

Curriculum Vitae

Dr. Rajesh Parmar

Professor

Department of Physics,

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(a) Educational Qualifications:

Sr. No.	Degree	Year of passing	University/Institute
4	Ph.D.(Physics)	2015	Ch. Devi. Lal University, Sirsa
3	Others		
	(i)M.Phil.(Physics)	1993	M.D.U. Rohtak
	(ii) M.Sc. (Comp.Sc.)	2004	M.D.U. Rohtak
2	PG	1991	M.D.U. Rohtak
1	UG	1988	M.D.U. Rohtak

(b) Professional Carrier:

Designation	Institute served	Duration	
		From	To
Professor	M.D.U. Rohtak	Dec 2015	Till Date
Associate Professor	M.D.U. Rohtak	Jan 2009	Nov 2015
Lecturer(Assist Professor)	M.D.U. Rohtak	June 2008	Dec 2008
Lecturer(Assist. Professor)	University College Rohtak	Jan 1996	May 2008

(c) Research Guidance:

1. 03 students have been awarded Ph.D. degree on following topics:-

- (1) Title: "Synthesis and Characterization of Metal Oxide of Nanoparticles"
Name of Student: **Harita Kumari** **Year: 2025**
- (2) Title: "Study of Structural, Optical and Electrical properties of Modified Tellurite Glasses".
Name of the Student: **Komal** **Year: 2025**
- (3) Title: "Synthesis and Characterization of Boro-Vandate Glasses".
Name of the Student: **Asha Rani** **Year: 2025**

2. Scholars presently registered/ working - 02

(1) Name – **Priyanka Rani**

Title: “**Synthesis and Characterization of Ion Conducting Glassy Materials for Energy Storage Applications**”.

(2) Name - **Pooja Rawat**

Title: “**Study of Structural, Optical and Magnetic Properties of Ferrite – Metal Oxide Nanocomposits**”.

(d) Research Publications:

Published in Refereed/Peer Reviewed Journals = 31

Published in Conferences/Seminars Proceedings = 11

Participation in Conferences/Seminars/Workshops = 18

(e) Assignment within the M.D.University, Rohtak

1. Chairman/HOD, Department of Physics
2. Member of academic Council, Faculty of Physical Science, U.G. and P.G. Board of Studies, MDU.
3. Chairman of U.G. and P.G. Board of Studies of Physics

Sr. No.	Title with name of author (s) as appearing in publication	Journal name, Volume, year, pages/article no	ISSN/I SBN no. if any	Impact factor
42	<i>Structural and optical study in MnO₂-modified lithium borate glasses.</i> Priyanka Rani, Komal Poria, Sunil Dhankhar , R.Parmar , R. S. Kundu.	Optical and Quantum Electronics , 58, 2026 , 27	030689 19	4.0
41.	<i>Structural, magnetic, and photocatalytic properties of Ce³⁺ ion doped Ni–Zn ferrite nanoparticles.</i> Harita Kumari, Sourabh Sharma, Ashok Kumar, R. Parmar , Poorva Rani ,Priyanka Godara, Ram Mehar Singh, Richa Jain, Asha.	Journal of Magnetism and Magnetic Materials 636,2025,173671	187347 66	3.0
40.	<i>Impact of particle size on photocatalytic degradation of organic pollutants using SnO₂ nanostructures synthesized using modified Hydrothermal method.</i> H. Kumari, Mahak, Saurav, Sonia, S. Chahal, S. Sharma, Reenu, A. Kumar and R. Parmar	Ceramics International , 51, 2025 ,55269-55283	036152 35	5.6
39.	<i>Investigating the electrical properties of V₂O₅ modified lithium borate glasses using Dielectric Spectroscopy: Insights into Li⁺ ion diffusion and mixed conduction for energy storage applications.</i> P. Rani, K. Poria, S. Dhankhar, R. Parmar , R.S. Kundu	Journal of Non Crystalline Solids , 665, 2025 , 123611	002230 93	3.5
38.	<i>Ferroelectric to relax or transition and improved dielectric response in samarium-doped barium titanate stannate ceramics.</i> K. Poonia, A. S. Lather, N. Ahlawat, R.S. Kundu, A. Nehra, R. Parmar.	Ceramics International , 51, 2025 ,33105-33121	036152 35	5.6

