

Dr. Samarjit Sihotra

Assistant Professor (Senior Scale)
Department of Physics
Panjab University, Chandigarh
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Area of Research

- ❖ Nuclear Structure studies in Experimental Nuclear Physics.
- ❖ Accelerator and Detector- Related R&D and Prototyping.

Professional background

- Lecturer/Assistant Professor, GNDU, Amritsar (2007 – 2010)
- Assistant Professor, Panjab University, Chandigarh (2010 onwards)

Teaching Experience (courses taught)

Almost eight years teaching experience of M.Sc. (Physics) classes (2007- 2014)
(Quantum Mechanics, Advanced Quantum Mechanics, Mathematical Physics and Statistical Mechanics, Electrodynamics, Nuclear physics, Experimental Techniques, and Low temperature techniques).

Educational Qualifications

- ❖ M. Sc. Physics (*Specialization in Electronics and Nuclear Physics*) -2004
- ❖ Ph. D in *Experimental Nuclear Physics*-2009. *Title of Thesis*
(Nuclear Structure Studies in A~100-130 Mass region)

Awards/Scholarships

- ❖ National Scholarship at secondary stage (H.P. Govt.)
- ❖ GATE qualified.
- ❖ CSIR NET- JRF (short listed for Shyama Prasad Mukherjee Fellowship Examination).

Research Experience and Research Projects

- ❖ Doing research in experimental Nuclear physics since 2004.
- ❖ GEANT4 Simulations for detectors R&D.
- ❖ Lifetime measurements
- ❖ Theoretical Nuclear Physics
- ❖ **Working on the projects entitled:**
 1. Accelerator and Detector- Related R&D and Prototyping” In Pre operative Programme for Indian participation in FAIR Project at GSI, Darmstadt, Germany; funded by DST (2009-till date).
 2. Normal deformed and strongly deformed band structures in Lu and Hf- Nuclei; funded by IUAC, New delhi (2011-2014).
 3. Nuclear Structure Studies in A~100 and 130 Mass regions; funded by UGC (2012-2015)
 4. Nuclear Structure studies in some Ag, Rh, and Pd Isotopes close to N=Z=50 shell closure; funded by IUAC, New delhi (2013-2016).

- ❖ M. Sc thesis supervised -18.
- ❖ M. Phil thesis Supervised -3.
- ❖ Ph. D thesis Supervising -3.

Our group is engaged in the study of nuclear structure at high spin, reaction dynamics and mechanism, Coulomb excitation and hyperfine interactions, accelerator and detector related R&D and prototyping at TIFR, Mumbai, GSI, Germany and Nuclear Science Center facility at New Delhi.

