

# Chaudhary Devi Lal University, Sirsa



## BIO-DATA



***Dr. Ram Mehar Singh***  
***Assistant Professor***  
***Department of Physics***  
***CDLU, SIRSA***

# CHAUDHARY DEVI LAL UNIVERSITY, SIRSA



## Bio-Data

1. **Name (in Block Letters)** : DR. RAM MEHAR SINGH
2. **Father's Name** : SH. ZILE SINGH
3. **Mother's Name** : SMT. SHANTI DEVI
4. **Date of Birth** : 06-07-1973
5. **Department** : PHYSICS, CDLU SIRSA
6. **Current Designation & Grade Pay** : Associate Professor & Rs. 9,000/-(GP)
7. **Date of appointment** : In the institution : 22.08.2007  
In the present post : 22. 08 .2019
8. **Address for correspondence** : H. No. D-27, UNIVERSITY CAMPUS,  
CH. DEVI LAL UNIVERSITY, SIRSA  
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9. **i) Mobile No** : 094162 73644  
**ii) Email** : [dixit\\_rammehar@yahoo.co.in](mailto:dixit_rammehar@yahoo.co.in) , [dixitrammehar@cdlu.ac.in](mailto:dixitrammehar@cdlu.ac.in)

### 8. **Qualifications :**

- (i) 10<sup>th</sup> with first division from Board of School Education Haryana in 1990
- (ii) 10+2 with first division from Board of School Education Haryana in 1992
- (iii) B.Sc. (Electronics) with first division from Kurukshetra University Kurukshetra in 1995.
- (v) M.Sc. (Physics with specialization in Electronics) with first division from Kurukshetra University Kurukshetra in 1998.
- (v) M.Sc. (Computer Science) with first division from Ch. Devi Lal University, Sirsa in 2013.
- (vi) Ph.D. from Department of Physics Kurukshetra University Kurukshetra in 2010.
- (vii) GATE with 86.06 percentile conducted by IIT Kanpur in 2002.
- (viii) NET qualified conducted by UGC-CSIR New delhi in 2004.

## 9. Membership of Professional Bodies Editorship of Journals etc. :

- (i) Life member of The Indian Society for Technical Education. M.No- LM-4909.
- (ii) Sessional membership , The Indian Science Congress (2014-15)
- (iii) Referring of Research Papers of Journal :
  - (a) Computer and Mathematics With Applications
  - (b) Results in Physics

## 10. Past Job Experience:

- (i) Worked as a lecturer in physics in Haryana College of Technology & Management, Kaithal, from Dec- 03 , 1998 to Aug -21,2007
- (ii) Worked as a lecturer in physics in R.K.S.D college Kaithal from Aug -01, 1998 to Feb-28 , 1999

## 11. Research Papers Published in Online/Indexed/Digital/Refereed Journals or Conference Proceedings, etc.

Sr. No.	Title with name of authors as appearing in the publication	Journal, Volume, Year, Page Numbers	Whether refereed/Non-refereed or Conference Proceedings	Impact factor, if any	ISSN/ ISBN No.,if any	Whether you are first author / supervisor /corresponding author / Or other author
1.	The solutions of the Schrödinger equation for complex Hamiltonian system in two dimensions, Fakir Chand, <b>Ram Mehar Singh</b> , Narender Kumar and S.C. Mishra.	Journal of Physics A:Mathematical and Theoretical, IOP Publishing, 40(2007) 10171-10182	Indexed & refereed	1.933	ISSN 1751-8113 (Print) 1751-8121 (online)	Other Author
2.	Solutions of the Schrödinger equation for two dimensional complex quartic potential, <b>Ram Mehar Singh</b> , Fakir Chand and S.C. Mishra.	Communication in Theor. Phys. IOP Publishing, 51(2009) 397-406	Indexed & refereed	0.948	ISSN 0253-6102	First Author
3.	The solutions of the Schrödinger equation for a coupled quadratic and quartic potential in two dimensions, <b>Ram Mehar Singh</b> , Fakir Chand and S.C. Mishra.	Pramana Journal of Physics 72(2009) 647-654	Indexed & refereed	1.688	ISSN 0304-4289 (Print) 0973-7116 (online)	First Author
4.	Solutions of an analogous Schrödinger equation for PT-Symmetric sextic potential in two dimensions, Fakir Chand, S.C. Mishra and <b>Ram Mehar Singh</b> .	Pramana Journal of Physics 73(2009) 349-361	Indexed & refereed	1.688	ISSN 0304-4289 (Print) 0973-7116 (online)	Other Author

