

# Dr. Anirban Guha

## Professor, Head of the Department

Department of Physics, Tripura University  
Suryamaninagar, Tripura, India

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Date of birth: 12th November 1978

## Education:

1. Post-Doc from MIT, USA 2012-13 (Fulbright) and 2016-17 (Raman)
2. Ph.D. in Physics, Tripura University, India, 2011
3. CSIR-UGC National Eligibility Test (NET), India, December 2002 and June 2003
4. M.Sc. in Physics, from University of Calcutta, India, 2003
5. B.Sc. in Physics, from University of Calcutta, India, 2000

## Professional positions:

Professor, Department of Physics, Tripura University, India from 2<sup>nd</sup> March 2022

Associate Professor, Department of Physics, Tripura University, India from 2<sup>nd</sup> March 2019

Assistant Professor, Department of Physics, Tripura University, India from 7<sup>th</sup> September 2006

## Teaching interests:

1. Theoretical: Classical and Relativistic Electrodynamics, Magneto-hydrodynamics and Plasma Physics, Digital Electronics, Digital Communication Systems, Microprocessor, Atmospheric Science
2. Practical: Advanced Analog and Digital Electronic, Digital Communication, Microprocessor Programming

## Research interests:

Lightning physics, radiative forcing aerosols, space weather, and the planetary atmosphere

## Services to students and the home institution:

1. Ph.D. guidance: Completed – 08, Registered – 05
2. Principal Investigator of sponsored research projects worth ~ Rs. 650 lakh INR
3. Collaboration with research institutes and universities in India and abroad (USA and Israel)
4. Member of technical and administrative committees, Tripura University, India
5. Head, Department of Physics, effective 8<sup>th</sup> January 2025.

## Professional honours, awards, and fellowships:

1. Young Scientist's Award 2005, URSI, Belgium
2. First position, DST SERC School, 2005 & 2007
3. Sir Jagadish Chandra Bose Award (2011-12), Tripura State Council for Science & Technology, India
4. Fulbright Post-Doctoral Fellow (2012-13), MIT, USA
5. Member, 34th Indian Scientific Expedition (2014-15) to Antarctica
6. INSA Visiting Fellow 2016, Tel Aviv University, Israel
7. Raman Post-Doctoral Fellow (2016-17), MIT, USA
8. Visiting Scientist, MIT, USA, 2014, 2019, 2022 and 2024 (1.5 months each)
9. Tripura University Faculty award 2021

## Publications

Total 120 peer-reviewed publications till May 11, 2026. Complete biodata is available at

<https://tripurauniv.ac.in/site/index.php/en/faculty-physics-anirban-guha-en>

|           |      |
|-----------|------|
| Citations | 1727 |
| h-index   | 22   |
| i10-index | 47   |

<https://scholar.google.com/citations?user=e0Mcm1EAAAJ&hl=en&authuser=4>

## Other professional activities:

1. Paper presenters at national and international conferences and workshops
2. Coordinator of seminar, workshop and refresher courses
3. Reviewer of peer-reviewed journals, research projects

## Membership and activities in professional associations:

1. Executive Committee Member, South Asian Lightning Network, Nepal
2. Member, American Geophysical Union, USA
3. Member, National Postdoctoral Association, USA
4. Member, MIT Alumni Association, USA
5. Life Member, Physics Academy of the North-East, India
6. Life Member, Indian Radio Science Society, India
7. Member, Academic Regulatory Committee, Institute of Astronomy Space and Earth Science, India

## Community services:

1. Awareness and safety measures from thunderstorm and lightning (<https://ildn.in>)
3. AI-ML applications to severe weather nowcasting
3. IT solutions such as computer hardware, software and cyber security, HPC, AIML.
4. Amateur radio operator, CALLSIGN: VU3XIH