**PAPERS PUBLISHED IN REFEREED
INTERNATIONAL RESEARCH JOURNALS**

1. **Rotational structures in the ^{125}Cs Nucleus;** K. Singh, S. Sihotra, S.S. Malik, J. Goswamy, D. Mehta, N. Singh, R. Kumar, R.P. Singh, S. Muralithar, E. S. Paul, J.A. Sheikh, and C.R. Praharaj, Eur. Phys. J. A 27, 321 (2006).
2. **Multiple Band Structures in ^{131}Cs Nucleus;** S. Sihotra, R. Palit, Z. Naik, P.K. Joshi, A.Y. Deo, J. Goswamy, S.S. Malik, D. Mehta, C. R. Praharaj, H.C. Jain, and N. Singh, Physical Review C 78, 034313 (2008).
3. **Band structures in ^{129}Cs ,** S. Sihotra, K. Singh, S.S. Malik, J. Goswamy, R. Palit, Z. Naik, D. Mehta, N. Singh, R. Kumar, R.P. Singh, and S. Muralithar, Physical Review C 79, 044317 (2009).
4. **Structure of dipole bands in ^{106}In ,** A.Y. Deo, R. Palit, Z. Naik, S. Sihotra, S. Kumar, P. K. Joshi, I. Mazumdar, R. Kshetri, D. Mehta, and H.C. Jain, Physical Review C 79, 067304 (2009).
5. **Level structures in the ^{107}In Nucleus and their microscopic descriptions,** S. Sihotra, Z. Naik, R. Palit, A.Y. Deo, S. Kumar, P.K. Joshi, D. Mehta, and N. Singh, Eur. Phys. J. A. 43, 45 (2010).
6. **Structure of degenerate dipole bands in ^{106}In and investigation of similar structure in neighbouring odd-odd isotopes,** R. Palit, A.Y. Deo, Z. Naik, S. Sihotra, S. Kumar, P. K. Joshi, I. Mazumdar, D. Mehta, and H.C. Jain, Nucl Phys A **834**, 81 (2010).
7. **Excited states in ^{99}Pd ,** S. Sihotra, Z. Naik, S. Kumar, K. Singh, J. Goswamy, R. Kumar, R.P. Singh, S. Muralithar, N. Singh, R. Palit, and D. Mehta, Physical Review C **83**, 024313 (2011).
8. **Structural change of the unique-parity $\pi h_{11/2} \otimes \nu h_{11/2}$ configuration in ^{134}Cs ,** H. Pai, G. Mukherjee, A. Raghav, R. Palit, C. Bhattacharya, S. Chanda, T. Bhattacharjee, S. Bhattacharyya, S. K. Basu, A. Goswami, P. K. Joshi, B. S. Naidu, Sushil K. Sharma, A. Y. Deo, Z. Naik, R. K. Bhowmik, S. Muralithar, R. P. Singh, S. Kumar, S. Sihotra, and D. Mehta, Physical Review C 84, 041301(R) (2011).
9. **Small quadrupole deformation for the dipole bands in ^{112}In ,** T. Trivedi, R. Palit, J. Sethi, S. Saha, S. Kumar, Z. Naik, V. V. Parkar, B. S. Naidu, A. Y. Deo, A. Raghav, P. K. Joshi, H. C. Jain, S. Sihotra, D. Mehta, A. K. Jain, D. Choudhury, D. Negi, S. Roy, S. Chattopadhyay, A. K. Singh, P. Singh, D. C. Biswas, R. K. Bhowmik, S. Muralithar, R. P. Singh, R. Kumar, and K. Rani, Physical Review C 85, 014327 (2012).
10. **Structure of dipole bands in ^{112}In : Through Lifetime Measurement,** T. Trivedi, R. Palit, J. Sethi, S. Saha, S. Kumar, Z. Naik, V. V. Parkar, B. S. Naidu, A. Y. Deo, A. Raghav, P. K. Joshi, H. C. Jain, S. Sihotra, D. Mehta, A. K. Jain, D. Choudhury, D. Negi, S. Roy, S. Chattopadhyay, A. K. Singh, P. Singh, D. C. Biswas, R. K. Bhowmik, S. Muralithar, R. P. Singh, R. Kumar, and K. Rani, Journal of Physics: Conference Series 381, 012061 (2012).
11. **New spectroscopic informations in $^{98,99}\text{Rh}$ nuclei,** S. Kumar, S. Sihotra, K. Singh, V. Singh, J. Goswami, N. Singh, R. Palit, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik, S. K.

Ghorui, C. R. Praharaj and D. Mehta, AIP Conf. Proc. 1524, 127-131 (2013); doi: 10.1063/1.4801694.

