

Curriculum Vitae

Personal Information

Name : Subhasish Roy
Gender : Male
Nationality : Indian

Current Position : Assistant Professor – III
Address : Department of Physics
Siksha Bhavana
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Educational Details

Degree	Board/University
Ph.D.	Visva-Bharati, India
M.Sc. (Physics with specialization in Electronics & Radio Physics)	Burdwan University, India
B.Sc. (Hons. in Physics)	Abhedananda Mahavidyalaya, Sainthia, Birbhum Burdwan University, India
Higher Secondary (10+2)	West Bengal Council of Higher Secondary Education, India
Madhyamik Examination (10)	West Bengal Board of Secondary Education

Teaching Experience

Positions held	Institution	Year
Part-time Lecturer	Department of Electronics Suri Vidyasagar College Suri, Birbhum India	1999 - 2002
Assistant Teacher	Suri P. & C.M.M. High School	2003-2007

	Suri, Birbhum India	
Lecturer in Electronics	Sarsuna College, Calcutta University Sarsuna Kolkata, India	January 2007 – August 2007
Assistant Professor	Department of Physics Visva-Bharati University Santiniketan India	August 2007 -

Research Experience

Research Area **Electronics & Instrumentation, Condensed Matter Physics**

Awards / Academic Distinction

- **Awarded University Gold Medal in the Master's degree examination from the University of Burdwan.**
- **Associate Member of the European Organization for Nuclear Research (Organisation européenne pour la recherche nucléaire) CERN, Geneva, Switzerland.**
- **Associate Member of India-based Neutrino Observatory (INO) project.**
- **Member of The Institute of Electrical and Electronics Engineers (IEEE), New York.**
- **Member of American Association of Physics Teachers (AAPT).**

Publications

1. **Roy, S.**, Sil, S. & Chakravarti, A. A voltmeter with browser-based control: an inexpensive instrument. *Indian J Phys* **84**, 301–307 (2010). <https://doi.org/10.1007/s12648-010-0009-z>.
2. **Roy, S.**, Chakravarti, A. & Sil, S. A simple phase-sensitive amplifier with automatic offset nulling. *Indian J Phys* **86**, 117–124 (2012). <https://doi.org/10.1007/s12648-012-0016-3>.
3. Bobillier, Vincent; Krohg, Petter ; Vasey, Francois ; Karmakar, Sabyasachi ; Maity, Manas ; **Roy, Subhasish** ; Kundu, Tapas Kumar; *PoS TWEPP-17* (2018) 058; DOI: [10.22323/1.313.0058](https://doi.org/10.22323/1.313.0058).
4. Achrekar, S. *et al.* (2018). Electronics, Trigger and Data Acquisition Systems for the INO ICAL Experiment. In: Liu, ZA. (eds) Proceedings of International Conference on Technology and Instrumentation in Particle Physics 2017. TIPP 2017. Springer Proceedings in Physics, vol 212. Springer, Singapore. https://doi.org/10.1007/978-981-13-1313-4_55.
5. **Subhasish Roy**, Mehbub A K Nooruddin, "A Simple Lock-in-Amplifier: An Inexpensive Student Instrument", *IJRAR - International Journal of Research and Analytical Reviews (IJRAR)*, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.5, Issue 4, Page No pp.52-56, December 2018, <http://www.ijrar.org/IJRAR1905028.pdf>.
6. Mehbub A. K. Nooruddin *and* **Subhasish Roy** , A simple digital phase-sensitive detector using AVR microcontroller, *American Journal of Physics* **88**, 153-158 (2020) <https://doi.org/10.1119/10.0000376>.

7. **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>.
8. Mehbub 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>.
9. 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>.
10. 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.
11. 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.
12. 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>.
13. 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>.
14. Dutta, S., Mukherjee, K., **Roy, S.** (2022). Analysis of All-Optical XNOR Gate Using Quantum Dot Semiconductor Optical Amplifier (QDSOA). In: Sikdar, B., Prasad Maity, S., Samanta, J., Roy, A. (eds) **Proceedings of the 3rd International Conference on Communication, Devices and Computing. Lecture Notes in Electrical Engineering**, vol 851. Springer, Singapore. https://doi.org/10.1007/978-981-16-9154-6_12.
15. 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). <https://doi.org/10.1364/AO.479656>.
16. S Chatterjee, R Labar, MAK Nooruddin, **S Roy**, TK Kundu, "DC conductivity mechanism in La_{0.7}Sr_{0.3}MnO₃ (LSMO)-ZnO nanocomposites", Journal of Applied Physics 134 (6) (2023). <https://doi.org/10.1063/5.0151397> .
17. 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. DOI: 10.1088/1748-0221/18/09/P09020.