

ENGR. TAJIK MUSTAFA SHAH

(tajikmustafa@neduet.edu.pk)

(+92 21 9926 1261 Ext. 2274)



Objective:

My primary objective is to use my skills for the development & betterment of humanity.

Personal Statement:

Ever since my childhood, I have remained interested in the development and civilization of society for a beautiful and sustainable environment. For this, I have been working towards my goal with keen interest.

Qualification:

- **Ph.D. in Civil Engineering (Currently Enrolled since Spring 2024)**
Assessing the vulnerability of masonry structures subjected to floods.
Core Subjects: “Non-Linear Finite Element Methods; Advanced Mechanics of Materials; Vulnerability Assessment of existing infrastructure; Concrete Durability; Assessment & FRP Strengthening of structures; GIS for Urban Research.”
NED University of Engineering & Technology, Karachi, Sindh, Pakistan.
- **M.E. Structural Engineering**
2016-2019 with 3.8/4.0 CGPA
Core Subjects: “Design of tall buildings; Advanced structural analysis; Bridge Engineering; Repair, maintenance & strengthening of Reinforced Concrete Structures.”
Mehran University of Engineering & Technology (MUET), Jamshoro, Sindh, Pakistan.
- **B. E. Civil Engineering**
2012-2016 with 83.98% (5th position in class; Grade A1 / 1st Division)
Core Subjects: “Structural Analysis & Design, Irrigation Engineering & Hydraulics, Soil Mechanics and Geotech, Estimation & Costing, Highways & Traffic Engineering, Surveying & leveling”.
Mehran University of Engineering & Technology (MUET), Shaheed Zulfiqar Ali Bhutto (SZAB) Campus, Khairpur Mir’s.
- **Higher Secondary School Certificate (HSSC)**
2008-2010 with 72.72% marks (Grade A / 1st Division)
Core Subjects: “English language, Mathematics & Pre-Engineering Sciences”
Hira Public Higher Secondary School, Sukkur.

Continued on next page...

- **Secondary School Certificate (SSC)**
2006-2008 with 77.5% marks (3rd position in class; Grade A / 1st Division)
Core Subjects: “English language, Mathematics & General Sciences”
Indus Public High School, Sukkur.
-

Internships:

- **Six months** at M/S Bhatti Petti contractors, Sukkur as an internee Site Engineer from November 2014 to February 2015.
 - **One month** at Unique Architects, Sukkur as Internee Structural Designer & Draftsman in August 2016.
-

Teaching Experience:

Position: **Laboratory Engineer (BPS-17)**

Tenure: December 2016 - June 2022 (5 years and 6 months)

Employer: Mehran University of Engineering & Technology (MUET), Shaheed Zulfiqar Ali Bhutto (SZAB) Campus, Khairpur Mir's.

Position: **Lecturer (BPS-18)**

Tenure: July 2022 – Till Date.

Employer: NED University of Engineering & Technology, Karachi.

Management Experience:

- **Senior Assistant Presiding Officer**
Employer: Election Commission of Pakistan
Dated: 25th of July, 2018.
 - **Presiding Officer**
Employer: Election Commission of Pakistan
Dated: 8th of February, 2024.
-

Administrative Experience:

- **Administration** of Fluid Mechanics & Hydraulics Laboratory of the Department of Civil Engineering at Mehran UET, SZAB Campus. Responsibilities included:
 - Maintenance of stock register.
 - Keeping lab equipment in operable condition.
 - Management of PEC Evaluation team visit.
 - Conduct of practical courses.
 - Management of lab files.
-

Committee / Teamwork Experience:

1- MUET, SZAB Campus Alumni Association

Position: **Departmental Coordinator** for the Department of Civil Engineering at MUET, SZAB Campus.

Responsibilities included:

- Assistance in management of **Alumni Reunion.**

Continued on next page....

- Maintenance of relations with Alumni of Civil Engineering Department.
- Keeping a record of employment of Alumni.

2- Curriculum Review Committee:

Position: Member/Secretary of the departmental Curriculum Review Committee at Department of Civil Engineering at MUET, SZAB Campus.

Responsibilities included:

- Management and scheduling of meetings.
- Preparation of Minutes of meeting and call letters.
- Review of Tentative teaching plans, Lesson Plans and Scheme of studies for all courses in a semester.