12. **Small Quadrupole Deformation for the Dipole Bands in ^{112}In** ; T. Trivedi R. Palit, J. Sethi, S. Saha, S. Kumar, Z. Naik, V. V. Parkar, B.S. Naidu, A.Y. Deo, A. Raghav, P. K. Joshi, H. C. Jain, **S. Sihotra**, D. Mehta, A. K. Jain, D. Choudhury, D. Negi, S. Roy, S. Chattopadhyay, A.K. Singh, P. Singh, D.C. Biswas, R.K. Bhowmik, S. Muralithar, R. P. Singh, R. Kumar, and K. Rani, [arXiv:1201.4757v1](https://arxiv.org/abs/1201.4757v1) [nucl-ex] 23Jan 2012.
13. **Structure of degenerate dipole bands in ^{108}Ag** , J. Sethi, R. Palit, S. Saha, T. Trivedi, G.H. Bhat, J.A. Sheikh, P. Datta, J.J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H.C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, B.S. Naidu, Z. Naik, S. Sihotra, P.M. Walker :Physics Letters B, Volume 725, Issue 1-3, p. 85-91(2013).
14. **Band structures in doubly odd ^{98}Rh** , S. Kumar, **S. Sihotra**, K. Singh, V. Singh, Sandeep, J. Goswamy, N. Singh, D. Mehta, S. S. Malik, R. Palit, R. Kumar, R. P. Singh, S. Muralithar, and R. K. Bhowmik, Physical Review C 89, 034303 (2014).
15. **Study of the level Structure of ^{108}Ag** , J. Sethi, R. Palit, S. Saha, T. Trivedi, G.H. Bhat, J.A. Sheikh, P. Datta, J.J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H.C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, B.S. Naidu, Z. Naik, **S. Sihotra**, P. M. Walker : EPJ web of Conferences 66, 02097(2014).
16. **Nuclear structure studies close to $N = Z = 50$** Kumar, S.; **Sihotra, S.**; Naik, Z.; Singh, K.; Goswami, J.; Singh, N.; Palit, R.; Muralithar, S.; Kumar, R.; Singh, R. P.; Bhowmik, R. K.; Mehta, D. AIP, Volume 1609, Issue 1, p.142-150 (2014)
17. **Band structures in doubly odd ^{99}Rh** , S. Kumar, V. Singh, K. Singh, **S. Sihotra**, J. Goswamy, N. Singh, S. S. Malik, I. Rangnarson, T. Trevedi, R. Palit, R. Kumar, R. P. Singh, S. Muralithar, and R. K. Bhowmik , A. Bharti, D. Mehta, J. Phys. G: Nucl. Part. Phys. 41 (2014) 105110 (27pp) :doi:10.1088/0954-3899/41/10/105110
18. **SPECTROSCOPY OF THE LOW-LYING STATES NEAR THE HIGH SPIN ISOMER IN ^{108}Ag** : J. Sethi, R. Palit, S. Saha, T. Trivedi, G.H. Bhat, J.A. Sheikh, P. Datta, J.J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H.C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, B.S. Naidu, Z. Naik, **S. Sihotra**, P. M. Walker : ACTAPHYSICAPOLONICA B, Vol. 46 (2015).
19. **Low-lying states near the $\pi = 6^+$ isomer in ^{108}Ag** Jasmine Sethi, R Palit, J.J. Carroll, S. Karamian, S. Saha, S. Biswas, Z. Naik, Tarkeshwar Trivedi, M.S. Litz, P. Datta, S. Chattopadhyay, R. Donthi, Umesh Garg, S. Jadhav, H.C. Jain, S. Kumar, Devinder Mehta, B.S. Naidu, G.H. Bhat, J.A. Sheikh, **S. Sihotra**, Philip Walker J. Phys. G: Nucl. Part. Phys. Accepted: 23 October 2015

Publications in Conferences/Symposium:

