CURRICULUM VITAE

Irfan Sabir



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Nationality : Pakistani

Languages : English, Chinese, Urdu and Punjabi

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QUALIFICATION ▼

Degree/ Certificate	Field	Major Subject	Institution/University	Year
PhD	Instrument Science & Technology	Energy Storage applications like supercapattery and supercapacitors.	Tianjin University, China	2025
MS 18 Years	Electrical Engineering	Renewable Energy, Power Generation, High Voltage Engineering Design	Bahria University, Islamabad, Pakistan	2015
M.Sc. 16 Years	Electronics	Measuring Instruments, Optoelectronics, Power Electronics,	Sarhad University of Science & Information Technology, Peshawar. Pakistan	2011
B.Sc.	Science	Physics, Math, Solid State Physics,	University of Punjab, Lahore, Pakistan	2007
Diploma of Associate Engineer (D.A.E.)	Electronics	Instruments, Digital and Power Electronics	Punjab Board of Technical Education Lahore, Pakistan	2003
Diploma of Software Engineering (D.S.E.)	Software Engineering	Microsoft Office, Computer Hardware, Software, etc.	Govt. Postgraduate College, Jhelum, Pakistan	2001

I am a **Member of the Institution of Engineering and Technology** (**MIET**, which is an internationally accredited institute) UK with No. **1100757568** under EU Directive 2005/36/EC.

Address:

Current: Central Hi-Tech Laboratory, University of Agriculture, Faisalabad,

Pakistan. (38040)

Permanent: Village Masoom Pur, Post Office Chak Daulat, Tehsil & District,

Jhelum. Pakistan.

EXPERIENCE

Technical Experience = More than 20 Years

- (1) Currently, I have been working as an **Assistant Executive Engineer** (Instruments)/ Incharge repairing & maintenance Cell at Central Hi-Tech Lab, **University of Agriculture**, **Faisalabad** since 30 April 2016 to date. I am providing repair & maintenance services for all kinds of scientific equipment mentioned above as well as hardware and software services to other departments. I have repaired about 425 Laboratory equipment and saved millions of rupees.
- (2) I performed my duties as a **Sub-Engineer (Electronics)** in the Department of Chemistry, Quaid-**i-Azam University, Islamabad, Pakistan** from 26th Aug 2005 to 29th April 2016. I am well versed in hardware and software services of X-ray Diffractometer, NMR, and other instruments. During this period, I analyzed more than 50,000 different types of samples on XRD and NMR.
- (3) I worked as a **Visiting Lecturer** at **Comwave Institute** of Sciences and Information Technology, Islamabad, Pakistan, from September 2015 to February 2016.
- (4) I also worked as a **Visiting Junior Instructor/Lecturer** at Govt. Institute of Technology, Jhelum, Pakistan Sine Jan 2004 to Oct 2004.
- (5) I have worked as a **Sub-Engineer** (**Electronics**) at Chemtech International (Pvt.) Ltd. Karachi, Pakistan from July 2003 to Aug 2005. During my stay, I performed my duties as in charge of testing, commissioning/installation of TGA, DSC, FTIR, Galvanostat/Potentiostat & TOC Analyzer, etc. I have also played a vital role in the execution of various job assignments.
- (6) I have contributed to establishing the Honey testing laboratory and packing unit for Muquet Honey Pvt. Ltd. Faisalabad.

SCIENTIFIC INSTRUMENTS EXPERTISE ▼

- ➤ X-ray Diffraction (XRD, PANalytical)
 - WAXS&SAXS
 - o HTK 16 (High-Temperature Chamber).
 - o Hardware services/ maintenance & Trouble Shooting
 - o X-ray Tube Cleaning, Installation & Alignment
- ➤ X-ray photoelectron Spectrometer (XPS by Thermo SCIENTIFIC)
 - o Sample Preparation & Operation
- ➤ Raman Microscope (inVia, RENISHAW)
- ➤ Zeta potential (Zetasizer Nano ZS90 by Malvern, UK)
- > NMR Spectrometer (Bruker 300 MHz)
 - o Software & Hardware Handling & Trouble Shooting
- Scanning Electron Microscopy (SEM)
 - o Sample Preparation & Operation of SEM
- > Energy Dispersive Spectroscopy (EDS)
- > Transmission Electron Microscopy (TEM)
 - Sample Preparation & Operation
- ➤ Laser Scanning Confocal Microscopy (LSM510)
- ➤ Electrochemical Workstation (CorrTest, CS-350)
 - o Sample Preparation & Analysis
 - o Two/three-electrodes real cell system
 - o CV (Cyclic voltammetry),

- o GCD (Galvanostatic charge-discharge),
- o EIS (Electrochemical impedance spectroscopy)
- Fourier Transform Infrared-Spectrophotometer (FTIR).
- ➤ Thermogravimetric Analysis (TGA/SDTA 851e)
- ➤ Differential Scanning Calorimetry (DSC)
- ➤ UV/Visible Spectrophotometer
- ➤ Atomic Absorption Spectrophotometers (AAS)
- ➤ Gas Chromatograph (GC)
- ➤ High-Pressure Liquid Chromatography (HPLC)
- > Centrifuge Machine etc.
- > Autoclave Machine etc.

