Dr.Engr.Shimza Jamil (Architectural Engineer)

Building & Architectural Engineering Departmeent,BZU,Multan.
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Summary

PhD-qualified Architectural Engineer and academic faculty member specializing in research on sustainable building materials and their role in environmentally responsible construction. My scholarly interests include material performance and the integration of innovative, low-impact materials within architectural and structural systems to address challenges related to strength, durability, environmental impact, and resource efficiency. Through doctoral research and academic practice, I have developed a rigorous, research-oriented approach that bridges theoretical inquiry with practical relevance.

Area of Interest

Sustainable Building Materials, Advances in Concrete Technologies, Architectural Design.

Education

Ph.D in Architectural Engineering
University of Engineering & Technology • Lahore, Punjab.
01/2024

M.Sc. in Integrated Building Design
University of Engineering & Technology • Lahore, Punjab.
08/2018

B.Sc. Building & Architectural Engineering
Bahauddin Zakariya University • Multan, Punjab.
01/2014

Intermediate (Pre-Engineering)
Supperior College • Multan, Punjab.
01/2009

Matriculation
SF girls High School • Multan, Punjab.
05/2007

Experience

Assistant Professor
Building and Architectural Engineering Department • Multan,Punjab.
04/2015 - Present

Building Engineer
Aftab Associates • Multan, Punjab.
03/2014 - 03/2015

Field Supervisor
Rawadari Development Organization • Multan, Punjab.

11/2010 - 08/2011

Technical Skills & Abilities

Teaching Skills , Curriculum Development, Mentorship and Advising, Communication Skills, Time management, Research Expertise, Technical Proficiency(MicrosoftWord,Excel,AutoCAD,OriginPro)