5.	Exact solutions of the Schrodinger equation for an anharmonic potential in two dimensions, <b>Ram Mehar Singh.</b>	Applied mathematic and computation <b>218</b> (2012) 6439-6445	Indexed & refereed	1.349	ISSN 0096-3003 )	Principal Author
6.	Real eigenvalue of a non-hermitian Hamiltonian system, <b>Ram Mehar Singh</b>	Applied mathematics, V.3 Issue. 1 (2012)1117- 23	Indexed & refereed	0.19	ISSN 2152-7393	Principal Author
7.	Quantum mechanics of complex octic potential in one dimension, <b>Ram Mehar Singh</b>	Journal of quantum information science, V.3 (2013)42-49	Indexed & refereed	0.23	ISSN 2162-576X	Principal Author
8.	Closed form solutions of the Schrodinger equation for a coupled harmonic potential in three dimensions, <b>Ram Mehar Singh, S.B. Bhardaj , S.C. Mishra</b>	Computer and mathematic with applications, 66(2013)537 -541	Indexed & refereed	2.069	ISSN 0898-1221	First author & Supervisor
9.	Compositional study of Indian five rupee coin by EDXRF technique, Rajive Kumar, Anita Rani, <b>Ram Mehar Singh</b>	International review of applied engineering research, V.2 No. 1 (2014)83-88	Indexed & refereed	0.0	ISSN 2248-9967	Supervisor
10.	Elemental analysis of Indian rupee coin by using EDXRF technique, Rajive Kumar, Anita Rani, <b>Ram Mehar Singh</b>	Journal of integrated science and technology, V.2 Issue. 1 (2014)1-4	Indexed & refereed	0.0	ISSN 2321-4635	Supervisor
11.	On solving the Schrödinger equation for a complex deictic potential in one dimension, <b>Ram Mehar Singh.</b>	Pramana journal of Physics V. 83 No.3 (2014)301-316	Indexed & refereed	1.688	ISSN 0304-4289	Principal Author
12.	Eigenspectra of a complex coupled harmonic potential in three dimensions, S.B. Bhardaj, <b>Ram Mehar Singh, and S.C. Mishra</b>	Computer and mathematic with applications, 68(2014)206 8-2079	Indexed & refereed	2.069	ISSN 0898-1221	Supervisor
13.	Integrability of a coupled harmonic oscillator in extended complex phase space <b>Ram Mehar Singh.</b>	Discontinuity, Nonlinearity and Complexity 4(1)(2015)35-48	Indexed & refereed		ISSN 2164-6376	Principal Author
14.	Analysis of longitudinal momentum distribution data of core fragment coming from ${}^9\text{Be}({}^{11}\text{Be}, {}^{10}\text{Be}+n){}^9\text{Be}$ stripping reaction Monika Singh, Rajesh Kharab and <b>Ram Mehar Singh</b>	Modern Physics Letters A, V.30No.8(2015) 1550021	Indexed & refereed	1.198	ISSN:0217-7323	Supervisor

15.	Effects of First-Order Correction to Eikonal Approximation in the Analysis of ${}^9\text{Be}({}^{15}\text{C}, {}^{14}\text{C} + n){}^9\text{Be}$ Stripping Reaction M. Singh, R.Kharab, and <b>R. M. Singh</b>	Physics of Atomic Nuclei 78 (2015), 720-724	Indexed & refereed	0.457	ISSN (Print) 1063-7788 EISSN 1562-692X	Supervisor
16.	On solving the Schrödinger equation for a three-dimensional noncentral potential, S.B. Bhardaj, <b>Ram Mehar Singh</b> , S.C. Mishra and <b>Kushal Sharma</b>	Journal of Advanced Physics 4(2015)215-218	Indexed & refereed		ISSN (Print) 2168-1996 EISSN 2168-2003	Supervisor
17.	Periodic and solitary wave solutions of cubic–quintic nonlinear reaction-diffusion equation with variable convection coefficients S B Bhardwaj, <b>Ram Mehar Singh</b> , Kushal Sharma and S C Mishra	Pramana journal of Physics V. 86 No.6 (2016)1253-1258	Indexed & refereed	1.688	ISSN (Print) 0304-4289  EISSN 0973-7111	Supervisor
18.	Measurement of L-XRF cross-sections and Coster–Kronigen enhancement factors for ${}^{62}\text{Sm}$ at excitation energies 6.8, 7.4 and 8 KeV. Kumara, A. Rani, <b>R.M. Singh</b> , M.K. Tiwari, A.K. Singh	Journal of Electron Spectroscopy and Related Phenomena 209(2016) 34-39	Indexed & refereed	1.561	ISSN 0368-2048	Supervisor
19.	Exact Solutions of 3-Dimensional Schrödinger Equation with a Coupled Quartic Potential S. B. Bhardwaj and <b>Ram Mehar Singh</b>	Journal of Advanced Physics 5(2016)44-46	Indexed & refereed		ISSN (Print) 2168-1996 EISSN 2168-2003	Supervisor
20.	Quantum mechanics of $PT$ and non- $PT$ - symmetric potentials in three dimensions S. B. Bhardwaj , <b>Ram Mehar Singh</b> and S C Mishra	Pramana journal of Physics (2016) 87 :10	Indexed & refereed	1.688	ISSN (Print) 0304-4289  EISSN 0973-7111	Supervisor

21.	L X-ray Production Cross-Section Measurement of $^{58}\text{Ce}$ at Energy 8 KeV by Synchrotron Radiation Rajive Kumar, Anita Rani, Ram Mehar Singh, M.K.Tiwari, A. K. Singh, Sonu Malik	Journal of Appl. Sci. Lett.2(3) 2016, 97 -100	Indexed & refereed		ISSN (Print) 2394-479X EISSN 2394-501	Supervisor
22.	Complex dynamical invariant for a P T - symmetric Hamiltonian system in higher dimensions S.B. Bhardwaj, <b>Ram Mehar Singh</b> , Kushal Sharma	Chinese Journal of Physics 55 (2017) 533–545	Indexed & refereed	0.514	ISSN (Print) 0577-9073 EISSN 0973-7111	Supervisor
23.	Complex integrals for 3-dimensional non-hermitian Hamiltonian systems S.B. Bhardwaj, Ram Mehar Singh, Kushal Sharma, Richa Rani, Fakir Chand	Chinese Journal of Physics 55 (2017) 1170–1180	Indexed & refereed	0.514	ISSN (Print) 0577-9073 EISSN 0973-7111	Supervisor
24.	Measurement of L X-ray fluorescence cross-sections for $^{74}\text{W}$ at excitation energies 12, 14, 15 and 16.5 keV with synchrotron radiation R. Kumar, A. Rani, R.M. Singh, M.K. Tiwari, A.K. Singh	Journal of Radiation Physics and Chemistry 131 (2017) 79–85	Indexed & refereed	1.315	ISSN 0969-806X	Supervisor
25.	Structural and Optical Characterization of ZnO-TiO <sub>2</sub> -SiO <sub>2</sub> Nanocomposites Synthesized by Sol-Gel Technique Dharm Veer, <b>Ram Mehar Singh</b> , Harish Kumar	Asian Journal of Chemistry 29(11) (2017) 2391-2395	Indexed & refereed		ISSN:09707077	Supervisor
26.	Synthesis and Characterization of Pure CoO and Ni-doped CoO-NiO-SiO <sub>2</sub> Nanocomposites Using Sol-Gel Technique Harish Kumar Dharm Veer, <b>Ram Mehar Singh</b> ,	Chemical Science Transactions 2018, <b>7(1)</b> , 95-100	Indexed & refereed		ISSN:2278-3458	Supervisor

