



EDUCATION

PhD Student Material Science | Missouri University of Engineering and Technology - Rolla, MO USA

June 2025- ON GOING

Thermodynamic simulation and experimental characterization of calcium aluminate cement (CAC) systems.

Evaluating Strength and properties of blended CAC system with Supplementary Cementitious Materials SCM's

BSc Civil Engineering | University of Engineering and Technology Taxila, Pakistan

November 2018- August 2022

CGPA: 3.86/4.00

RESEARCH AND PUBLICATION

Publications

Journal

- **Syed Muhammad Talal Tirmazi**, Syed Haroon Ali Shah, Muhammad Sarmad Mahmood, Tariq Ali, Usman Ali, Seongho Han. Mechanical and thermal performance of high-strength concrete reinforced with hybrid steel and coir fibers . ***Journal of Structural Integrity and Maintenance Volume 10, 2025 - Issue 2*** <https://doi.org/10.1080/24705314.2025.2489861>
- Syed Haroon Ali Shah, Babar Ali, Ghafur H Ahmed, **Syed Muhammad Talal Tirmazi**, Mohamed Hechmi El Ouni, Iqrar Hussain. Effect of recycled steel fibers on the mechanical strength and impact toughness of precast paving blocks. ***Case Studies in Construction Materials***, e010252 (2022) (<https://doi.org/10.1016/j.cscm.2022.e010252>)

WORK EXPERIENCE

Project Control Head at M/S Syed Iqbal Hussain Shah

Oct 01st, 2022 - May 31 2025

I supervise a team of civil engineers and contractors to execute top-notch, cost-effective projects for the public and private sectors.

With over 2 years of experience, I have worked on various construction projects, including a 170-kilometer road in Abbottabad, a sustainable water supply system for rural communities in KPK, and a Precast Box Culvert bridge in KPK Pakistan. My focus is on quality, safety, and adherence to deadlines, fostering a collaborative environment for innovation and efficiency. I prioritize effective communication and stakeholder management, building trust-based relationships with government officials, suppliers, and community members. I am excited about future opportunities and challenges in the construction industry, aiming to deliver high-quality projects that exceed client expectations and positively impact the communities we serve.

CERTIFICATION/SHORT COURSES

Certificate of Excellence from Swedish College Of Engineering and Technology Affiliated with UET Taxila:

- Securing **2nd Position** in BS Civil Engineering on 26Th January 2023.
- Securing **1st position** in Final Year Design Project “Experimental Study of High Strength Concrete Hybridized with Coir and Steel Fibers”

Certificate of Excellence From “The Institution of Engineers Pakistan

- Securing **1st position** in Final Year Engineering Design Project “Experimental Study of High Strength Concrete Hybridized with Coir and Steel Fibers” on 7th October 2023.

Certificate of appreciation Pakistan Engineering Council continuing professional development program (Under PEB License no: PEB-P-SCETWC-0107)

- For attending half-day webinar on "Technical Advances Leading Towards Artificial Intelligence Enabled Health Care" on November 2021.
- For attending One-day webinar on "Importance Of Occupational Health Safety And Environment Management In The Industry" on December 2021.
- For attending one-day webinar on "Digital Transformation" on March 2023.

Certificate from Jamila Sultana Foundation affiliated with Thalassemia International Federation on donation of blood to a Thalassemia patient, on 17 October 2021.

Skills

- Proactive and Self motivated
- Leadership
- Adaptative and quick learner
- Team Oriented
- Lean Six-Sigma
- Root Cause Analysis

Others

- FactSage
- AutoCAD
- ETAB
- MATLAB
- SAP
- SAFE
- MS Office 365
- Fluency in English