Dr. Hidayat Ullah Khan

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Hidayat Ullah Khan joined Department of Physics, University of Peshawar, Pakistan as a lecturer on regular basis on March 16, 2004. The main theme of Dr. Khan's research includes fabrication of electroceramics and study of their phase transitions, electrical properties and crystal structures, and their mutual relationship. The experimental techniques, widely used in these investigations, are X-ray diffraction (XRD), Dielectric and ferroelectric measurements, Raman Spectroscopy, Energy Dispersive X-ray Spectroscopy (EDS), and Scanning and transmission electron microscopy. Special expertise is on Raman Spectroscopy and Transmission Electron Microscopy.

EDUCATION

- **University of Sheffield, UK**

PhD in Materials Science and Engineering, July, 2011.

- **Quaid-i-Azam University Islamabad, Pakistan**
  M.Phil in Atomic and Molecular Spectroscopy, August, 2002.
- **University of Peshawar, Peshawar, Pakistan**
  B.Ed in Education and Research, October, 1999.
- **Government Postgraduate College, Mardan**
  M.Sc Physics, 1998.
- **Government Postgraduate College, Mardan**
  B.Sc (Maths A, Maths B, Physics), 1996
- **Government Degree College Lahor (Swabi)**
  F.Sc (Pre-engineering), 1993
- **Government High School Yar Hussain (Swabi)**
  S.S.C (Science Group), 1991

EMPLOYMENT HISTORY

- 1994 – 1995: Science teacher at Afzal Academy, Yar-Hussain.
- 1995 – 1998: Organized Free Tuition Centre as Chairman Educational Faculty, Social Welfare Organization, Yaqubi District Swabi.
- 1999 – 2000: Lecturer (contract) in Physics at Government Postgraduate College, Swabi.
- Presently working as Assistant Professor at the Department of Physics, University of Peshawar, Pakistan.

COMPUTER SKILLS

- Origin, CaRine, WinX^{pow}, Igor Pro, Image J, End Note, MS office, Type writing.

PUBLICATIONS

- H. U. Khan, I. Sterianou, Y. Han, J. Pokorny and I. M. Reaney, *Phase transitions in $Li_xAg_{1-x}(Nb_{0.5}Ta_{0.5})O_3$ solid solutions.* J. App. Phys. 108 (6), 2010.
- H. U. Khan, I. Reaney and I. Sterianou, *A new superstructure in $(Li_xAg_{1-x})NbO_3$ $(0.05 < x < 0.10)$,* J. Pak. Mater. Soc. 4 (2), 2010.
- H. U. Khan, I. Sterianou, S. Miao, J. Pokorny and I. M. Reaney, *The effect of Li-substitution on the M-phases of $AgNbO_3$.* J. App. Phys. 111, 2012.
- R. Muhammad, Y. Iqbal, C. Renato, H. U. Khan, *Research trends in microwave dielectrics and factors affecting their properties: A review*, Int. J. Mat. Res. 105 (5), 2014, 431-439.
- H. U. Khan, Y. Iqbal, *Synthesis and characterization of Li-modified $AgTaO_3$,* J. Elec. Mat. 43 (7), 2014.
- B. S. Haq, H. U. Khan, K. Alam, M. Ajmal, S. Attaullah, I. Zari, *Determination of two-photon absorption cross sections of photosensitizers and its implications for two-photon polymerization*, Applied Optics, 54 (1), 2014, 132-140.
- K. Alam, N. Rahman, H. U. Khan, B. S. Haq, S. Rahman. *Particulate Matter and Its Source Apportionment in Peshawar, Northern Pakistan*. Aerosol and Air Quality Research, 15, 2015, 634 – 647.
- H. U. Khan, K. Alam, M. Mateenullah, T. Blaschke and B. S. Haq, *Synthesis and characterization of solid solution $Ag(Nb_xTa_{1-x})O_3$ $(x = 0, 0.25, 0.5, 0.75, 1.0)$,* Journal of the European Ceramic Society, 35, 2015, 2775-2789.

REFERENCES

- Dr. Ian Michael Reaney, Professor of Electroceramics, Department of Materials Science and Engineering, The University of Sheffield, UK. Email: i.m.reaney@shef.ac.uk
- Prof. Yaseen Iqbal, Department of Physics, University of Peshawar, Pakistan. Email: dryaseeniqbal@yahoo.co.uk