CURRICULUM VITAE

Name:	**DR ARVIND KUMAR SHARMA**	
Designation:	**Assistant Professor**	
School:	**Physical Sciences**	
Department:	**Physics**	
Specialisation & Research Interests:	**Condensed Matter Physics** • ***Synthesis of Amorphous Chalcogenides Glasses in Layered and Bulk form.*** • ***Phase-Change Optical (PCO) Memory Materials/ Data Storage/Energy storage Applications.*** • ***Study the Properties of Amorphous Chalcogenides Materials like Optical, Mechanical, Thermal and Electrical Properties for choosing the suitable Materials for the Fabrication of Photonic Devices - Solar Cell, Light-Emitting Diodes (LEDs) and Photodetectors.*** • ***Structural analysis of Amorphous Chalcogneide /Crystalline Materials.*** • ***Low and High-Temperature Studies of Transport Properties of Amorphous Materials***	
Email IDs (Official & Personal)	arvindkumar@mgcub.ac.in (Official) arvindphy007@gmail.com and arvindphy007@yahoo.com	
Mobile No.:	**+91-9598530866, 9452741886**	
Address:	**Department of Physics, School Physics Sciences, Mahatma Gandhi Central**	

	University, Temp Camp Zila School, Motihari- 845401, Bihar, INDIA

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
Ph. D. (Physics)	2015	Banaras Hindu University, Varanasi
M. Sc. (Physics)	2004	CSJM University, Kanpur
B. Sc. (Physics, Chemistry and Math)	2002	CSJM University, Kanpur
B.Ed.	2007	CSJM University, Kanpur
10+2	1999	UP Board
High School	1997	UP Board

3. ANY OTHER QUALIFICATION:

1. **CSIR NET (JRF and NET) : Qualified in 2008 June**
2. **Graduate Aptitude Test In Engineering (GATE) Qualified in 2009**

4. PROFESSIONAL EXPERIENCE: 4.4 years

Organisation/Institute/University	Position Held	Duration
Assistant Professor	2016 - Continue.	Mahatma Gandhi Central University Bihar
Assistant Professor	2015 Aug – 2016 Sep	Naraina Veedya Peeth of Engineering and Management

		Institute, Kanpur.

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work
Member in Controller of Examination (CoE) Cell	2016 - 2018	1. Assisted to examination cell. 2. Worked as a member of controller of examination cell to prepare the results for the semester examinations. 3. Assisted to the examination cell for smooth conduction of examinations.
Member of Sport committee	2017-2019	To organize various sport activities in university premises.
Member of Library committee	2017	As a member of library committee we helped in the accession of library books.
Special invitee member of Board of Studies (BoS)	2017-2019	*During this duration 2018-2019, department of Physics has been conducted two board of studies (BoS) meetings. First meeting was held in November 2017 for the approval of course structure and course content of graduate program B. Sc. (Hons.) and second meeting in and 2019 for the approval of course structure and course contents of graduate program B.Sc.(Hons.) and post graduate program M.Sc.(which will run from July 2019 session).* I was the special invitee member of

		the Board of Studies (BoS) in both the meetings. I given some inputs during the meetings of BoS and assisted to prepare the course structure and contents of aforementioned programme.
Department of Physics, Mahatma Gandhi Central University is organed Two day National Conference on November 22-23, 2019, I (**Joint Secretary of this National conference**)	November 22-23, 2019	National Conference on "***Physics and Chemistry of Advanced Materials (NCPCAM-2019)***, November 22-23, 2019, Department of Physics, Mahatma Gandhi Central University Bihar, Motihari-845401, INDIA

6. COURSES TAUGHT:

Courses taught at Graduate level

1. Mechanics and Special Theory of Relativity
2. GE-Optics and Modern Physics
3. GE-Electricity and Magnetism
4. Engineering Physics–II
5. Thermal Physics
6. Elements of Modern Physics
7. Quantum Mechanics & Applications
8. Physics of Devices and Instruments
9. Electromagnetic Theory
10. Basic Instrumentation Skills
11. GE-Mechanics

