

Faculty Profile



Name: Dr. ELIZABETH ZACHARIAS

Designation: Professor

Teaching areas: Mechanics & Optics, EM Theory & Material Science

Research interests: Experimental Solid State Physics

Education:

- PhD: Experimental Solid State Physics University of Hyderabad, 1995
- M.Phil: Experimental Solid State Physics University of Hyderabad, 1989
- M.Sc.Ed: Regional College of Education, Mysore University, 1987
- B.Sc. Ed: Regional College of Education, Mysore University, 1985

Research Publications:

1. Elizabeth Zacharias and R.Singh “Crystallization and resistivity studies on $\text{Bi}_4\text{Sr}_3\text{Ca}_3\text{Cu}_y\text{O}_x$ Glasses” *Physica C* Vol. 247, pp. 221-230,1995.
2. Elizabeth Zacharias and R.Singh “Structural and Superconducting Properties of $\text{Bi}_4\text{Sr}_3\text{Ca}_3\text{Cu}_y\text{O}_z$ and $\text{Bi}_4\text{Sr}_3\text{Ca}_3\text{Cu}_{4-x}\text{M}_x\text{O}_z$ (M= Fe, Cr and Mn) Glass Ceramics”*International Journal of Modern Physics B*, Vol. 9 No.4 & 5, pp. 549-561,1995
3. U.Ravikiran, Elizabeth Zacharias, G.Rajashekhar and P.Sarah “Impedance spectroscopy studies on Samarium and Sodium substituted Strontium Bismuth Titanate” *Ceramics International* , Vol. 45, No. 12, 15 pp. 15188-15198, (2019)
4. U. Ravikiran, P. Sarah, M. Buchi Suresh, and Elizabeth Zacharias “Effect of Sm and Na substitution on dielectric properties of $\text{SrBi}_4\text{Ti}_4\text{O}_{15}$ ” *Ferroelectrics*, Vol. 537, pp. 237–245, (2019)
5. RavikiranU, SarahP, A.R.James, Elizabeth Zacharias “Investigation of the role of Sm, Na in ferroelectric, piezoelectric and conduction behaviour of Strontium Bismuth Titanate ceramics” *Solid State Communication*, 332 (2021) 114309
6. RavikiranU, Elizabeth Zacharias, Gagan Anand, SarahP, “Modelling of dielectric studies on rare-earth substituted Strontium Bismuth Titanate using modified Lorentz equation” *Integrated Ferroelectrics* Vol 585 (2021), Vol 221, 245-253

Research Guidance: Guided one research scholar (Ravikiran Uppala) for Ph.D. degree on the topic “Synthesis and Dielectric Properties of Rare-earth (Sm, Y) substituted eco-friendly SBTi Ceramics”. (Date of award: 26th April, 2023).