., **Zeeshan, Q**, (2023), **Whale Optimization Algorithm Combined with Oversampling Technique for Imbalanced Issues**, 2023 Asia-Pacific Conference on Image Processing, Electronics and Computers (IPEC), Dalian, China, 2023, pp. 422-425, doi: 10.1109/IPEC57296.2023.00079

[2] Attique, U., Butt, S. I., Rashid, S. and **Zeeshan, Q**, **Discrete Event Simulation in Support of Optimized Automotive Assembly Line Producing Bullet Proof Vehicles Having Tailor Welded Blanks**," 2022 13th International Conference on Mechanical and Aerospace Engineering (ICMAE), Bratislava, Slovakia, 2022, pp. 532-535, doi: 10.1109/ICMAE56000.2022.9852858

[3] Cinar Z.M., **Zeeshan, Q**, (2022) **Design and Optimization of Automated Storage and Retrieval Systems: A Review**. In: Calisir F. (eds) Industrial Engineering in the Internet-of-Things World. GJCIE 2020. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-76724-2_14

[4] Fallaha M., Korhan O., **Zeeshan, Q.,** (2022) ***Virtual Reality: A Possibility for Training Operator 4.0.*** In: Calisir F. (eds) Industrial Engineering in the Internet-of-Things World. GJCIE 2020. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-76724-2_25

[5] Alhijazi M., **Zeeshan, Q.**, Ghasemian H. (2020) ***Failure Mode and Effect Analysis (FMEA) of Vertical Axis Wind Turbines***. In: Calisir F., Korhan O. (eds) Industrial Engineering in the Digital Disruption Era. GJCIE 2019. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-42416-9_6

[6] Cinar Z.M., Nuhu A.A., **Zeeshan, Q.**, Korhan O. (2020) ***Digital Twins for Industry 4.0: A Review***. In: Calisir F., Korhan O. (eds) Industrial Engineering in the Digital Disruption Era. GJCIE 2019. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-42416-9_18

[7] Cinar Z.M., **Zeeshan, Q.**, Solyali D., Korhan O. (2020) ***Simulation of Factory 4.0: A Review.*** In: Calisir F., Korhan O. (eds) Industrial Engineering in the Digital Disruption Era. GJCIE 2019. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-42416-9_19 .

[8] Fallaha M., Cinar Z.M., Korhan O., **Zeeshan, Q.**, (2020) ***Operator 4.0 and Cognitive Ergonomics***. In: Calisir F., Korhan O. (eds) Industrial Engineering in the Digital Disruption Era. GJCIE 2019. Lecture Notes in Management and Industrial Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-42416-9_20

[9] Rafique A.F., **Zeeshan, Q**., Kamran A., ***Design of Experiments based Variation Mode & Effect Analysis for the Conceptual Design of Air Launched Satellite Launch Vehicle***, ICNPAA 2014: International Conference on Nonlinear Problems in Aviation and Aerospace, Narvik, Norway, July 15 to 18, 2014. **ISBN: 978-0-7354-1276-7,** http://dx.doi.org/10.1063/1.4904657

[10] Karim S., Haque A, **Zeeshan, Q.,** Choudhary M.A., ***Wind Tunnel testing of Generic Model of Double Ellipsoidal Shaped Hull of LTA Airship.*** Proceedings of 2014 11th International Bhurban Conference on Applied Sciences & Technology (IBCAST) Islamabad, Pakistan, 14th - 18th January, 2014, Islamabad, Pakistan, 2014, pp. 289-293,DOI: 10.1109/IBCAST.2014.6778158 http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6778158

[11] Rafique A.F., **Zeeshan, Q**., Kamran A., ***Reversing the design process to aid in complex engineering problems***, MODSIM2013: 20th International Congress on Modeling and Simulation, Adelaide Convention Centre in Adelaide, South Australia, December 2013. DOI: 10.36334/MODSIM.2013.C4.RAFIQUE **ISBN: 978-0-9872143-3-1,** http://www.mssanz.org.au.previewdns.com/modsim2013/C4/rafique.pdf

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[31] **Zeeshan, Q.**, Qazi M, Yelun X. ***Analysis of Perturbation Effect on Satellite Orbit due to Geopotential Disturbances***. International Conference on Scientific Computing, Nanjing, P.R. China, June 2005.

