

CURRICULUM VITAE: Dr. Hardev Singh

Contact

Name:

Dr. Hardev Singh



Position held:

Associate Professor
Department of Physics,
Guru Jambheshwar University of
Science & Technology, Hisar-125001,
Haryana (India)

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+91-9728915004,

Date of Birth:

January 01, 1984

Educational Qualifications:

2013-2016

Post-doctoral Fellow

Department of Physics, Panjab University,
Chandigarh

Working on electronic and magnetic properties of carbon based nano-materials using Density Functional Theory

2009-2013

Ph.D.

Kurukshetra University, Kurukshetra, Haryana
(INDIA)

Worked on Electronic structure, electronic and magnetic properties of transition metal-based Diluted Magnetic Semiconductor compounds, which are the potential candidates for Spintronics.

2007-2009

M. Phil. Physics

Periyar University, Salem

2007

CSIR-UGC NET

Qualified

2004-2006

M.Sc. Physics

Deptt. of Physics, M.D.U. Rohtak, Haryana (INDIA)
Passed with 65% marks

2001-2004

B.Sc. Physics

Kurukshetra University, Kurukshetra , Haryana (INDIA)
Passed with 67% marks

Brief Idea of Research Interest: Theoretical Condensed Matter Physics/Material Science/Nanomaterials

Current Research Interest: Currently, we are engaged in:

1. Spintronic materials.
2. Thermoelectric properties of Heusler alloys and Topological insulators.
3. Electrochemical properties of electrode materials for alkali-ion batteries.
4. Electronics and Optical properties of low dimensional materials.

Scientific Publications:

Total research papers published: 63 (Sixty Three)

- In reputed International Journals: 35
- In conference proceedings of International Journals: 28
- Communicated: 05

Research Papers Presented in Conferences, Seminars, Schools and

Workshops:

Attended more than 34 national/International conferences, seminars, schools and workshops

Ph.D. Supervised:

Awarded: 02, Pursuing: 05

Sr. No.	Scholar Name	Research Topics	Institute	Year	Status
1.	Nisha	Electronic and Thermoelectric Properties of Topological Insulators	GJUS&T, Hisar	2022	Awarded
2.	Veenu Mehta	MXene Monolayers as electrodes materials for Alkalies- Ion Batteries	GJUS&T, Hisar	2022	Awarded

Teaching Experiences:

1. Presently working as Associate Professor at Department of Physics, GJUS&T, Hisar since March 2024 to till date.
2. Worked as Assistant Professor at Department of Physics, GJUS&T, Hisar from June 2016 to March 2024
3. Worked as Assistant Professor (on contract) at Department of Physics, NIT, Kurukshetra from July 2012 to June 2013.

Administrative Responsibilities:

1. Working as Deputy Director, MMTTC, GJUST, Hisar since June 27, 2024 to till date.
2. Working as Deputy Director, University Informatics & Grievance Cell, GJUST, Hisar since 2023 to till date.
3. Worked as OSD to Vice Chancellor since Feb. 2021 to May 2023.
4. Worked as Hostel Warden since April 2017 to Feb. 2024.
5. Worked as Member of the High-Power Standing Purchase Committee of the university since 2023 to 2024.
6. Worked as Member of Academic Council of the University.
7. Member of the various purchase committees of the University.
8. Member of BOS&R of the different courses of the University.
9. Member of the DRC of the Department.
10. Member of various inspection committees of the University.
11. Worked as time table in charge of the Department.
12. Worked as Departmental Coordinator of IQAC cell.

Abroad Visit:

1. Research paper presented in 21st WIEN2k workshop and International Conference on advanced materials modeling” at Nantes, France from July 01, 2014 to July 09, 2014.
2. Research paper presented in 24th Wien2k Workshop and International Conference on advanced materials modeling” at TU, Wien, Vienna, Austria from Sept. 18-22, 2017.

Awards and Prizes:

1. Best Poster Award for the paper “Accurate Description of Electronic Band gaps in CdXP_2 ($X = \text{Si, Ge and Sn}$) Ternary Pnictide Semiconductors” at 55TH DAE SOLID STATE PHYSICS SYMPOSIUM 2010, Manipal Univ. Manipal, 26-30 Dec 2010.
2. Best Poster Award for the paper “Quest of magnetism in Silicene nanosheets decorated with Cu atom for spintronics” at National Conference on Emerging trends in Physics and Materials Science (ETPMS-2016) (March 19-20, 2016).

