

Dr. Dilip Kumar Meena

Assistant Professor,

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Date of Birth: July 10, 1997



Academic Records:

- Assistant Professor, HNB Garhwal University, Uttarakhand (June 2022 Present)
- Ph.D. in Physics, Indian Institute of Science (IISc) Bangalore, *India* (2023)
- M.Sc. in Physics, Indian Institute of Technology (IIT) Ropar, *India* (2018)
- B.Sc. in Physics, Rajasthan University, Jaipur, *India* (2015)

Awards and Fellowships:

- Senior Research Fellowship (SRF), Indian Institute of Science (IISc), Bangalore, India,
 2020.
- Junior Research Fellowship (JRF), Indian Institute of Science (IISc), Bangalore, India, 2018.
- National Eligibility Test (NET) was conducted jointly by the Council of Scientific and industrial Research and University Grant Commission, in December 2019.
- Graduate Aptitude Test in Engineering (GATE), Indian Institute of Technology, India, 2019.
- National Eligibility Test (NET) was conducted jointly by the Council of Scientific and Industrial Research and University Grant Commission, in December 2018.
- Joint Entrance Screening Test (**JEST**), India, **2018**.
- Joint Admission Test (JAM) of Indian Institute of Technology, India, 2016.

Research Publications:

- **Dilip Kumar Meena**, Rapaka S C Bose, K. Ramesh, Melt Solidification Rate-Dependent Structural and Thermoelectric Properties of Sb₂Te₃/Te Nanocomposites, *Journal of Alloys and Compounds 902 (2022) 163767*.
- **Dilip Kumar Meena**, Rapaka S C Bose, S. Vinoth, K. Ramesh, Impact of Melt Solidification Rate on Structural and Thermoelectric Properties of n-type Bi₂Te₃ Alloy, *Applied Physics*, (2022) 128:528.
- Rapaka S C Bose, Dilip K M, Paolo Mele, and K Ramesh, Role of grain alignment and oxide impurity in thermoelectric properties of textured *n*-type Bi-Te-Se alloy, *J. Phys. D: Appl. Phys.* 54 (2021) 235503.
- K. Deva Arun Kumar, **Dilip K. Meena**, Rapaka S.C. Bose, Ramcharan Meena, Prashantha Murahari, Paolo Mele, K. Ramesh, Optical and thermoelectric properties of Sb₂Te₃/ZnTe nanostructured composites, *Journal of Alloys and Compounds 865 (2021) 158621*.

Conferences/ Workshops/Seminars:

- Given an **Oral Presentation** at a Conference on "Effect of Melt Solidification Rate on Structural and Thermoelectric Transport Properties of Sb₂Te₃/Te Nanocomposite" at the **International Conference on Radiation Awareness and Detection in Natural Environment**, March 02-04, 2023.
- Successfully **organized a seminar** entitled "**Role of Scientific Temper of Society Towards Sustainable Development**" from 28 Feb. 2023 to 1 March 2023.
- One day **workshop** "**Scientific Paper Writing**" **attended** by me on 10th February 2023 at Govt. P.G. College, New Tehri.
- Given an **Oral Presentation** on "Effect of Melt Solidification Rate on Structural and Thermoelectric Transport Properties of Sb₂Te₃/Te Nanocomposite" at the **International Virtual Conference on Thermoelectric**, July 20-22, 2021.
- Given a **Poster Presentation** on "Single Crystal Growth and Characterization of Topological Weyl Semimetal MoTe₂" at Research Conclave 2018 at IIT, Ropar.

Research Experience:

- Working on room temperature-based **Thermoelectric Materials** (Sb₂Te₃, Bi₂Te₃) since August 2018 [Ph.D.].
- Single Crystal Growth and Characterization of **Topological Weyl Semimetal** (MoTe₂) [M.Sc.].
- Automatic water tank level controller circuit using 555 Timer [M.Sc.].

Subjects Taught at HNBGU:

Undergraduate (B.Sc.)

- Electricity And Magnetism
- Electricity And Magnetism Lab
- Elements Of Modern Physics
- Elements Of Modern Physics Lab
- Quantum Mechanics

Postgraduate (M.Sc.)

- Mathematical Physics
- Statistical Physics
- Quantum Mechanics
- Advanced Quantum Mechanics
- Condensed Matter Physics B

Extracurricular Activities:

- Worked as a member of the National Service Scheme (NSS) for 240 hours during B.Sc. at R. R. College, Alwar, Rajasthan.
- Ran an 8 Km Mini Marathon organized by IIT Ropar for giving the message of "Clean India Healthy India" in 2018.

Administrative Activities:

- Worked as a committee member during the student council election 2022 at SRT Campus Tehri.
- Worked as a committee member in the admission of 1st and 5th sem of the accedmic year 2022-23.