27.	Effect of Dopant Concentration on Structural, Optical and Magnetic Properties of Zn1-xNixO Nanocomposites <b>DHARM VEER, RAM MEHAR SINGH</b> and HARISH KUMAR	Chemical Science Transactions 2018, <b>7(3)</b> , 464-476	Indexed & refereed		ISSN:2278-3458	Supervisor
28.	Integrability of a Time Dependent Coupled Harmonic Oscillator in Higher Dimensions <b>Ram Mehar Singh</b> <sup>1</sup> , S B Bhardwaj <sup>2†</sup> , Kushal Sharma <sup>3</sup> , Richa Rani <sup>2</sup> , Fakir Chand <sup>2</sup>	Discontinuity, nonlinearity and complexity 7(1)(2018)81-94	Indexed & refereed		ISSN 2164-6376	Supervisor
29.	<b>L X-ray fluorescence cross-sections measurements for elements Ba, La and Ce at synchrotron radiation energies 7, 8, 9 and 10 keV</b> R. Kumar, A. Rani, R.M. Singh, M.K. Tiwari	Radiation Physics and Chemistry 156 (2019) 283–291	Indexed & refereed	1.315	ISSN 0969-806X	Supervisor
30.	Effect of the magnetic field on the energy spectra of a quantum dot System. R Rani, V Kumar, S B Bhardwaj, <b>R M Singh</b> and F Chand	Indian J Phys <a href="https://doi.org/10.1007/s12648-019-01621-5">https://doi.org/10.1007/s12648-019-01621-5</a>	Indexed & refereed	1.242	<b>ISSN Electronic</b> 0974-9845 <b>Print</b> 0973-1458	Other author
31.	Classical invariants for non-hermitiananharmonic potentials in one dimension. <b>Ram Mehar Singh</b> , S.B. Bhardwaj, Kushal Sharma, Anand Malik, Fakir Chand	<i>Can. J. Phys.</i> 98, 1004-1008(2020) <a href="https://doi.org/10.1139">doi.org/10.1139</a>	Indexed & refereed	1.016	ISSN (print): 0008-4204 (electronic): 1208-6045	First author

32.	Construction of new traveling and solitary wave solutions of a nonlinear PDE characterizing the nonlinear low-pass electrical transmission lines. Hitender Kumar , Anand Kumar , Fakir Chand , <b>Ram Mehar Singh</b> and Manjeet Singh Gautam	Phys. Scr. 96 (2021) 085215	Indexed & refereed	1.985	<a href="#">ISSN</a> : 1402-4896 (print); 1402-4896 (web)	otherauthor
33.	Boundary layer flow with forced convective heat transfer and viscous dissipation past a porous rotating disk. Kushal Sharma, Neha Vijay , O.D. Makinde , S.B. Bhardwaj , Ram Mehar Singh, Fazle Mabood	Chaos, Solitons and Fractals 148 (2021) 111055	Indexed & refereed	3.764	<b>ISSN: 9600 779</b>	Other author
34.	Copper Nanowire Arrays: Growth and Properties Bharti Sharma, Ram Mehar Singh, Avshish Kumar Sushil Kumar	Indian Journal of Pure & Applied Physics Vol. 59, September 2021, pp. 612-618	Indexed & refereed	0.923	<b>ISSN: 0019-5596(Print)</b> <b>ISSN: 0975-1041(Online )</b>	Co-Supervisor
35.	Dynamical invariants for time-dependent real and complex Hamiltonian systems Narender Kumar, S. B. Bhardwaj, Vinod Kumar, Ram Mehar Singh, and Fakir Chand	J. Math. Phys. <b>62</b> , 112705 (2021);	Indexed & refereed	1.488	<b>ISSN:0022-2488</b> <b>ISSN: 1089-7658(Online )</b>	Other author
36.	Complex invariants for some time-independent and Time-dependent classical systems Narender Kumar, S. B. Bhardwaj, Dinesh Kumar Ram Mehar Singh, and Fakir Chand	Reports on Mathematical Physics 88, (2021); 399-419	Indexed & refereed	0.742	<b>ISSN:0034-4877</b>	Other author
37.	Co3O4/PANI nanocomposites as a photocatalytic, antibacterial and anticorrosive agent: Experimental and theoretical approach Harish Kumar, Manisha Luthra , Manisha Punia , Ram Mehar Singh	Colloid and Interface Science Communications 45 (2021) 100512	Indexed & refereed	4.914	<b>ISSN:2215-0382</b>	Other author



