

# Rai Waqas Azfar Khan

Defence Faculty  
Military College of Engineering

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## About

Dr. Rai Waqas Azfar Khan is working as Defence Faculty in the Military College of Engineering. Dr. Rai Waqas Azfar Khan has a PhD in Sustainable Supply Chain Management. Dr. Rai Waqas Azfar Khan has published 12 research articles & conference papers having a citation count of 178, carried out 0 projects and filed 0 intellectual property.

## Qualifications

**PhD in Sustainable Supply Chain Management** 2009 - 2017  
University of Veterinary & Animal Science , Pakistan

## Experience

**Defence Faculty** 2023- Present  
Military College of Engineering

**Defence Faculty** 2015 - 2015  
Military College of Engineering

**Proj Manager / Consultant / Te** 1998 - 2015  
Army / DDC / NUST , CE-Wing, MCE, NUST, Risalpur

## Awards

**Scholarship** 2009  
NUST Mega S&T Scholarship

## Professional Memberships

**PEC** Since 2009

## Research Articles

**Cooling load reduction strategies for community worship place towards attaining sustainability: a life cycle cost perspective** 2025  
*Fatima Anwar Muhammad Sohail Anwar Malik Mughees Aslam Rai Waqas Azfar Khan*  
*International Journal of Life Cycle Assessment*, Volume:30, Pages:301-317,  
**Impact Factor: 4.9 | Quartile: 1 | Citations: 1**  
**DOI:** <https://doi.org/10.1007/s11367-024-02393-9>

**Exploring waste marble dust as an additive in cementitious grouts for semi-flexible pavement applications: Analysis and optimization using RSM** 2024  
*Muhammad Nouman Khan Muhammad Imran Khan Jalal Habib Khan Sarfraz Ahmed Rai Waqas Azfar Khan*  
*Construction and Building materials* , Volume 411, Article Number 134554  
**Impact Factor: 7.4 | Quartile: 1 | Citations: 18**  
**DOI:** <https://doi.org/10.1016/j.conbuildmat.2023.134554>

**Prediction of compressive strength of cementitious grouts for semi-flexible pavement application using machine learning approach** 2023  
*Muhammad Imran Khan Nasir Khan Syed Roshan Zamir Hashmi Muhamad Razuhanafi Mat Yazid Nur Izzi Md Yusoff Rai Waqas Azfar Khan Mujahid Ali Roman Fediuk*  
*Case Studies in Construction Materials* , Volume 19, Article Number e02370  
**Impact Factor: 6.2 | Quartile: 2 | Citations: 12**  
**DOI:** <https://doi.org/10.1016/j.cscm.2023.e02370>

<p><b>Exploring Perceptions of the Adoption of Prefabricated Construction Technology in Pakistan Using the Technology Acceptance Model</b></p> <p><i>Rai Waqas Azfar Khwaja Mateen Mazher Basel Sultan Ahsen Maqsoom Shabir Hussain Khahro Zubair Ahmed Memon Muhammad Hamza Sustainability</i> , Volume 15, Issue 10, Article Number 8281</p> <p><b>Impact Factor:</b> 3.889   <b>Quartile:</b> 2   <b>Citations:</b> 8</p> <p><b>DOI:</b> 10.3390/su15108281</p>	2023
<p><b>Quantitative Analysis of Sustainable Use of Construction Materials for Supply Chain Integration and Construction Industry Performance through Structural Equation Modeling (SEM)</b></p> <p><i>Asad Kamal Rai Waqas Azfar Bashir Salah Waqas Saleem Muhammad Abas Razaullah Khan Catalin I. Pruncu Sustainability</i> , Volume 13(2), Article Number 522</p> <p><b>Impact Factor:</b> 3.889   <b>Quartile:</b> 2   <b>Citations:</b> 17</p> <p><b>DOI:</b> <a href="https://doi.org/10.3390/su13020522">https://doi.org/10.3390/su13020522</a></p>	2021
<p><b>BIM-based claims management system: A centralized information repository for extension of time claims</b></p> <p><i>Babar Ali Hafiz Zahoor Ahmad Khan Abdur Rehman Nasir Ahsen Maqsoom Rai Waqas Azfar Khan Khwaja Mateen Mazher Automation in Construction</i> , Voume 110, Article Number 102937</p> <p><b>Impact Factor:</b> 7.700   <b>Quartile:</b> 1   <b>Citations:</b> 72</p> <p><b>DOI:</b> 10.1016/j.autcon.2019.102937</p>	2020
<p><b>Risk factors influencing the building projects in Pakistan: from perspective of contractors, clients and consultants</b></p> <p><i>Asad Kamal Muhammad Abas Dildar Khan Rai Waqas Azfar International Journal of Construction Management</i> , Pages 1-17</p> <p><b>Impact Factor:</b> 0   <b>Citations:</b> 40</p> <p><b>DOI:</b> DOI: 10.1080/15623599.2019.1683693</p>	2019
<p><b>Comparison of Sulphur and Zirconium Doped TiO2 Nanoparticles for H2S Gas Destruction</b></p> <p><i>Rai Waqas Azfar Khan Naeem Shahzad International Journal of Environmental Science and Development</i> , Volume 10, No. 9, Pages 266-269</p> <p><b>Impact Factor:</b> 2.540   <b>Quartile:</b> 2</p> <p><b>DOI:</b> doi: 10.18178/ijesd.2019.10.9.1185</p>	2019
<p><b>Lowering of Groundwater Table Around River Ravi in Lahore: Aggravated by Indus Water Treaty</b></p> <p><i>Naeem Shahzad Sadaf Mumtaz Rai Waqas Azfar Khan Australia and New Zealand Journal of Social Business, Environment and Sustainability</i> , Volume 4, Issue 2, Pages 65-72</p> <p><b>Impact Factor:</b> -</p> <p><b>DOI:</b> NA</p>	2018
<p><b>Application of Lean Agile Resilient Green Paradigm Framework on China Pakistan Economic Corridor: A Case Study</b></p> <p><i>Rai Waqas Azfar Khan Naeem Shahzad Sadaf Mumtaz Mehran University Research Journal of Engineering &amp; Technology</i> , Volume 36, No. 3, Pages 521-534</p> <p><b>Impact Factor:</b> -</p> <p><b>DOI:</b> DOI: <a href="https://doi.org/10.22581/muet1982.1703.18">https://doi.org/10.22581/muet1982.1703.18</a></p>	2017
<p><b>Comparison of H2S gas destruction potential using TIO2 nanofibers and nanoparticles</b></p> <p><i>Naeem Shahzad Rai Waqas Azfar Environmental Science and Pollution Research</i> , Volume 24, Issue 2, Pages 1133-1136</p> <p><b>Impact Factor:</b> 2.800   <b>Quartile:</b> 2   <b>Citations:</b> 4</p> <p><b>DOI:</b> DOI:10.1007/s11356-016-7644-7</p>	2017