(Hardev Singh)

List of Publications

A. In International Journals

Sr. No.	Author's List	Year	Title of the Paper	Full Journal Name	Vol. No. Page No./ DOI No./Impact factors
35	Narender Kumar Nisha Sheoran and Hardev S. Saini,	June 2024	Thermoelectric Properties of Line-Node Dirac Semimetal and Topological Insulating Phase in Hexagonal Pnictide CaAgAs	Physica Status Solidi b	https://doi.org/10.1002/pssb.202400187
34	Narender Kumar, Hardev S. Saini, Nisha Sheoran, and Manish K. Kashyap	April 2024	Thermoelectric properties of doped topological half-Heusler LuPdBi _{1-x} Z _x (Z=P, As, Sb) compounds	Journal of Materials Science: Materials in Electronics	Vol. 35, pp. 793 I.F. 2.8 https://doi.org/10.1007/s10854-024-12546-z
33.	Poonam Sunidhi, Nisha & Hardev S Saini	Sept. 2023	Effects of Chromium (Cr) doping on Structural, Electronic and Magnetic Properties of Barium Selenide Compound: A Theoretical Investigation	Indian Journal of Pure & Applied Physics	Vol. 61, pp. 248-250 I.F. 0.7 DOI: 10.56042/ijpap.v61i9.3507
32	Veenu Mehta, Hardev S. Saini, Sunita Srivastava, Manish K. Kashyap and K. Tankeshwar	Jul 21, 2022	N-based single and double transition metal V ₂ N/CrVN monolayers as high capacity anode materials for Li ion batteries	Materials Chemistry and Physics	126531, 0254-0584, I.F.4.778
31	Veenu Mehta, Hardev S. Saini, Sunita Srivastava, Manish K. Kashyap and K. Tankeshwar	May 09, 2022	Ultralow diffusion barrier of double transition metal MoWC monolayer as Li-ion battery anode	J Mater Science	57, 1573-4803 I.F. 4.228
30	Veenu Mehta, Hardev S. Saini, Sunita Srivastava, Manish K. Kashyap and K. Tankeshwar	2021	Assessment of Mo ₂ N Monolayer as Li-ion battery anodes with high cycling stability	Materials Today Communications	26 (2021) 102100 (I.F. 3.66)
29	Nisha, Hardev S Saini, Sunita Srivastava, Manish K Kashyap,	2021	Effect of hydrostatic pressure on thermoelectric performance of topological half-Heusler LuPdBi compound	Physica Scripta	96 (2021) 125702 (I.F. 3.08)
28	Nisha, Hardev S Saini, Sunita Srivastava, Manish K Kashyap,	2021	Enhanced figure of merit of TaIrGe Half-Heusler alloy for thermoelectric applications under the effect of isotropic strain	Journal of Solid State Chemistry	303 (2021) 122524 (I.F. 3.656)
27	Poonam Mehra, Hardev S Saini, Satyender Sinhmar, Jyoti Thakur, Manish K Kashyap	2020	Induction of half-metallic ferromagnetism in BaS semiconductor via Cr-doping	Vacuum	182, (2020) 109760 (I.F. 4.11)
26	Nisha, Hardev S Saini, Narender Kumar, Satyender Singhmar,	2020	Structural, electronic and thermoelectric properties of topological semimetal	Physics Letters A	384 (31), 126789 (I.F. 2.7)