1. *Rotational structures in ^{125}Cs* , K.Singh, **S. Sihotra**, R. Kumar, J. Goswamy, D. Mehta, N. Singh, S.S. Malik, R.P. Singh, S. Muralithar, and R.K. Bhowmik Proc. DAE Symposium Nucl. Phys. 50, 254(2005).
2. *Band structures in ^{131}Cs* , **S. Sihotra**, K. Singh, Rajesh Kumar, J. Goswamy, D. Mehta, N. Singh, R.Palit, H.C. Jain, P.K. Joshi, and S.S. Malik, Proc. DAE Symposium Nucl. Phys. 51, 228 (2006).
3. *High spin states in ^{106}In* , A.Y. Deo, R. Palit, **S. Sihotra**, Z. Naik, S. Kumar, P.K. Joshi, I. Mazumdar, H.C. Jain, Kausik Basu, R. Kshetri, and R. Chakrabarti, Proc. DAE Symposium Nucl. Phys. 52, 193 (2007).
4. *Microscopic explanation of observed band structures of ^{131}Cs* , Z. Naik, R. Palit, **S. Sihotra**, A.Y. Deo, D. Mehta, and C.R. Praharaj, Proc. DAE Symposium Nucl. Phys. 52, 199 (2007).
5. *High spin states in ^{129}Cs* , **S. Sihotra**, K. Singh, J. Goswamy, D. Mehta, N. Singh, S.S. Malik, R. Palit, R. Kumar, S. Muralithar, R.P. Singh, and R.K. Bhowmik, Proc. DAE Symposium Nucl. Phys. 52, 228 (2007).
6. *Structures of Dipole Bands of ^{107}In* , **S. Sihotra**, Z. Naik, R.Palit, A.Y. Deo, S. Kumar, P.K. Joshi, D. Mehta, and N. Singh, Proc. DAE Symposium Nucl. Phys. 53, 235 (2008).
7. *Multiple band structures of $^{131;133}\text{Cs}$ isotopes*, R. Palit, **S. Sihotra**, A. Raghav, Z. Naik, K. Singh, A.Y. Deo, P.K. Joshi, J. Goswamy, S.S. Malik, D. Mehta, H.C. Jain, N. Singh, and C.R. Praharaj, Proc. CNS-RIKEN Joint International Symposium (gamma08) (2008).
8. *Band structures in ^{129}Cs* , **S. Sihotra**, K. Singh, J. Goswamy, S.S. Malik, D. Mehta, N. Singh, R.Palit, R. Kumar, S. Muralithar, R.P. Singh, and R.K. Bhowmik, Proc. DAE Symposium Nucl. Phys. 53, 347 (2008).
9. *High Spin Excitation in ^{99}Pd* , **S. Sihotra**, J. Goswamy, Z. Naik, R.Palit, S.S. Malik, D. Mehta, N. Singh, S. Muralithar, R. Kumar, R.P. Singh, and R.K. Bhowmik, Proc. DAE Symposium Nucl. Phys. 53, 351 (2008).
10. *Investigation of positive parity Degenerate Dipole Bands ^{133}Ce* , R. Palit, V.V. Parker, Z. Naik, H.C. Jain, P.K. Joshi, I. Mazumdar, A.Y. Deo, **S. Sihotra**, et al, Proc. DAE Symposium Nucl. Phys. 53, 323 (2008).
11. *Quadrupole and Octupole collectivity in ^{99}Pd* , **S. Sihotra**, Z. Naik, J. Goswamy, R. Palit, D. Mehta, N. Singh, S. Muralithar, R. Kumar, R.P. Singh, and R.K. Bhowmik, Proc. DAE Symposium Nucl. Phys. 54, (2009).
12. *High spin structure of ^{133}Cs* , A. Raghav, R. Palit, Z. Naik, A.Y. Deo, V.V. Parker, B.S. Naidu, H.C. Jain, P.K. Joshi, **S. Sihotra**, S. Kumar, D. Mehta, G. Mukherjee, and A. Goswami, Proc. DAE Symposium Nucl. Phys. 54, (2009).
13. *High spin spectroscopy of ^{134}Cs* , H. Pai, G. Mukherjee, S. Bhattacharyya, T. Bhattacharjee, R. Palit, A.Y. Deo, P.K. Joshi, B.S. Naidu, S. Sharma, A. Raghav, Z. Naik, A. Goswami, S.