38.	Effect of Porosity on hydromagnetic boundry layer flow with forced convective heat transfer  Kushal Sharma, Neha Vijay , O.D. Makinde , S.B. Bhardwaj , Ram Mehar Singh, Fazle Mabood	Indian journal of Engineering and Material Science Accepted IJEMS-2965	Indexed & refereed	0.881	<b>ISSN:0975-1017</b> Online) <b>ISSN: 971-4588(Print)</b>	Other author
39.	Analytical Solution to the Schrodinger Equation for Generalized Cornell Potential and its Applications to Diatomic Molecules and Heavy Mesons Vinod Kumar, S. B. Bhardwaj, Richa Rani Ram Mehar Singh, and Fakir Chand	Modern Physics Letters A.37(2) 2022, 2250010	Indexed & refereed	2.066	<b>ISSN:0217-7323</b> (print); 1793-6632 (web)	Supervisor
40.	Mass spectra and Thermodynamic Properties of Soime Heavy and Light Mesons, Vinod Kumar, S. B. Bhardwaj, Dinesh Kumar Ram Mehar Singh, and Fakir Chand	Pramana Journal of Physics Accepted PRAM-D-21-00316R3	Indexed & refereed	1.688	ISSN (Print) 0304-4289  EISSN 0973-7111	Supervisor
41.	Template Assisted Electrodeposition Of Copper Nanowires And Their Characteristics .Bharti Sharma, Sushil Kumar, Ram Mehar Dixit and Narinder Kumar	International Conference on Advanced Materials March 6-7, 2019	AIP Conference Proceedings 2276, 010001 (2020)		ISBN : 978-0-7354-4006-7	Supervisor (See Page No 65-69)
42.	<b>Ram Mehar Singh</b> , Fakir Chand and S.C.Mishra, “Quasi-exact solutions of Schrödinger equation for a sextic potentials in two imensions”,	Atti Della “ Fondazione Giorg io Ronchi ” Anno LXV (2010) N.-6 , 795-802.	Conference proceeding		ISSN 0015-606X	First Author
43.	Quantum mechanics of complex quartic potential in two dimensions <b>Ram Mehar Singh</b> , S.C. Mishra and Fakir Chand	International conference on “Recent developments in nonlinear dynamics” at school of physics, Bharathidasan University, Tiruchirapali -62004, Feb 13-16, 2008	Conference proceeding		ISBN- 978-7319-941-7	First author

44.	The Solutions of the Schrödinger equation for non-central potentials in two dimensions, S.C. Mishra <b>Ram Mehar Singh</b> and Fakir Chand.	International conference on “Recent developments in nonlinear dynamics” at school of physics, Bharathidasan University, Tiruchirapali -62004, Feb 13-16, 2008	Conference proceeding		ISBN-978-7319-941-7	Corress. Author
45.	Analysis of LMD data of fragments coming from ${}^9\text{Be}({}^{11}\text{Be}, {}^{10}\text{Be})\text{X}$ and ${}^9\text{Be}({}^{15}\text{C}, {}^{14}\text{C})\text{X}$ stripping reaction, Monika Singh, Rajesh Kharab and <b>Ram Mehar Singh</b>	Proceedings of the DAE Symp on Nucl. Phys.59(2014)	Conference proceeding		Online	Supervisor
46.	Analysis of ${}^{12}\text{C}({}^{23}\text{O}, {}^{22}\text{O}+n){}^{12}\text{C}$ stripping reaction within the first order corrected eikonal approximation Monika Singh, Rajesh Kharab and <b>Ram Mehar Singh</b>	Proceedings of the DAE – BRNS Symp. on Nucl. Phys.60(2015)-416	Conference proceeding		Online	Supervisor
47.	Effect of Annealing Temperature on Structural and Optical Properties of Zn-CoO Nanocomposites, Rampal, Dharm Veer, <b>Ram Mehar Singh</b> , Harish Kumar and S.B. Bhardwaj	International Conference of Advances in Optics and Photonics ,Guru Jambheshwar University of Science & Technology, Hisar, November 23-26, 2017	Conference proceeding		ISBN: 978-93-84871-109	Supervisor
48.	Synthesis and Characterization of ZnO-TiO <sub>2</sub> Nanocomposites Using Co-precipitation Technique, <b>Ram Mehar Singh</b> , Dharm Veer, Harish Kumar	National Conference on “Recent Developments in Science & Technology in Modern Era” Organized by Arya P.G. College, Panipat December 15, 2017	Conference proceeding			First Author

49.	EDXRF analysis of carat/under carat gold (Au) samples, R. Kumar, A. Rani, R. M. Singh, and R. Soni	National Conference on Recent Advances in Experimental and Theoretical Physics (RAETP-2018)	Conference proceeding		ISBN: 978-0-7354-1722-9	Supervisor
<b>Total API</b>						

## 12. Research Guidance :

Sr. No.	Course	No. of Students	Registered for Ph. D.	Thesis/Dissertation Submitted	Degree Awarded
(i)	PG Courses (Dissertation involving one semester)	21		Awarded	21
(ii)	M.Phil	02			02
(ii)	Ph. D.	10	05	01	04

## 13. Refresher Course, Methodology Workshops, Training, Teaching-Learning Evaluation Technology Programmes, Soft Skills Development Programmes, Faculty Development Programmes, Short ter course, Summer school and Winter school attended , etc.

