Shehroze Ali Baig

Date of birth: 19/11/1997 | **Nationality:** Pakistani | **Phone number:**

(+92) 3312869384 (Mobile) | **Email address:** shehrozeali@cloud.neduet.edu.pk |

Address: C-408 Farhan Tower, Gulshan-e-iqbal Block 10-A, 75290, Karachi, Pakistan (Home)

WORK EXPERIENCE

LECTURER – NED UNIVERSITY OF ENGINEERING & TECHNOLOGY – 03/07/2023 – Current – KARACHI, PAKISTAN

I am serving as a Lecturer in the Department of Textile Engineering at NED University, where I teach a range of undergraduate courses including Textile Chemistry, Material Science, Thermodynamics, and Utilities. My role extends beyond teaching to supervising final-year projects, guiding students in their academic development, and contributing to curriculum planning. In addition, I actively participate in departmental administration as a member of the Final Year Project Committee, Lab Incharge, and DOBEC Committee. This blend of teaching, research supervision, and academic service allows me to share my expertise in textile engineering while supporting both student learning and institutional growth.

FOCAL PERSON – NED ACADEMY- CCEE – 02/08/2022 – Current – KARACHI, PAKISTAN

1- Serving as Joint Focal Person for the Undergraduate Diploma in Textile Science and Technology, contributing to program coordination, academic planning, and smooth execution of departmental activities
2- Supervising postgraduate diploma theses, guiding students in research design, experimentation, data analysis, and technical report writing.

RESEARCH ENGINEER – NED UNIVERSITY OF ENGINEERING & TECHNOLOGY – 15/08/2020 – 01/08/2022 – KARACHI, PAKISTAN

SMARTEX+ ERASMUS Project
Project Title: "Modernization of Curriculum of Textile Engineering & Textile Technology in Indonesia, Malaysia, and Pakistan"
- Contributed to the SMARTEX+ ERASMUS international project focused on curriculum modernization in textile engineering and technology across partner countries.
- Designed and developed new academic modules aligned with contemporary industry trends, including smart textiles and advanced manufacturing techniques.
- Conducted research and hands-on experimentation in smart textile composites within the Erasmus Composite Laboratory, focusing on fabrication and performance evaluation.
- Actively participated in international meetings, workshops, and training sessions with global academic and industry partners, fostering cross-cultural collaboration and knowledge exchange.
- Supported the implementation and pilot testing of newly developed courses within the curriculum framework.
- Collaborated with multidisciplinary teams to integrate innovative teaching methodologies and emerging technologies into textile education.

MANAGEMENT TRAINEE OFFICER – ARTISTIC MILLINERS – 31/08/2019 – 31/07/2020 – KARACHI, PAKISTAN

1- Monitored and reported daily raw material consumption along with associated production costs.
2- Performed technical evaluation and re-engineering of B-grade textile to optimize usability and reduce waste
3- Managed production operations and workforce coordination to ensure efficient workflow and output.

EDUCATION AND TRAINING

02/10/2022 – CURRENT
PHD IN TEXTILE ENGINEERING NED University of Engineering & Technology

11/2019 – 14/04/2022 Karachi, Pakistan
MASTERS IN TEXTILE MANAGEMENT NED University of Engineering & Technology

CGPA: 3.95/4
Thesis: Characterization of Machining Parameters of Textile Reinforced Composites
Short Description: A composite material is a material produced from two or more constituent materials with notably dissimilar chemical or physical properties that, when merged, create a material with properties, unlike the individual elements. Textile composite are making their way in many fields due to their higher strength to weight ratio and flexibility in design, but they are difficult to machine hence this research will be based on investigating different weaving mechanism on some fibers which incorporates Kevlar/Dyneema. Composite will be manufactured through vacuum Infusion and then Machining of textile composite will be carried out by varying different parameters to achieve required strength, surface finish and tool wear.
This Project is Funded by NED University of Engineering & Technology Funding Body i.e; ASRB
Supervisor: Prof. Dr. Bilal Zahid

11/2015 – 07/2019
BACHELORS IN TEXTILE ENGINEERING NED University of Engineering & Technology

CGPA: 3/4
Thesis: Optimization of process parameters for printing cotton fabric with sulphur dye using bio-degradable reducing system
Short Description: The purpose of this project was to develop and optimize the recipe for printing cotton fabric with sulphur printing by using biodegradable reducing system as the current reducing agents are hazardous in nature. This project was a collaborative project between NEDUET and Archroma Pvt Ltd
Supervisor: Dr. Quratulain Mohtashim

Karachi, Pakistan
FACULTY TRAINING FOR STEM EDUCATION UK-PAK SCIENCE 26-27 APRIL AT NEDUET UK- Pakistan Science and Innovation Global Network

Website https://www.upsign.org.uk/ | **Level in EQF** EQF level 5

31/07/2021 – 08/10/2021 Valencia, Spain
CERTIFICATION ON ADVANCED TECHNOLOGIES FOR TEXTILE QUALITY CONTROL. ARTIFICIAL VISION Universitat Politècnica de València

Address Camí de Vera, s/n, 46022 València,, Valencia, Spain | **Website** http://www.upv.es/en

- **PROJECTS**

01/02/2025 – CURRENT
Woven Smart Textiles

Investigation of Woven parameters for optimizing sensitivity and performance of textile based sensors for monitoring mechanical and thermal change.