Courses taught at Post Graduate (M. Sc.) level-

1. Quantum Mechanics
2. Electrodynamics

Courses taught at M. Phil. And Ph.D. (Course work) level-

1. Physics of Advanced Materials (Elective Paper)

7. RESEARCH SUPERVISION: NONE

A. Ph.D.: NIL

i. Awarded :
ii. Submitted :
iii. Ongoing :

B. M. Phil.: NIL

i. Awarded :
ii. Submitted :
iii. Ongoing :

C. Non-Degree Oriented (Master's Level Dissertation):

i. Awarded :
ii. Submitted :
iii. Ongoing :

8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

1. As a member of sport committee, I have assisted to conduct various sport activities in University time to time. I have given contribution in conducting the annual sport events at the time of University foundation week. Also, University had given to me responsibility of co-convener to conduct annual sport events at time of Foundation day of university in 2019.
2. In preparation for ***MGCUB's first Foundation Week, Navankur***, 2017, was held from 29 January 2017 to 03 February 2017, the University created various committees such as Logistics Committee, Hospitality Committee, Stage Management Committee, Decoration Committee, Finance Committee, Trouble-shooters. I was the member of hospitality committee; I assisted to this unit during the foundation week for smooth conduction of the programme. Also, as a member of hospitality committee, I assisted to this unit during the "***Film***

Festival on Gandhi organised in collaboration with Directorate of Film Festivals during 14th to 16th April, 2017 in Town Hall, Motihari.

9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES: NONE

10. PUBLICATIONS: NONE

A. BOOKS/MONOGRAPHS:

1. Authored:

i. ……
ii. …….
iii. …….

2. Edited:

i. ……
ii. …….
iii. …….

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS: 25 (PUBLISHED)

S. No.	Publication Details	Impact Factor
1.	*Laser-induced self-organization in Se–Te–Sn–Cd glassy semiconductor for developing novel light-sensing dielectrics, Amit Kumar,* **Arvind Sharma,** *Neeraj Mehta,* **Progress in Natural Science: Materials International, 29 (2019) 541-548.**	**3.31**
2.	*Effect of laser irradiation on micro-hardness, compactness and Raman*	**3.40**

spectrum of glassy $Se_{76}Te_{20}Sn_2Cd_2$ alloy, *Amit Kumar, Mousa M.A. Imran*, ***Arvind Sharma,*** *Neeraj Mehta*, **Journal of Materials Research & Technology, 7(1) (2018) 39–44.**

3. *Optical characterization of tin containing novel chalcogen rich glassy semiconductors*, **Arvind Sharma**, *N. Mehta*, **Optical and Quantum Electronics 50 (2018) 116.** **1.17**

4. *Study of dielectric relaxation and thermally activated a.c. conduction in lead containing topological glassy semiconductors*, **A. Sharma**, N. Mehta, **RSC Advances, 2017, 7, 19085–19097.** **2.94**

5. *Observation of Switching Behaviour in Some Multi-component Glasses of Se-Te-Sn-Pb System*, **A. Sharma**, Neeraj Mehta, **Materials Letters, 178 (2016)178-180.** **2.69**

6. *Laser-induced effects on dielectric relaxation of multi-component $Se_{76}Te_{20}Sn_2Cd_2$ chalcogenide glass*, **Amit Kumar, Arvind Sharma, Neeraj Mehta, Materials Chemistry and Physics, 178, (2016), 39-48.** **2.21**

7. *Thermo-physical properties of multi-component $Se_{78-x}Te_{20}Sn_2Pb_x$ ($0 \leq x \leq 6$) chalcogenide glasses*, **A. Sharma**, N. Mehta, **Material Chemistry and Physics, 161 (2015) 35-42**. **2.21**

8. *Determination of density of defect states in glassy $Se_{98}M_2$ (M = Ag, Cd and Sn) alloys using a.c. conductivity measurements*, **A. Sharma**, N. Mehta, **Measurement, 75 (2015) 69–75**. **2.22**

9. *Composition dependence of thermo physical properties of multi-components chalcogenide glassy $Se_{78-x}Te_{20}Sn_2Bi_x$ ($0 \leq x \leq 6$) alloys*, **A.** **3.0**

Sharma, N. Mehta, **Journal of Materials Science, 50 (2015) 210–218**.