- Kumar, **S. Sihotra**, D. Mehta, S.K. Basu, and S. Chanda, Proc. DAE Symposium Nucl. Phys. 54, (2009).
14. Nuclear Structure studies in $A \sim 100$ and $A \sim 130$ mass regions; **S. Sihotra**, DAE Symposium Proceedings in Nuclear Physics (2009), Mumbai.
 15. *Hartree-Fock microscopic description of band structures in ^{99}Pd* ; Z. Naik, **S. Sihotra**, J. Goswamy, Proc. DAE Symposium Nucl. Phys.55, 22(2010).
 16. *Excited States in ^{98}Rh* ; Surender Kumar, **S. Sihotra**, and K. Singh et al., Proc. DAE Symposium Nucl. Phys.55, 44 (2010).
 17. *Excited States in ^{99}Rh* ; **S. Sihotra**, Surender Kumar, and K. Singh et al., Proc. DAE Symposium Nucl. Phys. 55, 46 (2010).
 18. Excited states in ^{99}Pd , S. Sihotra, Z. Naik, **S. Kumar**, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, CHASCON (2010) Panjab University Chandigarh.
 19. *Band Structures in ^{96}Ru* ; Jaspreet Kaur, **S. Sihotra**, S. Kumar, K. Singh, J. Goswamy, N. Singh, R. Palit, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik, and D. Mehta, Proc. DAE Symposium Nucl. Phys. (2011)
 20. *Band Structures in $^{98,99}\text{Rh}$ Nuclei*, S. Kumar, **S. Sihotra**, K. Singh, J. Goswamy, N. Singh, R. Palit, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik, and D. Mehta, Proc. DAE Symposium Nucl. Phys. (2011)
 21. *Implementation of Digital Constant Fraction Discrimination for fast Scintillators*; S. Saha, R. Palit, J. Sethi, T. Trivedi, S. N. Mishra, B.S. Naidu, S. Jadhav R. Donthi, S. M. Davane, S. Kumar, S. Mandal, **S. Sihotra**, and D.Mehta, Proc. DAE Symposium Nucl. Phys. (2011)
 22. *Small axially symmetric deformation for dipole bands in ^{112}In* ; T. Trivedi, R. Palit, J. Sethi, S. Saha, S. N. Mishra, B.S. Naidu, S. Jadhav, R. Donthi, S. M. Davane, S. Kumar, **S. Sihotra**, and D.Mehta, Proc. DAE Symposium Nucl. Phys. (2011).
 23. Maximally spin aligned states in ^{96}Ru ; **S. Sihotra**, Jaspreet Kaur, S. Kumar, K. Singh, J. Goswamy, N. Singh, R. Palit, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik, and D. Mehta, Proc. , CHASCON (2011) Panjab University Chandigarh.
 24. High spin states in $^{98,99}\text{Rh}$, S. Kumar, **S. Sihotra**, Z. Naik, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, CHASCON (2012) Panjab University Chandigarh.
 25. **Band Structure in ^{96}Tc** , V. Pal Singh, S. Kumar, **S. Sihotra**, Z. Naik, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, Proceedings of the DAE Symp. on Nucl. Phys. 57 (2012).
 26. **Nuclear structure studies close to $Z \approx N \approx 50$** , S. Kumar, V. Pal Singh, **S. Sihotra**, Z. Naik, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, DAE Symposium Proceedings in Nuclear Physics (2012), Delhi University.

