

## About the Institute

The National Institute of Technology Sikkim (NIT Sikkim) is one of the esteemed institutions of higher learning in the country, established in 2010 as part of the 11th Five-Year Plan of the Government of India. Located in the serene Himalayan region, the institute offers undergraduate, postgraduate, and Ph.D. programs in various disciplines of engineering, technology, and applied sciences. NIT Sikkim is committed to providing quality education and fostering innovation and research. The institute has a growing reputation for academic excellence, with its students consistently securing placements in top national and international companies.

## About the Departments

The Departments of Electronics and Communication Engineering (ECE) and Electrical and Electronics Engineering (EEE), at NIT Sikkim, are among the institute's leading academic divisions committed to fostering excellence in education and research. The ECE department offers undergraduate and doctoral programs emphasizing communication systems, VLSI design, embedded systems, signal processing, and biomedical signal processing. The department is known for its strong research culture and active engagement in collaborative projects with academia and industry. The EEE department offers a robust undergraduate and Ph.D. program, focusing on key areas such as power systems, power electronics, and renewable energy. It is supported by a team of highly qualified faculty who are actively engaged in research and industry consultancy.

## About ANRF

The Anusandhan National Research Foundation (ANRF) was established through the ANRF Act, 2023, enacted by the Parliament of India. It serves as the apex body for providing high-level strategic direction in advancing research, innovation, and entrepreneurship across a wide spectrum of disciplines. ANRF's core mandate is to promote a robust ecosystem of research and development (R&D) and cultivate a nationwide culture of innovation. It plays a pivotal role in strengthening the research capabilities of India's universities, colleges, research institutions, and R&D laboratories.

## About Sikkim

Sikkim, a small but picturesque state nestled in the northeastern part of India, is known for its breathtaking landscapes, rich biodiversity, and vibrant cultural heritage. Bordered by Bhutan, Tibet, and Nepal, it is home to the majestic Kanchenjunga, the third-highest mountain in the world. Sikkim boasts a unique blend of ethnic communities, including Lepchas, Bhutias, and Nepalese, each contributing to its diverse traditions and festivals. The state is also noted for its environmental consciousness, being the first fully organic state in India.



## Objectives of the event

The potential objectives for a workshop sponsored by the Anusandhan National Research Foundation (ANRF) on the proposed topic are listed below:

- To provide exposure to advanced research and emerging trends in intelligent robotics applied to smart agriculture.
- To introduce participants to the ANRF testbed and its capabilities in simulating smart farming environments.
- To demonstrate real-world applications of AI in agriculture including precision irrigation, crop health monitoring, etc.
- To foster interdisciplinary collaboration among researchers and practitioners.
- To contribute to national missions such as Digital India, Smart Villages, and Atmanirbhar Bharat.

राष्ट्रीय प्रौद्योगिकी संस्थान सिक्किम  
**NATIONAL INSTITUTE OF TECHNOLOGY SIKKIM**  
(An Institute of National Importance, Ministry of Education, Govt. of India)

**Workshop**  
**(Seminar/Symposia)**

on

**Intelligent Robotics in Smart Agriculture:  
The Future of Farming**  
**(23<sup>rd</sup> to 27<sup>th</sup> February 2026)**



**Sponsored by**



**Anusandhan  
National  
Research  
Foundation**

**Organized by**

**National Institute of Technology Sikkim**  
**Ravangla, Barfung Block**  
**South Sikkim- 737139 (India).**

(An autonomous Institute under the aegis of the Ministry  
of Education, Govt. of India)  
website: <https://nitsikkim.ac.in/>

## Topics to be covered

- Introduction to ANRF and networked experimentation for agriculture.
- Autonomous ground and aerial robots for precision farming.
- AI and machine learning in crop disease prediction and yield forecasting.
- Real-time communication protocols and remote-control systems.
- Robotics-based pesticide spraying and harvesting automation

## Resource persons

- Experts from IITs/NITs/IITs specializing in Robotics and AI.
- Researchers from ICAR, IARI, and C-DAC.
- Industry partners from AgriTech startups and automation companies.

## Who can attend?

The faculty members, Research scholars & PG Scholars of the technical institutions and Industry Personnel.

## Expected outcomes of the workshop

- Enhanced technical skills in intelligent robotic farming systems.
- Participant-led proposals for Agri-Robotics using ANRF testbed resources.
- Strengthened collaboration between academia, government, and industry.
- Increased awareness of sustainable and precision farming techniques using modern technologies.

## Contact us

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## Chief Patron

**Prof. Mahesh Chandra Govil,**  
Director, NIT Sikkim

## Patron

**Dr. Hemant Kumar Kathania**  
Assistant Professor & Head, ECE  
NIT Sikkim

**Dr. Nimai Charan Patel**  
Assistant Professor & Head, EEE  
NIT Sikkim

## Convener(s)

**Dr. Vishal Vishnoi**  
Assistant Professor, ECE,  
NIT Sikkim

**Dr. Vivek Kumar**  
Assistant Professor, EEE,  
NIT Sikkim

**Dr. Varun Gupta**  
Assistant Professor, ECE,  
NIT Sikkim

**Dr. Bam Bahadur Sinha**  
Assistant Professor, CSE,  
NIT Sikkim

## Organizing committee

Dr. Sanjay Kumar Jana, Associate Professor, ECE  
Dr. Reshmi Dhara, Assistant Professor, ECE  
Dr. Jeetendra Singh, Assistant Professor, ECE  
Dr. Sudipta Das, Assistant Professor, ECE  
Dr. JayShree, Assistant Professor, ECE  
Dr. Anjan Kumar Ray, Associate Professor, EEE  
Dr. Sourav Mallick, Associate Professor, EEE  
Dr. Aurobinda Panda, Assistant Professor, EEE  
Dr. Molay Roy, Assistant Professor, EEE  
Dr. Pradeep Kumar, Assistant Professor, EEE  
Dr. Abhishek Rajan, Assistant Professor, EEE  
Dr. Shakti Vashisth, Assistant Professor, EEE



## Other instructions

- This workshop will be conducted in offline mode.
- In case of any query, feel free to contact the coordinators.
- Relevant study materials will be provided to the participants
- The participants can register through the following details:

**Account Holder's Name:** DIRECTOR NIT SIKKIM

**Account Number:** 31996269106

**Bank Name and Branch:** State Bank of India/Ravangla

**IFSC Code:** SBIN0007218

## Registration and general information

**REGISTRATION FEE:** Rs. 500/- (including GST)

The number of participants is limited to 25, and will be selected based on a first-come, first-served basis, and a prerequisite. For any clarification, the workshop coordinator can be contacted.

**Last date of registration:** 09<sup>th</sup> February 2026

The candidates would be informed of their selection through email by the due date.

**Registration Link:**

<https://forms.gle/CMuDNN7uTvrJLsVi9>