THESIS SUPERVISION

Doctorate of Philosophy

Completed Ph.D. theses:

[1] Tauqir Nasir (2022), **The Effect of Process Parameters on Mechanical and Microstructure Properties of Al/Ti Welded Joints by Friction Stir Spot Welding (FSSW).** Doctorate of Philosophy in Mechanical Engineering, Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael. Co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan).

[2] Zeki Murat Çinar (2021) "**A Framework for Industry 4.0 Readiness and Maturity of Smart Manufacturing Enterprises**" – Doctorate of Philosophy in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assoc. Prof. Dr. Qasim Zeeshan; Co-supervisor: Prof. Dr. Orhan Korhan)

[3] Mohamad Kamal AlHijazi (2021) "**Experimental and Numerical Investigation on the Elastic Properties of Natural Fiber Composites** " - Doctorate of Philosophy in Mechanical Engineering, Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Babak Safaei; Co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan)

Masters of Science

Completed Masters theses:

[1] Umur Hüseyin Karaoğlu (2024) "**Applications of Machine Learning in Predictive Aircraft Maintenance**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University

[2] Osinachi Mbah (2023) "**Comparative Analysis of Metaheuristic Search Algorithms for Path Planning of Smart Vehicles**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University

[3] Yiğit Can Yilmaz (2023) "**A Comprehensive study of Energy Harvesting on Laminated 914C Epoxy and PZT-5H Composite Beamr**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei; Co-supervisor: Prof. Dr. Qasim Zeeshan)

[4] Garshasp S (2022) "**Simulation of flexural and tensile properties of Additively Manufactured Continuous Carbon Fiber**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei; Co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan)

[5] Abu Bakr Abdussalam Nuhu (2021) "**Investigation of Machine Learning Techniques for Fault Diagnosis in the Semiconductor Manufacturing Process**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University

[6] Muhammad Fallaha (2020) "**Operator 4.0 and Cognitive Ergonomics**" - Master of Science in Engineering Management, Eastern Mediterranean University – (Supervisor: Assoc. Prof. Dr. Orhan Korhan; Co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan)

[7] Hamed Ghasemiyan (2017) "**Failure Mode and Effect Analysis (FMEA) of Gas Turbine Power Plant System (GTPPS)**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University.

[8] Zeki Murat Çinar (2017) "**Configuration Design and Optimization of Circular Automated Storage and Retrieval System (C-AS/RS) for Automobiles**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University.

[9] Mohamad Kamal AlHijazi (2017) "**Failure Mode and Effect Analysis (FMEA) of Vertical Axis Wind Turbine**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University.

[10] Sahra Hamdollahi (2017) "**Economic Feasibility of 1kW Micro-Scale Wind Turbines for North Cyprus**" - Master of Science in Mechanical Engineering, Eastern Mediterranean University – (Supervisor: Prof. Dr. Ugur Atikol; co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan)

[11] Alireza Alipour (2016) "**Application of a Virtual Reality and an Ergonomics Framework for Production Time Optimization: Case study in pen production**"- Master of Science in Mechanical Engineering, Eastern Mediterranean University.