27. **Nuclear structure studies close to $N = Z = 50$** , S. Kumar, S. Sihotra, Z. Naik, K. Singh, J. Goswamy, R. Palit, N. Singh, R. Kumar, R.P. Singh, S. Muralithar, R. Bhowmik, and D. Mehta, www.iuac.res.in/FIG12/full-papers/fig12_Final_S.Sihotra.pdf.
28. **Structure of ^{108}Ag at Low and Medium Spin** ; J. Sethi, R. Palit, S. Saha, T. Trivedi, G.H. Bhat, J.A. Sheikh, P. Datta, J.J. Carroll, S. Chattopadhyay, R. Donthi, U. Garg, S. Jadhav, H.C. Jain, S. Karamian, S. Kumar, M. S. Litz, D. Mehta, B.S. Naidu, Z. Naik, S. Sihotra, P.M. Walker , DAE Symposium Proceedings in Nuclear Physics (2012), Delhi University.
29. **Nuclear Structure studies in $A\sim 100$ and $A\sim 130$ mass regions;** S.Sihotra, DAE Symposium Proceedings in Nuclear Physics (2012), Delhi University.
30. **Band Structure in ^{96}Tc** , V. Pal Singh, S. Sihotra, S. Kumar, Z. Naik, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, Proceedings of the CHASCON (2013) Panjab University Chandigarh.
31. **Nuclear structure studies close to $Z\approx N\approx 50$** , S. Kumar, S. Sihotra, V. Pal Singh, Z. Naik, K. Singh, J. Goswamy, N. Singh, R. Kumar, R. P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, and D. Mehta, Proceedings of the CHASCON (2013) Panjab University, Chandigarh.
32. **Lifetime measurements in ^{101}Pd** , S. Sihotra, V. Singh, S. Kumar, J. Goswamy, N. Singh, S. Saha, J. Sethi, T. Trivedi, R. Palit, H. C. Jain, and D. Mehta, Proceedings of the DAE Symp. on Nucl. Phys. 234, 58 (2013).
33. **Level Structures in ^{102}Ag** , V. Singh, S. Sihotra, S. Kumar, K. Singh, J. Goswamy, N. Singh, S. Saha, J. Sethi, T. Trivedi, R. Palit, D. Mehta, Proceedings of the DAE Symp. on Nucl. Phys. 236, 58 (2013).
34. **Excited States in ^{96}Tc** , V. Singh, S. Sihotra, S. Kumar, K. Singh, J. Goswamy, N. Singh, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik and D. Mehta, Proceedings of the DAE Symp. on Nucl. Phys. 242, 58 (2013).
35. **Band Structures in ^{99}Rh** , S. Kumar, S. Sihotra, V. Singh, J. Goswamy, K. Singh, N. Singh, R. Kumar, R.P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, S. S. Malik, T. Trivedi, I. Ragnarsson, and D. Mehta, Proceedings of the DAE Symp. on Nucl. Phys. 294, 58 (2013).
36. **Excited States in doubly-Odd ^{98}Rh** , S. Kumar, S. Sihotra, K. Singh, V. Singh, J. Goswamy, N. Singh, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik, S. S. Malik, R. Palit, and D. Mehta, Proceedings of the DAE Symp. Nucl. Phys. 298, 58 (2013).
37. **Band Structures in ^{99}Rh** , S. Kumar, S. Sihotra, V. Singh, J. Goswamy, K. Singh, N. Singh, R. Kumar, R.P. Singh, S. Muralithar, R. K. Bhowmik, R. Palit, S. S. Malik, T. Trivedi, I. Ragnarsson, and D. Mehta, Proceedings of the CHASCON (2014) Panjab University, Chandigarh.
38. **Lifetime measurements in ^{101}Pd** , S. Sihotra, V. Singh, S. Kumar, J. Goswamy, N. Singh, S. Saha, J. Sethi, T. Trivedi, R. Palit, H. C. Jain, and D. Mehta, Proceedings of the CHASCON (2014) Panjab University, Chandigarh.

