Curriculum Vitae

PERSONAL DETAILS

- Name : Mandeep singh
- Date of Birth : 19/10/1991
- Marital Status : Single
- Sex : Male
- Nationality : Indian

EDUCATIONAL QUALIFICATION

Sr. No.	Class	Board/University	Year	%age
1.	10^{th}	CBSE, Delhi	2007	83.20%
2.	10+2	CBSE, Delhi	2009	81.20%
3.	B.Sc.(Non Medical)	Punjabi University, Patiala	2012	62.38%
4.	M.Sc. (Applied Physics)	Punjabi University, Patiala	2014	66.50%
5.	Ph.D. (Physics) Topic: "Study of Structural, Morphological, Electrical and Magnetic Properties of Multiferroic Composites"	Punjabi University, Patiala	2016-2023	NA
6.	CSIR-NET (JRF)		June 2017	AIR-112

Working Experience

- CSIR-Junior Research Fellow 2018-2020
- CSIR-Senior Research Fellow 2020-2023

List of Publications

- **Mandeep Singh**, Jaspal Singh, Manoj Kumar and Sanjeev Kumar, 2020. Investigations on multiferroic properties of lead free (1-*x*)BCZT-*x*CZFMO based particulate ceramic composites. *Solid State Sciences*, *108*, p.106380.

- **Mandeep Singh**, Jaspal Singh, Manoj Kumar and Sanjeev Kumar, 2022. Strain mediated magnetoelectric coupling response in $Ba_{0.85}Ca_{0.15}Ti_{0.9}Zr_{0.1}O_3$-$CoFe_{1.95}Mg_{0.05}O_4$ particulate multiferroic composites. *Journal of Materials Science: Materials in Electronics*, *33*, p.14264.

- Kulwinder Kaur, **Mandeep Singh**, Jaspal Singh and Sanjeev Kumar 2020. Multiferroic and magnetodielectric properties of (1-*x*)KNN-*x*CMgFO ceramic-based composites. *Journal of Asian Ceramic Societies*, *8*(4), pp.1027.

- Kulwinder Kaur, **Mandeep Singh**, Jaspal Singh and Sanjeev Kumar 2020. The modified magnetodielectric response in KNN-CZFMO based particulate multiferroic composite system. *Journal of Advanced Dielectrics*, *10*(05), p.2050024.

Workshops and conferences attended

- One Day Workshop on "Advanced Functional Materials" organized by Department of Applied Sciences, Punjab Engineering College (Deemed to be University) on 17th March, 2018.

- Short Term Course on "Characterization of Advanced Functional Materials" organized by Department of Applied Sciences, Punjab Engineering College (Deemed to be University) from 18-24 June, 2018.

- Three day national workshop on "LaTex and Technical Writing" held at Department of Basic and Applied Sciences Punjabi University, Patiala from 23-25 November, 2018.

- Short Term Course on "Smart Materials and Nanotechnology" organized by Department of Basic and Applied Sciences, Punjabi University, Patiala from 2-6 December, 2019.

- Workshop on "Advanced functional materials" on 25-26 July, 2020 organized by Department of Applied Sciences, Punjab Engineering college (Deemed to be University), Chandigarh.

- Online workshop on "Rietveld Refinement Method" on 22-24 September, 2020 organized by UGC-DAE Consortium for Scientific Research, Mumbai center in association with Indore center.

- 6th International Conference on "Nanoscience and Nanotechnology" organized by SRM Institute of Science and Technology, Kattakulanthur, India during 1st to 3rd Feburary, 2021.

Technical Skills

- Expertise in handling instruments like P-E loop tracer, Impedence analyzer, high temperature programmable furnaces, hydraulic press pelletizer, Lock-in amplifier based magnetoelectric measurement setup.
- Expertise in handling data from by using softwares like MS-excel, Origin, Image J, Reitveld refinement using FullProf, Xpert Highscore, Z-View.

Areas of Interest

- Ferroelectrics, Ferromagnetics, Multiferroic Composites, Crystallography, Energy Harvesting Devices, Sensors, Acuators

(Mandeep Singh)