



FACULTY PROFILE

Name: Dr. Megha Gupta Chaudhary

Designation: Assistant Professor & Head of the Department

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➤ **Work Experience:** 18 Years

➤ **Professional Qualification:**

Degree	Institute/University	Specialization	Year of Passing
M.Tech.	Shobhit University, Meerut U.P.	VLSI	2012
Ph.D.	Gurukula Kangri University, Haridwar, U.K.	Atmospheric Physics	2011
M.Sc.	Indian Institute of Technology, Roorkee, U.K.	Physics	2004
B.Sc.	C.C.S. University, Meerut, U.P.	PCM	2002

➤ **Research Interest:**

- Lightning Discharge Mechanism
- Nanotechnology Thin Films
- 2D materials
- Low-Power Consumption Chip Designing
- Vedic Sciences

➤ **Publications (Journals & Conferences):**

1. **Megha Gupta Chaudhary**, V. Kabila, Ankita Gupta, Allika Sailaja, Rajat Garg: **The Role Of Environmental Education In Promoting Environmental Conservation: A Systematic Review**, Boletin De Literatura Oral, 10 (2023), PP. 1079-1089, ISSN: 2173-0695.
2. P. Singh, S. Mahla, **M. G. Chaudhary**, R. Agrawal, C. Singh & A. S. Verma: **“Structural, electronic, optical, mechanical and magnetic properties of Co₂ CrZ (Z = As, B, Ga, Pb) full-Heusler compounds”**, Journal of Ovonic Research, Vol. 19, No. 4, July - August 2023, p. 387 – 399. doi.org/10.15251/JOR.2023.194.387.
3. Sushil Kumar, Anupma, **Megha Gupta Chaudhary**: **“Vapour Phase electronic spectra of 1,2,3,4-Tetrahydro-2,6-dioxypyrimidine-4- carboxylic acid”** Gradiva Review Journal, Vol.9 , Issue 1 , Jan- 2023, pp.149-156, E-ISSN:

0363-8057, doi.org/10.37897.GRJ.2022.V8I12.22.50636.

