



Education

- **Bachelor of Science in Physics** (2016-2019)
JVM'S Mehta College, Mumbai University,
CGPI: 7.20/10
- **Master of Science in Physics (Material Science)** (2019-2021)
The Institute of Science, Dr. Homi Bhabha State University
Thesis:- Theoretical Review Of Photocatalytic Compound and Application
CGPI: 9.29/10

Work Experience

- * **Adjunct Professor** (Jan 2023 - Mar 2023)
THE INSTITUTE OF SCIENCE, Dr. HOMI BHABHA UNIVERSITY, MUMBAI
- * **Assistant Teacher**
 - ARYA GURUKUL INTERNATIONAL Jr. COLLEGE,
Jul 2022 - Apr 2023
 - MAZIDUN HIGH SCHOOL AND Jr. COLLEGE,
Oct 2021 – Apr 2022

Research experience

Junior Research Fellow at Tata Institute of Fundamental Research (TIFR) (Aug 2023 - Jan 2023)

- Sputtered thin films of different materials on flexible and rigid substrates.
- Involved in developing a custom-built substrate rotation mechanism for a sputtering system.
- Characterization of Thin Film with techniques of Atomic Force Microscopy (AFM), Scanning Electron microscope (SEM), Profilometry, and Ellipsometry.

INAF-BRERA:

- Optical Bench Setup & Alignment
- LASER Optics

Publication

Relativistic theory to Compton effect for spectroscopic detector

[<https://doi.org/10.1016/j.nima.2022.166656>].

Dhiraj Hiralal Gupta



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

**INAF - Osservatorio Astronomico
di Brera, Milan (gOLeM)**



PhD Research Topic: *Innovative holographic optical elements for modern optical instrumentation.*

Supervisor: Dr. Andrea Bianco

Research Description:

1. Developing Volume Holographic Optical Elements (VHOEs).
2. Enhancing and simplifying the performance of optical systems through VHOEs

3.VHOE Developments:

Volume Phase Holographic Gratings (VPHGs) & Volume Phase Holographic Diffuser

