# **Curriculum Vitae**

Name: Ms. SUDESH KUMARI

**Designation:** Assistant Professor

**Department:** Physics

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Area of specialization: Materials Science

**Academic Qualifications:** 

| Sr. | Degree           | Year      | Board/Univ./Inst.   | %of   | Div./           | Subjects Taken      |
|-----|------------------|-----------|---------------------|-------|-----------------|---------------------|
| no. |                  |           |                     | marks | Rank            |                     |
| 1.  | Ph.D.            | Submitted | Punjabi             |       |                 | Physics             |
|     |                  |           | University, Patiala |       |                 |                     |
| 2.  | UGC-NET          | 2009      | CSIR, New Delhi     |       |                 | Physics             |
| 3.  | M.Sc.(H.S.)      | 2009      | Panjab University,  | 74.70 | 1 <sup>st</sup> | Physics             |
|     |                  |           | Chandigarh          |       |                 |                     |
| 4.  | B.Sc.            | 2007      | Panjab University,  | 83.80 | 1 <sup>st</sup> | Physics, Chemistry, |
|     | (N.M.)           |           | Chandigarh          |       |                 | Maths, English and  |
|     |                  |           |                     |       |                 | Punjabi             |
| 5.  | 12 <sup>th</sup> | 2004      | P.S.E.B. Mohali     | 83.33 | 1 <sup>st</sup> | Physics, Chemistry, |
|     |                  |           |                     |       |                 | Maths, English and  |
|     |                  |           |                     |       |                 | Punjabi             |
| 6.  | 10 <sup>th</sup> | 2002      | I.C.S.E. New        | 81.33 | 1 <sup>st</sup> | Science, Maths,     |
|     |                  |           | Delhi               |       |                 | English, Punjabi,   |
|     |                  |           |                     |       |                 | Geography, Social   |
|     |                  |           |                     |       |                 | Science, History    |
|     |                  |           |                     |       |                 | and Civics          |



#### Medals/ Awards/ Honours Received:

- 1. 2<sup>nd</sup> Position in K.M.V. College Jalandhar in 6<sup>th</sup> National Science Olympiad, 2003.
- 2. 3<sup>rd</sup> Position in B.Sc. II in Government College, Hoshiarpur Merit List for session 2005-06.
- 3. 2<sup>nd</sup> Position in B.Sc. III in Government College, Hoshiarpur Merit List for session 2006-07.

### **Scholarships:**

**Prof. Hans Raj Bhatla Scholarship** in B.Sc. III for extra-ordinary performance in University exam for session 2007-08.

### **Details of Experience:**

| Sr.<br>no. | Name of Inst./Employer   | Position Held | Duration                      | Major Job<br>Responsibilities<br>and Nature of<br>Experience |
|------------|--------------------------|---------------|-------------------------------|--|
| 1.         | Punjabi University,      | Assistant     | 25 <sup>th</sup> July 2013    | Teaching and   |
|            | Patiala                  | Professor     | till present                  | Departmental   |
|            |                          |               |                               | Responsibilities   |
| 2.         | Sant Longowal Institute  | Assistant     | 9 <sup>th</sup> August 2010   | Teaching and   |
|            | of Engineering and       | professor     | to 24 <sup>th</sup> July 2013 | Departmental   |
|            | Technology, longowal     |               |                               | Responsibilities   |
| 3.         | Dr. B.R. Ambedkar        | Lecturer      | 28 <sup>th</sup> January      | Teaching and   |
|            | National Institute of    |               | 2010 to 6 <sup>th</sup> June  | Departmental   |
|            | Technology, Jalandhar    |               | 2010                          | Responsibilities   |
| 4.         | Doaba College, Jalandhar | Lecturer      | 4 <sup>th</sup> August 2009   | Teaching and   |
|            |                          |               | to 27 <sup>th</sup> January   | Departmental   |
|            |                          |               | 2010                          | Responsibilities   |

## List of Papers/Courses taught at P.G. and U.G. Level:

| Sr. no. | Paper/Course         | Class   |
|---------|----------------------|---------|
| 1.      | Mathematical Physics | M.Sc.   |
| 2.      | Applied Physics-I    | B.Tech. |
| 3.      | Applied Physics-II   | B.Tech. |

| 4. | Materials Science and Engineering | B.Tech. |
|----|-----------------------------------|---------|
| 5. | Analog Electronics                | M.Sc.   |
| 6. | Digital Electronics               | M.Sc.   |