Publications, Conferences, Workshop, & Trainings

Publication ▼

- 1. Ullah, F., Awan, M. S., Wazir, Z., **Sabir, I.,** Ul Haq, A. (2018). Effect of Heat Treatment and La Doping on the Electrical Properties of BiFeO3. *J. Chem. Soc. Pak*, 40 (05), 886, 2018.
- 2. **Sabir, I.**, et al., Utilization of copper-doped zinc spinel ferrites nano-composites as battery-grade electrode materials for supercapattery device applications. Journal of Energy Storage, 2025. **112**: p. 115498. https://doi.org/10.1016/j.est.2025.115498

Conferences ▼

- ➤ I have participated in an International Conference & Workshop on Nano Science and Technology at the Department of Electronics, Quaid-i-Azam University Islamabad, Pakistan (Oct 2012)
- ➤ I have participated as a Presenter in the "1st International Conference on Science for Future Trends, (ICSFT December 7-8, 2024)", UOL, Sargodha Lahore Road, Pakistan.
- ➤ I have participated as a Speaker at the "7th International Conference on Materials Science & Nanotechnology 2025 (MSNANO-25)", GCUF, Faisalabad, Pakistan.

Workshops **▼**

- ➤ 3rd Two-Day Training Workshop on "Bioassays for Exploration of Bioactives" organized by **Department of Biochemistry**, University of Agriculture Faisalabad, Pakistan (Nov-2022).
- ➤ International Conference on "Climate Change: Impacts & Solutions" University of Agriculture Faisalabad, Pakistan (Nov-2022).
- ➤ "One Week Hands-on Training 2022" held at Central Hi-Tech Lab, University of Agriculture, Faisalabad, Pakistan.
- ➤ "ISO 9001, 2015 IN HOUSE TRAINING" Organized by Central Hi-Tech Lab, University of Agriculture Faisalabad, Pakistan (Oct 2019)
- ➤ **BIOSAFETY MEASURES IN AGRICULTURE:** Issues and options, Organized by Office of Research, Innovation & Commercialization (ORIC), University of Agriculture Faisalabad (March 2019)

- ➤ Workshop on Advanced Spectroscopic Techniques for Characterization of Organic Compounds at **Department of Chemistry & Central Hi-Tech Lab**, University of Agriculture Faisalabad, Pakistan (August 2017)
- > Training workshop on some Basic Instruments arranged in the Department of Chemistry, Quaid-i-Azam University Islamabad, Pakistan (September 2012)

Imparted as Resource Person ▼

- ➤ "One Week Refresher Course for Laboratory Staff" as a Resource Person organized by UAF Community College, PARS, Faisalabad, Pakistan (August 2022).
- ➤ "International Training Workshop on Biotechnology, Bioinformatics & Biochemistry" as a Resource Person held at Centre of Agricultural Biochemistry & Biotechnology (CABB), University of Agriculture, Faisalabad. (April 2019) Pakistan.
- ➤ "Lectures/Hands-on Training on Operation & Maintenance of XRD" as a Resource Person held at the Department of Electronics, Quaid-i-Azam University Islamabad (June 2018).
- > "One Week Hands-on Training 2018" as a Resource Person held at Central Hi-Tech Lab, University of Agriculture, Faisalabad, Pakistan.

International Trainings ▼

- ➤ I completed Technician Training (Scientific equipment like TEM, SEM & Confocal LSM) at **Xinjiang Agriculture University, Urumqi (China)** from 2016 to 2017.
- ➤ I detailed for the **Basic X-ray diffraction Course** in June 2006, which was held at PANalytical's Development Center Almelo, **The Netherlands (Holland)**.

References

(1) Dr Raja Adil Sarfraz

Associate Professor

Department of Chemistry, University of Agriculture, Faisalabad, Pakistan.

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(2) Dr. Hafeez Anwar

Associate Professor

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(3) Muhammad Kashif

Associate Professor

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