

CURRICULUM VITAE

DR. SUCHITRA YADAV

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ACADEMIC EXPERIENCE

From Dec. 2019 to cont. Assistant Professor, Department of Physics,
University of Rajasthan, Jaipur (India)

ACADEMIC QUALIFICATION:

Ph. D (Physics)	IIT Delhi, New Delhi, India	2018
M.Sc. (Physics)	Univ. of Rajasthan, Jaipur, India	2010
B.Sc. (PCM)	Univ. Maharani's College, Univ. of Rajasthan, Jaipur, India	2008

AWARDS / FELLOWSHIPS/ ACHIEVEMENTS:

- **Gold Medal** in M.Sc. (Physics)
- **Senior Research Fellowship** by Ministry of Human and Resource Development (MHRD), Govt. of India (2013).
- **Junior Research Fellowship** by Ministry of Human and Resource Development (MHRD), Govt. of India (2011).
- **Qualified GATE exam 2010** with **AIR 260**.
- **NCC 'C' Certificate** with **A grade** and **NCC 'B' Certificate** with **'B' grade**.
- **NSS** (National Service Scheme) certificate.

ACADEMIC COMMITTEES:

1. Worked as course-co-coordinator in Refresher Course in Research Methodology in Basic Sciences (online) conducted by UGC-HRDC, University of Rajasthan, Jaipur from 07.11.2022 to 19.11.2022.
2. Worked as Joint Organizing Secretary in National Conference on Advances in Materials Science and Technology, 2020 organized by Deptt. of Physics, University of Rajasthan, Jaipur.

FACULTY INDUCTION PROGRAMME/ REFRESHER COURSE:

- 2nd Faculty Induction Programme (online) organized by HRDC DAVV Indore from 15-07-2021 to 11-08-2021.
- Refresher course in Physics organized by UGC-HRDC, Kumaun University, Nainital from 13-09-2022 to 27-09-2022.

TEACHING EXPERIENCE:

Undergraduate courses

1. Electromagnetism
2. Optics
3. Electronics
4. Nuclear Physics

Postgraduate courses

1. Classical Electrodynamics

RESEARCH INTEREST:

Experimental condensed matter physics, Synthesis and characterization of nanostructures and nanocomposites for thermoelectric applications, perovskite materials

PH.D. SCHOLARS WITH THESIS (COMPLETED/WORK IN PROGRESS/SHORT SUMMARY):

1. **Sahil Singh**- work in progress
2. **Suresh Kumawat**-work in progress
3. **Akshita Jain**- work in progress
4. **Mamta Jha**- work in progress

MEMBERSHIP IN PROFESSIONAL BODIES

- Life Member of Material Research Society of India, 2021
- Life Member of Indian Association of Physics Teachers, 2021

PUBLICATIONS:

1. **Suchitra Yadav**, Brajesh S. Yadav, Sujeet Chaudhary, and Dinesh K. Pandya, "Deposition potential controlled structural and thermoelectric behavior of electrodeposited CoSb₃ thin films", *RSC Advances* **7**, 20336 (2017). <https://doi.org/10.1039/C7RA01740E>
2. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, "Incorporation of MoS₂ nanosheets in CoSb₃ matrix as an efficient novel strategy to enhance its thermoelectric performance", *Applied Surface Science* **435**, 1265-1272 (2018). <https://doi.org/10.1016/j.apsusc.2017.11.262>
3. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, "Effect of 2D MoS₂ and Graphene interfaces with CoSb₃ nanoparticles in enhancing thermoelectric properties of 2D MoS₂-CoSb₃ and Graphene-CoSb₃ nanocomposites", *Ceramic International* **44**, 10628-10634 (2018). <https://doi.org/10.1016/j.ceramint.2018.03.090>

4. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, “Enhancing thermoelectric performance of *p*-type CoSb₃ skutterudite by Fe doping”, *Material Science in Semiconductor Processing* **127**, 105721 (2021). <https://doi.org/10.1016/j.mssp.2021.105721>
5. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Effect of bath temperature on structure, morphology and thermoelectric properties of CoSb₃ thin films” *AIP Conference Proceedings* **1731**, 110011 (2016). <https://doi.org/10.1063/1.4948032>

