



Indian Institute of
Technology Kharagpur
Geospatial Academy



IIT Kharagpur
PLATINUM JUBILEE

SAT-CAL/VAL 2027

PLATINUM JUBILEE WORKSHOP ON

SATellite Data CALibration and VALidation 2027

Building a Reliable, and Trusted Future for Satellite Data

A technical workshop integrating geospatial science, satellite technology, and in-situ measurements to bridge satellite remote sensing with ground-truth validation for a trusted and responsible satellite data future.



17-19
JANUARY 2027



IIT KHARAGPUR
WEST BENGAL, INDIA



ABOUT SAT-CAL/VAL 2027

SAT-CAL/VAL 2027 is a focused, high-energy technical workshop on calibration and validation of satellite observations with real-world ground truth verification, focus on integration of in-situ measurements through field campaigns, sensor technologies, drone-based observation. It aims to translate satellite based low-cost scientific observation into trusted and reliable data product by strengthening a link between satellite remote sensing and ground-truth practices. Workshop focuses on practices ensuring accurate, reliable, and scalable satellite Earth observation products for scientific and societal applications across local, regional, and global scales.

WORKSHOP FOCUS AREAS

- 01 Integrated Multi-platform CAL/VAL of Satellite Products**
integration of satellite, UAV, and ground sensor data fusion
- 02 Field Campaign Design for Satellite Products Validation**
sampling strategies, experimental design, uncertainty control
- 03 Drone-based Geospatial Measurements for CAL/VAL**
RGB, multispectral, LiDAR, and thermal UAV applications
- 04 In-situ Sensor Networks for Real-time Validation**
soil moisture, hydrology, flux towers, IoT sensing systems
- 05 Scale Bridging and Uncertainty Quantification in CAL/VAL**
upscaling point to satellite footprints, representativeness error reduction, bias correction, and confidence estimation
- 06 AI-driven CAL/VAL and Next-Generation Satellite Missions**
data fusion, hybrid physical-data model, evolving SAR product



WORKSHOP EXPERIENCE



Global Expert
Talks



Technical Sessions
& Discussions



Hands-on Training
& Experience



Field Campaigns &
In-situ Experiments



Drone
Demonstrations



Networking &
Collaboration



ABOUT THE INSTITUTE



IIT Kharagpur, established in 1951, is India's first IIT and an Institute of National Importance. As it celebrates its 75 years of excellence, marking its Platinum Jubilee, it carries a distinctive legacy of education, research, innovation, and nation-building.



ABOUT THE GEOSPATIAL ACADEMY



An interdisciplinary academic unit established 08 January 2026, dedicated to advancing geospatial science, remote sensing, and geo-informatics for applications of national importance - aligned with the National Geospatial Policy 2022 and National Geospatial Mission.

Focus areas include:

- ▶ AI/ML integration and high-resolution data
- ▶ Multi-sensor fusion (optical, SAR, thermal)
- ▶ Digital twin applications and foundation models
- ▶ Cloud & edge computing for space-based systems
- ▶ Capacity building and national outreach
- ▶ Calibration & Validation of Earth Observations



ORGANIZING COMMITTEE

Convenor

Mukunda Dev Behera
Chairperson, Geospatial Academy

Secretary

Prof. Gurjeet Singh
SoWR, IIT Kharagpur

Co-Convenor

Prof. Bharath H. Aithal
RCGSIDM, IIT Kharagpur

FINANCIAL SUPPORT FROM IIT KHARAGPUR

***Travel Support:** Reimbursement up to ₹5,000 or actual fare (3rd AC), whichever is lower for selected 25 students only.

***Accommodation (Complimentary for Students):** Hostel accommodation will be provided on a complimentary basis.

Guest House Accommodation (Optional):

Available on a payment basis:

- Single Occupancy: ₹1,500 per day
- Double Occupancy: ₹2,000 per day



IMPORTANT DATES & PROGRAMME

Application Submission Deadline	31 OCT 2026
Acceptance Notification	09 NOV 2026
Early Bird Registration Deadline	15 DEC 2026
Workshop Dates	17-19 JAN 2026

REGISTRATION FEES

Category	Early Bird (by 15 DEC)	Late (by 31 DEC)
*Students/Researcher	₹ 3,600	₹ 4,000
Faculty / Scientist	₹ 4,500	₹ 5,000
Industry Delegates	7,500	₹ 8,000

Target Audience: Master/Ph.D. students, and faculty/Scientists working in Remote Sensing

DISTINGUISHED SPEAKER LINEUP

IN-PERSON SESSIONS

Prof. Narendra N. Das

Michigan State University, USA (formerly NASA JPL)

Prof. Prashant K. Srivastava

Banaras Hindu University, INDIA

ONLINE-SESSIONS

Prof. Jadu Dash

University of Southampton, UK

Dr. Andreas Colliander

NASA Jet Propulsion Laboratory (JPL)

Prof. Jasmeet Judge

University of Florida, USA

CONTACT US & VENUE

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