4. K. P., Chandana, S. L., Samaniego, S. S. C. ., Chaudhary, D. M. G. ., Vekariya, D. V. ., & Chaturvedi, M. A. (2022). **Intelligent Mobile Edge Computing Integrated with Blockchain Security Analysis for Millimetre-Wave Communication**. International Journal of Communication Networks and Information Security (IJCNIS), 14(3), pp.110– 122. Dec 23, 2022, DOI: <https://doi.org/10.17762/ijcnis.v14i3.5577>, ISSN: 2076-0930, EISSN: 2073-607X.
5. Have presented a paper on the topic **“Accident –avoidance system due to somnolence and alcohol for safe driving”** in the international conference on **“Innovations in Management, Science and Technology” (ICIMST)**, organized by University of Science and Technology, Meghalaya, in association with American Institute of Science and Technology (AIMT) USA, **5-6 August, 2022**.
6. Naziya Hussain, Preeti Rani, Nitin Kumar, **Megha Gupta Chaudhary**: **“A Deep Comprehensive Research Architecture, Characteristics, Challenges, Issues, and Benefits of Routing Protocol for Vehicular Ad-Hoc Networks”**, International Journal of Distributed Systems and Technologies (IJ DST), Vol. 13, Issue 08, 16 Sep 2022, pp.1-23,ISSN: 1947-3532, EISSN: 1947-3540, <https://doi.org/10.4018/IJ DST.307900> .
7. **Megha Gupta Chaudhary**, Nitin Kumar and Sushil Kumar: **Future prospect of plumbene:A review**, EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, Vol. 08, Issue 04, December 2021, pp.1-9, ISSN: **21890420**, <https://doi.org/10.5109/4742116> .
8. Hariom Kaushik, Sushil Kumar, **Megha Gupta Chaudhary** and Savidh Khan: **‘Optical properties of CdS:Pb thin layer deposited on glass substrate**, Indian Journal of Pure & Applied Physics, Vol. 58, No. 1, January, 2020, pp. 11-15, ISSN: **0975-1041 (Online)**, URL: <http://nopr.niscair.res.in/handle/123456789/53478>.
9. **Chaudhary Gupta M.:** **“Analytical Modeling and Scaling of the Suspended-Gate FET (NEMFET) for low power logic”** , International Journal of creative research thoughts , in the proceedings of Conference on Recent Innovations in Emerging Technology & Science, pp. 734-746, 3-4April, 2018, organized by JB Institute of Technology, Dehradun, ISSN2320-2882.
10. Chaudhary Gupta, M. et al.: **“A Ray of Hope for Future Technology: Phosphorene”** Indian journal of science and technology, Vol. 10, Issue 19 , ISSN 0974-6846 (Print), ISSN 0974-5645 (Online), May, 2017, DOI: 10.17485/ijst/2017/v10i19/99528.
11. **Chaudhary Gupta, M. :** **“Future of Nanotechnology in India”** International journal of applied science and technology, Vol. 2, Issue 2 , ISSN 2231-3842 (Print), ISSN 2277-8691 (Online), Dec., 2012.
12. **Gupta, M., P. P. Pathak:** **“Mechanism of Higher Frequency radiation from Return Stroke”** International journal of applied science and technology, Vol. 2, Issue 1, 110-113,ISSN 2231-3842 (Print), ISSN 2277-8691 (Online), June,2012.
13. **Chaudhary, M.:** A review article on **“Nanotechnology: The next generation technology”** in bulletin of THE INDIAN ASSOCIATION OF EDUCATION in a monthly journal of education in physics & related areas, Vol. 2, No. 10, 305-306, October, ISSN 2277-8950, 2010.
14. **Gupta, M., P. P. Pathak:** **“Radiation due to stepped leader in HF range during ground discharge”** Journal of Natural & Physical Sciences, vol. 23 (1-2), 91-98, ISSN 097-3799, Jan., (2009).

➤ **Patent published and granted:**

1. **Patent Granted:** Device for managing and storing electronic information.
2. **Patent Granted:** An intelligent system and method for solar power generation based on iot and artificial

intelligence with maximum power tracking using contemporary ML.

3. **Patent Published:** 2D materials and their electric and physical properties in transistors.
4. **Patent Published:** Thermal Energy Storage Device Usage in Solar Air Heater-An Effective Analysis.
5. **Patent Published:** Sensing and Detection of cracks and obstacles on the railway line.

➤ **Books and Books Chapters:**

1. **Book Chapter:** Reepu, Sushil Kumar, **Megha Gupta Chaudhary**, K. Gurnadha Gupta, Sabyasachi Pramanik, Ankur Gupta **“Information Security and privacy in IOT”** is published in the book titled: **“Handbook of Research on Advancements in AI and IoT Convergence Technologies**, Jingyuan Zhao, V Vinoth Kumar, Rajesh Natarajan, Mahesh R , September, 2023, ISBN13: 9781668469712, doi: 10.4018/978-1-6684-6971-2.ch004, <https://www.igi-global.com/chapter/information-security-and-privacy-in-iot/330059>
2. **Book:** Mr. Satyaprakash Pandey, Dr. Yogesh Arun Kumar, Dr. Ramya P, Shri. Nandesh Tagde, Dr. **Megha Gupta Chaudhary: Contemporary Guide to Research Methodology**, book published, RED'Shine Publication Pvt. Ltd. Oct, 2023.ISBN Number:9789358796155
3. **Book Chapter: Chaudhary Gupta, M.: “Toxicity of E-waste & Human Health Complications”** published in the book titled: **“E-waste: Treasure or Threat”** edited by Dr. Suresh Kumar and Published by Authorspress, New Delhi, India. ISBN No: 978-93- 5529-744-7, January, 2023.
4. **Book: Chaudhary Gupta, M.: “Engineering Physics”** book published for B.Tech. First Year based on the Syllabus of RGPV, Bhopal 2016.
5. **Book: Chaudhary Gupta, M.: “Engineering Physics II”** book published for B.Tech. First Year based on the Syllabus of APJ Kalam University (Former UPTU), Lucknow 2015.
6. **Book: Chaudhary Gupta, M.: “Engineering Physics I”** book published for B.Tech. First Year based on the Syllabus of APJ Kalam University (Former UPTU), Lucknow 2014.
7. **Book: Megha Gupta Chaudhary**, book entitled **"Mechanism of Higher Frequency Radiation "**,(Ph.D. Thesis) has been published, **ISBN 978-3-8484-9700-3**, LAP LAMBERT Academic Publishing GmbH & Co., Germany, May-2012.