[12] Nadir Reza (2016) "**Risk Assessment of OSH relevant Failure Modes in Process Industries by applying process FMECA**" - Masters of Science in Energetic Materials Engineering, National University of Sciences and Technology (NUST), Islamabad, Pakistan – (Supervisor: Prof. Dr. Abdul Qadeer Malik, SCME, NUST; co-supervisor: Assoc. Prof. Dr. Qasim Zeeshan)

THESIS SUPERVISION

Masters of Science – Warwick Manufacturing Group - University of Warwick

Completed Masters theses:

[1] Ahmad Moussa (2020) " **Assessing Drilling Stage Risks for a Geotechnical and Foundation Company using AHP and FMEA**" - Master of Science in Engineering Business Management, WMG, Warwick

[2] Abdelrahman Ahmed Touman (2020) " **Techno-economic Feasibility Analysis of a Solar Photovoltaic Electric Vehicle Charging Station**" - Master of Science in Engineering Business Management, WMG, Warwick

[3] Sundus Haroon (2020) "**Understanding COVID-19 Pandemic's Impact on the Software Business Enterprises in Pakistan**" - Master of Science in Engineering Business Management, WMG, Warwick

[4] Mohamed Elgeab (2020) " **Blockchain Awareness and Adoption Challenges in the Oil and Gas Industry in Egypt**" - Master of Science in in Supply Chain and Logistics Management, WMG, Warwick

[5] Ossama Durrani (2020) "**Risk Assessment of Oil & Gas Construction Projects in Pakistan Using Failure Modes & Effects Analysis**" - Master of Science in Engineering Business Management, WMG, Warwick

[6] Batuhan Can Adsoy (2020) "**Exploring Blockchain Technology Adoption among Food and Beverage Distributors in the United Kingdom** " - Master of Science in in Supply Chain and Logistics Management, WMG, Warwick

[7] Abdurrahman Abdul Kadir (2019) "**Blockchain Technology Adoption for Agribusiness in Nigeria**" - Master of Science in Supply Chain and Logistics Management, WMG, Warwick

[8] Ali Al Soojery (2019) "**The Role of ICT on the Growth Strategy of SMEs. A Case of Oman, Muscat**" - Master of Science in Engineering Business Management, WMG, Warwick

[9] Ahmad Jabakji (2018)"**Investigating the Adoption of Industry 4.0 Technologies among UK Engineering Business Managers**" - Master of Science in Engineering Business Management, WMG, Warwick

[10] Rajab Qudsi (2018) "**Risk Assessment of Real estate construction projects in North Cyprus**" - Master of Science in Supply Chain and Logistics Management, WMG, Warwick

[11] Khubaib Najeeb (2017) "**Failure Mode and Effect Analysis of the Supply Chain Risks Associated with China-Pakistan Economic Corridor**" - Master of Science in Supply Chain and Logistics Management, WMG, Warwick

THESIS JURY MEMBERSHIPS

Doctorate of Philosophy

[1] **İsmail Barbaros (2023). Microstructural-dependent nonlinear buckling characteristics of laminated nanocomposite curved microbeams under thermomechanical loading conditions.** Eastern Mediterranean University, . Supervisor: Assoc. Prof. Dr. Babak Safaei, Co-Supervisor: Prof. Dr. Saeid Sahmani

[2] **Doğuş Hürdoğanoğlu, (2023). Study on the Size-dependent Thermomechanical Stability Behavior of Functionally Graded Multilayer Shallow Nano-Arches.** Eastern Mediterranean University, . Supervisor: Assoc. Prof. Dr. Babak Safaei, Co-Supervisor: Prof. Dr. Saeid Sahmani

[3] **Ali S. Milad EL Ghomati (2022). The Impact of Mobile Touch Screen Device Use on Musculoskeletal Disorders: Risk Assessment Modeling and Verification**. Eastern Mediterranean University, Supervisor: Prof. Dr. Orhan Korhan

[4] **Omer Kalaf, (2021). Friction Stir Spot Welding of Aluminium Alloy AA5052 With and Without Carbon Fiber-reinforced Polymer Composite Interlayer.** Eastern Mediterranean University, . Supervisor: Assist. Prof. Dr. Babak Safaei, Co-Supervisor: Assist. Prof. Dr. Mohammad Asmael

[5] **Noor Rahman (2020), Micromechanism of the effects of age and x rays irradiation on fracture of bone**, International Islamic University, Islamabad, Pakistan. Supervisor: Assist. Prof. Dr. Rafiullah Khan

