CURRICULUM VITAE

Name:	**Sweta Singh**	
Designation:	**Assistant Professor**	
School:	**School of Physical Sciences**	
Department:	**Physics**	
Specialisation & Research Interests:	**Condensed Matter Physics, Synthesis and Characterization of Graphene based Nano materials and its various applications**	
Email IDs (Official & Personal)	swetaphysics@mgcub.ac.in	
Mobile No.:		
Address:	Sidharthpuri Colony, Road No.- 2, P.O- Buniyadganj (Manpur) Distt.-Gaya (Bihar)	

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
Ph. D	2020	Institute of Science

Degree	Year	University / Board
		Banaras Hindu University, Varanasi, India
M.Sc. Physics	2013	Institute of Science Banaras Hindu University, Varanasi, India
B.Sc. (Hons.) Physics	2011	Banaras Hindu University, Varanasi, India
Intermediate	2007	C.B.S.E., New Delhi, India
H.S.C.	2005	Bihar Board, Patna, India

3. ANY OTHER QUALIFICATION: NIL

4. PROFESSIONAL EXPERIENCE:

Organisation/Institute/University	Position Held	Duration
Assistant Professor	From 05-10-16 to Till date	Mahatma Gandhi Central University, Department of Physics

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work
Associate Warden	15th Oct. 2016 – 14th June 2017	All duties related with KGGH Girls Hostel

Warden	15th June 2017-20th Feb. 2018	All duties related with KGGH Girls Hostel
Deputy Proctor	2017-2018	Smooth conduction of University examination and other administrative works related with University

6. COURSES TAUGHT:

1. Engineering Physics
2. Mechanics
3. GE Mechanics
4. Waves & Optics
5. Solid State Physics
6. Nuclear Physics
7. Thermodynamics
8. Nanoscience and its applications

1.	Flying Squad Member	Smooth conduction of Mid-term and End-term examination of the University

7. RESEARCH SUPERVISION: NIL

8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

2.	Reception Committee	First Foundation day of the University (NAVANKUR 2017) and Champaran Satyagraha Shatabdi Centenary celebration
3.	Cultural Committee	First Foundation day of the University (NAVANKUR 2017)
4.	Member	On Spot Painting Competition oraganized
5.	Member	Just A Minute (JAM) programme organized
6.	Member of Sports Committee	Annual Sports during first Foundation Day celebration
7.	Discipline Committee	Champaran Satyagraha Shatabdi Centenary celebration
8.	Sport committee Member	organize the Chess Games and Tug of War Games for students
9.	Anti-Ragging Committee	Anti-Ragging Squad

9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES:

Life Member of Electron Microscopy Society of India (EMSI)

10. PUBLICATIONS:

A. BOOKS/MONOGRAPHS:

1. **Authored: NIL**
2.

i. .....
ii. .....
iii. .....

3. **Edited: NIL**
4.

i. .....
ii. .....
iii. .....

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

i. Synthesis of graphene aerogel and its application in electromagnetic interference shielding. ***Sweta Singh,*** Prashant Tripathi, Ashish Bhatnagar, Ch. Ravi Prakash Patel, Avanish Pratap Singh, S.K.Dhawan, Bipin Kumar Gupta and O.N.Srivastava , ***RSC Adv.,*** *2015, 5, 107083.* ***(I.F. 2.936)***

ii. Synthesis, characterization and hydrogen storage characteristics of ambient pressure dried carbon aerogel, ***Sweta Singh,*** Ashish Bhatnagar, Viney Dixit, Vivek Shukla, M.A. Shaz , A.S.K. Sinha , O.N. Srivastava , V. Sekkar, ***International Journal of Hydrogen Energy*** *2016, 41, 5, 3561–3570.* ***(I.F. 4.229)***

iii. Fe_3O_4@Graphene as a superior catalyst for hydrogen de/absorption from/in MgH_2/Mg, Ashish Bhatnagar, Sunita K. Pandey, Alok K. vishwakarama, ***Sweta Singh,*** M.A .Shaz and O N Srivastava, ***Journal of Materials Chemistry A ,*** *2016, 4 (38), 14761-14772.* ***(I.F. 9.931)***

iv. New emerging radially aligned carbon nano tubes comprised carbon hollow cylinder as an excellent absorber for electromagnetic environmental pollution, Ch. Ravi Prakash Patel, Prashant Tripathi, ***Sweta Singh,*** Avanish Pratap Singh, S. K. Dhawan, R. K. Kotnala, Bipin Kumar Gupta and O. N. Srivastava, ***Journal of Materials Chemistry C,*** *2016,* ***4****, 5483-5490.* ***(I.F. 5.976)***

v. High Performance and Flexible Supercapacitors based on Carbonized Bamboo Fibers for Wide Temperature Applications, Camila Zequine, C. K. Ranaweera, Z. Wang, ***Sweta Singh***, Prashant Tripathi, O. N. Srivastava, Bipin Kumar Gupta, K. Ramasamy, P. K. Kahol, P. R. Dvornic & Ram K. Gupta, ***Sientific Reports*** *2016; 6: 31704 .* ***(I.F. 4.122)***

