## Introduction

Himachal and other mountainous states of India possess extreme geographical conditions ranging from high hills and mountains to areas of little flat land. Rugged terrains, unfavorable weather conditions and scattered settlements in the hilly and mountainous regions obstruct the mobility of people. In such a harsh mountainous region the construction of roads, rails and airports are expensive and time-consuming.

Increased urban density with space being continually appropriated for buildings leads to the problem that public transport (PT) networks in many historic cities have reached their capacity limit. Conventional PT infrastructure (tram lines, bus lines) cannot be extended in high density cities with narrow streets and limited space for additional transportation infrastructure. As a consequence, capacity extensions of mass transit in cities must be built either below or above ground level. Cities of moderate size are too small for an underground railway system to be economically viable. A ropeway system/cable car, however, could be a cost-effective and efficient alternative.

The Parvatmala Pariyojana, or the National Ropeways Development Programme, was announced in Budget 2022-23 and aims to improve connectivity for commuters in hilly areas and decongest urban areas where conventional modes of transport are saturated.

In this workshop, futuristic technologies related to Ropeway System will be discussed.

## Eligibility

The workshop is open to Faculty Members, Students from Engineering Institutes / Colleges / Polytechnics and Practicing Engineers from Industries and R&D Institutions.

## Workshop Content

- Feasibility Study: Project Management, DPR preparations.
- Design and Analysis: Cabin, Rope, Brakes and Drive system (Manual/ motorized), Terminals buildings, Steel towers etc.
- Manufacturing, Testing and Installation: Cabins, Drive systems and Steel towers.
- Safety Features: From snow, rain, wind and lightening.
- Case Studies of Accident, Failures and Rescue

## Faculty

The faculty members for this workshop are experts from reputed institutes and industry persons having rich experience in Ropeway system

## Registration Fee

Practicing Engineers: Rs. 5,000/-

Faculty Members: Rs, 2,500/- Students: Rs. 1,500/-

Registration fee includes workshop material, working lunch, refreshments, accommodation and registration kit.

Registration fee is payable in advance in below mentioned account.

- Bank: Punjab National Bank, IIT Kamand
- Account number: 7315000100034369
- Account Holder Name: CCE, IIT Mandi
- IFSC code: PUNB0731500
- Swift code: PUNBINBBPAR
- IIT Mandi GSTIN: 02AAALI0149J1ZI
- IIT Mandi PAN: AAALI0149J

Registration fee can be paid through UPI using QR code

Please keep screenshot of Transaction ID and UTR number saved before filling the registration form

Registration Fee UPI

## Date & Time of Registration:

21st July 2025, 9AM at SMME Conference Room.

# WORKSHOP

# ON

# Futuristic Technologies for Energy Efficient, Safe and Smart Ropeway Systems

**(July 21, 2025)**

**Registration form**

**Name**……..……

**Qualification** ……..

**Designation**……**Experience** ……..

**Organization**……..

**Address**…….……..

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……..

……

**Phone/Mobile No** …….. ……..

**E – Mail** ……..……..

**Payment Details**

**Transaction ID** …….....

**UTR number** ……

**Date**:……..**Signature**……

**General Information about Institute**

Nestled in the Sivalik Range of the Himalayas, away from the bustle of the metropolis, a new abode of learning, IIT Mandi, germinated in 2009.

The focus of IIT Mandi is to spearhead cutting edge research and development of technologies needed by the world in the years to come. Research groups work together in creating and harnessing the newest technologies needed to serve the people of the region and the country, and to tackle problems of global importance. In order to achieve excellence and high impact locally and globally, IIT Mandi is focusing strongly on fostering inter-disciplinary R&D. With a view to innovate sustainable technologies for widespread use, IIT Mandi encourages strong Humanities and Social Sciences participation in technology R&D.

**How to Apply**

The duly filled Registration Form along with the Registration Fees (see fee details overleaf) should reach to the coordinator on or before July 16, 2025. Intimation of selection will be communicated to the participants by July 17, 2025.

**Contact Address for Correspondence**

Prof. Rajeev Kumar / Prof. Vishal S Chauhan
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Indian Institute of Technology Mandi,
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website: http://www.iitmandi.ac.in/ropeway2025

# WORKSHOP

# ON

# Futuristic Technologies for Energy Efficient, Safe and Smart Ropeway Systems

**(July 21, 2025)**

Indian Institute of Technology Mandi

**Coordinators**

**Prof. Rajeev Kumar**
**Prof. Vishal S Chauhan**

**School of Mechanical and Materials Engineering,**
**Indian Institute of Technology Mandi,**
**Mandi 175005, INDIA**