Dr. Muhammad Asim Shahzad

Ph.D in Physics
The Islamia University of Bahawalpur, Pakistan
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Personal data

Father Name:	Muhammad Ashraf
Nationality:	Pakistani
Date of Birth:	25-01-1986
Religion:	Islam
Address:	Department of Physics, University of Sahiwal, Sahiwal, Pakistan.

Academic Record

1. **Ph.D. (Physics)** 2017
   The Islamia University of Bahawalpur, Pakistan.
   Title: Fabrication and Characterization of Pure and Doped Lead based Dielectric Materials.

2. **M.Phil (Physics)** 2011, First Division.
   The Islamia University of Bahawalpur, Pakistan.
   Title: Climbing Arc Assisted Processing of Hydro-Carbon Materials.

3. **M.Sc. (Physics)** 2008, First Division.
   The Islamia University of Bahawalpur, Pakistan.

4. **B.Sc. (Physics, Mathematics A & B courses)** 2005, First Division.
   The Islamia University of Bahawalpur, Pakistan.

Experiences (Teaching and Research related)

1. Lecturer in Physics
   University of Sahiwal, Sahiwal, Pakistan
   March, 2020 to date.

2. Visiting Lecturer in Physics
   Punjab group of colleges, Hasilpur, University block under affiliation from university of Sargodha, Sargodha.
   September, 2018 to August, 2019.

3. Visiting Lecturer in Physics
   Millat group of colleges, Hasilpur for BS program under affiliation from G.C. University Faisalabad from august 2018 to march, 2020.

4. Lecturer Physics
   Dawn Science College, Dahranwala, Bahawalnagar from January 2010 to March 2012.

5. Research experience in material Physics labs, department of Physics, The Islamia University of Bahawalpur during higher qualification from 2010 to 2017.

Research areas:

- Experimental research, samples prepared in the laboratory then characterize.
- Materials processing and Characterization.
- Lead (Pb) based Dielectric Materials.
- Growth of nano-materials via wet chemical methods (co-precipitation technique, micro-emulsion methods etc).
- Characterization of nanocrystals by structural, dielectric and electrical parameters.

Techniques used to characterize the prepared samples:

- X-ray diffraction (XRD)
- Fourier Transform Infrared Spectroscopy (FTIR)
- Dielectric parameters
- DC electrical resistivity (by using picometer)
- Thermo gravimeter analysis (TGA)

International Publications

1. **Muhammad Asim Shahzad**, Muhammad Shahid, Ismat Bibi, Muhammad Azhar Khan, Muhammad Asif Nawaz, Mohamed F. Aly Aboud, M. Asghar, Rizwan Nasir Paracha, Muhammad Farooq Warsi, The effect of rare earth Dy^{3+} ions on structural, dielectric and electrical behavior of new nanocrystalline $PbZrO_3$ perovskites, Ceramics International, 43 (2017) 1073-1079. **(I. F. 3.450)**
2. **Muhammad Asim Shahzad**, Muhammad Farooq Warsi, Muhammad Azhar Khan, F. Iqbal, M. Asghar, New Nd-doped lead zirconat $Pb_{1-1.5x}Nd_xZrO_3$ nanocrystals: Fabrication via wet chemical route for electrical and dielectric parameters evaluation, Journal of Alloys and Compounds, 647 (2015) 693-698. **(I. F. 4.175)**

Conferences attended

1. "5th International Conference on Semiconductor Materials and Nano-Devises (5th ICSMAND)" at the Islamia University of Bahawalpur on February 15-17, 2017.
2. International conference on light "Celebrating Light (IYL-2015, Abn Al-Haytham)" 2-3 February, 2015 at National center for Physics (NCP) & Quaid-e-Azam University, Islamabad.
3. "International Conference on Renewable Energy Resources" at the Islamia University of Bahawalpur on 12-14 March, 2014.
4. "3rd International Conference on Semiconductor Materials & Nano-Devices" at the Islamia University of Bahawalpur on 22-24 April, 2013.
5. "Two Day International Seminar/Workshop on Semiconductor Materials and Nano-Devices" at the Islamia University of Bahawalpur on 2-3 June, 2008.

Reference

Prof. Dr. Muhammad Asghar Hashmi
Ex. Dean Faculty of sciences/Professor in Physics
The Islamia University of Bahawalpur, Pakistan
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