[6] **Muhammad Zeeshan Siddiqui (2019**), **Inverse identification of constitutive parameters of carbon fiber reinforced plastic plates using 2D Digital Image Correlation technique**. National University of Sciences and Technology, Karachi, Pakistan. Supervisor: Assist. Prof. Dr. Asif Mansoor

[7] **Poorya Ghafoorpoor Yazdi (2019**), **Design, implementation and evaluation of a novel agent-based control system to improve performance of small and medium sized enterprises: An Industry 4.0 adoption**. Eastern Mediterranean University, Supervisor: Prof. Dr. Majid Hashemipour

[8] **Hussein Ahmad (2019), Intelligent Control Approaches for Load Shedding in Developing Countries**, Eastern Mediterranean University, Supervisor: Prof. Dr. Ugur Atikol

[9] **Vahid Khojastehnezhad (2019), Microstructures and mechanical properties of Al 6061 /Al2o3-TiB2 hybrid nano-composite layer produced via friction stir processing using optimized process parameters**. Eastern Mediterranean University, Supervisor: Assoc. Prof. Dr. Nermian Ozada, Co-Supervisor: Assist. Prof. Dr. Mohammad Asmael

[10] **Hamed Pourasl (2019), Theoretical and Experimental Investigation of the Material Removal Rate, Surface Roughness, and Tool Wear Ratio in Electrical Discharge Machining**. Eastern Mediterranean University, Supervisor: Assoc. Prof. Dr. Nermian Ozada, Co-Supervisor: Assist. Prof. Dr. Mohammad Asmael

[11] **Sadegh Mazloomi (2017**), **Vibro- Acoustic optimization of auxetic sandwich panels.** Eastern Mediterranean University, Supervisor: Assoc. Prof. Dr. Nermian Ozada. Co-Supervisor: Assoc. Prof. Dr. Mostafa Ranjbar

[12] **Amirsalar Khandan (2017**), **A Novel Silicate Ceramic-Magnetite Nanocomposite for Biomedical Application**. Eastern Mediterranean University, Supervisor: Assoc. Prof. Dr. Nermian Ozada

[13] **Khosro Bijanrostami (2017), Investigation on Thermal Effects of Water Submerged Friction Stir Welding on Mechanical Property and Microstructure of AA6060-T6 and AA7075-T6 joints**. Eastern Mediterranean University, Supervisor: Prof. Dr. Majid Hashemipour, Co-Supervisor: Assoc. Prof. Dr. Ghulam Hussain

[14] **Aydin Azizi (2016**), **Introducing a Novel Hybrıd Artificial Intelligence Algorithm to Optimize Network of Industrial Applıcatıons in Modern Manufacturing.** Eastern Mediterranean University, Supervisor: Prof. Dr. Majid Hashemipour

[15] **Amir Mirlatifi (2016), Electricity Peak Demand Forecasting for Developing Countries.** Eastern Mediterranean University, Supervisor: Prof. Dr. Ugur Atikol

THESIS JURY MEMBERSHIPS

Masters of Science

[1] **Muhammad Suleman (2022). Static Analysis of Double and Triple Hexagon Honeycomb Sandwich Aluminum 5052-H32 Alloy Core Structures** - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assoc. Prof. Dr. Babak Safaei

[2] **Saman Hameed (2022), Optimum Constellation Design for Regional Coverage of Pakistan by Cubesats,** Department of Aeronautics & Astronautics, Institute of Space Technology, Pakistan, Supervisor: Assist. Prof. Dr. Abdul Waheed