	Jyoti Thakur, Sunita Srivastava, Manish K Kashyap, Ali H Reshak		lanthanum monopnictide LaBi		
25	Veenu Mehta, Hardev S. Saini, Sunita Srivastava, Manish K. Kashyap and K. Tankeshwar	2019	S-Functionalized Mo ₂ C Monolayer as a Novel Electrode Material in Li-Ion Batteries	J. Phys. Chem. C	123, 41, 25052-25060 (I.F. 3.7)
24	Jyoti Thakur, Manish K. Kashyap, Ankur Taya, Priti Rani, Hardev S. Saini, A.H. Reshak	2017	Structure stability and magnetism in graphene impurity complexes with embedded V and Nb atoms	Journal of Magnetism and Magnetic Materials	433, 109–115 (IP: 3.09)
23	Jyoti Thakur, Manish K. Kashyap, Hardev S. Saini, Ali H. Reshak	2016	Half metallicity and magnetism in graphene containing monovacancies decorated with Carbon/Nitrogen adatom	Journal of Alloys and Compounds ISSN:0925-8388	Vol. 663 pp.100-106, http://dx.doi.org/10.1016/j.jallcom.2015.07.241 (IP: 6.37)
22	Jyoti Thakur, Manish K. Kashyap and Hardev S. Saini	2017	Sublattice dependent magnetic response of dual Cr doped grapheme monolayer: a full potential approach	Indian Journal Physics	91, 43-51 DOI 10.1007/s12648-016-0899-5 (IP: 1.778)
21	Hardev S. Saini, Jyoti Thakur, Mukhtiyar Singh, G.S.S. Saini and Manish K. Kashyap	2015	Half-metallic ferromagnetism in Al _{1-x} V _x P (x=0.03) DMS compound: A potential material for the Spintronic Devices	Applied Science Letter ISSN: 2394-5001	Vol. 2(4), pp. 110-113, DOI:10.17571/appslett.2016.02026
20	Jyoti Thakur, Hardev S. Saini, Mukhtiyar Singh and Manish K. Kashyap	2016	Enhancement of spin-polarization and magnetic response in fluorinated monovacant graphene	Applied Science Letter ISSN: 2394-5001	Vol. 2(4), pp. 118-121, DOI: 10.17571/appslett.2016.02028
19	Jyoti Thakur, Hardev S. Saini, Mukhtiyar Singh and Manish K. Kashyap	2016	Remarkable magnetic response in graphene monolayer decorated with V-atom for spintronics	Applied Science Letter ISSN: 2394-5001	Vol. 2(4), pp. 133-135. DOI: 10.17571/appslett.2016.02031
18	Jyoti Thakur, Mukhtiyar Singh, Hardev S. Saini, Ali H. Reshak and Manish K. Kashyap	2016	Quest for magnetism in graphene via Cr- and Mo- doping	Physica E ISSN:1386-9477	Vol. 78, pp. 35-40 http://dx.doi.org/10.1016/j.physe.2015.11.037 (IP: 3.369)
17	Jyoti Thakur, Satvik Vats, Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2016	Vacancy mediated spin polarization and magnetism in Graphene monolayer; A Full potential approach	Applied Science Letter ISSN: 2394-5001	Vol. 2(2), pp. 55 - 58. DOI: 10.17571/appslett.2016.02011
16	Jyoti Thakur, Manish K. Kashyap, Hardev S. Saini and A. H. Reshak	2015	Enhancing magnetic response and metallicity in AB stacked Bilayer Graphene via Cr-doping	Journal of Alloys and Compounds	Vol. 649, pp. 1300-1305, http://dx.doi.org/10.1016/j.jallcom.2015

