CURRICULUM VITAE

(A) **Name** : Dr Rajender Singh Kundu

(B) **Designation** : Professor

(C) **Date of Birth** : 15.06.1967

(D) **Institution** : Department of Physics
Guru Jambheshwar University of Science &Technology,
Hisar – 125001 (Haryana) INDIA
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(D) (i) Academic Qualifications :

Sr.No.	Degree	Year	Division	University/Institution
1.	Matric	1983	Ist	Board of School Education, Haryana
2.	B.Sc.	1988	Ist	M.D. University Rohtak
3.	M.Sc.	1991	IInd	M.D. University Rohtak
4.	Ph.D.	2005	Degree Awarded	M.D. University Rohtak

(ii) Professional Career:

Sr.No.	Position held	year		University/Institution
1.	Assistant Professor	31.10.2005-	20. 07.2014	GJUS&T, Hisar
2.	Associate Professor	22.07.2014-	22.07.2017	GJUS&T, Hisar
3.	Professor	23.07.2017	Till date	

(E) Topic of Ph.D. Thesis:

Electronic and Structural Properties of Some Amorphous Chalcogenide Semiconductors Containing Transition/ Non-Transition Metallic Impurities.

(G) Foreign Visits:

(1) Visited Germany for Training Course and Seminar on Broadband Dielectric and Impedance Spectroscopy and Its Applications (Advanced course) by Novo control Technologies in Department of Chemistry, University of Marburg, Marburg, Germany from September 25-27, 2013.

(2) Visited Singapore for presenting research paper in International Conference on Electronic Materials (IUMRS-ICEM 2016) at SUNTEC City Singapore

(H) Administrative Involvements

Besides Teaching and research activities, I have been part of following activities in the university as well as in others institutions since 2005.

1. Member Proctorial Committee, GJUS&T Hisar
2. Member Admission Committee, GJUS&T Hisar
3. Member Selection Committee (Mattu Ram College of Engineering & management and Jat College, Rohtak)
4. Member, Departmental Research Committee (DRC) and UG & PGBOS, GJUS&T Hisar
5. Member of Academic Council (AC), GJUS&T Hisar

(I) Field of Specialization: Materials Science (Glass and Ceramics) in their Bulk and Thin films and their Structural, Electrical, Optical and Dielectric Characterization.

(J) Research Projects:

Sr.No.	Title	Sponsoring Agency	Duration	Amount
(i)	Development and characterization of Optical Materials for Photonic Systems and Devices **(Co-Principal Investigator)**	DRDO	3 years	Rs.4.98 crores (2008-2011)
(ii)	Synthesis and Characterization of Nano composites/Micro Crystallites based glass **(Principal Investigator)**	DRDO	3 years	Rs. 14.91 lacs (2009 - 2012)
(iii)	Studies on base line radioactivity in environment matrices around Nuclear power plant site in Haryana **(Co-Principal Investigator)**	DAE-BRNS	3 years	Rs. 16.05 lacs (2009-2014)

(iv)	Synthesis & Characterization of Heavy Metal oxide based glasses **(Principal Investigator)**	UGC	3 Years	Rs. 14.28 lacs (2012 -2015)
(v)	Synthesis and Characterization of Tellurite based glasses **(Principal Investigator)**	UGC (GJUST)	1 Year	Rs. 0.6 Lacs (2016)

(K) Courses Taught:

(i) Post Graduate (a) M.Sc.: Materials Science (Condensed Matter Physics), Solid State Physics**,** Plasma Physics and Physics in our Daily Life

(b) M.Tech. : Optical Materials and Semiconductor Optics

(ii)**Pre- Ph.D. Course:** Experimental /Analytical Techniques, Research Methodology

(L) Summer Institutes/Refresher/Orientation/Short Courses attended:

(i) Directorate of Higher Education, Haryana sponsored Refresher course on "New Trends in Physics" from May 07- 27, 2008 organized by the Department of Physics, Govt. College for Women, Rohtak.

(ii) Attended Training programme on Introduction to Emerging Technologies for Learning offered by University of Manitoba, Canada from March 23-29, 2009.

(iii) Training course on "Radiological Safety Aspects in the Research Application of Ionizing Radiation" from May 21-29, 2012 organized by Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, Mumbai in collaboration with Indian Association for Radiation Protection.

(iv) UGC sponsored Refresher course in Physics from May 01- 21, 2013 organized by UGC-Academic College, Guru Jambheshwar University of Science and Technology, Hisar (Hr).

(v) Energy Conversion and Storage (ECS-2016) during May 9- 14, 2016, Organized by Department of Chemistry, IIT Hyderabad.

(M) Orientation Course attended:

UGC sponsored Orientation Programme from Oct. 23- Nov. 21, 2009 organized by UGC-Academic College, BPS Mahila Vishwavidyalaya, Khanpur Kalan (Sonipat).

