



जम्मू केंद्रीय विश्वविद्यालय Central University of Jammu

राया-सूचानी (बागला), जिला: सांबा-181143, जम्मू (जम्मू एवं कश्मीर), भारत
Rahya-Suchani (Bagla), District: Samba – 181143, Jammu (J&K), India.

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FACULTY PROFILE

First Name	DR. MANVI	Middle Name		Last Name	RAJPUT	Photograph
Title & Designation		ASSISTANT PROFESSOR				
Address		Department of Physics and Astronomical Sciences, Central University of Jammu Rahya-Suchani (Bagla), Samba-181143, Jammu (J&K)				
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Web-Page						

Educational Qualifications:

Degree	Institution	Year	Achievement/Remarks
B.Sc.	GDC Kathua (University of Jammu)	2016	Secured a merit position (10 th) in the Science stream under University of Jammu
M.Sc. (Physics)	University of Jammu	2018	First Rank Holder
Ph.D. (Physics)	Central University of Jammu	2022	Awarded Ph.D. in Physics

Areas of Interest / Specialization:

- Nuclear Physics
- Nuclear Structure and Nuclear Spectroscopy
- Material Science

Fellowships and Eligibility Qualifications

Qualification/Fellowship	Agency/ Institute	Year
JRF	DST, Govt. of India	2019
SET	J&K State Eligibility Test Agency	2023

Ph. D. SUPERVISION

Sr. No.	Name of the Research Student	Degree	Status
1.	Ritvik Gupta	Ph.D.	ongoing
2.	Vikas Dhiman	Ph.D.	ongoing

Publications Profile:

a) Research Publication

S.No.	Paper Title	Year	Journal	Volume
1.	Microscopic analysis of yrast and near yrast band structures in even-even ¹⁸⁸⁻¹⁹⁶ Hg	2026	The European Physical Journal A	62

	Isotopes			
2.	Study of shape evolution in even-even $^{94-100}\text{Mo}$ isotopes	2026	The European Physical Journal A	62
3.	Theoretical analysis of collective band structures in odd-mass $^{117-125}\text{Cs}$ isotopes	2026	Journal of Physics G: Nuclear and Particle Physics	53
4.	Insights into triaxial collectivity of odd-mass $^{111-119}\text{Sb}$ isotopes	2026	Nuclear Physics A	1067
5.	Theoretical Insights into Nuclear Structure of ^{196}Pt	2026	EPJ Web of Conferences/, 02021	356
6.	TPSM Analysis of Structural Evolution in ^{109}Sb	2026	EPJ Web of Conferences/, 02022	356
7.	Microscopic study of ^{117}Te isotope using projected shell model	2026	EPJ Web of Conferences, 02003	356
8.	Theoretical investigation of near yrast bands in odd-mass $^{123-131}\text{La}$ isotopes	2025	The European Physical Journal A	61
9.	Shape evolution of even-even strontium isotopes near $N = 50$ shell closure	2025	The European Physical Journal A	61
10.	Microscopic Insights into the Structure of Even-Even $^{144-148}\text{Ce}$ Isotopes	2025	Nuclear Physics A	1061
11.	Shape Coexistence in $^{119,121}\text{I}$: Insights from the Triaxial Projected Shell Model	2025	International Journal of Modern Physics E	34
12.	Theoretical investigation of nuclear structure and shape evolution in even-even Gd isotopes with $A = 152-160$	2025	The European Physical Journal Plus	140
13.	Enhanced UV protection and photocatalytic activity in samarium and Europium co-doped TiO_2 thin films: A durable solution for protective coatings	2025	Materials Science and Engineering B	320
14.	Microscopic study of near yrast band structures in odd mass $^{117-127}\text{I}$ isotopes	2024	The European Physical Journal A	60
15.	Theoretical study of nuclear structure properties of positive parity states of odd mass $^{103-117}\text{Ag}$ nuclei	2022	The European Physical Journal A	58
16.	Triaxial projected shell model study of γ -bands in even even $^{104-122}\text{Cd}$ nuclei	2022	Nuclear Physics A	1019
17.	Microscopic insight into the structure of negative parity yrast bands in $^{99-117}\text{Pd}$ isotopes	2021	Nuclear Physics A	1014
18.	Quasiparticle structure of low-lying yrast energy levels and $\gamma\gamma$ -bands in $^{164-174}\text{Hf}$ nuclei	2021	The European Physical Journal A	57
19.	A detailed study of nuclear structure of odd-mass Pm isotopes near $N=82$ shell closure	2021	The European Physical Journal Plus	136
20.	Systematic study of odd-mass $^{151-161}\text{Pm}$ and $^{154,156}\text{Pm}$ isotopes using projected shell model	2020	Chinese Physics C	44

(b) No. of Conference paper/Workshop/Courses: 20

Involvement in the Administrative Responsibilities :

क्र.सं /S.No.	प्रशासनिक जिम्मेदारियाँ/ Administrative Responsibilities	से/From	तक/To	टिप्पणी/Remarks
1.	Timetable In charge	December 2023	Till date	Departmental level
2.	Co-convenor Dramatics Club	November 2024	Till date	University level

Life Member

Indian Physics Association, Membership No-LM-2023-CHA-13829

[Dr. Manvi Rajput]