				ISSN:0925-8388	.07.241 (IP: 6.37)
15	Hardev S. Saini , Manoj Kumar, Manish K. Kashyap, Jyoti Thakur, Mukhtiyar Singh, , Ali H. Reshak G.S.S. Saini	2015	Generating magnetic response and half metallicity in GaP via dilute Ti-doping for spintronic applications	Journal of Alloys and Compounds ISSN: 0925-8388	Vol. 649, pp. 184-189 http://dx.doi.org/10.1016/j.jallcom.2015.06.278 (IP: 6.37)
14	Mukhtiyar Singh, Hardev S. Saini, Ali H. Reshak and Manish K. Kashyap	2014	Half metallicity and electronic properties tuning via Fe-doping in Cr ₂ CoZ (Z = Al, Si) inverse heusler alloy.	Journal of Magnetism and Magnetic Material ISSN: 0304-8853	Vol. 370, pp. 81–86 http://dx.doi.org/10.1016/j.jmmm.2014.06.050 (IP: 3.09)
13	Mukhtiyar Singh Hardev S. Saini, Jyoti Thakur, Ali H. Reshak and Manish K. Kashyap	2013	Electronic structure, magnetism and robust half-metallicity of new quaternary Heusler alloy FeCrMnSb	Journal of Alloys and Compounds ISSN: 0925-8388	Vol.580, pp.201 http://dx.doi.org/10.1016/j.jallcom.2013.05.111 (IP: 6.37)
12	Hardev S. Saini, Mukhtiyar Singh, Ali H. Reshak and Manish K. Kashyap	2013	Accounting Oxygen vacancy for half-metallicity and magnetism in Fe-doped CeO ₂ Dilute Magnetic Oxide	Computational Material Science, ISSN: 0927-0256	Vol 74, pp.114/ http://dx.doi.org/10.1016/j.commat.2013.02.029 (IP: 3.572)
11	Hardev S. Saini, Mukhtiyar Singh, Ali H. Reshak and Manish K. Kashyap	2013	Variation of half-metallicity and magnetism of Cd _{1-x} Cr _x Z (Z = S, Se and Te) DMS compounds on reducing dilute limit	Journal of Magnetism and Magnetic Material, ISSN: 0304-8853	Vol.331, pp. 1, http://dx.doi.org/10.1016/j.jmmm.2012.10.044 (IP: 3.09)
10	Mukhtiyar Singh, Hardev S. Saini, Ali H. Reshak and Manish K. Kashyap	2013	Transition from Ferro- to Ferri-magnetic ordering via Mn disorder in NiCoMnGa quaternary Heusler alloy	Journal of Material Science, ISSN: 0022-2461	Vol. 48, pp. 1837/ http://dx.doi.org/10.1007/s10853-012-6949-2 (IP: 4.68)
9	Mukhtiyar Singh, Hardev S. Saini, Ali H. Reshak and Manish K. Kashyap	2013	Disordered dependence half metallicity in Mn ₂ CoSi inverse Heusler Alloy.	Journal of Solid State Chemistry, ISSN: 0022-4596	Vol. 208, pp.71. 10.1016/j.jssc.2013.09.041 (IP: 3.656)
8	Hardev S. Saini, Mukhtiyar Singh, Ali H. Reshak and Manish K. Kashyap	2012	Emergence of half metallicity in Cr-doped GaP DMS compound within solubility limit	JALCOM, ISSN:0925-8388	Vol. 536, pp. 214/ http://dx.doi.org/10.1016/j.jallcom.2012.04.122 (IP: 6.37)

7	Hardev S. Saini, Mukhtiyar Singh, Ali H. Reshak and Manish K. Kashyap	2012	Effect of cation substitution on electronic band structure of ZnGeAs ₂ pnictides: A mBJLDA approach	Journal of Alloys and Compounds, ISSN:0925-8388	Vol 518 , pp.74/ http://dx.doi.org/10.1016/j.jallcom.2011.12.129 (IP: 6.37)
6	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2012	Effect of substituting <i>sp</i> -element on half metallic ferromagnetism in NiCrSi Heusler alloy	Computational Material. Science, ISSN: 0927-0256	Vol 53 , pp.431/ http://dx.doi.org/10.1016/j.commatsci.2011.08.037 (IP: 3.572)
5	Hardev S. Saini, Mukhtiyar Singh and Manish K. Kashyap	2012	Modified Becke-Johnson approach for governing half metallic ferromagnetism in Cr-doped GaP DMS compound	Advanced Material Research, ISSN: 1662-8985	Vol. 585 , pp. 265/ http://dx.doi.org/10.4028/www.scientific.net/AMR.585.265
4	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2012	Mn-Disorder Effect on Magnetism and Half Metallicity of NiCoMnGa Quaternary Heusler Alloy	Advanced Material Research, ISSN: 1662-8985	Vol. 585 pp. 270 http://dx.doi.org/10.4028/www.scientific.net/AMR.585.270
3	Hardev Singh, Mukhtiyar Singh, Sarvesh Kumar and Manish K. Kashyap	2011	Full potential calculation of electronic properties of rutile RO ₂ (R = Si, Ge, Sn and Pb) compounds via modified Becke Johnson potential	Physica B, ISSN: 0921-4526	Vol. 406 , pp. 3825/ http://dx.doi.org/10.1016/j.physb.2011.07.004 (IP: 2.998)
2	Hardev S. Saini, Mukhtiyar Singh and Manish K. Kashyap	2011	Search of half metallicity in VX (X = As, Sb and Bi) compounds for spintronic applications	Asian Journal of Chemistry, ISSN: 0970-7077	Vol. 23 pp.5598/
1	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2011	Effect of atom interchange on half metallicity of AuMnSn Heusler compound	Asian Journal of Chemistry, ISSN: 0970-7077	Vol. 23 pp.5611

