



# GeodCon-26

*Geodesy on the move*

## First National Conference on Geodesy

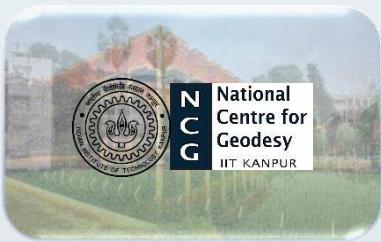
Advancing Geodesy for Integrated Earth Observation, Precision  
Positioning, and Sustainable Development

11-13 MARCH, 2026

Venue - Indian National Science Academy (INSA), New Delhi

Website - <https://iitk.ac.in/oa/events/2025-26/GeodCon-26/>

# Organizers



**IIT KANPUR**  
**National Centre for Geodesy**



**IIT BOMBAY**  
**Regional Centre for Geodesy**



**MANIT BHOPAL**  
**Regional Centre for Geodesy**



**MNNIT ALLAHABAD**  
**Regional Centre for Geodesy**



**IIST THIRUVANANTHAPURAM**  
**Regional Centre for Geodesy**



**IIT (ISM) DHANBAD**  
**Regional Centre for Geodesy**



**ANNA UNIVERSITY**  
**Regional Centre for Geodesy**

# Invitation

Dear Colleagues,

The National Centre for Geodesy (NCG), IIT Kanpur, in collaboration with the Regional Centres for Geodesy (RCGs) – IIT Bombay, IIT (ISM) Dhanbad, MANIT Bhopal, MNNIT Allahabad, Anna University, and the Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram – cordially invites you to participate in GeodCon-26, to be held in New Delhi, 11-13 March, 2026.

GeodCon-26 will serve as a premier platform to explore cutting-edge research, technological advancements, and practical applications shaping the future of geodesy. The conference will bring together leading scientists, industry experts, policy makers, and early-career researchers to exchange ideas, present innovations, and foster collaborations that address the evolving challenges of Earth observation, precise positioning, and sustainable development.

Your presence and contributions, through keynote lectures, technical presentations, workshops, or interactive discussions, will be invaluable in driving forward the vision of a resilient and data-driven geospatial future.

We eagerly look forward to welcoming you to New Delhi in March 2026 for this landmark gathering.

# Highlights



- Specialized tutorials for students, researchers, and professionals on fundamental and applied geodesy.
- Interactive sessions with experts on emerging geodetic trends.
- Technical presentations showcasing innovative research and applications in geodesy and allied areas.
- Exhibition pavilion featuring cutting-edge geospatial technologies and instruments.
- Poster presentations for students and young researchers to present and discuss their work.
- Networking opportunities connecting academia, industry, and policymakers for future collaborations.



# NCG-RCG Consortium

The NCG-RCG Consortium is a collaborative national framework coordinated by the National Centre for Geodesy (NCG) at IIT Kanpur, which was established in 2019 with the support of Department of Science & Technology (DST), Government of India (GoI).

The NCG serves as the nodal and resource Centre for advancing education, research, and capacity building in Geodesy, the foundation for Geospatial Science and Technologies. To further strengthen the efforts in promoting Geodetic Science, NCG initiated the establishment of six Regional Centres for Geodesy (RCGs) at Anna University Chennai, IIT Bombay, MANIT Bhopal, MNNIT Allahabad, IIT(ISM) Dhanbad & IIST Thiruvananthapuram across India with the support of DST.

These RCGs work in tandem with NCG to foster academic development, cutting-edge research, geodetic infrastructure growth, and training programs for students, researchers, professionals and industries in geodesy and allied areas.

The NCG-RCG consortium contribute to build capacity in Geodesy through education, research, and modern infrastructure. It fosters collaboration for innovation in Earth observation and supports societal needs like disaster risk reduction, climate resilience, and sustainable development. The consortium benefits academia, industry, government, and students through shared resources, technology transfer, reliable data, and hands-on training.

# GeodCon-26

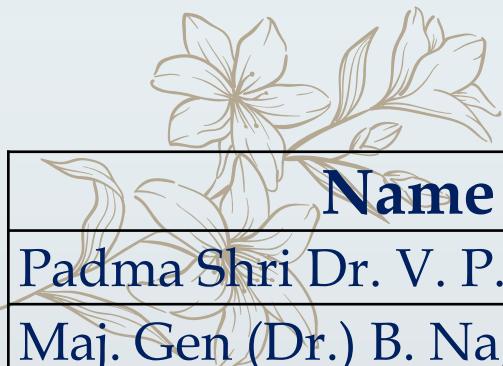
The National Conference on Geodesy (GeodCon-26) aims to bring together researchers, academicians, professionals, policymakers, and industry leaders to explore recent advancements in Geodetic Science and its Applications. This premier event will serve as a platform to share innovations and best practices shaping Earth observation, positioning, and navigation technologies.