[3] **Zahra Pezeshki (2022) . Effect of porosity on buckling behavior of shallow FG natural fiber reinforced composite arches under hydro-thermo mechanical loads** - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[4] **Emmanuel Chukwueloka Onyibo (2022). Effect of Static and Harmonic Loading on Honeycomb Sandwich Beam by Using Finite Element Method** - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[5] **Ibinabo Justus Kemuel (2022) - A Numerical Approach to Buckling Behavior of Auxetic Sandwich Structures** - Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[6] **Mehmet Gören (2022). Free Vibration Analysis of Honeycomb Beam Structured by Aluminium Alloy Face Sheets.** Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[7] **Ahmed Salih (2022). Vibration Analysis of Piezoelectric Energy Harvesting Advanced Light Weight Rotating Beams.** Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[8] **Yasser Hamed H. Elmoghazy (2022). Dynamics Analysis of Viscoelastic Sandwiched Structures Integrated with Aluminum Sheets by Using Finite Element Method.** Master of Science in Mechanical Engineering, Eastern Mediterranean University. Supervisor: Assist. Prof. Dr. Babak Safaei

[9] **Mohammed Wafi (2020), Modeling and simulation of ABS system through different types of controllers using Simulink.** Eastern Mediterranean University, Supervisor: Prof. Dr. Hasan Hacisevki

[10] **Otonye Tekena Fubara (2020), Springback Investigation of Aluminium (AA5052-H36) Alloy Sheet Metal in Vee-Bending,** Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael

[11] **Dekoumwine Parfait Meda (2020), Springback Investigation of Yellow Brass Alloy Sheet Metal in Vee-Bending,** Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael

[12] **Abdulhakim Akinlabi (2020), Empirical Thermal Performance Investigation of a Compact Lithium Ion Battery Module under Forced Convection Cooling**. Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Davut Solyali

[13] **Kayvan Khatibi (2019), The Characterization of Eutectic Al-Si Casting Alloy with Addition of Tin,** Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael

[14] **Mustafa Ali A. Glaissa (2019), The Effect of Rotation Speed and Dwell Time on the Mechanical Properties and Microstructure of Dissimilar Aluminum-Titanium Alloys by FSSW Process.** Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael

[15] **Tauqir Nasir (2019), Effect of Rotational Speed, Dwell Time and Pin length on properties of Microstructure of Dissimilar Aluminum sheet Metal by FSSW.** Eastern Mediterranean University, Supervisor: Assist. Prof. Dr. Mohammad Asmael

[16] **Selah Saleh (2017) "Feasibility analysis of solar PV-systems in Saudi Arabia"**, Eastern Mediterranean University, Supervisor: Prof. Dr. U. Atikol

PROFESSIONAL RESEARCH EXPERIENCE

Jan 2013 to Feb 2015

General Manager (Mechanical and Aerospace)
Centers of Excellence in Science & Applied Technologies (CESAT)
Public Sector Research and Development Organization, Islamabad, Pakistan

Team Leader:

- Project management for all phases of project life cycle including feasibility, proposal, preliminary design and analysis, prototype development, verification, validation and operations support. Conduct of technical reviews of stakeholder requirements, and project progress reviews; preparation of contracts and evaluation of tenders; conduct tests, document results, and liaison with clients to prepare specifications, explain proposals and present reports.
- System Design and Analysis: feasibility, design, performance evaluation and performance enhancement of mechanisms and systems.
- Assignment, co-ordination and review of technical work of project teams comprising of engineers, technologists and technicians.

Senior Team Member:

- Program management, planning, monitoring and control of various research and development projects from inception to delivery.
- Risk Management of systems as per AS9100 Rev C and design modifications to mitigate system malfunctions and failures.
- Recruitment and Training of mechanical and aerospace engineers.

Dec 2005 to Nov 2012

Manager (Mechanical and Aerospace)
Centers of Excellence in Science & Applied Technologies (CESAT)
Public Sector Research and Development Organization, Islamabad, Pakistan

Senior Team Member:

- Project Management for all phases of project life cycle including feasibility, proposal, preliminary design and analysis, prototype development, verification, validation and operations support.
- System Design and Analysis: feasibility, design, performance evaluation and performance enhancement of mechanisms and systems.
- Investigation of failures and recommendation of workable solutions for nonconformance parts and products.
- Implementation of Quality Management System (QMS) as per AS9100 Rev B.