37.	<i>Investigating Oxygen Vacancies and their Role in Enhanced Photocatalytic and Magnetic Properties of Cadmium-Doped ZnFe₂O₄ NPs.</i> H. Kumari, Sonia, S. Chahal, R. M. Singh, A. Kumar, R.Parmar	Journal of Electronic Material , 54, 2025 , 6454 - 6470	027288 42	2.5
36.	<i>Examination of bismuth Borovanadate Glasses Modified by Alkaline Earth Oxide (SrO) in Terms of AC Conductivity and Dielectric Relaxation.</i> A. Rani, R. Parmar , R.S. Kundu	Journal of Electronic Materials ,54, 2025 , 6013 - 6028	036152 35	2.5
35.	<i>Frequency-dependent electrical conductivity and impedance analysis on KCl modified tellurite-based glasses.</i> K. Poria, S. Dhankhar, R. Parmar , R.S. Kundu, D. Singh	Materials Research Bulletin , 187, 2025 , 113358	036152 35	5.7
34.	<i>Investigating the influence of barium oxide on bismuth borovanadate glasses: physical, structural, optical, and dielectric properties.</i> A.Rani, R.Parmar , R.S. Kundu, R. Bala	Applied Physics A:Materials Science and Processing , 131, 2025 , 250	002554 08	2.8
33.	<i>Exploring the impact of CuCl₂ modification on structural variations and dielectric constant in bismuth borate tellurite glasses.</i> K. Poria, R. Parmar , S. Dhankhar, R.S. Kundu,	Journal of Molecular Structure , 1321, 2025 , 140019	094783 96	4.7
32.	<i>Study of electric transport and impedance analysis in copper chloride modified bismuth boro-tellurite glasses.</i> K. Poria, S. Dhankhar, R. Parmar , R.S. Kundu,	Journal of Non-Crystalline Solids , 648, 2025 ,123301	002228 60	3.5
31.	<i>Physical and Optical Properties of Tellurium Dioxide-Based Quaternary Glasses: Potential for Nonlinear Optical Applications.</i> K. Poria, R. Parmar , H. Kumari, S. Dhankhar, R.S. Kundu,	Journal of Electronic Materials ,54, 2025 ,172-179	002230 93	2.5
30.	<i>Electrical characterization of lead-modified bismuth borovanadate glasses.</i> A. Rani, R. Parmar , R.S. Kundu	Current Applied Physics ,68, 2024 , 151 - 158	156717 39	3.1
29.	<i>Physical, thermal and optical study of Bismuth modified boro-vanadate glasses: V₂O₅-B₂O₃-Bi₂O₃.</i> A. Rani, R. Parmar , R.S. Kundu	AIP Conference Proceedings , 3149, 2024 , 080009	009424 3X	
28.	<i>Glass transition behaviour and structural analysis of SrCl₂ modified tellurite-Based glasses.</i> K. Poria, R. Parmar , S. Dhankhar, R.S. Kundu,	AIP Conference Proceedings , 3149, 2024 , 080003	009424 3X	
27.	<i>Uncovering the impact of BaO on electrical properties of bismuth boro vanadate glasses: V₂O₅-B₂O₃-Bi₂O₃-BaO.</i> A. Rani, R. Parmar , R.S. Kundu	Applied Physics A: Materials Science and Processing ,130, 2024 , 585.	094783 96	2.8
26.	<i>Structural, optical and dielectric studies of KCl modified TeO₂-Bi₂O₃-B₂O₃ glasses.</i> K. Poria, R. Parmar , S. Dhankhar, R.S. Kundu,	Optical and Quantum Electronics ,56, 2024 , 1347	030689 19	4.0
25.	<i>Enhanced catalytic degradation of organic dye by Sn1-xLaxO₂ nanoparticles under UV light for wastewater treatment.</i> H. Kumari, Sonia, S. Sharma, S. Chahal, M. Gupta, A. Kumar, R. Parmar .	Journal of Photochemistry and Photobiology A: Chemistry ,453, 2024 , 115673	101060 30	4.7
24.	<i>Formulation of conductivity, electric modulus and dielectric behaviour of calcium bismuth borovanadate glasses with varying temperature and frequency.</i> A. Rani, R. Parmar , R.S. Kundu	Journal of Non-Crystalline Solids ,631, 2024 , 122910	002230 93	3.5
23.	<i>Efficient adsorption, mechanism and photocatalytic performance of Yb-SnO₂photocatalyst.</i> H. Kumari, Sonia, S. Chahal, A. Kumar, R. Parmar .	Ceramics International ,50, 2024 , 15976 - 15993	027288 42	5.6