The conference will highlight global and regional developments in geodesy, focusing on reference frames, Earth system monitoring, satellite and ground-based observations, and the integration of emerging tools such as AI and cloud computing in geodetic data analysis. Discussions will emphasize geodesy's role in addressing challenges like climate change, natural hazards, groundwater monitoring, and crustal deformation.

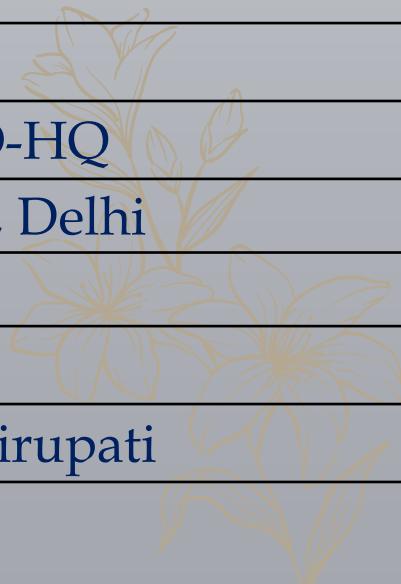
The technical program will include tutorials by eminent experts, offering valuable insights and practical perspectives for students, researchers, and professionals. Workshops, paper and poster sessions, and expert panels will further promote interaction, skill enhancement, and collaboration among academia, government, and industry.

GeodCon-26 aspires to strengthen national geodetic capacity, foster innovation and capacity building, and position India at the forefront of global geospatial science and earth observation.

# National Advisory Committee



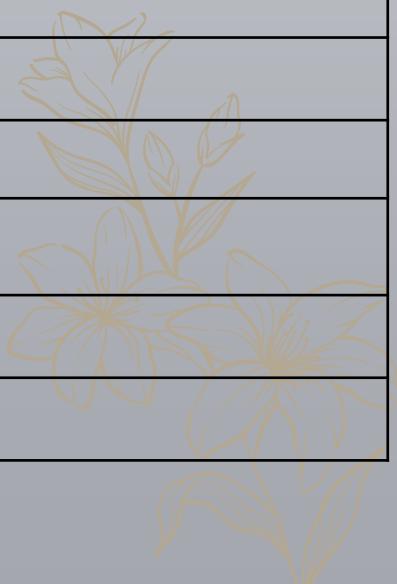
Name	Organization
Padma Shri Dr. V. P. Dimri	Patron & Chief Advisor
Maj. Gen (Dr.) B. Nagarajan	Co-Patron
Dr. Nilesh M. Desai	SAC, ISRO
Shri. R. Anand, IPoS	DoLR
Shri Hitesh K. S. Makwana, IAS	SoI
Dr. Prakash Chauhan	NRSC, Hyderabad
Dr. Yashwant Gupta	NCRA, Pune
Dr. V. K. Dadhwal	EDF, Gurugram
Brig Arun Kumar	Military Survey, Army
Dr. P. K. Garg	IIT Roorkee
Dr. V. M. Tiwari	CSIR-NEIST, Jorhat
Dr. Dheeraj Kumar	IIT (ISM) Dhanbad
Dr. Lalan P. Singh	GSI
Dr. M. Mohanty	DST
Dr. S. Pandey	DST
Dr. Manish Saxena	ISRO-HQ
Dr. Ashish Agarwal	NPL, Delhi
Shri Nikhil Kumar	AGI
Dr. K. C. Tiwari	DTU
Dr. Roshan K. Srivastav	IIT Tirupati



# Organizing Committee



Name	Organization
Dr. Onkar Dikshit	Chairperson, NCG, IIT Kanpur
<b>Organizing Secretaries</b>	
Dr. S. K. Katiyar	RCG, MANIT, Bhopal
Dr. N. Rama Rao	RCG, IIST, Thiruvananthapuram
Dr. R. Vidhya	RCG, Anna University, Chennai
Dr. R. Dwivedi	RCG, MNNIT, Allahabad
Dr. RAAJ Ramsankaran	RCG, IIT Bombay
Dr. V. G. K. Villulri	RCG, IIT (ISM), Dhanbad
<b>Joint Organizing Secretaries</b>	
Dr. Mugundhan V.	SPASE, IIT Kanpur
Dr. Reet Kamal Tiwari	IIT Ropar
Dr. Sumanta Pasari	BITS Pilani
Dr. Ropesh Goyal	IIT BHU
Dr. Avadh Bihari	IIT Tirupati
Shri. Mayank Rajput	DoLR
<b>Conference Executives</b>	
Dr. Sushant Shekhar	NCG, IIT Kanpur
Dr. Somalin Nath	NCG, IIT Kanpur



