



FACULTY PROFILE

Name: Dr. Pankaj Varshney

Designation: Assistant Professor & Chief Proctor

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➤ **Work Experience:** 19.2+ Years

➤ **Professional Qualification:**

Degree	Institute/University	Specialization	Year of passing
Ph.D.	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra	Physics	2021
M.Phil.	VMU, Salem, T.N.	Physics	2008
M.Sc.	C.C.S. University, Meerut, U.P.	Physics (with lectronics)	2001
B.Sc.	C.C.S. University, Meerut, U.P.	PCM	1999
CSIR-NET(A.I.Rank-11)	UGC, Under MHRD, Govt. Of India.	Physics	2011

➤ **Research Interest:**

- Condensed Matter Physics: Nanostructured Thin film (2D) Semiconductor
- Spectroscopy: Colorimeter fabrication and device applications

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

1. **Pankaj Varshney: High Temperature Electrical Characterization of Single Crystal of N-Type CDSE Optimally Annealed in a molten CD**, International Journal of Soft Computing and Engineering (IJSCE), Volume-2, Issue-4, September 2012, pp. 275-278, ISSN: 2231-2307, Retrieval Number: D0947082412/2012©BEIESP
2. **Pankaj Varshney, Kapil Kumar Bansal, Jyotshana Gaur: Wavelets for the Fast Solution of Ordinary Differential Equations**, International Journal of Soft Computing and Engineering (IJSCE), Volume-2, Issue-4, September 2012, pp. 287-291, ISSN: 2231-2307.

3. **Pankaj Varshney, Piyush gupta, Gaurav Sharma: Calculation and Analysis of Thermodynamic Parameters of DI-Substituted Pyridine**, International Journal of Application or Innovation in Engineering & Management (IJAIEEM), Volume 2, Issue 5, May 2013, pp. 137-142, ISSN 2319-4847.
4. Piyush Gupta, **Pankaj Varshney: Physico Chemical properties of drinking water in some areas of Modinagar, Ghaziabad, U.P.**, International Journal of Engineering & Science Research, Vol-3, Issue-6, pp. 281-283, June 2013, e-ISSN 2277-2685, p-ISSN 2320-9763.
5. **Pankaj Varshney, Jyotshana Gaur: Cascade Structural Analysis and Characterization of High-Temperature Superconductivity**, International Journal of Education and Science Research Review, Volume-1, Issue-2 April- 2014, pp. 164-169, ISSN 2348-6457.
6. Farha Y. Siddiqui, Shaheed U. Shaikh, Deepali J. Desale, Deepak S. Upadhye, Sandeep V. Mahajan, Anil V. Ghule, **Pankaj Varshney, Sung-Hwan Han, Ramphal Sharma: Band gap engineering by substitution of S by Se in nanostructured $\text{CdS}_{1-x}\text{Se}_x$ thin films grown by soft chemical route for photosensor application**, Materials Science in Semiconductor Processing, 27(1), November 2014, pp.404-411, Online ISSN: 1873-4081, Print ISSN: 1369-8001, <https://doi.org/10.1016/j.mssp.2014.07.014>
7. **Pankaj Varshney, Jyotshana Gaur: Theory of the Structure of Vanadyl Ion**, International Journal of Education and Science Research Review(IJESRR), Volume-1, Issue-6, December- 2014, pp. 80-83, ISSN 2348-6457.
8. **Pankaj Varshney, Dr Ramphal Sharma: Hexagonal wurtzite Mn doped ZnO nanostructured thin film for ferromagnetic and LPG sensing applications**, International Journal of Education and Science Research (UGC Approved) Review (IJESRR), Volume-3, Issue-6 December- 2016, pp. ISSN 2348-6457.
9. **Pankaj Varshney, Dr Ramphal Sharma: Influence of Mn doping on structural and LPG sensing properties of nanostructured ZnO thin film**, International Journal of Pure and Applied, Volume 118 No. 20, 2018, pp. 1581-1586, ISSN: 1311-8080, url: <http://www.ijpam.eu>
10. **Pankaj Varshney, Dr Ramphal Sharma,” Influence of Mn doping on structural and Optoelectronic properties of ZnO thin film**, in International Journal of Pure and Applied, Volume 118 No. 20, 2018, pp. 1587-1593, ISSN: 1311-8080, url: <http://www.ijpam.eu>
11. Shalu Agrawal, **Pankaj Varshney, Pankaj Agrawal: Evaluation of developed colorimeter for glucose estimation in water**, 2nd International conference on Micro-Electronics and Telecommunication Engineering) IEEE ICMETE-2018, 20- 21 Sept’2018, DOI: 10.1109/ICMETE.2018.00077
12. **Pankaj Varshney, Sandip Mahajan, Ramphal Sharma: Comparative studies of Pure and Mn doped ZnO thin film for gas sensor and Magnetic applications**, Journal of Emerging Technologies and Innovative Research (JETIR), Volume 6, Issue 5, May-2019, pp. Page No. 321-332, ISSN - 2349-5162, DOI:<http://www.jetir.org/papers/JETIR1905Q44.pdf>
13. **Pankaj Varshney, Bhanu Pratap Singh, Maniram Kumar: Comparative Assessment Of Glucose Determination In Blood Using Fabricated Colorimeter And Strip-Based Commercial Glucometer**, European Journal of Molecular & Clinical Medicine, Volume 7, Issue 6, 2020, pp. 2789-2796, ISSN: 2515-8260.
14. **Pankaj Varshney, Kumar Vinay, Singh Pankaj, Sharma Ramphal and Kumar Arvind, RF sputtered ZnO nanoballs on porous substrate for highly sensitive NO2 gas sensing applications**, Journal of Physical Science, Vol. 33(2), 2022, pp. 1-17, ISSN: 1675-3402 (Print), 2180-4230 (Online), <https://doi.org/10.21315/jps2022.33.2.1>
15. V.R. Balaji, Vigneswaran Dhasarathan, Sofyan A. Taty, **Pankaj Varshney, Superconductor photonic crystal: Optical Tunable multichannel filter**, Optoelectron. Adv. Mat., Vol. 17, no. 3-4, 2023, pp. 117-121, Print: ISSN 1842-6573, On-line: ISSN 2065-3824.
16. Pankaj Ramtekkar, M Aruna, **Pankaj Varshney, V. Bhoopathy, T Naga Durga, Mohd Asif Saha: Dynamic Configuration Method for Improving PV Water Pumping System Efficiency in Partially Shaded Environments**, Conference: 2023 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), pp. 1041-1046, DOI: <http://dx.doi.org/10.1109/ICSCDS56580.2023.10104891>

