CV FORMAT

1. Name: Rajendra Bahadur Singh

2. Profession: Assistant Professor

3. Education: Ph.D. In physics

4. Nationality:Indian

- 5. Membership of Professional Associations: Indian Science Congress
- 8. Area of Research: Material Science, Renewable Energy & High Energy Physics

9. Research Contribution:

The research contribution in terms of publications is meaningful. Major research contribution is in the area of analysis of biomedicine and its impact on human body; material characteristics; Simulation; Ecology studies.

10. List of Publication:

Out of 40 publications

- 1. Fourier transform infrared spectra and normal mode analysis of 1-[(3-methylphenyl)...]ethane (Centhaquin): a potent centrally acting anti-hypertensive agent 15-21, Spectrochimica Acta Part A
- 2. Experimental (FT- IR, UV-visible, NMR) spectroscopy and molecular structure----- density functional theory, IOSR Journal of Biotechnolo gy and Bio Chemistry
- 3. Bio-accumulation of Heavy Metals (Zn,Cu,Fe,Cd,Ni and Cr) and wild plants near express highway (NH25) in unnao district, UP state (India,) 777-787, Journal of Biological and Chemical Research
- 4. Combined Experimental and Quantum Chemical Analysis ofacetonitril; Organic & Biomolecular Chemistry
- 5. Ecological studies......Unnao district of UP state, India 149-152, Research in Environment and Life Sciences
- 6. Non-Covalent interactions and spectroscopic study on Chalcone derivative 1-(4-chlorophenyl)-3-95-methylfuran-2-yl) prop-2-en-1-one, Journal of Molecular Structure.
- 7. Srishti Nagu, Jaydip Singh, Jyotsna Singh, R.B. Singh; Impact of cross-sectional

- uncertainties on DUNE sensitivity due to nuclear; Nuclear Physics B 951 (2020) 114888
- 8. <u>Jaydip Singh</u>, <u>Srishti Nagu</u>, <u>Jyotsna Singh</u>, <u>R.B. Singh</u>; Quantifying multinucleon effect in the Ar-target using High Pressure gas TPC DUNE Near Detector; https://arxiv.org/abs/1909.10329
- 9. "Atmospheric muon charge ratio analysis at the INO-ICAL detector" Jaydip Singh and Jyotsna SinghAdvances in High Energy Physics, 2019
- 10. Sabeeha Naaz, Anupam Yadav, Jyotsna Singh, R.B. Singh (Lucknow U.), Effect of final state interactions on neutrino energy reconstruction at DUNE, Nucl. Phys. B933 (2018) 40-52, arXiv:1804.02191 [hep-ph]
- 11. <u>Srishti Nagu, Jaydip Singh, Jyotsna Singh,</u> Nuclear Effects and CP Sensitivity at DUNE, <u>arXiv:1906.02190</u> [hep-ph], Advances in High Energy Physics, Volume 2020 | Article ID 5472713 | 6 pages | https://doi.org/10.1155/2020/5472713

11. Popularization of Science

Have touched roughly half of the Uttar Pradesh's rural area with popularization programs on Science to motivate young students.

- 12. Invited Lectures: 30
- 13. Session Chair in Conferences: 20
- 14. Papers Published in National International Conferences: 25
- 15. National Collaboration :01