➤ **Awards and Achievements**

1. Certified Trainer of **“Design the Thinking”** course, graduated from Intellect, School of Design Thinking, Siruseri, Chennai.
2. **“Promising Educationist 2023”** in the Globally Top 50 Remarkable Women Awards 2023 by Diva Planet Magazine, February 2023.
3. **“Excellence in Education”** award by CEE (confederation of education excellence) on the occasion of International education conclave on National education Policy 2022, on dated 25 November 2022.
4. Won Third prize in **Meerut Mini Marathon** on 23 April' 2023

➤ **Workshops/Seminars/FDPs**

1. One Week - **“FDP on “Blended Learning and Flipped Classrooms”**, 16th- 20th Oct 2023, Online Mode, NITTTTR Chandigarh.
2. One-week FDP on- **“Managing your ego and emotions at workplace ”**, 11-15 Sep 2023, NITTTTR Chandigarh

(Online mode).

3. 10-Days Online FDP on **“Creating an Inclusive Learning Environment”**, held from 24th July 2023 to 3rd Aug 2023, organized by Department of Physics, SRM Institute of Science and Technology.
4. Two-week FDP on- **“Refresher course in engineering Physics”**, 14-25 Nov 2022, NITTTR Chandigarh (Online mode).
5. 2 Week - **“FDP on “Engineering Materials Science”**, 18-29 April 2022, Online Mode, NITTTR Chandigarh.
6. Five-day online FDP, Refresher 1 Part 1 on the theme **“Inculcating Universal Human Values in Technical Education”** organized by All India Council for Technical Education (AICTE) from 21-25 Feb 2022.
7. Five-day online FDP on the theme **“Inculcating Universal Human Values in Technical Education”** organized by All India Council for Technical Education (AICTE) from 9 August, 2021 to 13 August, 2021.
8. One-week online Faculty Development Program on **Emerging Trends in Applied Physics** organized by Department of Physics, Faculty of science, from 5 July to 9 July, 2021 at SGT University Gurugram.
9. Online Two-week Faculty Development Program on **“Enhanced Teaching, Learning and Research-2020** during 9th – 18th, July 2020 organized by Department of Physics and Nanotechnology, SRM Institute of Science and Technology, Kattankulathur, Chennai – 603203, India.
10. Faculty development program on **“Computer Science and Business Systems”** designed by Tata Consultancy Services, held on 24 June 2019 to 26 June 2019, at Indian Statistical Institute, Kolkata.
11. Faculty development program, **“ERUDITIA: A Multi-Disciplinary FDP series**, held on 12 June 2018 to 23 June 2018, at SRM IST, Delhi-NCR Campus.
12. Three days workshop on **“Design the Thinking”**, held on 8-10 May 2023 by intellect, School of Design Thinking, Siruseri, Chennai.
13. 2nd National Level workshop on **“Curriculum & Credit Framework 2023”**, held on 17- 18th March 2023, through online, conducted by Institute of Academic Excellence (IAE) Hyderabad in collaboration with Collegiate Education & Technical Education Department, Govt. of Telangana.
14. Workshop- **“STC on “Photonics and Optoelectronic Devices”**, 21-25 Feb 2022, NITTTR Chandigarh.
15. Workshop- **“STC on “Advances in Laser Technology”**, 23-27 August 2021, NITTTR Chandigarh.
16. Workshop- **“STC on “Nanomaterials and Thin Films”**, 26-30 July 2021, NITTTR Chandigarh.
17. Workshop- **“STC on “Nanotechnology: Developments & Applications”**, 22-26 May 2017, NITTTR Chandigarh.
18. Workshop- **“STC on “Nanotechnology: Developments & Challenges”**, 16-20 May 2016, NITTTR Chandigarh.
19. National Workshop on **“Advance Techniques in Mathematics, Physics & Computer Science**, 18-20 Feb, 2016 held at SRM University, Delhi-NCR campus, Ghaziabad.
20. Workshop- **“STC on Nanotechnology: Opportunities and challenges”** in NITTTR, Chandigarh in **May, 2010**.
21. Eight-Week refresher online course on **“Personality development and communication skills”**, an online three-credit course by Savitribai Phule Pune University, Pune, offered through SWAYAM Portal, Oct-2023.
22. Eight-Week refresher online course on **“Understanding Einstein: The Special Theory of Relativity”**, an online non-credit course authorized by Stanford University and offered through Coursera completed on 9 Jan, 2023.
23. Online certification course on **“Classical electromagnetism-2 (Magneto statics)”**, 15 Aug 2022 to 25 Dec 2022, Indian Institute of Technology, Kanpur.
24. Eight-Week refresher online course on **“How Things Work: An Introduction to Physics”**, an online non-credit course authorized by University of Virginia and offered through Coursera completed on April, 2022.
25. Online certification course on **“Classical Mechanics-1”**, 26 Jan 2021 to 25 April 2021, Indian Institute of Technology, Kanpur.