#### Administrative/Academic Experience:

- 1. Member of various Departmental Committees (Admission Committee, Fee Concession Committee, Orientation Committee, Discipline Committee, Anti-Ragging Committee etc) constituted from time to time since 2013 at Punjabi University, Patiala.
- 2. Member of Syllabus and Ordinance Preparation Committee for Integrated M.Sc. Physics (Honors School), 2019.
- 3. Member of Decoration Committee for Three Days National Workshop on, "Latex and Technical Writing" organized by the Department of Basic and Applied Sciences, Punjabi University, Patiala from 23<sup>rd</sup> to 25<sup>th</sup> November 2018.
- 4. Member of Decoration Committee for Three Days National Workshop on, "Research Methods and Data Analysis using SPSS" organized by the Department of Basic and Applied Sciences, Punjabi University, Patiala from 29<sup>th</sup> to 31<sup>st</sup> March 2019.
- 5. Centre Superintendent for B. Tech. and FYIP M.Sc. Program in Physics during Feb-June 2022.
- 6. Member of Syllabus Revision Committee for M.Sc. (Physics), 2023.
- 7. Member of Venue Committee for One Day National Seminar on Condensed Matter Physics And Materials-CMPM 2023 organized by the Department of Physics, Punjabi University, Patiala on 08 May, 2023.

### List of Conferences/Symposiums and Workshops attended/participated:

 Presented a paper in, "One Day National Seminar on Condensed Matter Physics and Materials CMPM-2023" organized by Department of Physics, Punjabi University, Patiala on 8th May, 2023.

- Presented a paper in, "12<sup>th</sup> National Conference on "Chemical and Environmental Sciences: Advanced Innovations -2020" organized by Department of Chemistry, Punjabi University, Patiala from February 19-20, 2020.
- 3. Participated in, "69<sup>th</sup> Refresher Course in Research Methodology (I.D.)" organized by UGC-HRDC at Punjabi University, Patiala from 1<sup>st</sup> December 2018 to 21<sup>st</sup> December 2018.
- 4. Presented a paper in International Conference on, "Emerging Areas of Mathematics for Science and Technology" organized by Department of Mathematics, Punjabi University, Patiala from 30<sup>th</sup> January to 1<sup>st</sup> February 2015.
- 5. Participated in, "21st Orientation Programme" organized by UGC-HRDC at Punjabi University, Patiala from 2nd June to 28th June, 2014.
- 6. Participated in National Symposium on, "Emerging Trends in Physics for Ionizing Radiations, Aerosols and Materials Science" organized by the Department of Physics, Punjabi University, Patiala from 13<sup>th</sup> to 14<sup>th</sup> December 2013.
- 7. Participated in Two days Training Programme in, "Computational Techniques in Physics" under, "Technical Education Quality Improvement Programme (TEQUIP) Phase-II" organized by the Department of Physics, Sant Longowal Institute of Engineering and Technology, Longowal from 23<sup>rd</sup> to 24<sup>th</sup> March 2013.
- 8. Participated in 2<sup>nd</sup> National conference on, "Advanced Materials and Radiation Physics AMRP-2011" organized by the Department of Physics, Sant Longowal Institute of Engineering and Technology, Longowal from 4<sup>th</sup> to 5<sup>th</sup> November 2011.

## **List of Papers Published in International Journals:**

**1. Sudesh Kumari**, Rameez Ahmad Mir, Sanjay Upadhyay, O. P. Pandey and Anup Thakur, Impact of annealing on charge storage capability of thermally evaporated molybdenum oxide thin films, **Functional Materials Letters**, (2023) –In Press.

- 2. Thickness dependent structural, morphological and optical properties of molybdenum oxide thin films, *Sudesh Kumari*, *Kamaljit Singh*, *Palwinder Singh*, *Sanjay Kumar*, *Anup Thakur*, **SN Applied Sciences** 2:1439, 1-6 (2020).
- **3.** Structural and optical properties of thermally induced nanostructures in amorphous molybdenum oxide thin films, *Sudesh Kumari*, *Palwinder Singh*, *Harpreet Singh*, *Kamaljit Singh*, *Akshay Kumar*, *Sanjay Kumar*, *and Anup Thakur*, **Journal of Materials Science: Materials in Electronics** 32, 24990–24996 (2021).
- **4.** Effect of Annealing on Structural, Morphological and Optical properties of InSe thin films, *Harpreet Singh, Sudesh Kumari*, *Palwinder Singh, Akshay Kumar*, *Anup Thakur*, **Journal of Materials Science: Materials in electronics** 33, 23599–23606 (2022).
- **5.** A review on GeTe thin film-based phase-change materials, *Kamaljit Singh*, *Sudesh Kumari*, *Harpreet Singh*, *Neeru Bala*, *Palwinder Singh*, *Akshay Kumar*, *Anup Thakur*, **Applied Nanoscience** 13, 95–110 (2021), ISSN-2190-5517.

Sudesh Kumari

**Date:** 20<sup>th</sup> September, 2023 (**Signature**)