17. Sudhir Kumar, **Pankaj Varshney**, Raj Kumar Gupta: **Facile synthesis of pristine and lanthanum modified BiFeO₃ nanomaterials and the investigation of photocatalytic properties**, Eur. Chem. Bull. 2023, 12(Special Issue 10), pp. 4012-4015, DOI: 10.48047/ecb/2023.12.si10.00460, ISSN 2063-5346.

18. Baliram Nadekar, Yogesh B. Kholam, Shoyebmohamad F. Shaikh, Dattatray, **Pankaj Varshney**, Bidhan Pandit, Pravin S. More: **Enhanced ammonia/amines sensitivity at room temperature using plasma polymerized polyvinyl acetate-reduced graphene oxide composite film sensors**, Surfaces and Interfaces, Received 5 April 2023, Revised 6 September 2023, Accepted 25 September 2023, Available online 27 September 2023, Version of Record 14 October 2023, Online ISSN: 2468-0230, <https://doi.org/10.1016/j.surfin.2023.103453>.

➤ **Patent published and granted:**

1. Design Patent Published with Grant:

Title: **Solar Energy Helmet (As a First Author)**, Application No. : 348987-001, Design Accepted and Published, Journal no. is 21/2022 and Journal date is 27/5/2022.

➤ **Patent published:**

1. Title: A method of mitigation of power quality events by conditioning system in integration of three renewable energy sources, publication date: 16/04/2021.
2. Title: A system based on neural network to refine the heuristic data with image processing techniques, publication date: 07/05/2021.
3. Title: Analysing the impact of copper and bismuth incorporated cation perovskite solar cells by one step solution (application no.202311004699 a), publication date: 10/2/2023.
4. Title: Analysis of flexible perovskite solar cells with evaluating their efficiency, operational stability and mechanical reliability (application no.202311008508), publication date: 17/3/2023
5. Title: Deep learning techniques to analyse the impact of artificial intelligence in quantum theory (application no. 202341015519), publication date: 17/3/2023.
6. Title: Systematic approach to study the functional advantages of building nanosystems using multiple molecular components (application no. 202341025859), publication date: 26/05/2023.

➤ **Books and Books Chapters:**

1. **Book: Dr. Pankaj Varshney**, book entitled “**Elements of nuclear physics**” ISBN: 978-93-95691-82-6, Year of Publication: 2023.