Sr. No.	Programme	Duration	Organized by
i.	UGC sponsored orientation program	08-07- 2009 to 04-08-2009	UGC-Academic staff college Kurukshetra University, Kurukshetra
ii.	UGC sponsored refresher course in Physics	29-11-2010 to 18-12-2010	UGC- Academic staff College, GJUS & T, Hisar(Haryana)
iii.	UGC sponsored refresher course in Physics	01-05-2013 to 21-05-2013	UGC- Academic staff College, GJUS & T, Hisar(Haryana)
iv.	AICTE / ISTE – Short Term Training Programme on Recent Trends and	March 15 - 20, 2004	Department of Physics, Institute of Information technology & Management, Gwalior (M.P)
v.	A Short Term programme on Effective Teaching	Jul 30 , 2007 to August 03, 2007	EDU & EDCL. Mgt Department Chandigarh at Haryana College of Technology & Management Kaithal
vi.	Winter school on nonlinear dynamics (WINEXPND-2008)	December 1-5, 2008	SINP Kolkata
vii.	ICTS Summer Programme on Dynamics of Complex Systems Dynamics	June 16-25, 2018	ICTS, Bengaluru

viii.	One week Short term course on Advanced instrumentation techniques	Dec. 10-15, 2018	Guru Jambheshwar University of Science and Technology, Hisar
ix.	One week workshop on MOOCs and open education resources	July 22-27, 2019	Guru Jambheshwar University of Science and Technology, Hisar
x.	One Week Online Short Term Course on Synthesis and Characterization of Nanomaterials (SCNM-2020)	November 02-07, 2020	Department of Physics, J.C. Bose University of Science and Technology, YMCA, Faridabad
xi.	One week Online Short Term Course on Research and Development in Composite Materials (RDCM2020)	July 27-31, 2020	Department of Mechanical Engineering and Physics, J.C. Bose University of Science and Technology, YMCA, Faridabad

#### 14. Participation and Paper (s) Presented in Conferences/Seminars/Workshops/Symposia, etc.

Sr. No.	Title of the paper presented	Presented by	Title of the Conference/ Seminar etc & Organizer	Date(s) of the event	Whether International/ National/State/ Regional/University or College level
1.	“ The solutions of the Schrödinger equation for complex Hamiltonian system in two dimensions”.	<b>Ram Mehar Singh</b>	“National conference on nonlinear systems and dynamics” at Physical research laboratory Navrangpura Ahmedabad-380009 Gujarat India	Jan 03-05, 2008	National
2.	Solutions for differential equation for complex system in two dimensions.	<b>Ram Mehar Singh</b>	National Conference on “Futuristic Trends in Engineering and Technology”(FTET-08) Organized by J.C.D.M.College of Engineering on	January 28-29, 2008	National
3.	Quantum mechanics of complex quartic potential in two dimensions <b>Ram Mehar Singh, S.C. Mishra and Fakir Chand</b>	<b>Ram Mehar Singh</b>	International conference on “Recent developments in nonlinear dynamics” at school of physics, Bharathidasan University, Tiruchirapali-62004,	Feb 13-16, 2008	International
4.	Quasi- exact solutions of Schrödinger equation for a sextic potentials in two imensions	<b>Ram Mehar Singh,</b>	National workshop on Nanotechnology and Applied Science, Haryana College of Technology and Management Kaithal	November 28-20, 2009	National
5.	Quasi-Exact Solutions of the Schrödinger Equation for a Complex Coupled Sextic Potential in Two Dimensions	<b>Ram Mehar Singh</b>	International Symposium on “Complex Dynamical systems and Applications (CDSA2009)”Organized by Digha Science Center, West Bengal, India	December 4-6, 2009	International
6.	Exact solutions of the diffusion reaction equation in one dimension	<b>Ram Mehar Singh</b>	National conference on recent trends & technology Organized by Prannath Parnami institute of management & technology Hisar	June.04-06, 2012	National

7.	Quantum mechanics of shifted harmonic potential in one dimension	<b>Ram Mehar Singh</b>	International conference on "Sports, Biomechanics, Emerging Technology & Quality assurance in technical Education" Organized by PrannathParnami institute of management & technology Hisar	March.17-18, 2012	International
8.	Construction of exact invariants for a dynamical system using extended complex phase space approach	Ram Mehar Singh	8 <sup>th</sup> Conference on Nonlinear system and dynamics at Indian Institute of technology Indore	Dec 11-14, 2013	National
9.	Integrability of a dynamical system in complex phase space	Ram Mehar Singh	National Seminar on New Horizons in Computing Research organized by Department of Computer Science & Applications CDLU Sirsa	Feb26, 2015	National
10.	Construction of invariants for a complex Hamiltonian system in 3-dimensions	Ram Mehar Singh	National conference on "Emerging trends in Physics and material Science" organized by Physics Department CDLU Sirsa	March 09-10, 2015	National
11.	Integrability of a coupled harmonic potential in complex phase space	Ram Mehar Singh	Conference on nonlinear systems and Dynamics at IISER Mohali	March 13-15, 2015	National
12.	Invariants for a complex cubic potential in three dimensions	Ram Mehar Singh	Conference on nonlinear systems and Dynamics at IISER Mohali	March 13-15, 2015	National
13.	Integral of motion for a PT-symmetric potential in three dimensions	Ram Mehar Singh	National Conference on "Emerging Trends in Mathematical Sciences" organized by Department of Mathematics CDLU Sirsa	March 17-18, 2015	National
14.	Solitary wave solutions for non linear reaction diffusion equation with variable coefficients	Ram Mehar Singh	National conference on "Physics Industry Interface" organized by Department of Physics, Kurukshetra University Kurukshetra	September 02-04, 2015	National
15.	Structural and optical characterization of ZnO nano particles by sol-gel route	Ram Mehar Singh	3 <sup>rd</sup> National conference on "Photonics and Material Science" organized by Department of Applied Physics, Guru Jambheshwar University of Science and Technology, Hisar	November 18-19, 2015	National
16.	Structural and Optical Properties of $\text{TiO}_2$ Nanoparticles Prepared by Sol-gel Technique	Ram Mehar Singh	Recent advancements in science & Technology Organized by Arya P.G. College, Panipat	February 27-28, 2016	National
17.	Synthesis and Characterization of NiO Nanoparticles by Sol-gel Route	Ram Mehar Singh	2 <sup>nd</sup> National Conference On Physics of Engineering Materials organized by Department of Physics, DCRUST, Murthal, Haryana	March 10-11, 2016	National