(B) In Conference Proceedings of International Journals

Sr. No.	Author's List	Year	Title of the Paper	Full Journal Name	Vol. No. Page No./ DOI No.
28	Nisha, Narender Kumar, Hardev S Saini, Manish K Kashyap	2020	Thermoelectric properties of YSb: A first-principles approach	Materials Today: Proceedings	26, 3416-3419 https://doi.org/10.1016/j.matpr.2019.11.117
27	Narender Kumar, Hardev S Saini, Mukhtiyar Singh, Manish K Kashyap	2020	Enhanced thermoelectric properties of Ta-doped Half-Heusler ZrNiSn	Materials Today: Proceedings	26, 3478-3481 https://doi.org/10.1016/j.matpr.2020.01.367
26	Veenu Mehta, K. Tankeshwar, and Hardev S. Saini	2019	Prediction of Mo ₂ CF ₂ monolayer as a novel anode material for Li-ion batteries: A first principle study	AIP Conference Proceedings	2115, 030576/ https://doi.org/10.1063/1.5113415
25	Poonam, Hardev S. Saini, Jyoti Thakur, A. K. Pundir, Mukhtiyar Singh, and Manish K. Kashyap	2019	Structural, electronic and magnetic properties of Ti-doped MgSe diluted magnetic semiconductor compound	AIP Conference Proceedings	2093, 020001 https://doi.org/10.1063/1.5097070
24	Nisha, Hardev S. Saini, Manish K. Kashyap, Jyoti Thakur, and Mukhtiyar Singh	2019	First-principles study on electronic, mechanical and thermoelectric transport properties of topological insulator NaAuS	AIP Conference Proceedings	2093, 020016 https://doi.org/10.1063/1.5097085
23	Poonam, A. K. Pundir, Mukhtiyar Singh, Jyoti Thakur, Manish K. Kashyap, and Hardev S. Saini	2019	First-principles investigation of half metallic ferromagnetism in Ti-doped MgTe binary alloy via modified Becke-Johnson potential	AIP Conference Proceedings	2115, 030485 (2019); https://doi.org/10.1063/1.5113324
22	Nisha, Kulwinder Kaur, Jyoti Thakur, Manish K. Kashyap, and Hardev S. Saini	2019	Electronic and thermoelectric transport properties of topological insulator LiAuS	AIP Conference Proceedings	2115/ 030426 https://doi.org/10.1063/1.5113265
21	Bhuvan Agrawal, Anushka Nagpal, Ramesh Kumar, Hardev S. Saini, Manish K. Kashyap, and Mukhtiyar	2019	Study of FeCrSn _{1-x} Gax Heusler alloys: Tuning Fermi level to attain half-metallic ferromagnetism	AIP Conference Proceedings	2093, 020019/ https://doi.org/10.1063/1.5097088

