

# St. Xavier's College

Dr. Camil Bulcke Path, Ranchi

## Faculty Profile

Name of Faculty Member : Dr. Rajesh Kumar

Gender : Male

Email ID : rkumariitm@gmail.com

Name of Department : Department of Physics

Designation : Assistant Professor

Level of Teaching : Undergraduate

Academic Qualification : M.Sc., Ph.D.

Total Teaching Experience : 12 Years and 06 Months

UGC NET/SET Qualified : Yes

### **Research Papers Published:**

- Electronic States in a Doubly Eccentric Cylindrical Quantum Wire. Journal of Scientific Research, Vol. 12, No. 4, 473-483 (September 2020). ISSN: 2070-0237 and E-ISSN: 2070-0245. (UGC-CARE List Group I). DOI: http://dx.doi.org/10.3329/jsr.v12i4.45504
- 2) Study of Effect of Shape, Size and Symmetry on Electronic States of Some Three-dimensional Structures in Mesoscopic Size Regime, Research & Reviews: Journal of Physics, Vol.8, No.1, 23-33 (Ja 2019). ISSN: 2278- 2265 (online) and 2347-9973 (Print). (UGC listed Journal as on January 2019). <a href="http://sciencejournals.stmjournals.in/index.php/RRJoPHY/article/view/1495">http://sciencejournals.stmjournals.in/index.php/RRJoPHY/article/view/1495</a>
- 3) **ELECTRONIC STATES IN AN EQUILATERAL TRIANGULAR QUANTUM WIRE,** Pages: 118--123, Volume 4, no.2, January 2017, RANCHI UNIVERSITY JOURNAL OF SCIENCE AND TECHNOLOGY, ISSN: 2319-4227.
- 4) **ELECTRONIC STATES IN A PRISM SHAPED QUANTUM DOT**, Pages: 149-153, Volume 4, Issue 1, March 2015, INERNATIONAL JOURNAL OF ENGINEERING, SCIENCE and MATHEMATICS, ISSN :2320-0294.

#### Participation in UGC-HRDC Course/FDP/OC/RC:

- 1) MOOC Course by NPTEL: JAN-APRIL 2023, Topic: **Physics of Linear and Nonlinear Optical Waveguides**.
- 2) Participated in the Inter/multidisciplinary Refresher Course in MOOCs Development and Delivery on ONLINE MODE ,10/08/2022 to 23/08/2022, UGC- HUMAN RESOURCE DEVELOPMENT CENTRE, MORABADI CAMPUS, RANCHI UNIVERSITY, RANCHI – 834008 (Jharkhand).
- 3) Participated in the Refresher Course in **Research Methodology and Statistical Analysis (ID)**, 05/08/2021to 18/08/2021, UGC- HUMAN RESOURCE DEVELOPMENT CENTRE, MORABADI CAMPUS, RANCHI UNIVERSITY, RANCHI 834008 (Jharkhand).
- 4) Participated in the Refresher Course in **Basic Science (Chem., Maths., Phy.)**, 11-01-2016 to 31-01-2016, UGC-ACADEMIC STAFF COLLEGE, Ranchi University, Ranchi.
- 5) Participated in the 68<sup>th</sup> Orientation Programme, 21-05-2012 to 17-06-2012, by UGC-ACADEMIC STAFF COLLEGE, Ranchi University, Ranchi.

### <u>Seminar/Conference attended/Paper Presented (National/International)</u>:

- Presented a paper, "Measurement of surface profile along discontinuous surface using white light spectrally resolved phase shift interferometry" at The International Conference on Advances in Novel Materials: Towards Sustainable Future (ICAN24), 20-22 January 2024, organised by Department of Physics, St,. Xavier's College, Ranchi.
- 2) Presented a paper, "THE NATIONAL EDUCATION POLICY 2020 AND PHYSICS RESEARCH IN INDIA" at National Seminar on the theme Reorientation of Higher Education as envisioned in NEP 2020, 06-07 October 2023, Organised by Department of Education, St. Xavier's College, Ranchi.
- 3) Presented a paper, "EFFECT OF ECCENTRICITY ON ECTRONICSTATES IN DOUBLY-CONNECTED QUANTUM WIRE" AN INTERDISCIPLINARY INTERNATIONAL CONFERENCE ON EMERGINGSUSTAINABLE TECHNOLOGIES, POLICIES AND METHODOLOGIES (12th-13th May 2023) organized by Marwari College, Ranchi, India.
- 4) Presented a paper entitled, "Solution of Schrödinger like equation in multiply- connected cylindrical hetrostructures" in International Web Conference on emerging areas of Mathematics and Mathematical Sciences-

- 2020 organized by Calcutta Mathematical Society, Kolkata during 12-14 December, 2020.
- 5) Presented a paper entitled, "Electronic states in an equilateral prism quantum dot" at National Conference on "Recent Trends in Research in Applied Sciences: An Interdisciplinary Approach", 6-7 December, 2018, organized by Ganesh Lal Agrawal College, Medininagar, Palamu, Jharkhand -822102 (India), (A Constituent Unit of Nilamber-Pitamber University, Medininagar), Sponsored by Higher, Technical Education & Skill Development Department, Govt. of Jharkhand, Ranchi.

[Dr. Rajesh Kumar]