

MUHAMMAD IRSHAD KHAN

Residential Address:

Muhammad Irshad khan C/O Asst prof Ather Hussein, Department
Physics Allama Iqbal open university Islamabad



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OBJECTIVE

To be a part of a professionally managed and dynamic organization, which provides opportunities for self-development and responsibilities to contribute towards organization's success.

PERSONAL

Name	:	Muhammad Irshad Khan
Father's Name	:	Kala Khan
CNIC No	:	14301-7560748-9
Material Status	:	Single
Religion	:	Islam
Gender	:	Male
Domicile	:	Kohat
Nationality	:	Pakistani

ACADEMIC QUALIFICATION

DEGREE/CERTIFICATE	YEARS	Marks	BOARD/university
PhD	2021-2025	Continue	AIOU ISB
B. ED (1.5)	2020	1212/1400	AIOU (ISB)
M.S	2021	3.30/4.00	IIUI(ISB)
DIT	2018	1059/1500	Peshawar
BS Physics (Hons)	2018	3.05/4.00	KUST
F.SC (Pre ENG)	2013	671/1100	B.I.S.E (Kohat)
SSC	2011	735/1050	B.I.S.E (Kohat)

TEACHING AND TUTORSHIP EXPERIENCE

Institution	Program/ Class	Subject Taught	From -To
Federal Urdu University of Arts, Sciences & Technology Islamabad	Department of Software Engineering and Artificial Intelligence BS artificial intelligence	Applied Physics Basic electronics (lab +theory)	01 Oct 2024 up to date
Allama Iqbal Open University Islamabad	Department of Physics, main campus, Islamabad/Regional Center, Islamabad	Weekly Online Workshops: Duties of Superintendent and Invigilator	1 August 2022-July 2024
Faculty of Computing, Riphah international University Islamabad (I-14 Campus)	BS Data Science BS Computer Science	Applied physics course-work Applied physics lab Basic electronics course-work Basic electronics lab	01 Feb 2023-28jan 2024
Faculty of Physics, Riphah International University Islamabad (I-14 Campus)	BS Physics	Advanced Synthesis Nanomaterial Physics At Nano Scale Electronics Lab Heat, Waves and Oscillations, Sound	01 Sept 2021- 15 Jan 2022
International Islamic University Islamabad	BS Physics	Electronic course work Electronics lab	15 Aug 2021- 15 Jan 2022

RESEARCH EXPERIENCE

Institution	Program (MS /M.Phil. I/PhD)	Research Topic	From -To
Allama Iqbal Open University Islamabad	PhD	Computational screening 2D Materials for Hydrogen evaluation reaction	01 Jan 2024-30 Jun 2024
International Islamic University Islamabad	MS	CoO/rGO nanocomposites for Energy storage devices	01 July 2019- 15 Jan 2021

ADMINISTRATIVE EXPERIENCE

- Assisted in academic coordination and examination management at Allama Iqbal Open University Islamabad.
- Worked as an Admission Officer, handling student applications, enrollment procedures, and guiding prospective students through the admission process (BS, BSc, MSc, MS, M-Phil, & PhD).
- Served as Superintendent and Invigilator during university examinations, ensuring proper exam conduct and compliance with academic policies.
- Organized academic workshops and student mentorship programs, facilitating a structured learning environment.
- Managed student records, scheduling, and faculty coordination to enhance academic operations.
- Actively participated in departmental administration, assisting in course planning, faculty meetings, and student engagement initiatives.

RESEARCH EXPERIENCE AND EXPERTISE

- **02 Years' experience as a Research Assistant** in the spintronic lab, Department of Physics, International Islamic University Islamabad.
- **6 months experience as a research assistant in NRPU-PROJECT Funded by HEC in** department Physics Allama Iqbal Open University Islamabad.
- Under my guidelines, **18 MS/MPhil students and 29 BS Students completed their Research Project and Thesis**, respectively.
- **Vast software expert**
- **DFT expert**
- **Materials Studio expert**
- **VASP software expert**
- **Xpert high score** software expert
- X-Ray diffraction (**XRD**) Machine Expert.
- Fourier-transform infrared spectroscopy (**FTIR**) Machine Expert.
- Cyclic Voltammetry (**CV**) Machine Expert.
- Electrochemical Impedance Spectroscopy (**EIS**) Machine Expert
- **UV- Spectroscopy** Machine Expert
- Potentials state device.
- Origen software experts
- Digital advance Oven.
- Furnace annealer of an advance level device.