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20	Anushka Nagpal, Bhuvan Agrawal, Ramesh Kumar, Hardev S. Saini, Manish K. Kashyap, and Mukhtiyar Singh	2019	Effect of disorders on half-metallic ferromagnetism in Cr ₂ CoAl inverse Heusler alloy	AIP Conference Proceedings	2093 , 020023/ https://doi.org/10.1063/1.5097092
19	Jyoti Thakur, Priti Rani, Monika Tomar, Vinay Gupta, Hardev S. Saini, and Manish K. Kashyap	2019	Tailoring in-plane magnetocrystalline anisotropy of Fe ₅ SiB ₂ with Cr-substitution	AIP Conference Proceedings	2115, 030506/ https://doi.org/10.1063/1.5113345
18	Hardev S. Saini, Poonam, A. K. Pundir, Mukhtiyar Singh, Jyoti Thakur and Manish K. Kashyap	2019	Prediction of Half Metallicity in Ti-Doped BeSe: A Spintronics Material	AIP Conference Proceedings	2115/030498/ https://doi.org/10.1063/1.5113337
17	Veenu Mehta, K. Tankeshwar, and Hardev S. Saini	2018	Li-adsorption on doped Mo ₂ C monolayer: A novel electrode material for Li-ion batteries	AIP Conference Proceedings ISSN: 1551-7616	Vol: 1942 , pp. 140047 doi: 10.1063/1.5029178
16	Veenu Mehta, K. Tankeshwar, and Hardev S. Saini	2018	Ab-initio study of electronic and magnetic properties of Co-doped Mo ₂ C monolayer	AIP Conference Proceedings, ISSN: 1551-7616	Vol: 1953 , pp. 030109; doi: 10.1063/1.5032444
15	Hardev S. Saini, A. K. Pundir, Veena Mehta, Nisha, Poonam Mehra, and Manish K. Kashyap	2018	Investigation of half-metallic ferromagnetism in Ti-doped BeS DMS compound: A promising spintronic material	AIP Conference Proceedings, ISSN: 1551-7616	Vol: 2006 , pp. 030019; doi: 10.1063/1.5051275
14	Mukhtiyar Singh, Manish K. Kashyap and Hardev S. Saini	2018	Corroborating the Spin Gapless Character of Ti ₂ MnAl Inverse Heusler Alloy: A study of Strains Effect	Materials Today: Proceedings:	Vol: 5 pp. 15421–15425
13	Hardev Singh, A. K. Pundir, Jyoti Thakur, Mukhtiyar Singh and Manish K. Kashyap	2017	Half-Metallic Ferromagnetism In V-Doped AIP: An Imperative Compound For Spintronics	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1832 , pp. 130017 doi: 10.1063/1.4980737

12	Hardev Singh, Mukhtiyar Singh, Jyoti Thakur, G.S.S. Saini and Manish K. Kashyap	2016	A First Principles Study Of Half-Metallic Ferromagnetism In $\text{In}_{1-x}\text{Ti}_x\text{P}$ ($x = 0.06$) Diluted Magnetic Semiconductor	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1731, pp. 130007 http://dx.doi.org/10.1063/1.4948113
11	Hardev S. Saini Mukhtiyar Singh, G.S.S. Saini and Manish K. Kashyap	2015	Effect of Oxygen vacancy on half metallicity in Ni-doped CeO_2 Diluted Magnetic Semiconductor	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1661, pp. 070011 http://dx.doi.org/10.1063/1.4915389
10	Jyoti Thakur, Hardev S. Saini Mukhtiyar Singh and Manish K. Kashyap	2015	Electronic and magnetic properties of Mo-doped graphene; full potential approach	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1661, pp. 080029 http://dx.doi.org/10.1063/1.4915420
9	Hardev S. Saini Mukhtiyar Singh, Jyoti Thakur and Manish K. Kashyap	2014	Half-Metallic ferromagnetism in Cr-doped semiconducting Ge-Chalcogenide: Density Functional Approach	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1591, pp. 1660 http://dx.doi.org/10.1063/1.4873068
8	Mukhtiyar Singh, Hardev S. Saini, Jyoti Thakur, and Manish K. Kashyap	2014	Enhancement of spin polarization via Fermi level tuning in $\text{Co}_2\text{MnSn}_{1-x}\text{Sb}_x$ ($x = 0, 0.25, 0.5, 0.75, 1$) Heusler alloys	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1591, pp. 1606 http://dx.doi.org/10.1063/1.4873050
7	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2013	Stability of high spin polarization via substituting sp element in $\text{Co}_2\text{MnSn}_{1-x}\text{Gax}$ Heusler alloys	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1512, pp. 1140 http://dx.doi.org/10.1063/1.4791450
6	Hardev S. Saini, Mukhtiyar Singh, and Manish K. Kashyap	2012	Tuning magnetism in semiconducting Cadmium Chalcogenides via Cr-doping	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1447, pp. 1175 http://dx.doi.org/10.1063/1.4710428
5	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2012	Effect of Atomic Disorder on Half-Metallic Ferromagnetism in $\text{Fe}_3-x\text{Cr}_x\text{Si}$ ($x = 0, 0.25, 0.75, 1$) Heusler alloys	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1447, pp. 1111 http://dx.doi.org/10.1063/1.4710396
4	Hardev S. Saini, Mukhtiyar Singh, and Manish K. Kashyap	2011	Accurate Description of Electronic Band gaps in CdXP_2 ($X = \text{Si, Ge and Sn}$) Ternary Pnictide Semiconductors	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1349, pp. 069 http://dx.doi.org/10.1063/1.3606231

