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Specialisation:	Theoretical Nuclear Physics	
Research Interest:	Low-energy heavy-ion reactions	
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Publications

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2. Exploring fission mode transitions in fermium isotopes,
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3. Fission path analysis in ^{48}Ca -induced actinide reactions using the dynamical cluster-decay model,
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Nucl. Phys. A 1063 (2025) 123194, <https://doi.org/10.1016/j.nuclphysa.2025.123194>
4. Asymmetric to symmetric fission transition in $^{180}\text{Hg}^*$: Effects of excitation energy and angular momentum
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3. Dynamical Model for the decay of hot and rotating compound nucleus,
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9. Collective clusterization effects in light heavy ion reactions. R.K.

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PG Project dissertation Supervised: 37

M.Phil./Ph.D.

01 Ph.D. (Supervised), 02 Ph.D.(supervising)

Supervised/Supervising:

Participation in Seminars/Conferences/workshop/invited talk etc.

1. Invited talk in the national seminar cum workshop on "Recent trends in Basic and Applied Nuclear Physics" during 22-23, November, 2023.
2. Member organizing team of National Conference on Frontiers in Chemical Science-4-5 Nov, 2022.
3. Organizing Secretary for the online international conference on theoretical aspect of nuclear physics, from 15-20 Feb, 2021.
4. Participated and presented poster in 65th DAE-BRNS Symposium on Nuclear Physics, December 1-5, 2021.
5. Two week FDP on "Managing online classes and co-creating MOOCs 2.0", from 18 May to 03 June, 2020. (online).
6. Online FDP on "Quest abound with radiation around: a webinar on cross disciplinary endeavours in radiation science" from 7th -11th December, 2020.
7. Online Curriculum design and development (online) 21st July to 31st July, 2020.
8. Subject refresher course-environment study from 3rd Sept to 18th Sept, 2020 (online).
9. One week one line FDP on Open source tools for research, 18-14 June, 2020.
10. Two days workshop on "Indian Mathematics" organized by Department of Mathematics, CUHP, during September 13-14, 2019.
11. National Workshop on "In Silico Approach for Modelling New Materials: Methodology & applications" organized by DPAS, CUHP during 14th – 20th January, 2019.
12. Resource Person for the Project evaluation in 26th state level Himachal Pradesh Children Science Congress-2018, during 9th – 12th October, 2018.

13. XXII National Symposium (NSU-2017) on “Advances in Ultrasonics and Materials Research”, held during November 8-10, 2017, organised by Department of Physics and Astronomical Science and Ultrasonic Society of India.
14. School on “Gravitation and Astroparticle Physics”, organized by CUHP and IUCAA, Pune, from 29-02-2016 to 12-03-2016.
15. Three days workshop on “Computerisation Experiments in Physics” organized jointly by CUHP and IUAC, New Delhi, from 17th to 19th March, 2016.
16. One Week Faculty Development Programme on “Emerging Trends of ICT in Higher Education” from 9th -15th June, 2016.
17. Two day workshop on “Experimental Physics” held during 4th to 5th April, 2016 at Department of Physics and Astronomical Science, CUHP.
18. Two days workshop on “Recent Trends in Modern Materials”, organised by Department of Physics and Astronomical Science, CUHP during March11-12, 2015.
19. National Conference on “Emerging Challenges in Physics & Nano Science”, during 4th March, 2015 at DAV College Dasuya, District Hoshiarpur Punjab (Invited talk).
20. Two days International Conference on “Emerging Trends in Basic and Applied Sciences” held during May 1-2, 2015, at MAU, Baddi, (H.P.)-India.
21. Invited talk on “Scientific typesetting software ‘Latex for Publications’” in One day workshop on scientific writing and presentation on 20th March, 2015 at CUHP.
22. Organised Three day workshop on “Physics Experiments Using Data Acquisition Kit EXPEYES” during 6th to 8th November, 2014 at CUHP.
23. One week Workshop on “Analytical Aspects of Dynamics”, held during 11th November, 2014 to 17th November, 2014 at CUHP.
24. One day National Workshop on “Astronomy & Astrophysics” jointly organized by NSCBM Govt. Post Graduate College Hamirpur (H.P.) and Inter-University Center for Astrophysics, Pune, Pune University, Maharashtra held on 15th October, 2012.
25. International Conference on “Recent Trends in Nuclear Physics”, held during 19-21st Nov, 2012 at CITTkara University Himachal Pradesh.
26. National workshop on “Mathematica: An integrated Environment for Computer Simulation in Physics and Mathematics” held on 28th -30th July, 2011 at Chitkara University, Himachal Pradesh.
27. DAE-BRNS Nuclear Physics Symposium held at Andhra University, Visakhapatnam, during December 26-30, 2011.
28. 11th Punjab Science congress, at Thapar University, Patiala, Feb 7-9, 2008.

29. Diamond Jubilee National Seminar on Advances in Physics, Feb 28-March 1, 2008, Department of Physics, Panjab University, Chandigarh.
30. 2nd Chandigarh Science Congress, Panjab University, Chandigarh. (India), March 14-15, (2008).
31. One day seminar on “Emerging Interactive Sciences: Road to Global Development” held at Govt. College for Girls, Sector 11, Chandigarh on August 23, 2008.
32. 1st Chandigarh Science Congress, Panjab University, Chandigarh. (India), March 10-11, (2007).
33. International Symposium on Heavy Ion Physics 2006 “ISHIP2006” Frankfurt Institute for Advanced Studies (FIAS), Johann Wolfgang Goethe-University, Frankfurt, Germany, April 3-6, 2006.
34. International Workshop on “Nuclear Structure Physics at The Extreme: New Direction” (NUSPE’05), March 21-24th, 2005, H.P. University, Shimla-5.
35. 91st Session of Indian Science Congress Association, jointly organized by Panjab University and I.M. Tech. Chandigarh, Jan. 3-7, 2004.
36. DAE-BRNS Symposium on Nucl. Phys., Dec. 6-10, 2004, at BHU, Varanasi.
37. DAE-BRNS Symposium on Nucl. Phy., Dec. 8-12, 2003, BARC, Mumbai.
38. National Level School on “Nuclear reaction and Structure Studies with Low energy Stable and Unstable Heavy ion Beams” Sept. 25-29, 2000, a joint venture of NSC, New Delhi and H.P.U. Shimla.

Awards & Honours Received

1. JRF and SRF under the Department of Science and Technology Projects (Dec, 2002-June, 2006 and Dec, 2006-August, 2008)
2. Research stay at Frankfurt Institute of Advance Study (1st January, 2006 to 15th April, 2006) under the Deutsche Forschungsgemeinschaft (DFG) grant Associated with Mercator Professorship.

Others:

Certification Course on the Radiation Safety Aspects in the Research Applications of Ionizing Radiation, from BARC, Mumbai-400085 (India).