10. *Study of thermo-mechanical properties in glassy Se and $Se_{98}M_2$ (M = In, Sb, Sn) Alloys*, H. Kumar, **A. Sharma** and N. Mehta, **Materials Letters, 121 (2014) 194-197**. **2.69**

11. *Determination of specific heat in multi-component chalcogenide glasses of Se–Te–Sn-Pb system using modulated differential calorimetry*, **A. Sharma**, H. Kumar, N. Mehta, **Materials Letters 86 (2012) 54 –57**. **2.69**

12. *Effect of some metallic additives (Ag, Cd, and Sn) on thermal transport properties of a-Se*, **A. Sharma**, N. Mehta , K. Singh, **Journal of Thermal Analysis and Calorimetry, 109 (2012) 915–920**. **2.21**

13. *Dependence of activation energy and pre-exponential factor on audio frequency in glassy $Se_{80-x}Te_{20}Sn_x$ alloys*, **A. Sharma**, N. Mehta, A. Kumar, **Journal of Alloys and Compounds, 509 (2011) 3468–3472**. **3.78**

14. *Estimation of the density of defect states in glassy $Se_{80-x}Te_{20}Sn_x$ alloys using ac conductivity measurements*, **A. Sharma**, N. Mehta, **Physica Scripta 84 (2011) 5**. **1.902**

15. *Dielectric relaxation in $Se_{80-x}Te_{20}Sn_x$ chalcogenide glasses*, **A. Sharma**, N. Mehta , A. Kumar, **Journal of Materials Science, 46 (2011) 4509–4516**. **3.0**

16. *Analysis of dielectric relaxation in glassy Se and $Se_{98}M_2$ (M = Ag, Cd* **0.802**

and Sn) alloys, **A. Sharma**, N. Mehta, **European Physical Journal Applied Physics, 59 (2012) 1-7**.

17. *Analysis of composition dependence of some thermal transport properties in glassy $Se_{80-x}Te_{20}Sn_x$ alloys using transient plane source measurements*, **A. Sharma**, N. Mehta, **Measurement 46 (2013) 514–520**. **2.22**

18. *Observation of Dielectric Peaks in Glassy $Se_{70}Te_{20}Sn_{10}$ Alloy*, **A. Sharma**, N. Mehta, **Defect and Diffusion Forum, 329 (2012) 165-175**. **None**

19. *Effect of Bismuth incorporation on some thermo-mechanical properties of glassy $Se_{78}Te_{20}Sn_2$ alloy*, H. Kumar, **A. Sharma**, N. Mehta, **Journal of Optoelectronics and Advanced Materials, 14 (2012) 899 – 904**. **None**

20. *Calorimetric study of specific heat in glassy Se–Te–Sn–Bi system using MDSC technique: effect of Bi incorporation*, **A. Sharma**, H. Kumar, N. Mehta, **Phase Transitions, 86 (2013) 971-976**. **1.028**

21. *Effect of Lead Incorporation on Some Thermo-Mechanical Properties of Glassy $Se_{78}Te_{20}Sn_2$ Alloy*, H. Kumar, **A. Sharma**, N. Mehta, **Materials Focus, 2 (2013) 184-187**. **None**

22. *Composition Dependence of Specific Heat in $Se_{80-x}Te_{20}Sn_x$ Chalcogenide Glasses*, **A. Sharma**, H. Kumar, N, Mehta, **Glass Physics and Chemistry, 39 (2013) 372–376**. **0.699**

23. *Effect of Tin incorporation on thermo-mechanical properties of glassy $Se_{80}Te_{20}$ alloy*, H. Kumar, **A. Sharma** and N. Mehta, **Chinese Physics** **0.847**

Letters, 31 (2014) 3.