3	Hardev S. Saini, Mukhtiyar Singh, and Manish K. Kashyap	2011	ab-initio study of electronic band structures of CdBAs ₂ (B = Si, Ge and	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1393 , pp. 169, http://dx.doi.org/10.1063/1.3653663
2	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2011	High Spin Polarization and Magnetization in NiCrS Heusler alloy	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1349 , pp. 1153 http://dx.doi.org/10.1063/1.3606272
1	Mukhtiyar Singh, Hardev S. Saini and Manish K. Kashyap	2011	First principle prediction of half metallic ferromagnetism in Heusler NiMnZ (Z = P, Ge) compounds	AIP Conference Proceedings, ISSN: 1551-7616	Vol. 1393 , pp. 165 http://dx.doi.org/10.1063/1.3653661

(C) Conferences/Seminars/Symposia/workshops attended

S. No.	Title of Conference / Seminar/workshops/attended	Organized by	Whether international / national/ regional/college or university level
42	1st Faculty Development Program (FDP) on Molecular Modelling at Nanoscale (MMN-2023) from 19th – 25th June 2023	Centre for Advanced Computational Chemistry Studies, Delhi	National
41	International Conference on Advanced Materials for Emerging Technologies (ICAMET 2023) May 4-6, 2023	NSUT, New Delhi	International
40	International Conference on Recent Advances in Functional Materials (RAFM-2022) from 14 -16th March 2022.	Department of Physics, IQAC and Star College Scheme (GoI), ARSD College University of Delhi	International
39	International Conference on Frontiers in physics, materials science & nanotechnology (FPMSN-2022) March 25-26, 2022	CHAUDHARY DEVI LAL UNIVERSITY, SIRSA	National
38	7-Days FDP on Novel tools and Methodologies from 03.08.2021 to 09.08.2021.	Sri Guru Gobind Singh College, Sector 26, Chandigarh	National
37	AICTE Training And Learning (ATAL) Academy Online FDP on "Photonics" from 2020-11-2 to 2020-11-6.	GJUS&T, Hisar	National
36	5 Days FDP on paper writing using Latex, July 20-22, 2020.	IIT, Bombay	National
35	International Conference of Atomic, Molecular, Optical and Nano Physics	DTU, Delhi	International

	with Applications (CAMNP 2019) Dec. 18-20, 2019.		
34	FDP on Recent Trend in AI, ML and ICT, Jan., 6-10, 2020	GJUSS&T, Hisar	National
33	Workshop on women empowerment and gender sensitization, Oct 23, 2019	GJUS&T, Hisar	National
32	63 rd DAESSPS, Dec 18-22, 2018	BARC, Mumbai	National
31	One day Orientation workshop on AWAYAM MOOCs, Sept 19, 2018	GJUS&T, Hisar	National
30	21 st International Conference of International Academy of Physical Sciences (CONIAPS XXI) October 28-30, 2017	Department of Mathematics, Guru Jambheshwar University of Science & Technology, Hisar-125001 (Haryana), India.	International
29	Recent Trends in Engineering & Technology" Feb. 27-28, 2018	TEQIP-III, at GJUS&T, Hisar	National
28	Recent Advances in Experimental and Theoretical Physics, April 17-18, 2018	Department of Physics and Astronomical Sciences Central University of Jammu	National
27	NSM Workshop on HIGH PERFORMANCE COMPUTING, May 04, 2018	Department of Physics, Kurukshetra University, Kurukshetra	National
26	61 st DAESSPS 2016, Dec. 26-30, 2016	BARC, Mumbai	National
25	Analytical Techniques and their Applications (NCATA-2017)" March 16-17, 2017	Dr. APJ Abdul Kalam Central Instrumentation Laboratory, GJUS&T, Hisar	National
24	Nanoscience and Instrumentation Technology (NCNIT-2017), March 5-6, 2017	Department of Physics, NIT, Kurukshetra during	National
23	Nanotechnology: Insights into the properties of materials from Computational Modeling Methods, October 16-20, 2016	Deptt. of Bio & Nano Sciences, GJUS&T, Hisar	National
22	National Conference on Physics of Engineering Materials (NCPem-2016) from March. 10-11, 2016	Deptt. of Physics, DCRUST, Murthal Haryana (INDIA)	National
21	National Conference on Emerging trends in Physics and Materials Science (ETPMS-2016) (March 19-20, 2016)	Deptt. Of Physics, Chaudhary Devi Lal University, Sirsa	National
20	National Conference on Physics Industry Interface Sept. 02-04, 2015,	Deptt. of Physics, K.U. Kurukshetra, Haryana (INDIA)	National
19	DAE-SSPS-2015	Amity University, Noida	National
18	Conference on Advanced Materials and	MNIT, Jaipur	National

