

SRISTI BAROI

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ABOUT ME

Postgraduate in Physics with a specialization in Nanophysics, with a strong interest in condensed matter and nanoscale systems. Eager to pursue research exploring the intersection of quantum physics and nanoscience.

EDUCATION

MASTERS IN PHYSICS,

DEPARTMENT OF PHYSICS AND ASTROPHYSICS | UNIVERSITY OF DELHI | NEW DELHI, INDIA

2023-2025

Major course curriculum included Classical Mechanics, Quantum Mechanics, Electromagnetic Theory, Mathematical Physics, Thermodynamics and Statistical Mechanics, Solid State Physics, Nuclear and Particle Physics, Atomic and Molecular Physics, Electronics

Specialization paper - Physics at Nanoscale

CGPA - 8.15/10

BACHELOR OF SCIENCE, PHYSICS

2020-2023

ST. XAVIER'S COLLEGE (AUTONOMOUS) - KOLKATA | WEST BENGAL, INDIA

Major coursework covering core areas of Physics alongside foundational exposure to topics later pursued in advanced depth during masters.

CGPA - 8.49/10

SKILLS

- C/C++ language
- Python programming
- GNU PLOT
- ORIGIN (Software)
- LaTeX
- Qiskit

PROJECTS

Grover's Algorithm, A Quantum Search Engine for Huge Database

Studied and prepared a detailed report on the working of a quantum algorithm that provides speedup over classical algorithms as a part of Bachelor's Dissertation under the supervision of *Dr. Tanaya Bhattacharyya*, Postgraduate and Research Department of Physics, St. Xavier's College (Autonomous), Kolkata

Structural and Magnetic Characterisation of Thermally Evaporated Ni-Mn-Ga-Cu Heusler Alloy

Thin films of Heusler alloy of thickness 25 nm, 50 nm, 100 nm were deposited on silicon substrate using Thermal Evaporation Technique followed by characterisation using Vibrating Sample Magnetometer and Electron Spin Resonance under the supervision of *Dr. Debabrata Mishra*, Department of Physics and Astrophysics, University of Delhi

Characterisation of Thin Films of Polystyrene

Thin films of Polystyrene were prepared using Spin Coating Method followed by characterisation using methods of X-Ray Diffraction, UV-Visible Spectroscopy and Differential Scanning Calorimetry under the supervision of *Dr. Yana Bagbi*, Department of Physics and Astrophysics, University of Delhi and *Dr. Debabrata Mishra*, Department of Physics and Astrophysics, University of Delhi

Synthesis and Characterisation of Nickel Oxide (NiO) Nanoparticles

Chemical synthesis of nanoparticles of Nickel Oxide using the method of Sol-Gel followed by characterisation using methods of X-Ray Diffraction, Dynamic Light Scattering and Scanning Electron Microscopy (SEM) under the supervision of *Dr. Sevi Murugavel*, Department of Physics and Astrophysics, University of Delhi

ACHIEVEMENTS

- Received an offer for the position of *Assistant Lecturer (NEET Physics)* at Aakash Educational Services Limited post-M.Sc. selection.
- Awarded a *Meritorious Student Award* during M.Sc. Physics for academic excellence.
- Received a *Certificate of Merit* during B.Sc. Physics(hons.) for academic achievement.