

Curriculum Vitae

Dr. Chandrabhan Dohare, Ph.D.

Name	Chandrabhan Dohare				
Current Position	Assistant Professor, VMSB-Uttarakhand Technical University (UTU), Dehradun (UK)				
November, 2020- April, 2023	Assistant Professor (Ad-hoc), Sri Venkateswara College (SVC), DU				
13/2/20-30/10/20 (Teaching)	Assistant Professor (Guest Faculty), Department of Physics, Delhi University (DU)				
January 2017- January 2020 (Post Doc Fellow)	Post Doctoral Fellow (DS Kothari-PDF) School of Physical Sciences, Jawaharlal Nehru University (JNU), New Delhi				
January 2016- December 2016	Assistant Professor, Lovely Professional University (LPU), Jalandhar				
*Education					
	Degree	/Subject/	Division/%	University/	Completion Year
Academic/ Degrees	❖ Ph.D.	Physics,	1 st	Banaras Hindu University	2016
	❖ M.Sc.	Physics,	1 st	Banaras Hindu University	2009
	❖ B.Sc.	PCM group,	2 nd	Bundelkhand University	2006
	❖ HSC	PCM group,	2 nd	Uttar Pradesh Board	2003
	❖ SSC	PCM group,	1 st	Uttar Pradesh Board	2001
Thesis Title	“Thermo-mechanical, Calorimetric and Dielectric Studies of Some Selenium Based Chalcogenide Glasses”				
Thesis Advisor	Prof. Neeraj Mehta, Department of Physics, BHU, Varanasi-221005				
Post Doc Project (DSK-PDF)	Investigation on Optical Properties of Two Dimensional (2D) Transition Metal Dichalcogenides (i.e. MoS ₂ , MoSe ₂ , WS ₂ & WSe ₂)				
Post Doc Adviser	Prof. Subhasis Ghosh School of Physical Sciences, JNU, New Delhi-110067				
Address	Mobile: +91-9532771478 , E-mail: chandrabhanbhu@gmail.com				



* References

1. Prof. Subhasis Ghosh	School of Physical Sciences, Jawaharlal Nehru University (JNU), New Delhi, E-mail: subhasis.ghosh.jnu@gmail.com
2. Prof. Kedar Singh	School of Physical Sciences, Jawaharlal Nehru University (JNU), New Delhi, E-mail: kedarbhp@rediffmail.com
3. Prof. Neeraj Mehta	Department of Physics, Banaras Hindu University, Varanasi E-mail: dr_neeraj_mehta@yahoo.co.in

* Field of Interest

The main research interests include:

- 🌐 Synthesis and characterization of a wide range of bulk/thin film of new Chalcogenide/amorphous semiconductors
- 🌐 Optical, electronic and photoelectrical properties of bulk/thin films of amorphous semiconductors
- 🌐 Glass transition and crystallization kinetics
- 🌐 Dielectric behavior and the phenomenon of AC conductivity in glassy/amorphous materials
- 🌐 **Graphene mono** and **fewlayers** for device applications i.e. TFT
- 🌐 Synthesis of thin films and Optical investigation of **two dimensional (2-D) transition metal dichalcogenides** (i.e. **MoS₂, MoSe₂, WS₂ & WSe₂**)

* Publications (During Ph.D.)

1. C. Dohare, N. Mehta, A. Kumar, *Materials Chemistry and Physics*, 127 (2011) 208.
2. C. Dohare, N. Mehta, A. Kumar, *Phase Transitions*, 84 (2011) 1064-1074.
3. C. Dohare, N. Mehta, J. *Thermal Analysis and Calorimetry*, 109 (2012) 247-253.
4. C. Dohare, N. Mehta, J. *Crystallization Process and Technology*, 2 (2012) 139-146.
5. C. Dohare, S.B. Rai, N. Mehta, *Philosophical Magazine Letters*, 93 (2013) 174-181.
6. C. Dohare, N. Mehta, *Appl. Nano-science*, 3 (2013) 271-280.
7. C. Dohare, N. Mehta, *Journal of Alloys and Compounds*, 587 (2014) 565-572.
8. C. Dohare, N. Mehta, *Canadian Journal of Physics*, 92 (2014) 648-653.
9. C. Dohare, N. Mehta, *Applied Physics A*, 114 (2014) 597-603.
10. C. Dohare, N. Mehta, J. *Int. Pulsed Laser Appl. Adv. Physics*, 4 (2014) 1-9.
11. C. Dohare, N. Mehta, J. *Advanced Physics*, 3 (2014) 51-54.
12. C. Dohare, N. Mehta, *Materials Letters*, 138 (2015) 171-174
13. C. Dohare, M.A.M. Imran, N. Mehta, J. *Asian Ceramic Society*, 4 (2016) 252-258
14. A. Dahshan, N. Mehta, C. Dohare, *Chinese Journal of Physics* 77 (2022), 1123-1129