OTHERS (CONFERENCES/LECTURES/ETC.):

1. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Effect of deposition potential and bath temperature on the morphology of electrodeposited cobalt antimony thin films for thermoelectric applications” International Conference on Nanoscience and Nanotechnology (ICNN-2013), 18th-20th November, Lucknow, India (**Oral Presentation**).
2. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Deposition potential controlled morphology of electrodeposited cobalt antimony thermoelectric thin films” International conference on electron microscopy (EMSI-2014), 9th-11th July 2014, University of Delhi, Delhi, India (**Poster presentation**).
3. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Structure and thermoelectric properties of nanostructured electrodeposited CoSb₃”, 8th International Conference on Materials for Advanced Technologies (ICMAT-2015), 28th June – 3rd July 2015, Suntec, Singapore (**Oral Presentation**).
4. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Electrodeposition of CoSb₃ thermoelectric thin films in citric-based solution” International Conference on Condensed Matter and Applied Physics (ICC-15), 30th-31st October 2015, Govt. Engg. College, Bikaner, India (**Poster presentation**).
5. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Effect of bath temperature on structure, morphology and thermoelectric properties of CoSb₃ thin films” 60th DAE-SSPS-2015, 21st-25th December 2015, Amity University, Noida, India (**Poster presentation**).
6. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Thermoelectric properties of electrodeposited Ni-doped CoSb₃ thin films” International Conference on Engineering Physics, Materials and Ultrasonics (ICEPMU-16), 3rd-4th June 2016, The Northcap University, Gurugram, India (**Oral Presentation**).
7. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Graphene boosts thermoelectric properties of CoSb₃ compounds” Nano India-2017, 15th-16th March 2017, IIT Delhi, New Delhi, India (**Poster presentation**).
8. **Suchitra Yadav**, Dinesh K. Pandya and Sujeet Chaudhary, “Improved thermoelectric properties of CoSb₃: MoS₂/Graphene nanocomposites” 1st Departmental Symposium on Advances in Physics-2017, 18th-19th March 2017, IIT Delhi, New Delhi, India (**Poster presentation**).

9. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, “Role of interface on electrical and thermal properties of CoSb₃/MoS₂ composites as a function of the interface density” NCAMST-2020, 29th Feb and 1st March 2020, Department of Physics, University of Rajasthan, Jaipur, India (**Oral Presentation**).
10. National workshop on “**Science through Experiments**”, 22-23rd Feb 2021, S S Jain Subodh PG (Auto.) College Jaipur.
11. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, “Graphene boosts thermoelectric properties of CoSb₃ compounds” International Conference on Green Energy and Sustainable Environmental Practices (GESEP-2023), 30th-31st Jan 2023, University of Rajasthan, Jaipur, India (**Oral Presentation**).
12. **Suchitra Yadav**, Sujeet Chaudhary and Dinesh K. Pandya, “Thermoelectric properties of Mn-doped CoSb₃ skutterudite prepared by Electrochemical deposition” International Conference on Renewable Energy (ICRE-2022), 25th-27th Feb 2022, CNCER, University of Rajasthan, Jaipur, India (**Oral Presentation**).

FACULTY DEVELOPMENT PROGRAMME/ WORKSHOP

1. Participated in one-week online faculty development programme on “**Present and Future of Renewable Energy Sources: From Laboratory to Industry**” from sept. 26 to 30,2022 at SVVV, Indore.
2. Delivered a talk in the workshop on “**Spectroscopy-a powerful tool to study materials**” on 28th Feb 2020, the National Science Day, organized by CDPE, Univ. of Rajasthan, Jaipur.
3. Participated in National Symposium on “**Global Environmental Challenges: Present Scenario**” held on 21st Jan, 2017 organized by Deptt. of Botany, University of Rajasthan, Jaipur.

INVITED TALK/SESSION CHAIR

1. Chaired session in National Conference on Advances in Materials Science and Technology, 2020 organized by Deptt. of Physics, University of Rajasthan, Jaipur.