INAUGURAL PROGRAMME

28th November 2023

Venue: Auditorium, Symbiosis International (Deemed University), Lavale Campus, Pune, MH, India

Time	Schedule	
09:00-10:00	**Registration**	
10:00-10:03	**Lighting of ceremonial lamp**	
10:03-10:06	**Welcome**	Dr. T.P. Singh, Chairman ISG / Secretary ISRS - Pune Chapter, Director SIG
10:06-10:14	**Opening Remark**	Dr. R. Raman, Vice Chancellor, Symbiosis International (Deemed University)
10:14-10:20	**Felicitation of Guests**	
10:20-10:28	**Address by**	Dr. Vidya Yeravdekar, Pro Chancellor, Symbiosis International (Deemed University)
10:28-10:36	**ISG-ISRS President Address**	Dr. Prakash Chauhan, President ISG / ISRS, Director, National Remote Sensing Centre (ISRO), Hyderabad
10:36-10:44	**Address by**	Shri Nilesh Desai, Director, Space Application Centre, Ahmedabad
10:44-10:54	**Address by**	Prof. (Dr.) S.B. Mujumdar, Chancellor, Symbiosis International (Deemed University)
10:54-11:00	**Release of Abstract Volume by Chief Guest**	
11:00-11:10	**ISG Award Ceremony**	**Moderated by,** Dr. C.P. Singh, Secretary ISG, Scientist, Space Application Centre
11:10-11:20	**ISRS Award Ceremony**	**Moderated by,** Dr. Praveen Thakur, Secretary ISRS, Scientist, Indian Institute of Remote Sensing
11:20-11:30	**Address by Chief Guest**	Dr. Shailesh Nayak Director, NIAS & Former Secretary MoES
11:30-11:33	**Vote of Thanks**	Dr. Yogesh Kumar Singh, Organizing Secretary, Associate Director, C-DAC Pune
Tea Break		
Vikram Sarabhai Memorial Lecture		
11:55-12:35	**Shri S. Somanath, Chairman ISRO**	
Inauguration of Exhibition followed by Lunch		

PROGRAMME SCHEDULE DAY I

28th November 2023

14:15 – 15:30	15:30- 15:45	15:45 – 17:00	17:00-17:30	17:30-18:30	17:30-18:30	18:30 onwards
PLENARY SESSION-I **Topic-** Geospatial Ecosystem and Trend **Speakers** **Dr. S.P. Agarwal** Director, NESAC **Dr. Debapriya Dutta** Head, SEED, DST **Dr. R.P. Singh** Director, IIRS **Dr. R. Krishnan** Director, IITM **Dr. H. Venuprasad** Regional Director General, FSI	Tea Break	**PLENARY SESSION-II** **Topic-**Emerging Technology and Geospatial Innovation **Speakers** **Mr. Mr. Rakshit Bhatt** VP Product, GalaxEye Space **Mr. Surendra Nath Das** CEO, Azure Cloud Service **Mr. Suhaspritipal Gongate** Lead 3D Experience Lab India, Dassault Systèmes **Dr. Deb Jyoti Pal** Vice President, Geospatial world **Mr. Agendra Kumar** Managing Director, ESRI India	**Millennium Lecture** **Shri Nilesh Desai** Director, Space Application Centre, Ahmedabad	Tea/ Networking Break	**ISG, ISRS AGM**	**Award ceremony and Cultural Programme followed by Dinner**