➤ **Awards and Achievements**

1. Merit certificate & a token of appreciation (wrist watch) awarded by Hon’ble Dr. D. K. Modi, for qualifying CSIR-NET with A.I.Rank-13 in Physics Subject being the alumni of MM(PG) Degree College, Modinagar, CCS University, Meerut, in 2011.
2. Letter of appreciation: Guest Lecture at Neon IT and Research Laboratory, Meerut, in 2022.

➤ Workshops/Seminars/FDPs

1. Organizing Committee Member of **National Conference** titled on **“Green Chemistry-2012”** in University premises, dt.-18th & 19th September-2012.
2. Organizing Committee Member of **National Conference** titled as **“Research & Development in Computational and Information Technology-2012”** in SRM University premises, dt.-7th & 8th September-2012.
3. **Coordinated & Participated** in the **Faculty Development Program** Titled as **Paradigm Shift On Pedagogy & Fim**, dt. 8th & 9th Feb.-2012.
4. Coordinated & Organized **3 days** National level workshop on **Robotics** under the mentor of IIT-K held at SRM University, Delhi-NCR Campus, Modinagar as **Co-convenor**, dt. 21-23 Sept.-2013.
5. Participated in **International Conference** titled as **“Recent development in Computational and Information technology** held at SRM University, Modinagar from dt.-07th to 08th March-2014.
6. Organizing Secretary of **International Meet** Titled as **“Conference on Advanced Technologies & devices in Mathematical and Physical sciences (CATDMP-2015)”** held at SRM University, Modinagar, 2015.
7. Participated in **National Workshop** titled as **“Advance techniques in mathematics, physics & computer science** from Feb. 18-20, 2016.
8. Attended 3 days **National Workshop** on Electron Microscopy and Allied Techniques organized by **Electron Microscope society of India (EMSI) North chapter & University of Delhi**, Dec 21-23, 2015.
9. Organizing Committee Member of **International Conference** titled as **“Global Initiatives in Applied Sciences and Green Technologies”** from dt.-09th to 11th September-2016.
10. Participated in **12 days Faculty Development program- ERUDITIA 2018** (Multidisciplinary) organized by **SRM Institute Of Science & Technology, Delhi-NCR Campus, Ghaziabad**,) 12-23 June, 2018.
11. Organizing Committee Member of **National Conference** titled as **“Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019)”**, organized by SRM-IST, NCR Campus, Modinagar, from dt.-26th-28th April’2019.
12. Participated in **3days National Conference/Workshop/Seminar** in National conference/Seminar organized by Commission for Scientific and Technical Terminology/**Ministry of HRD, Government of India/Department of Higher Education** and **presented (oral)** a research paper titled as **“Effect of Mn doping on structural and magnetic behaviour of ZnO thin films”**, 26th-28 April’ 2019.
13. Participated and **Successfully completed** the **05days online Faculty Development program** on the theme **“Inculcating Universal Human Values in Technical Education”** organized by **All India Council for Technical Education Institute Of Science & Technology (AICTE)** from 01st-05th February’ 2021.
14. Participated in the online **Faculty Development program** on the theme **“Emerging Trends in Applied Physics”** organized by Dep’t of Physics, Faculty of Science, **SGT University, Gurugram, India**, from 05th -9th July’ 2021 (One Week).
15. Organizing member in **SWACHHTA PAKHWADA** organized by NSS Chapter of SRM IST, Delhi-NCR Campus, Modinagar, as **Faculty Coordinator** from dt. 01st -15th September’ 2021.
16. **Organizing Committee Member** of Workshop on **“Space Physics”** organized by Dep’t. Of Physics, SRM IST, Modinagar, from dt.-08th - 09th October’ 2021.

Online Workshops /Seminars/Conferences/Quizes (WEBINAR) – During 2020

- **International Web Conference on Science, Engineering & Technology (IWCSET-2020)** by STAMI (Encompassing Physical, Chemical, Biological, Material, Engineering Sciences & Technology towards Sustainable Development), 15th-16th May’ 2020.