# Registration

## Conference Registration Fee Details

Category	Early Registration	Regular Registration
Students	₹ 4,000	₹ 5,000
Academia & Researchers	₹ 7,000	₹ 9,000
Industry Professionals	₹ 10,000	₹ 12,000

## Conference Attendees

Category	Early Registration	Regular Registration
Attendees (per day)	₹ 3,000	₹ 4,000

## Tutorial Registration (Pre-Conference)

Category	Registration
Students	₹ 2,000
Others	₹ 4,000

## Important notes:

- The Conference registration fee includes access to all conference sessions, tea/coffee, and lunch.
- Only registered participants in conference will receive the conference kit and materials.
- Early registration is encouraged to avail discounted rates.
- Tutorial sessions have limited seats, allotted on a first-come, first-served basis.
- Participants wishing to attend tutorials only are required to register separately to avail the conference facilities, as the fee includes tutorial materials, sessions, and tea/coffee and lunch for that day only.

# Important Dates

- Call for Abstract Submission : Oct 20, 2025
- Last date for Abstract Submission : ~~Dec 15, 2025~~ Jan 15, 2026  
*(extended)*
- Acceptance of Abstract : Jan 30, 2026
- Early Bird Registration : Feb 25, 2026
- Late Registration : Mar 5, 2026

**Note: All presenters and participants must register online and pay the applicable fee.**

## Awards and Recognition

Outstanding oral and poster presentations will be recognized with awards in each technical session of GeodCon-26, spanning themes such as global and regional reference frames, space geodetic techniques, gravity missions and geoid concepts, geodesy for Earth system and society, and advances in sensors, data processing, and AI/ML applications. Special prizes will be awarded to students for exceptional contributions, and we strongly encourage them to participate and showcase their talent.

# Call for Abstracts

## Submission Guidelines

We invite you to share your latest research and innovations at **GeodCon-26**.

## How to Submit

1. Submit your abstract online through the official conference website.
2. Submissions by post or fax will not be accepted.
3. Abstracts must be written in English, limited to 300 words, and formatted according to the provided template.
4. The abstract template can be downloaded from the official conference website:

Contact: [geodcon.2026@gmail.com](mailto:geodcon.2026@gmail.com)



# Pre Conference tutorial

## 1. Introduction to Geodesy

Overview of Earth's shape, reference surfaces, and coordinate systems, geoid, ellipsoid, WGS-84, and Indian Mean Sea Level, understanding reference frames and the basics of GNSS and its applications

## 2. Adjustment Computations in Geodetic Networks

Basics of least squares adjustment and simple models used in geodesy, introduction to practical examples for handling observational data and datum definition

## 3. UAVs and Integration of Sensors

Understanding UAV platforms for mapping and surveying, integration of optical, LiDAR, and GNSS sensors for precise 3D data collection and modelling

## 4. Fundamentals of InSAR and Its Geodetic Applications

Introduction to SAR and InSAR principles, data, and basic processing steps, applications in ground deformation, crustal motion, and environmental monitoring

## 5. Space Geodetic Techniques

Overview of modern space geodetic methods used to measure Earth's shape and motion, highlighting their roles in reference frame realization and Earth system science

## 6. Emerging Tools and Techniques in Geodesy

Introduction to data-driven geodesy, applications of data science and machine learning in GNSS, InSAR, and deformation studies

# Conference Themes

## 1. Reference Frames and Precise Positioning

- Global and Regional Reference Frames: Realization, Maintenance, and Transformation
- Advances in GNSS, PPP, and Multi-GNSS Integration
- Ionospheric and Tropospheric Modelling for High-Precision Positioning
- National Geodetic Reference Frame Modernization and its Applications

## 2. Space Geodetic and Observation Techniques

- Integration of VLBI, SLR, DORIS, and GNSS for Global Geodesy
- SAR and InSAR for Surface Deformation and Hazard Mapping – with focus on the NISAR Mission
- Satellite and Coastal Altimetry for Ocean, Hydrology, and Inland Water Studies
- Synergistic Use of Space Geodetic Sensors for Earth Observation

## 3. Earth's Gravity Field, Geoid, and Vertical Datum

- Satellite Gravity Missions (GRACE, GRACE-FO, GOCE) and Mass Transport Studies
- Terrestrial, Airborne, and Marine Gravimetry for Geoid Modelling
- Unification of Vertical Datums and Height Systems
- Applications of Gravity Field Models in Hydrology, Cryosphere, and Geodynamics