Research Publications

1. Kashif Rasheed, **Shimza Jamil**, Muhammad Ramzan, Muhammad Zulqarnain (2018). Thermal Analysis of an Educational Building with Different Construction Materials. *Journal of Art, Architecture and Built Environment (HEC-Y)*. *1*(2): 96-109, ISSN (P): 2617-2690. doi: https://doi.org/10.32350/jaabe.12.05.
2. **Shimza Jamil**, Jinyan Shi, Maria Idrees (2023). "Effect of various parameters on carbonation treatment of recycled concrete aggregate using the design of experiment method." *Construction and Building Materials (Elsevier).* 382,131339. ISSN (P): 0950-0618. doi:https://doi.org/10.1016/j.conbuildmat.2023.131339. IF:7 Q1.
3. Aalia Faiz, Fakhar Imam, **Shimza Jamil**, Wasif Zubair, Ahmer Iqbal (2025). Predicting compressive strength of steel fiber-reinforced concrete incorporating silica fume using machine learning models. *Kashf Journal of Multidisciplinary Research (HEC-Y)*. 2(01), 32-45, ISSN (P):3007-1992. doi: https://doi.org/10.71146/kjmr186.
4. **Shimza Jamil**, Maria Idrees, Arslan Akbar, Salim Barbhuiya (2025). Optimizing concrete properties with carbonated recycled concrete aggregate: a sustainable approach. *Archives of Civil and Mechanical Engineering (Springer)*. *25*(5), 266. ISSN (P) :1644-9665. doi: https://doi.org/10.1007/s43452-025-01319-y.I.F:2.5, Q1.
5. **Shimza Jamil**, Maria Idrees, Arslan Akbar, Wisal Ahmed (2025). Investigating the Mechanical and Durability Properties of Carbonated Recycled Aggregate Concrete and Its Performance with SCMs. *Buildings (MDPI)*. *15*(2), 201. ISSN (P): 2075-5309. doi: https://doi.org/10.3390/buildings15020201. IF:3.2, Q2.
6. Aalia Faiz, **Shimza Jamil**, Rana Waseem Ahmad, Waqas Ahmad (2025). Statistical modeling of concrete strength using regression and machine learning approaches. *Policy Research Journal (HEC-Y)*. Vol: 3, Issue 09, 1058-1071, ISSN (P): 3006-7022. doi: https://doi.org/10.5281/zenodo.17240115.
7. Sumra Yousaf, Sunera Imtiaz, **Shimza Jamil**, Aalia Faiz, Muhammad Hamza Bhatti (2025). Study of the crossover effect in compressive strength of cement-based materials containing supplementary cementitious materials. *Kashf Journal of Multidisciplinary Research (HEC-Y)*. 2(09), 18-29. ISSN (P): 3007-1992. doi: https://doi.org/10.71146/kjmr604.
8. Shahzad Umer, Farah Naz, Shiraz Baloch, **Shimza Jamil** (2025). Evaluating the effect of ammonium nitrate on the mechanical properties of concrete incorporating waste glass as a partial replacement.*Spectrum of Engineering Sciences (HEC-Y)*. 3(09),480-508. ISSN (P):3007-312X. doi: https://doi.org/10.5281/zenodo.17202635.
9. Aalia Faiz, **Shimza Jamil**, Fatima Mehvish, Imran Ali Channa, Muhammad Yousaf Raza Taseer (2025). Mechanical behavior and experimental evaluation of bamboo bundles as sustainable reinforcement in beam design. *Spectrum of Engineering Sciences (HEC-Y).* 3(09),992-1002.ISSN (P): 3007-312X. doi: https://doi.org/10.5281/zenodo.17183518.
10. Aliyan Syed, Aalia Faiz, **Shimza Jamil**, Wasif Zubair, Fakhar Imam (2025). Predicting flexure strength of ceramic tiles manufactured by incorporating industrial wastes and coal bottom ash using machine learning models. *Kashf Journal of Multidisciplinary Research*. 2(01), 70-82. ISSN (P): 3007-1992. doi:10.71146/kjmr199.
11. Aalia Faiz, **Shimza Jamil**,Fasiha Nadir, Muhammad Yousaf Raza Taseer, Muhammad Ali, and Ali Ajwad. "Concrete Innovation for Super-Tall Buildings: Risk Management Frameworks and Structural Innovations with High-Strength and Self-Consolidating Concrete (Case of the Burj Khalifa). *Annual Methodological Archive Research Review.* 3(09), 379-429. ISSN (P): 3007-3189. doi:10.63075/mfsqv509.
12. Naveed Husnain, Sami ur Rehman, Nosheen Blouch, **Shimza Jamil,** Nijah Akram, Mariam Farooq, Uzair Rasool (2025). Evaluation of Mechanical Properties of Glass Fiber Reinforced Concrete (GFRC) for Sustainable Construction. *THE PROGRESS: A Journal of Multidisciplinary Studies*. *6*(4), 1-18. ISSN (P): 2958-291. doi:https://doi.org/10.71016/tp/217wv423.
13. Zulkifl Ahmed, Sumra Yousuf, Sunera Imtiaz, **Shimza Jamil**, Fatima Mehvish, Fasiha Nadir (2025). Study of Slip Surface Effecting Factors for Loose Rock Slope. *Annual Methodological Archive Research Review*. 3(10),352-369. ISSN (P):3007-3189.
14. **Shimza Jamil**, Aalia Faiz, Sumra Yousuf (2026). Seismic performance assessment of reinforced concrete buildings using performance-based design. *Policy Research Journal*. 4(02),33-47. ISSN (P): 3006-7022. doi: https://doi.org/10.5281/zenodo.18477801.

Conference Paper

1. Maria Idrees and **Shimza Jamil**. "Effect of rice husk ash and marble powder on the mechanical behavior of concrete." In *Proceedings of the Fifth International Conference on Sustainable Construction Materials and Technologies, London, UK*, pp. 14-17. 2019.

Certificates

Workshop on "Energy Efficient Building Design"(2016), High Performance Energy Efficient Building Design (2017), Outcome Based Education & SAR Developpment (2018)