18.	Synthesis and Characterization of Ni-Mn Oxide Nanocomposites Using Wet Chemical Route	Ram Mehar Singh	National conference on "Emerging trends in Physics and material Science" organized by Department of Physics CDLU Sirsa	March 19-20, 2016	National
19.	Solitary Wave-Type Solutions of Nonlinear Diffusion Reaction Equation Using Auxiliary Equation n Method	Ram Mehar Singh	"Conference on Nonlinear Systems & Dynamics" organized by IISER Kolkata"	Dec 16-18, 2016	National
20.	Exact Solutions of the Burge-Fisher Type Equation With Nonlinear-Convective Terms	Ram Mehar Singh	National Seminar on "Emerging Trends in Science & Technology" Organized by Arya P.G. College, Panipat	Feburary 18, 2017	National
21.	Solitary and Travelling Wave Solutions of Nonlinear Evaluation Equation	Ram Mehar Singh	National Conference on "Recent Developments in Science & Technology in Modern Era" Organized by Arya P.G. College, Panipat	December 15, 2017	National
22.	Synthesis and Characterization of ZnO-TiO <sub>2</sub> Nanocomposites Using Co-precipitation Technique	Ram Mehar Singh	National Conference on "Recent Developments in Science & Technology in Modern Era" Organized by Arya P.G. College, Panipat	December 15, 2017	National
23.	Effect of Annealing Temperature on Structural and Optical Properties of Zn-CoO Nanocomposites	Ram Mehar Singh	National Conference on "Recent Developments in Science & Technology in Modern Era" Organized by Arya P.G. College, Panipat	December 15, 2017	National
24.	New Solitonic Solutions of the Burger-Fisher Type Equations Using A-E Method	Ram Mehar Singh	Conference on Nonlinear Systems & Dynamics (CNSD-218) organized by Jawhar Lal Nehru University , New Delhi	October 12-14, 2018	International
25.	Exact Solutions of Certain Diffusion Reaction Equations With Higher Order Nonlinearities	Ram Mehar Singh	International Conference on Complex Dynamical Networks (IC <sup>2</sup> DN- 2018) at Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata .	October 04 - 05, 2018	International
26.	Study of structural, optical and antibacterial properties of Zn <sub>1-x</sub> Mn <sub>x</sub> O nanocomposites by wet-chemical technique	Ram Mehar Singh	National webinar on Advances in Physics organized by Guru Jambheshwar University of Science and Technology, Hisar	June 25-26, 2020	National

27.	Structural and Magnetic Characterization of $Zn_{1-x}Co_xO$ nanocomposites	Ram Mehar Singh	International Conference on Scientific Developments in Current Era (ICSDE-2021) IB Postgraduate College Panipat	June 9-10, 2021	International
28.	Solitary Wave Solutions of Some Coupled D-R Equations Using $G'/G$ Method	Ram Mehar Singh	International Conference on Recent Advances in Basic and Applied Sciences, Faculty of Science, Baba Mastnath University Rohtak	August 27-28, 2021	International
29.	Mass Spectra of Charmonium and Bottomonium Using the Coulomb Perturbed Potential	Ram Mehar Singh	65th DAE-BRNS Symposium on Nuclear Physics, 2021, DAE Convention Centre, Anushaktinagar, Mumbai, Maharashtra, 400094	December 1-5, 2021	International
30.	Travelling and Solitary Wave solutions of (2+1)-dimensional nonlinear evolution equations by using Khater Method	Ram Mehar Singh	International Conference on Nonlinear Dynamics and Applications (ICNDA- 2022) at Department of Mathematics, Sikkim Manipal Institute of Technology, Majitar, East-Sikkim 737136, India	March 9-11, 2022	International

#### 15. Invited for conferences/ seminars/ workshops/ symposia to deliver lectures/ chair sessions

Sr. No.	Whether Lecture delivered/ Academic Session Chaired	Title of the Lecture delivered	Title of Conference/ Seminar etc.	Date(s) of the event	Organizer	Whether International/ National/ State/ Regional/ University or College level
(i)	Lecture Delivered	A brief report on nonlinear dynamics	Recent developments in technology	Feb 13-16, 2008	School of physics, Bharathidasan University, Tiruchirapali-62004,	International
(ii)	Key note address	Role of emerging technologies & quality assurance in technical education	Sports, Biomechanics, Emerging Technology & Quality assurance in technical Education	March 17-18, 2012	Prannath Parnami institute of management & technology Hisar	International
(iii)	Chaired Sessions	Poster Presentation Session	Recent advancements in science & Technology	February 27-28, 2016	Arya P.G. College, Panipat	National
(iv)	Chaired Sessions		National Conference on "Recent Developments in Science & Technology in Modern Era"	December 15, 2017	Arya P.G. College, Panipat	National

#### 16. Academic contribution through organizing conferences/ seminars/ workshops/ symposia/orientation/refresher courses, etc.