## 4. Earth System Dynamics and Environmental Monitoring

- Crustal Deformation, Plate Tectonics, and Seismic Hazard Assessment
- Sea-Level Variability, Coastal Deformation, and Climate Change Studies
- Land Subsidence, Groundwater Depletion, and Urban Dynamics
- Geodetic Contributions to Climate and Environmental Change Monitoring

# Conference Themes

## 5. Geospatial Technologies, Data Science, and Integration

- LiDAR, UAVs, and Drone Mapping for 3D Geospatial Modelling
- AI/ML and Big Data Analytics for Geodetic and Earth Observation Data
- Cloud and Open-Source Platforms for Data Processing and Visualization
- Integrated Geodetic Networks, Smart Sensors, and Real-Time Systems

## 6. GNSS and its Applications

- Advanced GNSS Techniques: PPP, RTK, and Multi-Constellation Solutions
- GNSS-Based Monitoring for Infrastructure, Surveying, and Mapping
- GNSS Reflectometry and Integration with Remote Sensing for Environmental Studies
- Emerging Trends in GNSS Augmentation, Integrity, and Real-Time Applications

## 7. Capacity Building, Policy, and Societal Impact

- Geodesy for Infrastructure, Energy, and Natural Resource Management
- Geospatial Systems for Land Administration, Smart Cities, and Urban Planning
- Disaster Risk Reduction and Early Warning through Geodetic Observations
- Education, Training, and Capacity Building in Modern Geodesy

# Sponsorship

## Sponsorship and Exhibition

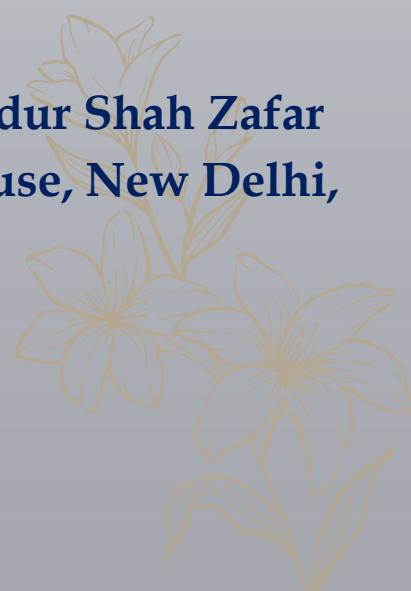
## Privileges

Category	Amount (INR)	Complimentary Registration	Others
Platinum	₹ 20,00,000/-	10	<ul style="list-style-type: none"> <li>• Stall Area (Front one)</li> <li>• Banner publicity as Platinum Sponsor</li> <li>• Logo Display on Brochure, Kit and Website</li> </ul>
Gold	₹ 10,00,000/-	5	<ul style="list-style-type: none"> <li>• Stall Area</li> <li>• Banner publicity as Gold Sponsor</li> <li>• Logo Display on Brochure, Kit and Website</li> </ul>
Silver	₹ 5,00,000/-	3	<ul style="list-style-type: none"> <li>• Stall Area</li> <li>• Banner publicity as Silver Sponsor</li> <li>• Logo Display on website</li> </ul>
Conference Dinner Sponsor	₹ 10,00,000/-	5	<ul style="list-style-type: none"> <li>• Banner publicity as Conference Dinner Sponsor</li> <li>• Logo Display on Brochure, Kit and Website</li> </ul>
Conference Kit Sponsor	₹ 5,00,000/-	5	<ul style="list-style-type: none"> <li>• Logo and company details printed on the bag</li> </ul>

# Venue - INSA New Delhi



**Indian National Science Academy (INSA), Bahadur Shah Zafar Marg, Mata Sundari Railway Colony, Mandi House, New Delhi, Delhi, 110002**



# Fee Payment Details

- Participants can make fee payment for Registration, Conference Tutorial and Conference Attendees through SBI Collect using the procedure given in the following link:  
([https://drive.google.com/file/d/1Ln2Gj2NOY5JYrACtGhOf6043Lyl\\_0C7q/view?usp=sharing](https://drive.google.com/file/d/1Ln2Gj2NOY5JYrACtGhOf6043Lyl_0C7q/view?usp=sharing))
- Please use the below details during fee payment.

Course Code	IITK/OOA/2025-26/066
Course Title	GeodCon 26 1st National Conference on Geodesy
Course Duration	11.03.2026-13.03.2026
Participants Category	<p>IITK Students</p> <p>NON IITK Students</p> <p>IITK Faculty</p> <p>NON IITK Faculty</p> <p>Industry Participant</p> <p>Others</p>
Course Fees + 18% GST *IITK Faculty & Students pay only course fees	
Name of Participants	
Name of Institute/Organization	
Course Fee	
Remarks	Kindly mention here the category of payment has been done (Registration Fee/ Tutorial Registration/ Conference Attendees).