(N) Invited Talks/Extension lectures delivered

- Delivered two invited talks on Research Methodology for Basic Sciences at HRDC, GJUS&T, Hisar (2015, 2016)

(O) Research Guiding Experience:

(a) M.Phil./M.Tech Thesis

(i) M.Phil. – (01) "Microstructures based on the Reactive Ion Etching of Silicon"

Name of the Student Sanjeev Kumar, Annamalai University, August 2008

(ii) M.Tech. -03

1. "Study & Characteristics of Highly Reflective p-Contact" by Yogesh Kumar Yadav (13071003)

2. "Multilayer Metallic Coatings for Beam Splitter Applications" by Minal Bhutani (14071002)

3. "Multilayer Broadband graded Index Antireflection Coatings for Solar Cells" by Naresh Kumar (15071005)

(b) Ph.D. Thesis Guided:

(i) Ph.D. Degree Awarded : **Eight**
(ii) Ph.D. Thesis Submitted **: NIL**
(iii) Ph.D. Thesis in Progress **: Eight**

(1) Thesis Title: **"Study of Electronic Transport Properties of Some Modified Semiconductors"**
Name of Student: Rajesh Punia Year: 2013
Supervisors: Dr. Nawal Kishore & Dr. R.S.Kundu

(2) Thesis Title**: "Synthesis and Characterization of Some Oxide/Chalcogenide Glasses"**
Name of the Student: Jai Pal Singh Hooda Year: 2014
Supervisors: Dr. Nawal Kishore & Dr. R.S.Kundu

(3) Thesis Title**: "Synthesis and Characterization of Bismuth Based Oxide Glasses"**
Name of the Student: **Meenakshi** Year: 2016
Supervisors: Dr. R.S.Kundu & Dr. Rajesh Punia

(4) Thesis Title**: "Study of Electronic Properties of Heavy Metal Oxide based materials"**
Name of Student: **Sunil Dhankhar** Year: 2016
Supervisors: Dr. Nawal Kishore & Dr. R.S.Kundu

(5) Thesis Title**: "To Study the Effect of transition Metal Ions on the Properties of Heavy metal Oxide Based Glasses"**
Name of Student: **Rajesh Parmar** Year: 2016
Supervisors: Dr. Praveen Aghamkar & Dr. R.S.Kundu

(6) Thesis Title**: "Synthesis and Characterization of Rare Earth Doped Glasses"**
Name of Student: **Kirti Nanda** Year: 2016
Supervisors: Dr. R.S.Kundu & Dr. Nawal Kishore

(7) Thesis Title**: Synthesis and Characterization of ZnO based Nano Materials**
Name of Student: **Sarita Sharma** Year: 2016
Supervisors: Dr. Nawal Kishore & Dr. R.S.Kundu

(8) Thesis Title**: Synthesis and Characterization of Modified BaTiO3 Ceramics**
Name of Student: **Kanta** Year: 2019
Supervisors: Dr Neetu Ahlawat & Dr. R.S.Kundu

(P) MEMBERSHIP/FELLOWSHIP OF LEARNED BODIES/SOCIETIES

(1) Life Member, Materials Research Society of India

(II) Life Member, Forum of Chalcogeniders.

(III) Life Member, Electron Microscopy Society of India.

(Q) As Member Organizing Workshop/Conference/Seminar/Chaired Technical Session

(i) Member of Organizing Committee for National Conference on Photonics and Materials Organized by Department of Applied Physics.

(ii) Organizing Secretary for One Day National Workshop on Trends in Optical Coating for Head up Display & High Laser Damage Threshold on 27 June, 2011

(iii) Two times Chaired Technical Session in National Conference at GVM College, Sonipat (2012, 2014).

(Q) Current Research /Teaching Interests

The study of oxide glasses are of importance because of their technological applications in various electronics and optoelectronics. Oxide glasses containing SiO_2, B_2O_3, TiO_2, ZnO, Fe_2O_3, V_2O_5 etc. plays the important role in modifying the properties of the glasses. The prepared glasses are characterized by using XRD, DTA, DSC, SEM, FTIR, RAMAN and their dielectric impedance measurement. Our department is equipped with XRD, DSC, SEM, UV-Vis-NIR spectrophotometer, PE loop tracer, DC high field dependent measurements, Dielectric measurements from -150C to 500C at frequency range μHz to 40 MHz.

Ceramics materials based on $BaTiO_2$ are the materials of technological importance. When it is modified by various dopants at different sites gives different interesting properties. In our laboratory BT and CCTO based large no. of single phase modified ceramics have been prepared and characterized by using XRD, Raman, PE, Dielectric measurements, diffused reflectance measurement and the results have been published in international journals o repute.

We also provide training to our M.Sc. students for synthesis and characterization of different types of materials as a part of their curriculum as minor research project.

(R) PUBLICATIONS

1. Research Papers in Journals of International Repute: 70
2. Research Papers in Conferences/ Symposia: International Conferences: 20

   National Conferences : 80

Prof. R S Kundu