CONFERENCES/WORKSHOPS PARTICIPATED

- 1 CHINA-PAKISTAN BILATERAL WORKSHOP ON **FERROMAGNETIC HYBRID NANO-STRUCTURES** HELD AT SNS, NUST” ISLAMABAD ON DEC 6, 2019
- 2 USA-PAKISTAN BILATERAL CONFERENCE ON **ENERGY NANOMATERIALS** 2020, HELD AT SNS, NUST” ISLAMABAD ON JANUARY 16, 2020
- 3 SIXTH INTERNATIONAL CONFERENCE ON **“NANO- MATERIALS MODELING & SIMULATION** “AT DEC 15-16, 2021
- 4 WORKSHOPS ON **MEMBRANCE TECHNOLOGY APPLICATIONS** AT UET PESHAWAR ON MARCH 17, 2022
- 5 National Workshop and Interactive Session on **“Self-powered Energy Storage System** “at international Islamic university Islamabad on 12-13 May 2022.
- 6 6TH INTERNATIONAL CONFERENCE ON **NANO-MATERIALS MODELING AND SIMULATION** ON DECEMBER 15-16, 2023

PAPER PUBLICATIONS

S. No.	Paper Title	Journal Name	Type (National/International)	Year of Publication
1	Influence of graphene oxide on AC-conduction of hematite nanoparticles	Materials Innovations	International	2022
2	Ag-rGO Nanocomposite as an Efficient Electrochemical Sensor for Thiourea	ECS Advances	International	2022
3	A comparative study of PEGylated cobalt oxide nanoparticles (Co ₃ O ₄ -NPs) and cobalt sulfide nanoparticles (Co ₉ S ₈ -NPs) for biological and photocatalytic applications	BioNanoScience	International	2024
4	Investigating the Role of Charge Transfer in Eco-Friendly Coffee Waste-Based Carbon Dots Coupled to ZnBi-Layered Double Hydroxide Heterojunction for Visible-Light Catalytic Activity	Dialogue Social Science Review (DSSR)	International	2025
5	Biological synthesis, characterization, and antifungal effect of silver nanoparticles and their formulation	The Research of Medical Science Review	International	2025
6	Identification of the structure of a protein by X-ray crystallography and NMR spectroscopy	The Research of Medical Science Review	International	2024
7	Metal nanoparticles in catalysis: Mechanism and applications	The Research of Medical Science Review	International	2024

ALREADY TECH AND THE PREFERRED COURSES FOR TEACHING

- Advanced Synthesis Nanomaterial
- Heat, Waves and Oscillations, Sound
- Electronics Lab
- Optics Lab
- Heat And Thermodynamics Lab
- Physics At Nano Scale
- Digital logic design (DLD)
- Applied Mathematics
- Applied Physics Lab
- Applied Physics

COMPUTER SKILLS

- One Year DIT diploma (From Khyber Pakhtunkhwa Board of Technical & Commerce Education, Peshawar) and 06 Months diploma in computer MS-Office & Windows.

OTHER SKILLS

- PTC (Primary teaching Certificate) for AIOU Islamabad.
- Diploma in Information & Technology from GCMS Kohat.

<u>HOBBIES</u>	<u>LANGUAGES</u>
➤ reading Newspapers	➤ English
➤ studying books	➤ Urdu
➤ Playing cricket,	➤ Pashto
➤ RESEARCH NEW IDEAS	➤ Hinko

REFERENCE NAME

Name <u>Prof Dr. Syed Zafar Ilyas</u>	Name Dr Ather Hussan
Position: <u>DEAN of Sciences/Chairman</u>	Position: Assistant Prof
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