26. Online certification course on “**Classical electromagnetism-1 (Electrostatics)**”, 15 Aug 2020 to 13 Dec 2020, Indian Institute of Technology, Kanpur.
27. Online certification course on “**Basics of Quantum Mechanics**”, 15 Aug 2019 to 18 Nov 2019, Indian Institute of Technology, Kanpur.
28. Online certification course on “**Basics of Special Theory of Relativity**”, 18 Dec 2018 to 08 March 2019, Indian Institute of Technology, Kanpur.
29. Online certification course on “**Physics of semiconductors**”, 15 Aug 2017 to 20 Nov, 2017, Indian Institute of Technology, Kanpur.

➤ **Work experience: 18 Years**

❖ **Teaching at Under Graduate Level: (16 Years)**

- Assistant Professor, Physics, SRM Institute of Science and Technology, Delhi- NCR Campus, Modinagar, Ghaziabad. **(August 2015 to till date)**
- Associate Professor, Physics, IIMT Engineering College, Meerut. **(Jan 2010 to July 2015)**
- Assistant Professor, Physics, Gyan Bharti institute of Technology, Meerut. **(June 2008 to December 2009)**
- Lecture, Physics, Tula’s Institute, Dehradun. **(Aug 2007 to June 2008)**

❖ **Teaching at Post Graduate Level: (2 Years)**

- Lecturer Physics, Kanya Gurukula Mahavidyalaya (P.G.), Gurukula Kangri University, Haridwar. **(Aug 2005 to May 2007)**

➤ **Professional Memberships:**

1. Life Membership of **Vijnana Bharati (VIBHA)**
2. Life membership of “**Indian Association of Physics Teachers**”. **Membership ID: 8686 L -5094.**
3. Membership of the **International Association of Engineers (IAENG)**. **Membership ID 160695**
4. Membership of **Universal Association of Computer and Electronics Engineers (UACEE)**.
5. Membership of “**Indian Physics Association**”, **Membership no: LM-2023-DEL-13836.**
6. Life Member of the **Indian Society for Technical Education (ISTE)**. **Membership ID: 134555.**