



## Bipin B. Tripathy, M.Sc., B.Ed

**Name** : Mr. Bipin Bihari Tripathy

**Designation** : Sr. Assistant Professor

**Department** : Department of Basic Science and Humanities (Physics)  
(JOINED THE INSTITUTE IN 2001)

**Contact** : +919937542185 (M)

**Email** : bipin@silicon.ac.in

### RESEARCH INTERESTS

Experimental condensed matter Physics: Synthesis and characterization of TiO<sub>2</sub> (doped and un-doped) bulk, film and nanomaterials.

Elemental analysis of materials by non-destructive nuclear techniques (PIXE, EDXRF, External PIXE).

### Academic Qualifications

Ph.D (Physics): Utkal University (Cont.)

M. Sc. (Physics): Utkal University, India

Specialization: Electronics.

CSIR- NET (LS) in Physical Science

**TEACHING EXPERIENCE:** 19 years teaching experience in teaching ENGINEERING PHYSICS, APPLIED PHYSICS, SEMI-CONDUCTOR DEVICES, ELECTRONIC DEVICES AND MATERIALS SCIENCE & ENGINEERING

**RESEARCH EXPERIENCE:** 8 YEARS

## PUBLICATIONS

### JOURNAL

- [1]. Evolution of microstructure and optical properties of TiO<sub>2</sub>/Au nanocomposite, **B. B. Tripathy**, M.R. Behera, H. Rath, P. Mallick and N. C. Mishra, Indian J. of Pure and Appl. Physics, Vol. 57, February 2019, pp. 95-100.
- [2]. Study of Phase Transformation in TiO<sub>2</sub> by High Energy Planetary Ball Mill, **B. B. Tripathy**, H. Rath, P. Mallick and N. C. Mishra, Adv. Sci. Engg. And Med., Vol 9, 2, Feb 2017, pp. 144-147.

- [3]. Evolution of structural and optical properties in TiO<sub>2</sub> nanoparticles prepared by high-energy ball milling, **B. B. Tripathy**, P. K. Sahoo, D. K. Mishra, S. K. S. Parashar and N. C. Mishra, Adv. Sci. Lett., Vol 20 (3/4), March 2014, pp. 612- 616.
- [4]. Effect of doping on the phase transformation in TiO<sub>2</sub>- A Review, **B. B. Tripathy**, Orissa J of Physics, Vol 21(1), Feb 2014, pp. 33-41.
- [5]. Elemental analysis of coal and coal ash by PIXE Technique, K. C. Patra, T. R. Rautray, **B. B. Tripathy**, P. Nayak, Applied Radiation and Isotopes, Vol 70, Issue 4, April 2012, pp 612-616.
- [6]. Analysis of ancient Indian silver punch-marked coins by external PIXE, T.R. Rautray, S. S. Nayak, **B. B. Tripathy**, S. Das, M.R. Das, S. R. Das, P.K. Chattopadhyay, Applied Radiation and Isotopes, Volume 69, Issue 10, Oct 2011, pp 1385-1389.
- [7]. Elemental analysis of ancient silver coins by non destructive techniques- A review, **B. B. Tripathy** and T. R. Routray, Orissa J. of Physics, Vol.17, 2, August 2010, pp.213-220.
- [8]. Elemental analysis of silver coins by PIXE technique, **B.B. Tripathy**, Tapash R. Rautray, A.C. Rautray and V.Vijayan, Applied Radiation and Isotopes, Vol 68, Issue 3, March 2010, pp 454-458. ISSN 0969-8043.
- [9]. Analysis of Indian Silver Coins by EDXRF Technique, **B.B.Tripathy**, Tapash R. Rautray, Satya R. Das, Manash R. Das and V. Vijayan, Int. J of PIXE, Vol 19, Issues: 3-4, 2009, pp. 167-173.
- [10]. Elemental analysis of silver Punch-marked coins, Tapash R. Rautray, **B. B. Tripathy**, A. C. Rautray, V. Vijayan, Orissa J of physics, Vol.16, No.2, Aug 2009, pp. 373-377.

## ANY OTHER

### Poster Presentation:

- [1]. Synthesis and Characterization of Au-TiO<sub>2</sub> nanocomposites, **B. B. Tripathy**, M.R. Behera, P. K. Sahoo, and N. C. Mishra, national Seminar on recent advances in physics (NSRAP-14), Berhempur University, Berhempur, May. 5-6, 2014.
- [2]. Evolution of structural and optical properties in TiO<sub>2</sub> nanoparticles prepared by high-energy ball milling, **B. B. Tripathy**, P. K. Sahoo, D. K. Mishra, S. K. S. Parashar and N. C. Mishra, national conference on recent trends in condensed matter physics (RTCMP-14), ITER, SOA University, Bhubaneswar, Feb. 8-9, 2014.
- [3]. Study of Phase transformation in TiO<sub>2</sub> by high energy ball milling, **B. B. Tripathy**, H. Rath, S. K. S. Parashar and N. C. Mishra, National conference on condensed matter physics (CMDAYS-13), NIT Rourkela, Aug. 29-31, 2013.
- [4]. Analysis of Indian silver coins by EDXRF technique by **B. B. Tripathy**, T.R.Routray and V. Vijayan, National Conference on X-Ray Fluorescence (XRF 2010), held at Saha Institute of Physics, Kolkata, January 12 – 15, 2010.

CONFERENCE/ SEMINAR/ WORKSHOP ATTENDED: 30

STAFF DEVELOPMENT PROGRAMME: 07

ONLINE (NON-CREDIT) COURSE COMPLETED: 15 (THROUGH COURSEERA)

**MEMBERSHIP:** ORISSA PHYSICAL SOCIETY (LIFE MEMBER)