



Dr. Dilip Kumar Meena

Assistant Professor,
Department of Physics,
H. N. B. Garhwal University, SRT Campus
Tehri – 249 199, India
Phone: (+91) 6377427768, 8745889213
Email: dilip.physics1212@gmail.com



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, A. M. Umarji, D Arvindha Babu, Polymer-mixed Sb_2Te_3/Te nanocomposites exhibiting p-type to n-type conduction reversal and thermal conductivity reduction, *Material Research Express* **10** (2023) 074001.
- **Dilip Kumar Meena**, Rapaka S C Bose, K. Ramesh, Melt Solidification Rate-Dependent Structural and Thermoelectric Properties of Sb_2Te_3/Te Nanocomposites, *Journal of Alloys and Compounds* **902** (2022) 163767.
- **Dilip Kumar Meena**, Rapaka S C Bose, S. Vinoth, K. Annapurna, K. Ramesh, Impact of Melt Solidification Rate on Structural and Thermoelectric Properties of n-type Bi_2Te_3 Alloy, *Applied Physics A* (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 $Sb_2Te_3/ZnTe$ nanostructured composites, *Journal of Alloys and Compounds* **865** (2021) 158621.

Book Chapter Publications:

- **Dilip Kumar Meena**, K. Deva Arun Kumar, Low Thermal Conductivity of n-Type ZnTe Thermoelectric Alloy Prepared by Facile Top-Down Process, ISBN: 978-1-80433-962-6 "Advances in Applied sciences (*Rubicon Publication*)" reference No. RC 23-22 (2023).

Conferences/ Workshops/Seminars:

- Given an **Oral Presentation** at a Conference on “Effect of Melt Solidification Rate on Structural and Thermoelectric Transport Properties of Sb_2Te_3/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 Sb_2Te_3/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 $MoTe_2$ ” at Research Conclave 2018 at IIT, Ropar.

Research Experience:

- Working on room temperature-based **Thermoelectric Materials** (Sb_2Te_3 , Bi_2Te_3) since August 2018 [Ph.D.].
- Single Crystal Growth and Characterization of **Topological Weyl Semimetal** (MoTe_2) [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.

