

Engr. Dr. Shahid Hussain Abro, PhD.



EDUCATIONAL QUALIFICATIONS

Degree Name	Level (Master/Bachelors etc.)	Institute	Major Subject(s)	Start Date	End Date	Country
PhD	Doctorate (Full Time)	Korea Advanced Institute of Science and Technology (KAIST)	Materials Science and Engineering	2011 Sep	2016 Feb	South Korea
M.E	Masters of Engineering (Full Time)	NED University of Engineering and Technology	Materials Engineering	2007 July	2010 Jan	Pakistan
B.E	Bachelor of Engineering (Full Time)	Mehran University of Engineering & Jamshoro Pakistan	Metallurgy	1998 Jul	2003 Jan	Pakistan

- ❖ Industry Experience **3 years**
- ❖ Teaching Experience **16 years**

PERSONAL DETAILS

Date of Birth:	7 th -June-1980
Office Ph. #	+92-99261261 ext 2518
E-mail:	engrabro@neduet.edu.pk
Nationality	Pakistan

Total Years of Experience: 18+ years, teaching, training, research and Industrial experience.

Failure Investigations and Metallurgical specialist for:

1. Peoples Steel Mills
2. Pakistan Air Force
3. Amereli Steel Mills
4. Hussain Engineering Foundry Limited

Employment History:

1. **Professor** Metallurgical Engineering Department NED university of Engineering and Technology Karachi Pakistan (2022 to date) <http://www.neduet.edu.pk/myd/Index.html>

Role: This newly established department including research and experimental facilities, I took an active part and lead to establish this newly department and its facilities including installation and operation of research and development machines, like heat treatment furnaces, melting furnaces, optical microscopy. I worked as area coordinator of the materials department and class advisor of different batches at undergraduate level.

2. **Senior Instructor/Lecturer** Institute of Industrial Electronics Engineering (IIEE).Pakistan Council of Scientific & Industrial Research (PCSIR) Ministry of Science & Technology Government of Pakistan. (2005 to 2007) <http://www.iiee.edu.pk>

Role: Incharge of a) Mechanical Workshop b) Materials Testing Laboratory c) Fabrication Laboratory. I teach and train to undergraduate engineers in their projects from different industries. Bench work, filing, milling, leath machine, EDM etc

3. **Assistant Manager (Technical)** Allied Precision Engineering Products Pvt Ltd. Karachi, Pakistan. (Automotive parts manufacturing) (2003 to 2005) <http://www.a pep.com.pk>

Role: To Supervise the Production Work, Heat Treatment, Lead the team of 20 peoples including technicians and workers. Main tasks were design the heat treatment process to improve the thermal and mechanical properties of the steel components like spindles, gears for the vendor and pressure die casting using melting, homogenizing and then casting in dies and molds to make the engineering components. This role was based in 2 shifts day and night.

4. **Research Scientist, PhD.** Nano and Functional Materials Laboratory, Materials Science Engineering Department Korea Advanced Institute of Science and Technology South Korea, South Korea. (2011 to 2016) www.nanolab.kaist.ac.kr

Role: Material Testing, Characterization, Quality Control. X-ray Diffraction, Tensile Testing, Metallography, Hardness Testing I am working with multi skilled researchers and my work include in this laboratory is managing research activities and managing research team, raw materials testing and characterization to assist its suitability according to the specifications, doing different kind of experiments and tests and giving recommendations.

Research Work

More than 50 research publications

Goggle Scholar: <https://scholar.google.com/citations?user=rSYxsSgAAAAJ&hl=en>

Orcid: <https://orcid.org/0000-0001-6019-0350>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57226344947>

Training and Certification

Institute & Country	Training title	Duration	Description
Bernice McCarthy, Paul Mark (USA)	Teaching around the 4MAT Cycle.	5 days, 45 credit hours	Mastering Learning Design.
Institute of Business Administration IBA AMAN CED university of Karachi Pakistan	Entrepreneurship Workshop	2 Days	designing, launching, and running a new business
Metkon Engineering Bursa (Turkey). www.metkon.com	Metallographic Techniques	07 Days	To investigate the Microstructures of Metals
Alser Teknik Ankara(Turkey) www.prothermfurnaces.com	Heat Treatment Furnaces Calibration And Maintenance	07 Days	Heat treatment Furnaces
Pak-Swiss Training Center (PSTC) Karachi Pakistan. www.pstcpk.com	Dies & Moulds Technology	02 Months	Manufacturing methods of Dies and Moulds
United Nations Development Programme (UNDP) & Energy Conservation Center Pakistan. www.undp.org	Instrumented Tune Up Services Course	01 Month	Computerized Tune up of automotives
N.E.D University of Egg & Technology Karachi. www.neduet.edu.pk	Corrosion Protection Management & ICCP Design Course	03 Days	Corrosion & its protection through ICCP.