* Publications (During Post Doctoral fellowship-DS Kothari Fellow)	
[1]	C. Dohare et al. , "Investigation of plasmonic nature of silver in ZnO matrix" AIP Conf. Proc. 1953, 030256 (2018); https://doi.org/10.1063/1.5032591
[2]	Vedanki and C.Dohare , "Defect Free Monolayer and Bilayer Graphene Exfoliated by Solvent with Low Dielectric Constant" AIP Conf. Proc. 2265, 030713 (2020); https://doi.org/10.1063/5.0017671
[3]	C. Dohare et al. , "Optical Investigation on Tri-layers MoS ₂ Thin Film" AIP Conf. Proc. 2265, 030722 (2020); https://doi.org/10.1063/5.0017681 .
[4]	C. Dohare et al. , "High quality defect free graphene exfoliated in organic solvent THF" under communication.
[5]	C. Dohare et al. , Excited Dominated Optical Investigation MoS ₂ Films" under pipeline.
[6]	D. Shahu, A.Panghal, Jyoti, C.Dohare , J. Sinha, B.Kabiraj, Correlation of Surface energy and work function of thickness modulated CVD-grown MoS ₂ nano-sheets, Journal of Colloid & Interface Science , 2023 (Under Review)

* Expertise in the following techniques	
Synthesis routes	Investigations & Analysis
1. Plasma Sputtering technique	1. Ellipsometry Spectroscopy
2. Electron beam (e-beam) evaporation	2. Raman Spectroscopy
3. Thermal Evaporation technique	3. Atomic Force Microscopy (AFM)
4. Chemical Vapour Deposition (CVD)	4. Differential Scanning Calorimetry (DSC)
5. Melt quenching technique	5. XRD, TEM and PPMS analysis
* Conferences	
<ol style="list-style-type: none"> 25th International conference on Amorphous and Nano-Crystalline Semiconductors "ICANS 25" University of Toronto, Canada. August 18-23, 2013. (ORAL) 15th CRSI national symposium in chemistry February 1-3, 2013, BHU, Varanasi. Indo-us international workshop on spectroscopy: Application to national security, January 18-20, 2013, BHU, Varanasi. (Poster) International conference on condensed matter and biological systems, January 11-14, 2013, BHU, Varanasi. (Poster) International conference on Adv. Mater. Proc (AMPCO 2012) IIT-Roorkee, November 2-4, 2012. (ORAL) National symposium on advanced functional materials "NSAFM-2012" Feb. 11-12, 2012, BHU, Varanasi. (Poster) National conference on recent trends in materials science "RTMS-2011" Oct. 8-10, 2011, JUIT, Solan, Himachal Pradesh. (Poster) International conference on advances in condensed and nano-materials "ICACNM" Feb 22-26, 2011, Panjab University, Chandigarh. (Poster) International conference on Multifunctional materials "ICMM" Dec 7-9, 2010, BHU, Varanasi. (Poster) 	

*** School/Workshop**

1. Solid State Symposium, DAE 2019, December 18-23, **2019, IIT-Jodhpur.**
2. Winter school in JNCASR, December 2-7, **2017, Bangalore.**
3. Workshop on "Nano-Science and Life 2015" Feb. 26-March 2, **2015, BHU.**
4. School on Experimental Characterization, September 1-12, **2014, DAE-UGC, Indore.**
5. Summer school on development and characterization of advanced materials, Feb. 22-March 14, **2013, BHU.**
6. Workshop on "Advanced functional materials "WAFM-2012" March 19-24, **2012, BHU.**
7. Summer school on experimental nuclear physics, September 5-25, **2011, BHU.**
8. Summer school on theoretical condensed state and biological systems July 19-August 10, **2010, BHU.**

*** Reviewer since Ph.D.**

1. "Canadian Journal of Physics" published by NRC Research Press, Canada.
2. "Synthetic Metals" published by Elsevier.
3. "Journal of Opto-electronics and Advanced materials" by SJR Romania.

*** Membership of Scientific Societies (Life membership)**

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| 1. Indian Physics Association, | - | Membership no. DEL/LM/13321 |
| 2. Indian Association of Physics Teacher | - | Membership no. C10856 |
| 3. Indian Science Congress Association | - | Membership no. 11846-L7816 |