

Mainak Ghosal



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II. Academic Qualifications:

2021- till date: Doctor of Philosophy, IISER Kolkata, Supervisor: Prof. Prasun K. Mandal.

2018- 2020: Master of Science, IIT Kanpur, Specialisation in Physical Chemistry, CGPA: 9.1.

2015- 2018: Bachelor of Science, University of Calcutta, Percentage: 68.5 %.

2015: Higher Secondary, West Bengal Council of Higher Secondary Education, Percentage: 87%.

2013: Secondary, West Bengal Board of Secondary Education, Percentage: 84.4%.

III. Current research:

❖ **Field of interest:**

- ✓ Molecular Photochemistry.
- ✓ Fluorescence Spectroscopy.
- ✓ Ultrafast dynamics.
- ✓ Ultrasensitive single molecule spectroscopy.

❖ **Instruments/ Techniques known:**

- ✓ UV Spectrometer.
- ✓ Spectrofluoremeter.
- ✓ TCSPC.
- ✓ FLS 1000.
- ✓ Origin.
- ✓ Igor Pro.
- ✓ PyMol.

IV. Awards and Honours:

- ✓ AIR 56 in Joint Admission for M.Sc. (JAM) exam in 2018.
- ✓ AIR 18 (LS) CSIR JRF/NET in December 2019.
- ✓ AIR 58 (JRF) CSIR JRF/NET exam in June 2020.
- ✓ AIR 885 in GATE, 2020.
- ✓ AIR 634 in GATE, 2021.

V. Publications:

1. S Chatterjee; M Ghosal; K Tiwari; P Sen*; Potassium-Induced Passivation of Deep Traps in Bismuth- Doped Hybrid Lead Bromide Perovskite Nanocrystals: Massive Amplification of Photoluminescence Quantum Yield, *J. Phys. Chem. Lett.* **2021**, *12*, 1, 546–551.