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17	Current Advances in Theoretical and Experimental Physics (CATEP-15)	Deptt. Of Physics, S.D. College, Ambala Cantt.	National
16	Recent development in Theoretical and Experimental Physics, March 21, 2015	Deptt. Of Physics, S.D. College, Ambala Cantt.	National
15	National Seminar on Recent Trends in Physics and Chemistry, March 25, 2015	Deptt. Of Physics, S.A. Jain College, Ambala City	National
14	ICCMP-2014	Deptt. Of Physics, H.P. University, Shimla	International
13	DAE-SSPS-2013	Thapur University, Patiala	National
12	National Conference on 'Nanoscience and Instrumentation Technology' (NCNIT-2013)	NIT, Kurukshetra	National
11	AMPCO-2012	IIT, Roorkee (India)	International
10	ICACNM-2011	Punjab University, Chandigarh	International
9	DAE-SSPS-2011	SRM University, Chennai	National
8	DAE-SSPS-2010	Manipal University, Manipal (Karnataka)	National
7	National conference on simulation and characterization of advanced materials	D. C. R. university of science and technology, Murthal (Sonapat), India	National
6	International Conference on Advanced Materials Modelling (ICAMM 2014)	Institute of Materials Jean Rouxel University of Nantes, France	International
5	National Conference on Simulation & Characterization of Advanced Material, April 17-18, 2010	Mahatma Jyotiba Phule Rohilkhand University, Bareilly (India)	National
4	Workshop on HPC, March 16-17, 2015	PU, Chandigarh	National
3.	Workshop on High Performance computing, March 11-13, 2015	IUAC, New Delhi	National
2.	SERB school on "Density Functional Theory and Beyond: Computational Material Science and Material Design", 3 weeks (Nov. 24-Dec. 13, 2014)	The M.S. University of Baroda, Vadodara, Gujrat	National

1.	21st WIEN2k workshop, July 01, 2014 to July 05, 2014	IMN institute, Nantes, France	International
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(D) Details of Seminars, Conferences, Symposia organized:

- i. Worked as Organising Secretary of International Conference of Emerging Materials and Quantum Photonics (ICEMQP 2024) organized by Department of Physics, GJUS&T, Hisar Nov. 07-09, 2024.
- ii. Worked as Joint Secretary of NATIONAL CONFERENCE ON PHOTONICS AND MATERIALS SCIENCE (NCPMS-2024) organized by Department of Physics, GJUS&T, Hisar March 14-15, 2024.
- iii. Course coordinator of Refresher Course in Physics organized by HRDC, GJUS&T, Hisar from Oct 14-27, 2020.
- iv. Member of Organizing Committee in TEQIP II sponsored “National Workshop on LASER Techniques” on dated March 2-3, 2016.
- v. Member of Organizing Committee in National Conference on “Analytical Techniques and their Applications (NCATA-2017)” organized by Dr. APJ Abdul Kalam Central Instrumentation Laboratory, GJUS&T, Hisar during March 16-17, 2017.
- vi. Member of Organizing Committee in International Conference on Advances in Optics and Photonics, Department of Physics, GJUS&T, Hisar during Nov. 23-26, 2018.

Dr. Hardev S. Saini