22.	<i>Electrical conductivity and hopping conduction mechanism by VRH model in halide modified tellurite glasses.</i> K. Poria, R. Parmar , S. Dhankhar, R.S. Kundu,	Solid State Sciences ,148, 2024 , 107442	129325 58	3.3
21.	<i>UV-irradiated photocatalytic performance of Er³⁺ ion doped SnO₂ for hazardous Rose Bengal dye.</i> H. Kumari, Sonia, Suman, P. Kumar, A. Kumar, R. Parmar .	AIP Conference Proceedings ,2995, 2024 , 020039	009424 3X	
20.	<i>Sol-gel synthesis and characterization of Gd-doped SnO₂ nanoparticles for water treatment and spintronic applications.</i> H. Kumari, Sonia, S. Chahal, A. Kumar, R. Parmar .	Journal of Materials Science: Materials in Electronics , 35, 2024 ,212	095745 22	2.8
19.	<i>Photocatalytic Degradation of RB dye via Cerium substituted SnO₂ Photocatalysts.</i> H. Kumari, Sonia, , S. Chahal, A. Kumar, R. Parmar .	Materials Science and Engineering: B , 296, 2023 , 116654	092151 07	4.6
18.	<i>Structural, physical and optical study of calcium modified bismuth borovanadate glasses: V₂O₅-B₂O₃-Bi₂O₃-CaO.</i> A. Rani, R. Parmar , R.S. Kundu.	Optical Materials , 143, 2023 , 114135	092534 67	4.2
17.	<i>Effect of ZnCl₂ on structural and optical features of TeO₂-B₂O₃-Bi₂O₃-ZnCl₂ glasses.</i> K. Poria, S. Dhankhar, R. Parmar , R.S. Kundu, R. Bala.	Solid State Sciences , 142, 2023 , 107239	129325 58	3.3
16.	<i>A Review on Photocatalysis Used For Wastewater Treatment: Dye Degradation.</i> H. Kumari, Sonia, Suman, R. Ranga, S. Chahal, S.Devi, S. Sharma, S. Kumar, P.Kumar, S. kumar, A. Kumar, R. Parmar .	Water, Air, and Soil Pollution , 234, 2023 , 349	004969 79	3.0
15.	<i>Structural, Physical, Thermal, and Optical Analysis of Lead Modified Bismo-Borovanadate Glassy System: V₂O₅-B₂O₃-Bi₂O₃-PbO.</i> A.Rani, R. Parmar , R.S. Kundu.	Journal of Inorganic and Organometallic Polymers and Materials , 2023	157414 43	4.9
14.	<i>Optical and physical properties of magnesium modified borate glass system.</i> K. Rani, N. Ahlawat, R.S. Kundu,P. Khandelwal, A. Rani, R. Parmar .	AIP Conference Proceedings , 2220, 2020 , 080031	009424 3X	
13.	<i>Role of lithium ions on the physical, structural and optical properties of zinc boro tellurite glasses.</i> S.Rani, N. Ahlawat, R. Parmar , S. Dhankhar, R.S. Kundu.	Indian Journal of Physics , 92, 2018 , 901 - 909	097314 58	1.7
12.	<i>To study the effect of doping concentration of silver on structural and optical properties of cadmium oxide (CdO) nanostructure.</i> R.Kumar, A. Sharma, R. Parmar , S. Dahiya, N. kishor.	AIP Conference Proceedings ,1728, 2016 , 020321	009424 3X	
11.	<i>To study the effect of dopant NiO concentration and duration of calcinations on structural and optical properties of MgO-NiO nanocomposites.</i> R. Kumar, P. praveen, , A. Sharma, R. Parmar , S. Dahiya, N. Kishor.	AIP Conference Proceedings ,1728, 2016 ,020193	009424 3X	
10.	<i>To study the effect of calcinations durations and temperature on optical and structural properties of MgO-CuO nanocomposites.</i> R. Kumar, K. Praveen, A. Sharma, R. Parmar , S. Dahiya, N. Kishor.	AIP Conference Proceedings ,1728, 2016 , 020385	009424 3X	
9.	<i>Structural characterization of ZnCl₂ modified tellurite based glasses.</i> S. Dhankhar, R.S. Kundu, R. punia, Sunita, R. Parmar , N. Kishor.	AIP Conference Proceedings ,1728, 2016 , 020340	009424 3X	
8.	<i>Electronic transport and relaxation studies in bismuth modified zinc boro-tellurite glasses.</i> S. Dhankhar, R.S. Kundu, R. Parmar , S. Murugavel, R. Punia and N. Kishore.	Solid State Sciences , 48, 2015 , 230-236.	1293- 2558	3.3

