CURRICULUM VITAE

Name: Dr. Rajendra Pratap

Contact Information:

Designation: Assistant Professor

Institution: University Department of Physics,

Binod Bihari Mahto Koyalanchal University

(BBMKU), Dhanbad

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Date of Birth: July 3, 1960

Date of Joining: October 3, 1985

Educational Qualifications

• **B.Sc.** (Physics Hons.): 1982

• M.Sc. (Physics): 1984

(Specialization: Nuclear & Particle Physics)

• **Ph.D.:** 2016

Administrative Roles

1. Controller of Examinations

R.S. More College, Govindpur November 9, 2015 – February 14, 2019

2. Professor In-Charge

R.S. More College, Govindpur February 14, 2019 – December 31, 2023

3. Head of the University Department of Physics

Binod Bihari Mahto Koyalanchal University (BBMKU), Dhanbad January 1, 2024 – Present

Assignments and Committees

- 1. Professor In-Charge
- 2. Coordinator, IQAC
- 3. Coordinator, Student Placement Cell
- 4. Nodal Officer, Admission Cell
- 5. Member, Green Campus Committee
- 6. Member, NAAC Steering Committee
- 7. Convener, Free Ship Committee
- 8. Member, Digitalization & Webinar Committee

Research Publications

- 1. Realization of higher-order antibunching in harmonic generation. National Seminar on Nanomaterials and Their Applications (NANOMAT 2011), ISM Dhanbad, Feb 10, 2011, p. 41.
- 2. Higher-order squeezing and sub-Poissonian photon statistics in fourth harmonic generation. National Seminar on New Sources of Energy Using Nanotechnology, Jubilee College, Bhurkunda, Sept 8, 2011, p. 13.
- 3. Squeezing and sub-Poissonian effects of light in third harmonic generation. Acta Physica Polonica A (Poland), 2014, Vol. 125, No. 6, pp. 1126–1131.
- 4. Effect on squeezing and sub-Poissonian effects of light in fourth harmonic generation. Optik International Journal for Light and Electron Optics (Elsevier, Netherlands), 2014, Vol. 125, Issue 3, pp. 1065–1070.
- 5. Non-classical effects of light in fifth harmonic generation. ISRN Optics (USA), 2014, pp. 1–9.
- 6. Sum squeezing of the field amplitude in four-wave mixing process. National Seminar on Recent Advances in Physical Science (RAPS 2018), P.K.R.M. College, Dhanbad, Jan 19–20, 2018, p. 51.

Seminars, Conferences, and Workshops

Total Attended: 07

Papers Presented: 03

- 1. New Sources of Energy Using Nanotechnology, **Jubilee College**, **Bhurkunda**, September 8–10, 2011.
- 2. Nanomaterial and Their Application, **ISM Dhanbad**, February 10–11, 2011.
- 3. Research Methodology and Data Analysis, **ISM Dhanbad**, January 21–25, 2013.
- 4. Prospect of Cultivation and Marketing of Medicinal Plants in Jharkhand, Chas College, Chas, April 11–12, 2015.
- 5. Harmony with Nature in Context of Resource Conservation and Climate Change, **VBU Hazaribagh**, October 22–24, 2016.
- 6. Recent Advances in Physical Science (RAPS 2018), **P.K.R.M. College, Dhanbad**, January 19–20, 2018.
- 7. Promotion of Research in Science and Technology, **DHTE Jharkhand**, February 1–2, 2024.

National and International Webinars/Symposia

Total Attended: 06 (International: 02, National: 04)

- 1. *International Webinar on Nuclear Physics and Applications in Medicine*, F.M. University, Balasore, July 30 August 1, 2020.
- 2. International Symposium on Material Science and Innovation for a Sustainable Society, Mizoram University, August 26–27, 2020.
- 3. *Mathematical Models on COVID-19*, Achhuram Memorial College, June 9, 2020.
- 4. Indian Association of Physics Teachers (IAPT), August 8–9, 2020.

- 5. Fundamentals of Microprocessors, Government PG College, MHOW, August 24, 2020.
- 6. *Role of Symmetries in Physics and Quasi-periodic Order,* Ashutosh College, August 24 and 28, 2020.

Professional Development Programmes

- 1. Orientation Course, **IIT Kharagpur**, October 3–12, 1996.
- 2. AIDS Awareness Educational Programme, **VBU**, January 31 February 3, 1997.
- 3. NSS Central Camp (Resource Person), New Delhi, August 2001.
- 4. Refresher Course, **Dept. of Youth Affairs & Sports**, March 1–5, 2003.

UGC-Sponsored Programmes

- 1. Refresher Course, ASC, B.R. Ambedkar Bihar University, Muzaffarpur.
- 2. Orientation Course, ASC, Ranchi University, Nov 25-Dec 22, 2010.
- 3. Refresher Course, ASC, Ranchi University, March 4–24, 2013.
- 4. Refresher Course on Nano-Biotechnology, **IIT (ISM) Dhanbad**, May 25–June 14, 2017.