Sr. No.	Convener/Secretary/Member of Organizing/Advisory Committee, etc.	Date/Duration of Event	Whether International/ National/ State/ Regional/ University or College level
i	Member Local Organizing Committee, National Conference on“Emerging Trends in Chemical Sciences & Technology (ETCST-15)” Organized by Department of Chemistry, CDLU Sirsa	Feb 25, 2015	National
ii	Organizing Secretary , National Conference on“Emerging Trends in Physics and Material Science” Organized by Department of Physics, (ETCST-15) CDLU Sirsa	March 09-10, 2015	National
iii	Member Organizing Committee,, National Conference on“Emerging Trends in Mathematical Sciences” Organized by Department of Mathematics, CDLU Sirsa	March 17-18, 2015	National
iv	Organizing Secretary, National Conference on“Emerging Trends in Physics and Material Science (ETPMS-2016)” Organized by Department of Physics,CDLU Sirsa	March 19-20, 2016	National
V	Organizing Secretary, International Conference on“Frontiers in Physics, Material Science and Nanotechnology (FPMSN-2022)” Organized by Department of Physics,CDLU Sirsa	March 25-26, 2022	International

## 17. Academic contribution through participation in quality enhancement efforts

- (i) Member, NAAC Committee, CDLU Sirsa
- (ii) Member, PGBOS, Department of Physics, CDLU Sirsa
- (iii) Member, UGBOS, Department of Physics, CDLU Sirsa
- (iv) Member, DRC, Department of Physics, CDLU Sirsa
- (v) Member Staff council , Department of Physics, CDLU Sirsa
- (vi) Member, Departmental purchase committee, Department of Physics, CDLU Sirsa
- (vii) Member adhoc purchase committee, Department of Physics, CDLU Sirsa
- (viii) Convener, Physical Society , CDLU Sirsa
- (ix) Member, Admission committee, Physical society, Staff council, Time table committee, Budget/Purchase committee Department of Physics, CDLU Sirsa
- (x) Member syllabi enrichment committee, Department of Physics CDLU Sirsa
- (xi) Member, University Industry Cell CDLU Sirsa
- (xii) Member, Hostel Committee, CDLU, Sirsa
- (xiii) Member, Adhoc purchase committee for CCTV cameras for BH-I.
- (xiv) Convener, Adhoc purchase committee for CCTV cameras for BH-II.
- (xv) Convener, Hostel purchase committee for hostel upto Rs. 10000/-
- (xvi) Member, Preparation of Hostel Prospectus Committee, CDLU, Sirsa
- (xvii) Member, Executive committee of alumni association CDLU, Sirsa
- (xviii) Member, Panel of the editor for the University magazine ZENITH CDLU, Sirsa
- (xix) Member, Inspection committee to grant extension in provisional affiliation for B.Ed



- course in respect of Ch. RR Memorial college of education Ellenabad.
- (xx) Member , Inspection committee to inspect KT Govt. College, Ratia, Distt. Fathebad for extension in provisional affiliation for academic session 2019-20
  - (xxi) Member, Inspection committee for DRDO New Delhi Research Project in Chemistry Department CDLU, Sirsa
  - (xxii) Convener purchase committee for organization of seminar on Swami Vivekanand and his teaching on April 16, 2015.
  - (xxiii) Member, Purchase committee for UGC Major Research Project in Department of Chemistry CDLU, Sirsa
  - (xxiv) Member, Committee to discuss the recommendation given by Colonel (Ret) MS Dahiya, Shaurya.
  - (xxv) Member NSS Advisory Committee CDLU, Sirsa, Unit-II
  - (xxvi) MOOC course coordinator of the Department of Physics CDLU Sirsa
  - (xxvii) Member, student grievance redressal cell, Department of Physics CDLU Sirsa
  - (xxviii) Member of the panel for Judges to evaluate the performance of participants of National Level Competition “Perform Physics Experiments”
  - (xxix) Member selection committee for selection of assistant professor in Physics at CRDAV Girls college Ellenabad, Sirsa
  - (xxx) Member, Committee to redraft the rules regarding students grievances
  - (xxxi) Member, Committee for smooth organization of induction programme
  - (xxxii) Member, Adhoc Committee for procurement/ completion of upgradation of Wi-Fi system
  - (xxxiii) Member, Committee to suggest appointment of examiners for practical examinations
  - (xxxiv) Member, Committee to look into the age consideration for offering regular admission
  - (xxxv) Member, Committee to reframe Ph.D. admission guidelines/ordinance.
  - (xxxvi) Member, Committee to prepare Ph.D admission notice and reservation distribution of seats for session 2021-22.
  - (xxxvii) Member adhoc purchase committee for purchasing of software for research/teaching
  - (xxxviii) Member , Proctor committee CDLU, Sirsa
  - (xxxix) Member Criteria-II of NAAC, Deptt of Physics, CDLU, Sirsa(xl)  
Chairperson, Department of Geography, CDLU Sirsa
  - (xli) Director Ranking, , CDLU Sirsa
  - (xlii) Nodal officer, NIRF and Atal Ranking , CDLU Sirsa
  - (xliii) Convener, PGBOS, Department of Geography, CDLU Sirsa
  - (xliv) Convener, UGBOS, Department of Geography, CDLU Sirsa
  - (xlv) Convener, DPC, Department of Geography, CDLU Sirsa
  - (xlvi) Convener , To purchase lab equipments, Department of Geography, CDLU Sirsa