Nov 2000 to Nov 2005

Assistant Manager (Mechanical)
Centers of Excellence in Science & Applied Technologies (CESAT)
Public Sector Research and Development Organization, Islamabad, Pakistan

Team Member:

- System Design and Analysis: feasibility, design, performance evaluation and performance enhancement of mechanisms and systems.
- Configuration Management of research and development projects. Development of manufacturing and acceptance test procedures; maintenance, operational and safety standards; and schedules for timely completion of projects.

JOURNAL REFEREE

- **Advances in Mechanical Engineering**, SAGE Publishing, eISSN: 16878140 | ISSN: 16878140
- **Aerospace.** MDPI. ISSN 2226-4310
- **Aerospace Science and Technology,** ELSEVIER, ISSN: 1270-9638
- **Aerospace Technology and Management,** ISSN 2175-9146
- **Aircraft Engineering and Aerospace Technology,** EMERALD, ISSN: 0002-2667
- **Alexandria Engineering Journal,** ELSEVIER, ISSN / eISSN: 1110-0168 / 2090-2670
- **Annals of Operations Research**, Springer, Electronic ISSN: 1572-9338, Print ISSN: 0254-5330
- **Applied Artificial Intelligence,** Taylor and Francis, Print ISSN: 0883-9514 Online ISSN: 1087-6545
- **Arabian Journal of Geosciences**, Springer, Electronic ISSN 1866-7538, Print ISSN 1866-7511
- **Archives of Advanced Engineering Science**, Bon View Publishing
- **Case Studies in Thermal Engineering**, ELSEVIER, ISSN: 2214-157X
- **CIRP Journal of Manufacturing Science and Technology**, ELSEVIER, ISSN: 1755-5817
- **Concurrency and Computing, Practice and Experience**. Wiley. ISSN:1532-0634
- **Drones.** MDPI. ISSN 2504-446X
- **Indoor and Built Environment**, SAGE Publications, ISSN: 1420-326X, Online ISSN: 1423-0070
- **International Journal of Electrical Power & Energy System,** ELSEVIER, ISSN: 0142-0615
- **International Journal of Information Technology & Decision Making**, ISSN (print): 0219-6220 | ISSN (online): 1793-6845
- **International Journal of Production Research**, Taylor & Francis, Print ISSN: 0020-7543 Online ISSN: 1366-588X
- **International Journal of Lightweight Materials and Manufacture**, ELSEVIER, ISSN 2588-8404
- **International Journal of Mechanics and Materials in Design**, Springer, Electronic ISSN 1573-8841, Print ISSN 1569-1713
- **Journal of Computer Aided Drafting, Design and Manufacturing**, China Graphics Society, ISSN 1003495-1
- **Journal of Electronic Imaging**, SPIE, ISSN: 1017-9909
- **Journal of Engineering and Applied Sciences**, University of Engineering & Technology, Peshawar, Pakistan
- **Journal of Manufacturing and Materials Processing**, MDPI, ISSN 2504-4494
- **Journal of Risk and Financial Management**, MDPI, ISSN 1911-8074
- **Journal of Sandwich Structures and Materials**, SAGE Publishing, eISSN: 15307972 | ISSN: 10996362
- **Journal of Supercomputing**, ELSEVIER, Print ISSN: 0920-8542, EISSN: 1573-0484
- **Materials**, MDPI, ISSN: 1996-1944
- **Mechanics Based Design of Structures and Machines.** Taylor and Francis, ISSN 1539-7742
- **Mehran University Research Journal of Engineering and Technology,** ISSN / eISSN: 0254-7821 / 2413-7219
- **Nanotechnology Reviews,** ISSN: 2191-9097
- **Polymer Composites,** WILEY, ISSN:1548-0569
- **Production & Manufacturing Research**, Taylor and Francis, ISSN / eISSN:2169-3277
- **Sensors**, MDPI, ISSN: 1424-8220
- **Sustainability**, MDPI, ISSN: 2071-1050
- **Technological Forecasting and Social Change,** ELSEVIER, Print ISSN: 1873-5509
- **Transport in Porous Media**, Springer, Electronic ISSN 1573-1634, Print ISSN 0169-3913
- **Unmanned Systems**, ISSN (print): 2301-3850 | ISSN (online): 2301-3869