7.	<i>Physical, Structural and optical properties of Iron doped bismuth Silicate glass ceramics.</i> R. Parmar	International Journal of applied Engineering Research , 10(20), 2015, 41362-41370.	0973-4562	
6.	<i>Optical characterization of Zinc Bismuth Silicate glasses: An applicability of Hydrogenic Excitonic model.</i> R. Parmar, J. Hooda, R.S. Kundu, R. Punia and N. Kishore.	International journal of Optics , Volume 2015	1687-9392	1.7
5.	<i>Iron modified Structural and Optical spectral properties of Bismuth Silicate glasses.</i> R. Parmar, R.S. Kundu, R. Punia, P. Argamkar N. Kishore .	Physica B: Consensed Matter , 450, 2014, 39-44.	0921-4526	2.8
4.	<i>Titanium induced structural modifications in Bismuth Silicate glasses.</i> R.S Kundu, M. Dult, R. Punia, R. Parmar and N. Kishore.	Journal of Molecular Structure , 1063, 2014, 77-82.	0022-2860	4.7
3.	<i>Physical and Structural properties of Nd³⁺ doped BaO-ZnO-B₂O₃ glasses.</i> K. Nanda, R.S. Kundu, R. Punia, R. Parmar and N. Kishore.	AIP Conference Proceeding , 1536, 2013, 659.	0094-243X	
2.	<i>Optical properties of Bi_{0.1}Zn_{0.45}VO_{3.1} thin film using UV-VIS-NIR spectroscopy.</i> R. Punia, R.S. Kundu, J. Hooda, R. Parmar and N. Kishore.	AIP Conference Proceeding , 1536, 2013, 539.	0094-243X	
1.	<i>Effect of Fe₂O₃ on the physical and structural properties of bismuth silicate glasses.</i> R. Parmar, R.S. Kundu, R. Punia, N. Kishore and P. Argamkar.	AIP Conference Proceedings , 1536, 2013, 653 - 654	155176 16	

Papers presented/attended in International/ National Conferences/Workshops/Seminars/Somposia.

Sr. No.	Title of Conference/ Seminar and Organizer	Date of Event	Conference detail
19	International Conference on Innovations in Nanomaterials, Nano Devices & Smart Technologies (INNOST NANO 2025) SGT University Gurugram, Haryana, India	12-14 Nov 2025	International
18.	Synthesis and Characterization of Smart Materials and Their Potential Applications (ISSCSPA-2020) , University School of Basic and Applied Sciences Guru Gobind Singh Indraprastha University, New Delhi	14-17 June, 2020	E-International Symposium
17.	Indian Science Congress Association Rohtak Chapter on "Science & Technology: Rural Development (ICSTRD-2020) , Department of Chemistry, Maharishi Dayanand University, Rohtak	4-5 March, 2020.	International
16.	Nanotechnology for better living (ICNBL-2019) , NIT Srinagar and IIT Kharagpur	07-11 April, 2019.	National
15.	Indian Science Congress Association-Rohtak. (Chapter on Science and Technology for Sustainable Development) , Department of Chemistry, Maharishi Dayanand University, Rohtak (Haryana)	12-13 February, 2019.	National