Attended Seminars & Workshops:

- **Pakistan Engineering Council’s “Interactive workshop on CDP framework for Professional development of Engineers” (0.5 CPD Points)** at auditorium of Mehran University of Engineering & Technology, SZAB Campus, KhairpurMirs’ on 14th April, 2015.
- **“2nd regional workshop on World Earth Day”** at auditorium of Mehran University Of Engineering & Technology, SZAB Campus, Khairpur Mirs’ on 22nd April, 2015.
- Seminar on **“Engineering Projects & Supply-Chain Management”** at Pizza Palace, Sukkur on the 25th of November, 2015 **(1 CPD Point)**.
- **“International Seminar and workshop on Design of tall buildings, Trends and advancements for structural performance”** at MUET, Jamshoro on 22nd November, 2017 **(1 CPD Point)**.
- **“Career Development & Entrepreneurship”** at auditorium of Mehran University Of Engineering & Technology, SZAB Campus, Khairpur Mirs’ on 16th of April, 2018.
- **“Two-Day Training of Presiding Officers & Senior Assistant Presiding Officers General Elections – 2018”** at Department of Commerce, Shah Abdul Latif University, Khairpur Mir’s on 29th & 30th of June, 2018.
- **“Literature Survey made easy: Using Endnote”** at auditorium of Mehran University Of Engineering & Technology, SZAB Campus, Khairpur Mirs’ on 16th of April, 2019.
- Online webinar on **“Design Methodology of Off-Grid PV Solar Powered System”** organized online by ORIC, MUET, SZAB Campus, Khairpur Mir’s on the 9th of July, 2020 **(0.5 CPD Points)**.
- Webinar on **“Self discovery with talent management achieving excellence in your professional career”** organized online by PEC HQ on the 7th of May, 2021 **(0.5 CPD Points)**.
- Webinar on **“How to start and grow a business: An introduction to PNIP Investment readiness program”** organized online by PEC HQ on the 29th of June, 2021 **(0.5 CPD Points)**.
- Webinar on **“Fundamentals of performing SIL studies as specified in IEC 61508, IEC 61511 & ISA-TR 84.00.02 using VAIL-PHA SIL”** organized online by VELOSI on the 27th of March, 2022 **(0.5 CPD Points)**.

Continued on next page....

- Webinar on **“Role of EMP (Environment Management Plan) in protection of environment”** organized online by PEC HQ on the 24th of April, 2022 **(0.5 CPD Points)**.
- Webinar on **“ARTIFICIAL INTELLIGENCE: Implications for technologies and business strategy”** organized online by PEC HQ on the 6th of April, 2023 **(1.0 CPD Points)**.
- Webinar on **“Cellular Networks (2G to 5G Technology): Future Applications”** organized online by PEC HQ on the 18th of April, 2023 **(1.0 CPD Points)**.
- Webinar on **“Dynamic Entrepreneurship for Engineers”** organized online by PEC HQ on the 14th of June, 2023 **(0.5 CPD Points)**.
- **“Forewarned is forearmed: Construction disputes avoidance & resolution”** at Civil A/V Hall of Department of Civil Engineering, NED UET, Karachi on the 23rd of December, 2023.
- Webinar on **“Professional Ethics”** organized online by PEC HQ on the 30th of January, 2025.
- Webinar on **“Procurement & contract management”** organized online by PEC HQ on the 15th of February, 2025.
- Webinar on **“Digitalization of Electricity Grids: Smart metering & Energy monitoring in Pakistan”** organized online by PEC HQ on the 28th of February, 2025.
- Webinar on **“Potential of Hydrogen as an energy source”** organized online by PEC HQ on the 1st of March, 2025.

Attended Conferences:

- **“International Multi-Topic Conference IMTIC ‘15”** at Sachal Auditorium, Khairpur Mirs’ on February 12, 2015.
- **“International conference on sustainable development in Civil Engineering”** at MUET, Jamshoro from 23rd-25th of November, 2017 **(3 CPD Points)**.
- **“1st South Asia Conference on Earthquake Engineering”** at Hotel Ramada Plaza, Karachi, from 21st-22nd February, 2019.
- **“10th International Civil Engineering Conference”** at the Institution of Engineers, Pakistan (IEP), Karachi from the 23rd-24th of February, 2019.
- **“2nd International conference on sustainable development in Civil Engineering”** at MUET, Jamshoro from 05th-07th of December, 2019 **(3 CPD Points)**.
- **“13th International Civil Engineering Conference”** at the Institution of Engineers, Pakistan (IEP), Karachi from the 10th-11th of November, 2023.
- **“14th International Civil Engineering Conference”** at the Institution of Engineers, Pakistan (IEP), Karachi from the 15th-16th of November, 2024.