vi. High-Performance Flexible Supercapacitors obtained via Recycled Jute: Bio-Waste to Energy Storage Approach , Camila Zequine, C. K. Ranaweera, Z. Wang, Petar R. Dvornic, P.K. Kahol, ***Sweta Singh,*** Prashant Tripathi, O.N. Srivastava, Satbir Singh, Bipin Kumar Gupta, Gautam Gupta and Ram K. Gupta, ***Sientific Reports*** *2017; 7: 1174.* ***(I.F. 4.122)***

vii. Dual borohydride (Li and Na borohydride) catalyst/additive together with intermetallic FeTi for optimization of hydrogen sorption characteristics of Mg (NH2) 2/2LiH, Vivek Shukla, Ashish Bhatnagar, ***Sweta Singh,*** Pawan K. Soni, Satish K verma , MA Shaz and O. N. Srivastava, ***Dalton Transactions*** *2019; 48, 11391-11403,* ***(I.F. 4.052)***

viii. Ternary transition metal alloy FeCoNi nanoparticles on graphene as new catalyst for hydrogen sorption in MgH_2, ***Sweta Singh***, Ashish Bhatnagar, Vivek Shukla, Alok K Vishwakarma, Pawan K Soni, Satish K Verma, MA Shaz, ASK Sinha, ON Srivastava, ***International Journal of Hydrogen Energy*** *2020; 45,* ***1,*** *774-786.* ***(I.F. 4.229)***

11. PAPERS IN CONFERENCES PROCEEDINGS: NIL

i. ……
ii. …….
iii. …….

12. Patents/Copyrights /IPR (If Any) NIL

13. INVITED TALKS: NIL

14. RESEARCH PROJECTS *(COMPLETED / ONGOING)*: NIL

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

- ✓ ***Winter School*** *on "Practical Crystallography and Structure Solution" 5-11 March 2014. Physics Department (B.H.U), Varanasi.*
- ✓ ***Winter School*** *on "Nano Materials with Special Reference to Energy Security" 11-16 March 2014, Physics Department (B.H.U), Varanasi.*
- ✓ ***International Conference*** *on "Nano Materials with Special Reference to Energy Security" 12-14 March 2014, Physics Department (B.H.U), Varanasi:* ***Poster-Presentation.***
- ✓ ***Workshop*** *on "Nano Science and Life" 26th Feb. to 2nd March 2015, Department of Physics (B.H.U), Varanasi.*
- ✓ ***International Conference*** *on "Nano Science and Life" 28th Feb. to 2nd March 2015, Department of Physics (B.H.U), Varanasi:* ***Oral Presentation.***
- ✓ ***International Conference*** *on "Pre-Conference Workshop on Basics of Electron Back Scattered Diffraction in Materials Science" EMSI-2106 30th May-1st June, 2016, Department of Metallurgical Engineering, Indian Institute of Technology (BHU), Varanasi:* ***Poster Presentation.***

- ✓ ***International Conference*** *on "Indo-US Nanotechnology: Science and Application in Advanced Materials and Beyond" (NSAAMB- 2016), 19th to 22nd December 2016, Department of Chemistry, Institute of Science, Banaras Hindu University:* ***Poster Presentation.***

- ✓ ***AICTE Sponsored Short Term Course & Continuing Education Program*** On **"***Electron Microscopy & Microanalysis of Materials" (EMMM-2018), 12th to 17th February, 2018, Department of metallurgy, IIT B.H.U, Varanasi:* ***Participation.***

- ✓ *Conference on "Hydrogen Energy in Indian Perspective: Role of Nano Materials", 31st Oct. to 2nd Nov.2018, Department of Physics (B.H.U), Varanasi:* ***Oral Presentation.(Awarded Best Oral Presentation Award)***

16. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

- Qualified ***Graduate Aptitude Test in Engineering (GATE 2014)*** with ***Gate score 399***
- Qualified ***Joint CSIR-UGC Test for Junior Research Fellowship and Eligibility for Lectureship (NET)*** held on 22-06-2014 in the subject ***PHYSICAL SCIENCES*** under ***ELIGIBILITY FOR LECTURESHIP (NET)*** Category.
- Awarded "***DST PURSE***" Senior Research Fellowship.

17. ANY OTHER SIGNIFICANT INFORMATION:

Working experience with skills:

- Multichannel hydride Evaluation system, AMC, Pittsburg, USA
- Glove Box
- Planetary Ball Miller
- X- ray Diffraction
- Raman spectroscopy
- FT-IR Spectrometer
- Brunauer-Emmett-Teller (BET) surface area analysis
- Transmission and Scanning Electron Microscopy (TEM and SEM)

Sweta Singh

(Name of Faculty)