

Faculty Profile

1. Name: **Dr. Subhasish Roy**
2. Designation: **Assistant Professor**
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4. Address:
Netaji Pally (East), Sainthia
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5. Research ID (Google Scholar, ORCID ID, Scopus ID, WOS ID, Vidyan ID, Research Gate):
Google Scholar: <https://scholar.google.com/citations?user=tRIuoxoAAAAJ&hl=en>
ORCID ID: <https://orcid.org/0000-0003-3284-135X>
Scopus ID: 57209165278
Vidyan ID: <https://vidwan.inflibnet.ac.in/profile/141427>
Research Gate: <https://www.researchgate.net/profile/Subhasish-Roy-2>
6. Membership of Learned Societies: IEEE IMS, AAPT
7. Homepage (If any):
8. Publication Summary:
 - (a) No. of Research papers - 16
 - (b) No. of Book Chapters - 1
 - (c) No. of Conference papers - 5
 - (d) h-index - 5
 - (e) i-10 index - 2
9. Date of Joining Visva-Bharati Service: **12-08-2007**
10. Education:

Degree	Year	University/Institution
Ph. D.	2014	Visva-Bharati
M. Sc. / M. Tech.	1996	Burdwan University
B. Sc.	1994	Burdwan University

11. Academic Positions held (in reverse chronological order)

Sl. No.	Positions held	Institution	Period
1	Assistant Professor - III	Visva-Bharati	12-08-2018 -
2.	Assistant Professor - II	Visva-Bharati	12-08-2013 – 11-08-2018
3.	Assistant Professor - I	Visva-Bharati	12-08-2007 - 11-08-2013
4.	Lecturer	Sarsuna College, Kolkata	03-01-2007 – 11.08.2007
5.	Assistant Teacher	Suri P & C M M High School	08-12-2003 - 02-01-2007

12. Areas of Research: **Electronics & Instrumentation**

13. Subject Specialization: **Radio Physics & Electronics**

14. Courses Teach / Taught:

Undergraduate Courses	Classical Mechanics, Analog Electronics (Core), Device Physics & Instruments (Elective), Electrical & Electronic Instruments (Elective),
Postgraduate Courses	Electronics (Core), Advanced Electronics (Elective), Communication (Elective), Instrumentation for Experiments (Elective)
Ph.D. Course-work	Electronics & Instrumentation

15. Research Guidance:

(a) No. of Postdoctoral students (Completed / Ongoing): NIL

(b) No. of Doctoral students (Completed / Ongoing): **Completed – 3, Ongoing - 1**

(c) No. of M.Sc. Dissertations: **27**

16. Research Grants/Projects

Sl. No.	Project Title	PI/Co-PI	Funding Agency	Amount	Completed/Ongoing
1.	Indian Participation in the CMS Experiment at CERN: Maintenance, Operation and Upgradation	Co-PI	Department of Science & Technology, Government of India.	Rs. 2,28,50,000/-	Ongoing
2.	Experimental study of percolation phenomenon through contactless technique.	PI	University Grants Commission, Government of India.	Rs. 1,70,000	Completed

17. Professional Recognition/ Award/ Prize/Fellowship

Sl. No.	Name of Award	Awarding Agency	Year
1.	University Gold Medal	Burdwan University	1996

18. Books / Book Chapters

Sl. No.	Title	Name of Author(s)	Publisher	Year of Publication
1.	Tera-Bit Per Second Quantum Dot Semiconductor Optical Amplifier-Based All Optical NOT and NAND Gates	Dutta, S., Mukherjee, K., Roy, S.	Advances in Terahertz Technology and Its Applications. Springer, Singapore	2021

19. List of Scientific Publications (last five years):

- Mehabub A K Nooruddin and **Subhasish Roy**; “A simple digital phase-sensitive detector using AVR microcontroller”; American Journal of Physics 88, 153, (2020).
- **Subhasish Roy**, A simple bridge to operate an AC susceptometer. *European Journal of Physics* 41:5, 055501 (2020) <https://doi.org/10.1088/1361-6404/ab92d5>.
- Mehabub A. K. Nooruddin, **Subhasish Roy**, and Nilotpal Bhandary , "Optimization of the performance of a voltage measuring station using genetic algorithm", *Review of Scientific Instruments* 92, 064704 (2021) <https://doi.org/10.1063/5.0044438>.
- Mukherjee, K., Dutta, S., **Roy, S. et al.** All-Optical digital to analog converter using Tera Hertz Optical Asymmetric Demultiplexer based on quantum dot semiconductor optical amplifier. *Opt Quant Electron* 53, 242 (2021). <https://doi.org/10.1007/s11082-021-02900-4>.
- Dutta, S., Mukherjee, K., **Roy, S.** (2021). Tera-Bit Per Second Quantum Dot Semiconductor Optical Amplifier-Based All Optical NOT and NAND Gates. In: Das, S., Anveshkumar, N., Dutta, J., Biswas, A. (eds) **Advances in Terahertz Technology and Its Applications**. Springer, Singapore. https://doi.org/10.1007/978-981-16-5731-3_5.
- M. Rahaman, A. Thakur, M. Maity, **S. Roy** and T.K. Kundu; “Studies of the low voltage power supply for a highly segmented fast detector”; *Journal of Instrumentation*, Volume 16, October 2021. DOI 10.1088/1748-0221/16/10/P10026.
- Dutta, Siddhartha, **Roy, Subhasish** and Mukherjee, Kousik. "Alternative method of implementation of all-optical NOR and NAND gates using quantum-dot semiconductor optical amplifiers in non-interferometer structure" *Journal of Optical Communications*, (2022). <https://doi.org/10.1515/joc-2021-0101>.
- Dutta, Siddhartha, Mukherjee, Kousik and **Roy, Subhasish**. "Simulative analysis of 1 Tb/s all-optical half-adder using quantum dot semiconductor optical amplifiers" *Journal of Optical Communications*, (2022). <https://doi.org/10.1515/joc-2022-0053>.
- Suman Garain, Amitava Bandyopadhyay, Dipankar Bhattacharyya, Suman Mondal, and **Subhasish Roy**, "Simple high-precision diode laser system with digital control," *Appl. Opt.* 62, 956-963 (2023).

- Suman Garain, Suman Mondal, Kalan Mal, **Subhasish Roy** and Amitava Bandyopadhyay; “Controlling optical bistability, multistability and all-optical switching through multi-photon excitation process”; **J. Phys. B: At. Mol. Opt. Phys.** 56 (2023) 185401 (11pp).
- M. Rahaman, A. Thakur, M. Maity, **S. Roy** and T.K. Kundu; “Nature of transient currents and voltages in the power chain for a Highly Segmented Fast Detector run by Low Voltage Power Supply”; **Journal of Instrumentation**, Volume 18, September 2023.
- Sumon Chatterjee, Rini Labar, Mehbub A K Nooruddin, **Subhasish Roy** and Tapas Kumar Kundu; “DC Conductivity Mechanism in La_{0.7}Sr_{0.3}MnO₃ (LSMO)-ZnO Nanocomposites”; **J. Appl. Phys.** 134, 064301 (2023) <https://doi.org/10.1063/5.0151397>.
- Suman Garain, Surajit Goldar, **Subhasish Roy**, and Amitava Bandyopadhyay; “Controlling optical multistability and all-optical switching in a four level Y-type atomic system”; **Indian J Phys** **98**, 3095–3105 (2024). <https://doi.org/10.1007/s12648-024-03088-5>.

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