CONFERENCE ACTIVITIES

Conference Organization:

- Member of the organizing and scientific committee for the *International Bhurban Conference on Science and Technology*, IBCAST, Islamabad, Pakistan, 2011, 2012, 2013 and 2014
- Member of the technical committee for the 2nd *Power Generation Systems & Renewable Energy Technologies*, PGSRET, Islamabad, Pakistan, 2015

Session Organization:

- ASME 2022 InterPACK, Track Co-Chair - Digital Technologies in Microelectronics, ASME 2022 InterPACK, Hyatt Regency Orange County, Garden Grove, CA, October 25-27, 2022
- MODSIM2015: *21st International Congress on Modeling and Simulation*, Gold Coast Convention and Exhibition Centre, Broad beach, Queensland, Australia, 29 Nov to 4 Dec, 2015
- Modeling & Simulation in Engineering, ICNPAA 2014 World Congress: *10th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Narvik University, Norway, July 15, 2014 – July 18, 2014
- ICASE 2013, *3rd International Conference on Aerospace Science and Engineering*, held at Institute of Space Technology (IST), Islamabad, Pakistan, Aug 21 – 23, 2013

Conference Reviewer:

- MODSIM2013: *20th International Congress on Modeling and Simulation*, Adelaide Convention Centre in Adelaide, South Australia, December 2013
- ICNPAA 2012 World Congress: *9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Vienna University of Technology, Austria, July 10- 14, 2012
- ICNPAA 2010 World Congress: *8th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, INPE (National Institute for Space Research), São José dos Campos, Brazil, June 30 - July 3, 2010

Keynote Speaker:

- ICASE 2013, *3rd International Conference on Aerospace Science and Engineering*, held at Institute of Space Technology (IST), Islamabad, Pakistan, Aug 21 – 23, 2013
- NCSS-2013: *2nd National Conference on Space Science*, WORLD SPACE WEEK 2013, Institute of Space and Planetary Astrophysics (ISPA), University of Karachi, Pakistan, October 7-8, 2013

MEMBERSHIPS

- Member, Advisory Board, EMU **Electrical Vehicle Development Center** (2020- Present)
- Member, Advisory Board, EMU **Energy Research Center** (2017- Present)
- Member, Advisory Board, EMU **Industry 4.0 Research Center** (2022- Present)
- Member, Advisory Board, EMU **Nanotechnology & Multifunctional Structures Research Center** (2022- Present)
- Member, EMU Mechanical Engineering Dept. **ABET Committee** (2016-Present)
- Member, EMU Mechanical Engineering Dept. **Capstone Projects Committee** (2016-2017 and 2020-Present)
- Member, EMU Mechanical Engineering Dept. **Graduate Committee** (2016- Present)
- Member, EMU Mechanical Engineering Dept. **Promotions Committee** (2016- Present)

PROFESSIONAL MEMBERSHIPS

- American Institute of Aeronautics & Astronautics, AIAA
- American Society of Mechanical Engineers, ASME
- Pakistan Engineering Council, PEC
- Society of Mechanical Engineers of Pakistan, SMEP

AWARDS & HONORS

2016 to present **Approved Supervisor -** Warwick Manufacturing Group, University of Warwick, UK

2009 to present **Approved Supervisor for PhD and Masters Students -** Higher Education Commission (HEC), Pakistan

2009 **Distinguished Students Scholarship for Excellent Study -** Beihang University (BUAA), P.R.China

2006-2009 **Distinguished International Student Scholarship for PhD -** China Scholarship Council, P.R.China

1997-2000: **Performance based scholarship -** National University of Sciences & Technology (NUST), Pakistan