- (xlvii) Convener, Admission Committee, Department of Geography, CDLU Sirsa
- (xlviii) Member, Academic audit, Department of Geography, CDLU Sirsa
- (xlix) Member, Academic-Administration Interface committee CDLU, Sirsa
- (l) Member , Committee for national teacher prize 2021
- (li) Member alumni association of the University , CDLU Sirsa
- (lii) Nodal officer , online examination , CDLU Sirsa
- (liii) Member committee to look into the age consideration for regular admission
- (liv) Convener, Kit/Chemical purchase committee , CDLU Sirsa
- (lv) Member, Admission Committee, USGS, CDLU Sirsa
- (lvi) Member discipline committee for 75<sup>th</sup> independence day 2021
- (lvii) Member, Committee to decide the quality of latest version, brand and preparation of specification of all in one computers and multifunctional computers
- (lviii) Member, National advisory committee of International Conference on Frontiers in Physics, Materials, Science and Nanotechnology, Department of Physics CDLU Sirsa
- (lix) Member, Local advisory committee of International Conference on Frontiers in Physics, Materials, Science and Nanotechnology, Department of Physics CDLU Sirsa

#### **18. Details regarding participation in summer schools, workshops, seminars, symposia etc.**

- (i) AICTE / ISTE – Short Term Training Programme on Recent Trends and Advances in semiconductor technology organised by Department of Physics, Institute of Information technology & Management, Gwalior (M.P) , from March 15 - 20, 2004.
- (ii) National conference on Recent advances in material science (RAMS-06) organized by Department of Physics Kurukshetra University Kurukshetra, from September 27-29, 2006.
- (iii) Workshop on MATLAB / SIMULINK Technology organised by Department of Electrical & Electronics Engineering, Haryana College of Technology & Management Kaithal, on Jan 4 , 2007.
- (iv) National Workshop on Nano Technology and Modeling organised by Department of Electronics & Communication Engineering, Haryana College of Technology & Management Kaithal, on Jan 5 , 2007.
- (v) DELNET One day orientation Programme organised in collaboration with Haryana College of Technology & Management Kaithal, on April 30 , 2007.
- (vi) A Short Term programme on Effective Teaching conducted by EDU & EDCL. Mgt Department Chandigarh at Haryana College of Technology & Management Kaithal, from Jul 30 , 2007 to August 03, 2007.
- (vii) Winter school on nonlinear dynamics (WINEXPNLD-2008) December 1-5, 2008

- (viii) National workshop and conference on “ Computational methods for Nonlinear Dynamics” organized by centre for Nonlinear Dynamics Bharathidasan University, Tiruchirapali-62004, from Sep 22-25, 2010.
- (ix) National workshop on “ Patent Awareness Vis-A-Vis intellectual Property Rights” organized by IPR & TC Cell Guru Jambheshwer University of Science & Technology Hisar – 125001 (Haryana) on August 9 , 2011.
- (x) National workshop on “ Patent Awareness Vis-A-Vis intellectual Property Rights” organized by IPR & TC Cell Guru Jambheshwer University of Science & Technology Hisar – 125001 (Haryana) on August 9 , 2011.
- (xi) National workshop on “ Patent Awareness: Issues & Challenges” organized by Department of Biotechnology, Ch. Devi Lal University Sirsa– 125055 (Haryana) on August 10 , 2011.
- (xii) National workshop on “ Patent Awareness: Issues & Challenges” organized by Department of Biotechnology, Ch. Devi Lal University Sirsa– 125055 (Haryana) on August 10 , 2011.
- (xiii) National workshop on “ Patent Awareness: Issues & Challenges” organized by Department of Biotechnology, Ch. Devi Lal University Sirsa– 125055 (Haryana)
- (xiv) National seminar on “Communal harmony, peace and social justice” organized by UGC cell for coaching schemes, Ch. Devi Lal University Sirsa– 125055 (Haryana) on Dec. 06 , 2011.
- (xv) Attended the orientation program with the theme, “**Nuclear Isomerism: Commemorating the centenary of discovery** ” on November 30, 2021, in the “65th DAE-BRNS Symposium on Nuclear Physics (SNP2021)”.

**19. Computater Skil :** Ms Word, Excel, Fortran , C++, Matlab, Latex , Origin, Mapple, Linux, Pythen

**20. Teaching Contributio :** I have taught the following subjects at UG & PG level

**UG Level :** Solid state Physics, Laser , Optics, Electronic, Quantum Mechanics, Classical Mechanics, Nuclear Physics, Electricity and Magnetism.

**P.G Level :** Electronics, Quantum Mechanics, Computational Physics.

**21. Extension Lectures Delivered :** Three times at MM College Fathebad and once at Janta (PG) College Fathebad

**22. Other Responsibilities Assigned by the University :**

- (i) Programme Officer, NSS, UTD, CDLU, Sirsa from 19-09-2011 to 18-10-2017
- (ii) Warden Boys Hostel-II, CDLU Sirsa w.e.f. June 20, 2014 till date.
- (iii) Chairperson, Department of Geography, CDLU Sirsa
- (iv) Director Ranking , CDLU Sirsa
- (v) Nodal officer, NIRF and Atal Ranking , CDLU Sirsa

I certify that the information provided and/or the documents are correct as per records.

Date:

**Signature of the Faculty**