

DR. RAMANSHU PRABHAKAR SINGH

Assistant Professor, Department of Physics, Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh 222001 India.

Phone: +91 9628210239

ramanshupsingh@gmail.com, ramanshupsingh@vbspu.ac.in

Citizenship: India



OBJECTIVE

Leveraging my expertise in Computational Physics that I gained during my PhD, I'm dedicated to advancing our understanding of the universe's high-energy phenomena through research and education. I am involved with research in the field of High Energy Astrophysics with focus on X-Ray Astronomy at present.

EDUCATION

PhD	Veer Bahadur Singh Purvanchal University, Physics Thesis title: “ <i>Ultrasonic and Thermophysical Properties of Advanced Materials</i> ”, Supervisor: Dr. Giridhar Mishra	2023
MSc	University of Allahabad, Physics, CGPA: 8.55 Specialization: Nuclear and Particle Physics	2018
BSc	University of Allahabad, Physics, Chemistry and Mathematics Percentage: 62%	2016

HONORS, AWARDS AND GRANTS

SERB International Travel Support To attend X-Vision 2023 A Joint IAU I-HOW and COSPAR Capacity Building Workshop in X-ray Astronomy , North-West University, Potchefstroom, South Africa during Feb 06-17, 2023	2023
CSIR-Junior Research Fellowship Awarded for Ph. D. degree	2019

PUBLICATIONS

Peer Reviewed Journal Publications

1. **Ramanshu P. Singh**, Shakti Yadav, A. K. Tiwari, Giridhar Mishra, “Theoretical Investigation of Mechanical and Thermal Features in ScTiZr and ScTiHf Alloys: A Comparative Study”, *Journal of Pure and Applied Ultrasonics*, vol 45, no. 3, pp 50-59, 2023.

2. **Ramanshu P. Singh**, Shakti Yadav, Devraj Singh, Giridhar Mishra, “Theoretical investigation of temperature dependent elastic, thermophysical and ultrasonic properties of Sc-Ti-Zr-Hf quaternary alloy” *Applied Innovative Research (AIR)* vol 4, no. 1, pp. 33-40, 2023.
3. Shakti Yadav, **Ramanshu P. Singh**, Devraj Singh, Giridhar Mishra, “Investigation of temperature dependent mechanical, thermophysical and ultrasonic properties of ScZrHf ternary alloy” *Journal of Pure and Applied Ultrasonics*, vol 44, no. 3-4, pp 79-85, 2022.
4. **Ramanshu P. Singh**, Shakti Yadav, Devraj Singh, Giridhar Mishra, “Theoretical approach to investigate temperature dependent Ultrasonic and Thermophysical Properties of Ti-Zr-Hf ternary alloy, *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, vol 10, no. 11, pp 583-588 2022.
5. S. Yadav, **Ramanshu P. Singh**, Giridhar Mishra, Devraj Singh, “Mechanical and thermophysical properties of 4d-transition mononitrides” *Zeitschrift für Naturforschung A*, vol. 77, no. 7, pp. 701-713, 2022.
6. **Ramanshu P. Singh**, S. Yadav, Giridhar Mishra, Devraj Singh, Pressure dependent ultrasonic properties of hcp hafnium metal, *Zeitschrift für Naturforschung A*, vol.76, No.6, pp. 549-557, 2021.

PRESENTATIONS AND INVITED LECTURES

1. **Workshop Oral Presentation:** Spectral and Timing analysis of GX 339-4 and GRS 1915+105, in *X-ray Vision of the Energetic Universe: A Joint IAU I-HOW and COSPAR Capacity Building Workshop in X-ray Astronomy “X-VISION” 2023*, North-West University, Potchefstroom, South Africa during Feb 06-17, 2023.
2. **Invited Lecture**, “Investigation of Ultrasonic and Thermophysical Properties of HCP Metals,” in *International Conference on Ultrasonics and Material Science for Advanced Technology (ICUMSAT-2022)* organized by Telangana University, Nizamabad during 01-03 August, 2022.
3. **Ramanshu P. Singh**, Shakti Yadav, Devraj Singh, Giridhar Mishra, “Ultrasonic and thermophysical properties of binary and ternary alloys of transition metals Ti, Zr and Hf,” *2nd International Conference on Recent Advances in Materials Science and Nanotechnology*, organized by G. S. Tompe Arts, Commerce & Science College, Chandur Bazar, Amravati. May 12-14, 2022, PAPERID: O-12.
4. **Ramanshu P. Singh**, Giridhar Mishra, “Pressure dependent Ultrasonic parameters of hcp structured Hafnium metal,” *International Conference on Ultrasonics and Materials Science for Advanced Technology (ICUMSAT-2019)*, organized by V. B. S. Purvanchal University, Jaunpur; Nov. 16-18, 2019, PAPERID: O-121.

PROFESSIONAL TRAINING

- **Refresher Course on Astronomy and Astrophysics 2024**, Inter-University Centre for Astronomy and Astrophysics, Pune, May 13-June 14, 2024
- **X-Vision 2023 X-ray Vision of the Energetic Universe: A Joint IAU I-HOW and COSPAR Capacity Building Workshop in X-ray Astronomy**, North-West University, Potchefstroom, South Africa, February 06-17, 2023.
- 4-Week Induction/Orientation Programme for “**Faculty in Universities/Colleges /Institutes of Higher Education**” Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi, May 18-17 June, 2021.
- **Refresher Course on Astronomy and Astrophysics 2021**, Inter-University Centre for Astronomy and Astrophysics, Pune, May 10-June 11, 2021

PROFESSIONAL POSITIONS AND AFFILIATIONS

- Member, Board of Studies for M. Sc. in Physics (Campus), Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh 222001 India (2023-2025)
- Assistant Professor, Department of Physics, Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh 222001 India. Nov. 2019-Present.
- CSIR-Junior Research Fellow (Ph. D. Scholar), Department of Physics, Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research, Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh 222001 India.
Jan. 2019-Nov. 2019.

MENTORSHIP AND SUPERVISION

M. Sc. Degree Dissertation

- **Rashmi Maurya**, “*Timing analysis of GX 339-4 during 2021 outburst using NICER observations*” (2022-2024).
- **Avaneesh Yadav**, “*Variability of QPOs and other timing-spectral parameters of GX339-4 during 2021 outburst using NuSTAR observations*” (2022-2024).

LANGUAGES

Hindi: Native Language

English: Intermediate Speaker, Advanced Listener, Reader and Writer

COMPUTER SKILLS

Programming: C++, Python, HTML, LaTeX

Applications: Microsoft Office, LibreOffice, Origin, HEASoft, GHATS

Platforms: Ubuntu, Windows.

OTHER

Hobby: Photography