14.	Recent advances in Chemical Sciences ", Department of Chemistry, Maharishi Dayanand University, Rohtak (Haryana)	7 March, 2018.	National
13.	International Academy of Physical Sciences (CONIAPS XXI) on "Symbiotic Development of Mathematical, Physical, Chemical and Computational Science " , Department of Mathematics, Guru Jambheshwar University of Science and Technology, Hisar (Haryana)	28-30Oct, 2017.	International
12.	Science & Technology for National Development ", Guru Kula Kangri Vishwavidyalaya, Haridwar, (Uttarakhand)	20-22 Nov, 2016.	National
11.	Emerging Trends in Physics and Material Science (ETPMS-2016) ", Department of Physics Chaudhary Devi Lal University, Sirsa, (Haryana)	19-20 March, 2016.	National
10.	Condensed matter & Applied Physics (ICC 2015) ", Govt. College of Eng. & Tech. Bikaner, (Rajasthan)	30-31 Oct, 2015.	International
9.	Nascent Development in Chemical Sciences: Opportunities for Academia-Industry Collaboration ", Department of Chemistry, Birla Institute of Technology & Science, Pilani, (Rajasthan)	16-18 Oct, 2015.	International
8.	Science & Technology for Indigenous development in India ", Guru Kula Kangri Vishwavidyalaya, Haridwar, (Uttarakhand)	28-30 Sept, 2015.	National
7.	Recent Advances in Engineering Science and Management ", Ph.D Chamber, New Delhi	30 Aug, 2015.	International
6.	Emerging Trends in Physics and Material Science ", Department of Physics Chaudhary Devi Lal University, Sirsa, (Haryana)	9-10 March, 2015.	National
5.	Emerging Computing Technologies and ICTDevelopment-2015 ", Department of Computer science & Applications, Maharishi Dayanand University, Rohtak, (Haryana)	28 Feb, 2015.	National
4.	Applied Physics and Material Science ", Department of Physics M.D. University, Rohtak, (Haryana)	5-6 Feb, 2015.	National
3.	Advances in Chemical Sciences(ACS-2013) ", Department of Chemistry, Maharishi Dayanand University, Rohtak,(Haryana)	1-2 March, 2013.	National
2.	Recent Trends in Applied Physics & Materials Science (RAM-2013) , Govt. College of Engg. & Technology, Bikaner	1-2 Feb, 2013.	International
1.	Nanostructured Ceramics and Astrophysics , University of Delhi	13 -16 March, 2012	International

(f) Referee of International Journals

1. Radiation Physics and Chemistry
2. Physica B: Condensed matter
3. Journal of Electronic materials
4. Indian Journal of Physics
5. ECS Journal of Solid State Science and technology
6. Journal of Inorganic and Organometallic Polymers and Materials

(g) Details of Ph.D. Scholars (Ph.D. Completed)

(1) Name – Harita Kumari

Email: mlharita999@gmail.com

Title: **“Synthesis and Characterization of Metal Oxide Nanoparticles”.**

Date of Registration- **19.02.2021**

(2) Name – Komal

Email: Komalpooria08@gmail.com

Title: **Study of Structural, Optical and Electrical properties of Modified Tellurite Glasses”.**

Date of Registration-**30.04.2021**

(3) Name – Asha Rani

Email;jangra.asha@gmail.com

Title: **Synthesis and Characterization of Boro-Vandate Glasses”.**

Date of Registration- **30.04.2021**

(h) Scholars Working

(1) Name – Priyanka Rani

Title: **Synthesis and Characterization of Ion Conducting Glassy Materials for Energy Storage Applications”.**

Date of registration- **18.05.2022**

Change of Topic and Change of Supervisor w.e.f.-**12.06.2024**

(2) Name – Pooja Rawat

Title: **“Study of Structural, Optical and Magnetic Properties of Ferrite – Metal Oxide Nanocomposits”.**

Date of Registration - **05.02.2025**

Prof. Rajesh Parmar