24. *Investigation of Metal Induced Effects on the Optical Properties of a-Se Thin Films*, **A. Sharma**, S. K. Tripathi, N. Mehta, **Journal of Surface Interface Materials, 2 (2014) 1-8.** **None**

25. *Observation of MNR and Further MNR for thermally activated ac conduction in unexposed and laser-exposed samples of* $Se_{76}Te_{20}Sn_2Cd_2$ *chalcogenide glass*, A. Jaiswal, **A. Sharma**, N. Mehta, **Journal of Intense Pulsed Lasers and Applications in Advanced Physics, 4 (2014) 41-44**. **None**

C. PAPERS IN CONFERENCES PROCEEDINGS: None

i. ……
ii. …….
iii. …….

11. Patents/Copyrights /IPR (If Any): NONE

12. INVITED TALKS: NONE

13. RESEARCH PROJECTS *(COMPLETED / ONGOING)*: NONE

14. PARTICIPATION& PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

SCHOOL(S) THREE WEEKS

1. *Summer School on Theoretical Condensed States and Biological Systems*, held from 19 July- 10Aug 2010 under UGC networking program in Department of Physics, B.H.U., Varanasi-221005 INDIA.

2. *Summer School on Development and Characterization of Advanced Materials*, 22 Feb-14 March under UGC networking, program in Department of Physics, B.H.U., Varanasi-221005 INDIA.
3. *Summer School on Experimental Nuclear Physics*, 5-25 Sep 2011 in Department of Physics, B.H.U., and Varanasi-221005 INDIA.

CONFERENCES/WORKSHOPS

1. ***International Conference on Multifunctional Materials*** **(ICMM-2010)** Dec. 7-9, 2010 organized by Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
2. **Workshop on *Chemo Metric/Techniques in Vibrational Spectroscopy***, Feb. 20, 20102010 organized by Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
3. **International conference on *Advances in Condensed matter & Nano materials* (ICACNM-2011)**, Feb. 22, 23-26, 2011, organized by Department of Physics, Punjab University, Chandigarh
4. **Workshop on *Advanced Functional Materials***, March 19-24, 2012 under the UGC Networking Program Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
5. **Conference on *Condensed Matter & Biological Systems* (ccmb-2013)**, 11-14 March 2012 Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
6. ***All India Conference*** **(AICON-2012)**, 20-21 Jan. 2012, Department of Engineering Physics, CSIT, Durg (C.G.)
7. ***Workshop on Writing Research Papers***, 10-11 June 2011Organized by National Academy Of Sciences, India at Banaras Hindu University, Varanasi-221005 INDIA
8. ***4th one day conference on New Trends In Research***, March 3-2011, Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
9. ***5th one day conference on New Trends In Research***, Feb 25-2012, Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA
10. ***6th one day conference on New Trends In Research***, Dec. 20-2012, Department of Physics, Banaras Hindu University, Varanasi-221005 INDIA.

11. National Conference on "***Physics and Chemistry of Advanced Materials (NCPCAM-2019)***, November 22-23, 2019, Department of Physics, Mahatma Gandhi Central University Bihar, Motihari-845401, INDIA.

15. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

1. **Qualified CSIR National Eligibility Test (NET) with the award of Junior Research Fellow (JRF) in 2008.**
2. **Qualified Graduate Aptitude Test in Engineering (GATE) in 2009**
3. **Awarded JRF from 09 Oct, 2009 to 08 Oct 2011 during Ph.D.**
4. **Awarded SRF from 09 Oct, 2011 to 08 Oct 2014 during Ph.D**.

16. ANY OTHER SIGNIFICANT INFORMATION:

I had attended *Orientation Course* which was scheduled from July 21 to August 17, 2018 at *UGC-HRDC*, *Banaras Hindu University*, Varanasi-221005, INDIA.

(Name of Faculty)

Dr Arvind Kumar Sharma