PROGRAMME SCHEDULE DAY II

TECHNICAL PROGRAMME

Day II	29th November 2023		
Theme: HPC and Machine Learning **Venue: Training Room 1, Sandipani**			
Key Note Speaker & Chairperson Dr. Akshara Kaginalkar Ex-Senior Director, C-DAC Pune		**Co-Chairperson** Dr. Shailesh Deshpande Principal Scientist, TCS, Pune	
Sr. No	**Time**	**Author**	**Paper Title**
1	09:30 am to 10:00 am	**Key Note Talk**	
2	10:00 am to 10:10 am	Shafique Matin	Machine Learning based Crop Type Prediction at Parcel Scale using Geospatial Data - Leveraging Technology for Agricultural Advancements in Madhya Pradesh State
3	10:10 am to 10:20 am	Jai Singla	Deep learning and instance segmentation on Indian remote sensing data
4	10:20 am to 10:30 am	Sahil K. Shah	Automated Grape (*Vitis vinifera*) Crop Disease Identification and Classification using Machine Learning Techniques in Remote Sensing Environment
5	10:30 am to 10:40 am	Titiksha Bhatia	Comparative Analysis of Ground Filtering Methods for 3D LiDAR Point Clouds
6	10:40 am to 10:50 am	Rohit Rajput	An Unsupervised Learning-based approach to Identify Road Objects from VLP-16 LiDAR Data in Indian Traffic
		Tea Break (10:50 am to 11:15 am)	
7	11:15 am to 11:25 am	Gourav Jyoti Kalita	Assessing the Nowcasting Capability of the UNET Deep Learning Model over North East India using Seasonal Hourly Precipitation
8	11:25 am to 11:35 am	Kedar N. Ghogale	A systematic review of pothole detection using deep neural networks
9	11:35 am to 11:45 am	Rama D. Mallelli	Automatic Built-up Extraction Using Machine Learning Techniques and Multi Sensor Composite Data
10	11:45 am to 11:55 am	Vivek Sharma	DL based technique for super-resolving satellite image and generating large image mosaic
11	11:55 am to 12:05 pm	Ujjwal K.Gupta	Development of a Web-based GUI for Deep Learning based Semantic Segmentation
12	12:05 pm to 12:15 pm	Saumya Vilas Roy	Complex Valued U-Net for Segmentation of SAR Images
13	12:15 pm to 12:25 pm	Radhika T.	Pixel Quality Layer generation for Remote sensing Data Products using Deep Learning
14	12:25 pm to 12:35 pm	Kriti Rastogi	Deep learning based Solar plants extraction using remote sensing satellite data
15	12:35 pm to 12:45 pm	Amrita Singh	Automatic extraction of forest burn scar using machine learning technique in tropical deciduous forest
16	12:45 pm to 01:00 pm	Sanket S. Virkar	A Synergistic Approach: SAR Data Analysis and Advanced Machine Learning for Automated Crop Area Identification
		Lunch Break (01:00 pm to 02:00 pm)	

TECHNICAL PROGRAMME

Day II	29th November 2023

Theme: HPC and Machine Learning
Venue: Training Room 1, Sandipani

Key Note Speaker & Chairperson	Co-Chairperson
Dr. Vinod M. Bothale	Dr. Vandita Srivastava
Former Associate Director, NRSC Hyderabad	Scientist-G, Geoinformatics, IIRS Dehradun

Sr. No	Time	Author	Paper Title
1	02:00 pm to 02:30 pm	Key Note Talk	
2	02:30 pm to 02:40 pm	Santosh B. Nagarale	Enhancing Grape Leaf Disease Detection: A Novel Deep Learning Classification Method
3	02:40 pm to 02:50 pm	Atulya Dhar	A Novel Approach for Improved Feature Extraction in an Urban Environment
4	02:50 pm to 03:00 pm	Manoj Chavan	Forest fire simulation modeling using Fire Dynamics Simulator (FDS) in Sikkim Himalayas
5	03:00 pm to 03:10 pm	Mamta Kumari	Machine Learning based Crop Discrimination & Biophysico-chemical Parameter Estimation using Airborne Hyperspectral data
6	03:10 pm to 03:20 pm	Avinash Chouhan	Deep learning based automated large-scale land use land cover mapping for North East Region of India
7	03:20 pm to 03:30 pm	Arpit Agrawal	Automated Hyper-parameter tuning of LSTM Neural Networks for NDVI Image Prediction
8	03:30 pm to 03:40 pm	Vandita Shrivastav	Light Weight Joint-Net proposed for Building Extraction from High Resolution Images
9	03:40 pm to 03:50 pm	Shant Kumar	Automated Detection of Yellow Rust of Wheat using Convolutional Neural Network
	Tea Break (03:50 pm to 04:10 pm)		

TECHNICAL PROGRAMME

Day II	29th November 2023			
Theme: UAV Applications **Venue: Training Room 2, Sandipani**				
Key Note Speaker & Chairperson Dr. Som Kumar Sharma Professor, Dy. Head, Acad. & Admin., PRL			**Co-Chairperson** Mr. Kedar Goghale Principal Technical Officer, C-DAC Pune	
Sr. No	**Time**	**Author**	**Paper Title**	
1	09:30 am to 10:00 am	**Key Note Talk**		
2	10:00 am to 10:10 am	Jediael Blah	Machine Learning Based Classification Approach for Delineation of *Muga* Host Plants with UAV Surveys	
3	10:10 am to 10:20 am	Bhargav A. Parulekar	Assessing the Performance of Segment Anything Model (SAM) Based Labels for Training Machine Learning Models in UAV Data Classification	
4	10:20 am to 10:30 am	Rama Rao Nidamanuri	A New Method for Object Detection in High-Resolution Drone-Based Hyperspectral Imagery for Plant-Level Crop Mapping	
5	10:30 am to 10:40 am	Jugal Kishore Mani	Detection of Leaf Miner Infestation in Mandarin Orange Using UAV Based Multispectral Imaging and Machine Learning	
6	10:40 am to 10:50 am	Shanmugapriya Palanisamy	Smart Sensor Technology for Monitoring Crop Health and Yield Prediction	
7	10:50 am to 11:00 am	Priya Yadav	Weed Identification using UAV-based Multispectral Imaging in Citronella (*Cymbopogon winterianus Jowitt.*) Crop for Precise Management	
8	11:00 am to 11:10 am	Akshay Paygude	Retrieving 3D replica for Forest Digital Twin: Insights from Broadleaf and Needleleaf ForestVegetation	
Tea Break (11:10 pm to 11:30 pm)				