39. **Excited States in ^{96}Tc** , V. Singh, **S. Sihotra**, S. Kumar, K. Singh, J. Goswamy, N. Singh, S. Muralithar, R. Kumar, R. P. Singh, R. K. Bhowmik and D. Mehta, Proceedings of the CHASCON (2014) Panjab University, Chandigarh.
40. **Antimagnetic Rotation in ^{101}Pd** , V. Singh, **S. Sihotra**, S. Kumar, J. Goswamy, N. Singh, S. Saha, J. Sethi, T. Trivedi, R. Palit, H. C. Jain, and D. Mehta, Proc. DAE Symp. on Nucl. Phys. **59**, 224 (2014). (ISBN:818372076-5)
41. **Chiral Structures in doubly odd nucleus ^{102}Ag** , V. Singh, **S. Sihotra**, G.H. Bhat, S. Kumar, K. Singh, N. Singh, J. Goswamy, J. Sethi, S. Saha, R. Palit, J.A. Sheikh, and D. Mehta, Proc. DAE Symp. on Nucl. Phys. **59**, 98 (2014). (ISBN: 818372076-5)
42. **Multi particle excitations in ^{102}Cd** , V. Singh, **S. Sihotra**, S. Kumar, Sandeep, N. Singh, J. Goswamy, S. Saha, J. Sethi, R. Palit, and D. Mehta, Proc. DAE Symp. on Nucl. Phys. **59**, 98 (2014). (ISBN: 818372076-5)
43. **Shell model calculations in ^{99}Rh** , S. Kumar, **S. Sihotra**, T. Trivedi, V. Singh, K. Singh, J. Goswamy, N. Singh, R. P. Singh, S. Muralithar, R. Kumar, R. K. Bhowmik, and D. Mehta, Proc. DAE Symp. on Nucl. Phys. **59**, 98 (2014). (ISBN: 818372076-5)
44. **Multi particle excitations in ^{102}Cd** , V. Singh, **S. Sihotra**, S. Kumar, Sandeep, N. Singh, J. Goswamy, S. Saha, J. Sethi, R. Palit, and D. Mehta, Proceedings of the CHASCON (2015) Panjab University, Chandigarh

Conferences/Workshops and Symposium Attended:

- DAE, Nuclear Physics Symposium Dec (2006).
- DAE, Nuclear Physics Symposium (2007)
- DAE, Nuclear Physics Symposium (2009)
- Indian Association of Nuclear Chemists and Allied Scientists workshop in 2005 in PU Chandigarh.
- Indian National Gamma Array -2007 Workshop in Sept 2007 at IUAC Delhi.
- Workshop in Advances in Physics in PU, Chandigarh in March 2008.
- DAE, Nuclear Physics Symposium (2010)
- DAE, Nuclear Physics Symposium (2011)
- Frontiers in Gamma-Ray spectroscopy (FiG-12)
- DAE, Nuclear Physics Symposium (2012)
- NuSTAR Week at VECC KolKatta (2012)
- Frontiers in INGA: TIFR, Mumbai (2013)
- DAE, Nuclear Physics Symposium (2013)
- International conference India-UK meet in Nuclear Physics at ISOLDE in PU, Chandigarh

(2014)

Awards and Reviewers

- ✚ CV included in Who's Who in the World 2015 (32nd edition) Marquis.
- ✚ Reviewer of Conceptual Physics, Global Edition 12/e by Lewis Paul Hewitt.

Invited Talks;

- ✚ Invited Talk on Nuclear Structure studies in $A \sim 100$ Mass regions in International workshop at TIFR, 2011.
- ✚ Invited Talk on Nuclear Structure studies in $A \sim 100$ and $A \sim 130$ Mass regions in DAE Nuclear Physics Symposium (2012)
- ✚ Invited Talk on Nuclear Structure studies in Mass 100 in International conference India-UK meet in Nuclear Physics at ISOLDE in PU, Chandigarh (2014).
- ✚ Invited talk on Nuclear structure studies in $N=Z=50$ Shell closure in National Conference on Emerging trends and Many body interaction at Jammu University, Jammu (2014).