08/02/2021 – 01/03/2022
Characterization of Machining Parameters of Textile Reinforced Composites

A composite material is a material produced from two or more constituent materials with notably dissimilar chemical or physical properties that, when merged, create a material with properties, unlike the individual elements. Textile composite are making their way in many fields due to their higher strength to weight ratio and flexibility in design, but they are difficult to machine hence this research will be based on investigating different weaving mechanism on some fibers which incorporates Kevlar/Dyneema. Composite will be manufactured through vacuum Infusion and then Machining of textile composite will be carried out by varying different parameters to achieve required strength, surface finish and tool wear.
This Project is Funded by NED University of Engineering & Technology Funding Body i.e; ASRB

31/10/2018 – 30/09/2019
Optimization of process parameters for printing cotton fabric with biodegradable reducing system

The purpose of this project is to optimize the process parameters used in Sulphur printing of 100% bleached plain weave cotton fabric with eco-friendly and biodegradable chemicals against hazardous reducing system used in Sulphur printing techniques. As due to hazardous effects Sulphur printing is not commonly used. One phase Sulphur printing is performed.

30/09/2020 – 30/09/2021
Characterization of Synthetic/Natural fiber reinforced concrete.

The Concrete possess properties such as strength and toughness but acts weak and brittle and tends to fail under stress and other external environmental conditions. Therefore, these properties and behaviour need to be improved by achieving high-strength Concrete that can withstand catastrophic stress. To achieve that, several types of research and methods have been applied since ancient times, which led up to Fiber Reinforced Concrete (FRC). The method includes random distribution of discrete fibers throughout the concrete mix. Its application serves the purpose of protection from plastic and drying shrinkage, improved durability, increased service life, and reduced maintenance costs.

INTERNATIONAL TRAININGS

14/05/2022 – CURRENT
Erasmus SMARTEX International Traineeship in UGENT Belgium

Traineeship is basically about Industrial services in Europe. I am working on smart Textile applications mainly Textile Based sensors.

28/05/2022 – 02/06/2022
OptimTex Intensive Study Program at University of Maribor, Slovenia

It was a full week Intensive study at University of Maribor, Slovenia, compromising of following trainings
1) Smart Textile and their weaving methods
2) Virtual Prototyping and 3D sensing using Optitex, Blender and Sense Software.
3) Embroidery for Smart Textile (Designing on Inkscape and then making Prototypes on Water Leak Detector)
4) Practical Work on Embroidery for different Smart Textile Applications

INTERNATIONAL ONLINE TRAININGS AND COURSES

Training on 1) Online learning 2) Importance of student engagement 3) Intro to learning management studies 4) Online teaching 5) Digital tools, Plagiarism detection, presentation tools interactive quizzes 6) Gamification

SMARTEX, ERASMUS
Ghent Belgium

Link https://www.ugent.be/en

Training on 1) TexGen 2) Digital embroidery for smart textile-using Ink/Stitch 3) Microcapsules Presentation 4) Programming for smart textile-Arduino

SMARTEX, ERASMUS
West Attica Greece

Link https://www.uniwa.gr/en/

31/07/2021 – 08/10/2021
Certification on Advanced technologies for textile quality control. Artificial Vision

Universitat Politècnica de València

Link http://www.upv.es/en

31/03/2020 – 31/05/2020
Certification on Sustainable Fashion

Copenhagen Business School, Denmark

Link https://www.cbs.dk/en

RESEARCH CERTIFICATES

26/05/2022 – 26/05/2022
Digital Transformation and Impact of IOT on Education, Industry, Health Sector, and Society Towards Creating Job Opportunities"

Pakistan Engineering Council

31/01/2022 – 01/02/2022
Two day workshop on "Promoting Research Excellence in Academics across Pakistan

Higher Education Commission, Pakistan

NETWORKS AND MEMBERSHIPS

01/10/2025 – CURRENT
Faculty Lead Social Media

30/09/2018 – 30/09/2019
Head of Team Logistics in AATCC

I Served AATCC for four years during my Graduation . I was Head of Team Logistic which managed all the resources of any event Organized by AATCC. We successfully manage Third International Textile Conference and local Textile Quiz competition and Futsal Tournament.

LANGUAGE SKILLS

Mother tongue(s):   **URDU**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Social communication and platforms (Instagram, LinkedIn, Facebook) │ Power Point │ Critical thinking │ Flexibility │ Microsoft Excel │ Presenting │ Microsoft Powerpoint │ Microsoft Office │ Microsoft Word

Analytical Tools

Good time management │ Written and Verbal skills │ Detail-Oriented │ Motivated │ Organizational and planning skills │ Team-work oriented │ Strategic Planning │ Responsibility │ Decision-making │ Research and analytical skills │ Reliability

Communication Tools

Gmail │ Zoom │ Google Drive │ Google Docs

RESEARCH TOOLS AND SOFTWARE

Research Tools

| Stereo Microscope | ConturoMatic | Laser cutter | Universal Tester | Magnetic Stirrer | Incubator |
| MATLAB | MINITAB | Optitex | ScopeTex | TexGen | Arduino |

RECOMMENDATIONS

Prof. Dr. Bilal Zahid

Position: Professor & Chairman
Organization: NED University of Engineering & Technology
Email: drbilalzahid@neduet.edu.pk

Prof.Dr. Muhammad Owais Raza Siddiqui

Position: Professor
Organization: NED University of Engineering & Technology
Email: orazas@cloud.neduet.edu.pk