

# Muhammad Rizwan UI Haq

Assistant Professor  
School of Mechanical & Manufacturing Engineering

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## About

Dr. Muhammad Rizwan UI Haq is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Muhammad Rizwan UI Haq has a PhD in Additive Manufacturing . Dr. Muhammad Rizwan UI Haq has published 12 research articles & conference papers having a citation count of 65, carried out 1 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Additive Manufacturing</b> National Taiwan University of Science and Technology , Taiwan	2020 - 2022
<b>MS in Advanced Manufacturing Technology</b> University of Manchester , United Kingdom	2007 - 2008
<b>BE in Mechanical Engineering</b> UET Taxila , Pakistan	1999 - 2003

## Experience

<b>Assistant Professor</b> School of Mechanical & Manufacturing Engineering	2022- Present
<b>Lecturer</b> King Fahd University of Petroleum and Minerals, KSA , Saudi Arabia.	2011 - 2020

## Research Projects

<b>National Projects</b>	
<b>Design and Development of Additive Manufacturing System (Phase - I)</b> Funding Agency: NUST Amount: PKR 15,000,000.00 Status: Completed	2023
<b>International Projects</b>	

- Design and Investigation of Mechanical Properties of Additively Manufactured Novel Coil-Shaped Wave Springs** 2025  
*Gul Jamil Shah Muhammad Rizwan Ul Haq Jeng-Ywan Jeng*  
*Applied Mechanics*  
**Impact Factor:** 1.500 | **Quartile:** 3  
**DOI:** <https://doi.org/10.3390/applmech6030061>
- Design for Additive Manufacturing Driven Multi-Layered Hybrid Mechanical Metamaterials for Improved Mechanical Performance** 2025  
*Mehmood Khan Muhammad Rizwan Ul Haq Muhammad Salman Khan Shahid Ikram Ullah Butt Aamer Nazir Asad Ullah Jan*  
*Advanced Engineering Materials*, Article Number:2402737, Pages:15  
**Impact Factor:** 3.4 | **Quartile:** 2 | **Citations:** 2  
**DOI:** 10.1002/adem.202402737
- Experimental and Numerical Analysis of Titanium 3D Body-Centered Cubic Lattice Structure Additively Manufactured Using Selective Laser Melting** 2025  
*Asad Ullah Jan Adnan Munir Muhammad Rizwan Ul Haq Muhammad Salman Khan Ahsan Kaleem Muhammad Naveed Ahsan Aqeel Ahsen Khurram Mehmood Khan*  
*3D Printing and Additive Manufacturing*, Pages 1-12  
**Impact Factor:** 2.300 | **Quartile:** 3 | **Citations:** 2  
**DOI:** <https://doi.org/10.1089/3dp.2024.0122>
- Analysis of variable frictional contacts wave springs fabricated using MultiJet fusion additive manufacturing** 2023  
*Gul Jameel Shah Muhammad Rizwan Ul Haq Shang Chi Lin Jeng-Ywan Jeng*  
*International Journal of Advanced Manufacturing Technology*, Pages 1-15  
**Impact Factor:** 3.563 | **Quartile:** 2  
**DOI:** 10.1007/s00170-023-11099-5
- WSdesign: a mathematical design method for generating uniform and functionally gradient/hybrid wave springs, fabricated using additive manufacturing processes** 2022  
*Muhammad Rizwan Ul Haq Aamer Nazir Hamza Azam Jeng-Ywan Jeng*  
*International Journal of Advanced Manufacturing Technology*, Volume:121, Issue:11-12, Page:7763-7778  
**Impact Factor:** 3.563 | **Quartile:** 2 | **Citations:** 7  
**DOI:** <https://link.springer.com/article/10.1007/s00170-022-09818-5>
- Design and performance evaluation of multifunctional midsole using functionally gradient wave springs produced using multijet fusion additive manufacturing process** 2022  
*Muhammad Rizwan Ul Haq Aamer Nazir Shang Chi Lin Jeng-Ywan Jeng*  
*Materials Today Communications*, Volume 31, Article Number 103505  
**Impact Factor:** 3.662 | **Quartile:** 3 | **Citations:** 15  
**DOI:** [doi.org/10.1016/j.mtcomm.2022.103505](https://doi.org/10.1016/j.mtcomm.2022.103505)
- Investigating the effect of design parameters on Mechanical performance of contact wave spring designed for additive manufacturing.** 2022  
*Muhammad Rizwan Ul Haq Aamer Nazir Shang Chi Lin Jeng-Ywan Jeng*  
*3D Printing and Additive Manufacturing*, Pages 1-21  
**Impact Factor:** 5.355 | **Quartile:** 2 | **Citations:** 3  
**DOI:** <http://doi.org/10.1089/3dp.2021.0313>
- Parametric investigation of functionally gradient wave springs designed for additive manufacturing** 2022  
*Muhammad Rizwan Ul Haq Aamer Nazir Shang Chi Lin Jeng-Ywan Jeng*  
*International Journal of Advanced Manufacturing Technology*, Volume 119, Issue 3-4, Pages 1673-1691  
**Impact Factor:** 3.563 | **Quartile:** 2 | **Citations:** 11  
**DOI:** [doi.org/10.1007/s00170-021-08325-3](https://doi.org/10.1007/s00170-021-08325-3)
- Design for additive manufacturing of variable dimension wave springs analyzed using experimental and finite element methods** 2021  
*Muhammad Rizwan Ul Haq Aamir Nazir Jeng-Ywan Jeng*  
*Additive Manufacturing*, Volume 44, Article Number 102032  
**Impact Factor:** 11.632 | **Quartile:** 1 | **Citations:** 22  
**DOI:** <https://doi.org/10.1016/j.addma.2021.102032>

Book Chapters

<b>Design for additive manufacturing of cellular structures</b> <i>Aamer Nazir Saad Waqar Muhammad Rizwan ul Haq Mohammad Qamar Tanveer</i> In: <i>Book on Additive Manufacturing Materials and Technology</i> , Chapter 14, Pages 359-388 <b>Citations:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.1016/C2022-0-00183-5">https://doi.org/10.1016/C2022-0-00183-5</a>	2024
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Editorial Activities

<b>Frontiers in Surgery</b> Reviewed Papers for Journals <b>Impact Factor:</b> 1.6	2025
<b>Additive manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 10.3	2025
<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 10.3	2024
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<b>Energy absorption enhancement of additively</b> Reviewed Papers for Journals <b>Impact Factor:</b> 10.3	2024
<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 11.6	2024
<b>Rapid Prototyping Journal</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.3	2024
<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 11.6	2024
<b>Proceedings of the Institution of Mechanical Engineers, Part C</b> Reviewed Papers for Journals <b>Impact Factor:</b> 2.5	2024
<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 11.6	2024
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<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 11.6	2024
<b>Frontiers in bioengineering and biotechnology</b> Edited Journal Issue / Proceeding / Book <b>Impact Factor:</b> 6.06	2024
<b>Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor:</b> 11.6	2023

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<b>3D Printing and Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor: 5.4</b>	2023
<b>3D Printing and Additive Manufacturing</b> Reviewed Papers for Journals <b>Impact Factor: 5.4</b>	2023
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