- International webinar on '**Coping with Covid-19 on Higher Education in Global Scenario**' by **Indira Gandhi National Tribal University** (A Central University), Amarkantak, Madhya Pradesh, 22nd May 2020.
- Webinar on **Star Python Programming** by star certification, 23rd May 2020.
- 4-Days Webinar organized by CSTT, MHRD (Higher Education Department), Govt. Of India, at Bundelkhand University, Jhansi Titled, **The Role Of Technical Terminology of Indian Languages in Social and Scientific Research Studies**, 21st -24th May 2020.
- ASM's **Faculty Development Program** by ASMA, 17th -21st May 2020.
- Webinar on "**Art of Online Teaching, Research Paper Writing & Patent Registration**" organized by SSBES' Institute of Technology & Management, Nanded, 18th -20th May 2020
- International e-Conference on "**Recent Trends in Advancement in Mathematical and Physical Sciences**" organized by Deva Nagri College (C.C.S University), Meerut, 22nd -23rd May 2020.
- Online Quiz on Engineering Physics conducted by Department of Physics, Gnanamani College Of Technology, Chennai, 26th May 2020.
- INTERNATIONAL Power Webinar on "**DIGITAL MARKETING & GROWTH HACKING**" organized by Guru Nanak Institute of Technology, Nagpur, Speaker-Govind Chandak, 29th May 2020.
- Social Awareness Quiz competition on **Corona Virus/Covid-19** organized by **Physics Deptt.** -DAV PG College Gorakhpur/Secured 100% marks, 26th May 2020.
- **FDP on Physics of Materials by School of Engineering & Technology**, Jain Global Campus, JAIN (Deemed-To-Be-University), Kanakapura-562 112, 28th -30th May 2020.
- Webinar on **Star AI & ML for Bussiness Applications** by star certification, 27th May 2020.
- Online **National Zoological Quiz 2020**, Bagpat, 27th May 2020.
- **International Workshop** on **Education 4.0: Transformation of Learning Environment** organized by Rajkiya Engineering College Banda and Consilio Intelligence Research Lab, Noida, 29th - 30th May 2020.
- Quiz on **Corona Virus/Covid-19** organized by Deptt. Of Humanities & Sciences -Malla Reddy IE & T, Hyderabad /Secured 100% marks, 28th May 2020.
- Participated in One Day webinar On "**Virtual Lab**" conducted by F.E.T., MJP Rohilkhand University, Bareilly on dt. 6th June 2020 (LFLRDE-CE000230).
- Online **FDP** on "**Emerging Trends in Applied Physics**" from 05-July 2021 to 09 July 2021
- Online **FDP** on "Importance of Innovation and IPR in Academia on dt. 10 July 2021
- One week **FDP** on "**Advanced security Analytics and machine learning**" from 18 April 2022 to 23 April 2022 organized by SRM IST, Modinagar.
- AICTE recognized **FDP** on "Refresher course in Engineering Materials Science" 18 April 2022 to 29 April 2022 organized by NITTTR, Chandigarh.
- 6-Days **FDP** on "**IOT and wearable devices for smart city ifrastructure**" from 20 June'2022 to 25 June'2022, organized by SRM IST, Modinagar.
- 1 Week FDP on MSPR-ESD from 28 June'2022 to 02 July'2022, organized by Deptt. Of Physics, SGT University, Gurugram, Haryana.

➤ **Work experience: 19.2+ Years**

- ❖ Having 19.2+ Years of teaching experience for a variety of courses.
- ❖ National and international research publications in SCI / SCOPUS Indexed Journals.
- ❖ 07 patents (including 01 Design grant Patent) and 01 book publication.
- ❖ Associated with many national/international academicians, researchers & scientists.
- ❖ 06 months industrial/Summer training/ certificate course on 'Transmitting and Receiving of T.V. signals' at Doordarshan relay Kendra (Broadcasting corporation of India), Moradabad.
- ❖ Organizing Committee Member of National/International conferences/Workshops/FDPs e.t.c.

Teaching experience:

ORGANIZATION	DURATION	Designation
1. SRM Institute of Science and Technology, Delhi - NCR Campus, Modinagar, Ghaziabad, U.P.	20th August 2008 to till date.	Assistant Professor
2. SRM Institute of Science and Technology, Delhi - NCR Cam	March 2023 to till date.	Chief Proctor
3. BBDIT, Ghaziabad	01st Jan 2008 to 30th June 2008	Lecturer
4. MM (PG) college, Modinagar	01st July 2002 to 30th June 2003	Lecturer

➤ **Professional Memberships:**

1. Life Time Member (**LM-PS-0960**) of Society for Technologically Advanced Materials (**STAMI**), India.
2. **American Physical Society**, membership id is 61217087
3. Membership of International Association Of Advanced Materials (**IAAM**).
4. **Member Of South Asian Meteorological Association (SAMA) - Member Number -LM-IND-104**
5. Life Member **IAENG (International Association of Engineers): Member Number: 315049**