Research Publications:

- 1- **Response of Armature Type Infill Wall Panels in Intermediate Moment Resisting Frames Subjected to Earthquakes**
 TM Shah
 2nd International Conference on Sustainable development in Civil Engineering
 (2nd ICSDC) MUET, Jamshoro, 2019

Continued on next page....

- 2- **Evaluation of the Mechanical Behavior of Local Brick Masonry in Pakistan.**
TM Shah, A Kumar, SNR Shah, AA Jhatial, MH Janwery
Engineering, Technology & Applied Science Research
9 (3), 4298-4300, 2019.
 - 3- **Surface Water Treatment is A Big Challenge for North Sindh-A Case Study Of 18 MGD WTP Numaishgah, Sukkur**
ESA Mangi, TM Shah, SA Memon
ENGINEERING AND TECHNOLOGY RESEARCH, 35. 2016.
-

Theses:

- 1- **Experimental & Numerical Investigations into the Behaviour of Local Brick Masonry.**
Tajik Mustafa Shah, Aneel Kumar, SNRS
Mehran University of Engineering & Technology, Jamshoro
2019
 - 2- **Performance Evaluation of 18MGD Water Treatment Plant, Numaishgah, Old Sukkur.**
TM Shah
Mehran University of Engineering & Technology, SZAB Campus, Khairpur Mir's
2016
-

Curricular Achievement Awards:

- Recipient of **Outstanding Performance Certificate** from Indus Public High School (2008) for being a position holder for 10 consecutive years.
 - Recipient of a **Laptop** by the Prime Minister's National Laptop Scheme (May 2015) for excellent academic performance.
 - Recipient of Mehran University's **Merit Scholarship** for **four consecutive years (2012 through 2015)** for securing distinctive position and exceptional results.
-

Short courses:

- **"Understanding the application of AutoCAD in Drafting & Design"** from ICPC, Mehran University of Engineering & Technology, SZAB Campus, Khairpur Mirs'.
 - **"Pro/Engineer Wildfire 5.0"** from ICPC, Mehran University of Engineering & Technology, SZAB Campus, Khairpur Mirs'.
 - **"A hands-on introduction to Engineering Simulations"** using ANSYS Mechanical & CFD 2021 R1 from the University of Cornell on edX Courses.
 - **"AI for everyone"** authorized by deeplearning.ai and offered on Coursera under the HEC DLSEI Program's Cohort 3.0.
-

Professional Memberships:

- **Registered Engineer (RE)** with the **Pakistan Engineering Council (PEC)** since 2016.
 - **Member of Institution of Engineers, Pakistan** Karachi Centre.
 - **Member** of National Book Foundation of Pakistan's **Readers' Club**.
-

Skills:

Computer skills:

- Expert in usage of Q-OBE / OBE MIS.
 - Expert in ANSYS Mechanical/CFD, ETABS, SAP2000, MDSolids.
 - Expert in ArcGIS / QGIS / Google Earth Pro.
 - Expert in AutoCAD, GRASP.
 - Expert in Office Automation viz. Microsoft Word, PowerPoint, and Excel.
 - Expert in management and operation of MS Windows, Macintosh & Linux-based OS's.
 - Proficient programmer of C++.
 - Intermediate skills in OCTAVE.
 - Beginner in MAPLE & Pro/Engineer Wildfire.
-

Communication skills:

- Fluent in English, Urdu & Sindhi.
 - Beginner in Punjabi & Persian.
 - Can write clearly & concisely.
 - Can lead group discussions and gather ideas.
-

Presentation skills:

- Presented research on “Performance Evaluation of 18MGD WTP Numaishgah” at MUET, SZAB Campus, Khairpur Mirs’ on 2nd February, 2016.
 - Presented research on “Experimental & Numerical Investigations into the behavior of local brick masonry” at MUET, Jamshoro in May 2019.
 - Presented research on “Response of armature type infill wall panels in IMRFs subjected to earthquakes” at MUET, Jamshoro in December 2019.
 - Moderated a session of 14th ICEC on 16th of November, 2024 at the IEP Karachi Center.
-

Leadership & Supervision Skills:

- Remained **Group Leader** of thesis group.
 - **Supervised** 01 undergraduate thesis group of **KF16CE** batch.
 - **Supervision & Guidance** of around 12 groups of 5 students in practical labs.
 - **Led the campaign** for Fahad Mangi (A student of Shikarpur)’s recovery in Khairpur in 2018.
-