TECHNICAL PROGRAMME

Day II| 29th November 2023			
Theme: Open Geoinformatics (Data & Tools) **Venue: Training Room 2, Sandipani**			
Key Note Speaker & Chairperson Dr. Arulraj Murugavel Group Head and Sc-G, NRSC Hyderabad		**Co-Chairperson** Mr. Girishchandra Yendargaye Principal Technical Officer, C-DAC Pune	
Sr. No	**Time**	**Author**	**Paper Title**
1	11:30 am to 12:00 pm	**Key Note Talk**	
2	12:00 pm to 12:10 pm	Anil Kumar Gumudavelli	Improving 3d Accuracy of Global DEMs and Kh9DEM using ICESAT2 Atlas Data
3	12:10 pm to 12:20 pm	Diganta Barman	Run-off behaviour analysis of *Muhuri* Watershed in Tripura State based on Continuous and Isolated Precipitation Events with GPM Open Source Rainfall Data
4	12:20 pm to 12:30 pm	Sharmistha Bhowmik	Drought Monitoring using MODIS derived Indices and Google Earth Engine Platform for Vadodara District, Gujarat
5	12:30 pm to 12:40 pm	Utkarsh Tyagi	Scalable and Demand Driven Geoportals for The Applications of Satellite Remote Sensing
6	12:40 pm to 12:50 pm	Puyam S. Singh	Enhancing Health Asset Management and Resource Planning through an Integrated Spatial Decision Support System utilizing Geospatial Technology
7	12:50 pm to 01:00 pm	Pragati Lalitbhai Nayak	Classification of India's Large Wetlands based on Optical Water Types
Lunch Break (01:00 pm to 02:00 pm)/Poster Session			
Sr. No	**Time**	**Author**	**Paper Title**
8	02:00 pm to 02:10 pm	Ahana Mukhopadhyay	Synergistic usage of Satellite Datasets for the analysis of the Cloud Microphysics associated with Extreme Rainfall Event over Himachal Pradesh
9	02:10 pm to 02:20 pm	Anurag Kandya	Simulating the Ward-Wise air pollution (PM2.5) concentration using satellite data and ground observations along with the reduction targets and associated Health benefits for Ahmedabad city, India
10	02:20 pm to 02:30 pm	Sweata Rasesh Katwala	Customization of CityGML for Locally Characterized Urban Objects in a 3-D City Model
11	02:30 pm to 02:40 pm	Shard Chander	SWOT Hydrology Simulator estimated Discharge over Narmada River
Tea Break (02:40 pm to 03:00 pm)			

TECHNICAL PROGRAMME

Day II	29th November 2023		
Industrial Talk **Venue: Training Room 2, Sandipani**			
Key Note Speaker & Chairperson Dr. Deb Jyoti Pal Vice President- Geospatial World			
Sr. No	**Time**	**Presenters**	
1	03:00 pm to 05:00 pm	Industrial Talk ESRI India, Dassault Systèmes, Dhruva Space, TCS, Ananth Technology, GalaxEye Space	

TECHNICAL PROGRAMME

Day II	29th November 2023			
Theme: Time Series Data Application **Venue: Training Room 3, Sandipani**				
Key Note Speaker & Chairperson Dr. Surya Durbha Professor, IIT Bombay				
Sr. No	**Time**	**Author**	**Paper Title**	
1	09:30 am to 10:00 am	**Key Note Talk**		
2	10:00 am to 10:10 am	Mahesh Pathakoti	Changes in Land Use/Land Cover and Atmospheric CO_2 and CH_4 Concentrations over the suburban region of India (Shadnagar)	
3	10:10 am to 10:20 am	Lakhan Jain	Statistical Assessment of Meteorological Drought Indices in Saurashtra Region, Gujarat	
4	10:20 am to 10:30 am	Anupam Das	Time Series analysis of Amery Ice Shelf using Space Borne Microwave Platform by invoking Semantic Segmentation techniques and ARIMA model	
5	10:30 am to 10:40 am	Dhruvi M. Sedha	Chronicles of Change: Time Series Exploration of Gujarat's Tree Species Phenology with Phenocam and Remote Sensing	
6	10:40 am to 10:50 am	Manabendra Saharia	An Indian Land Data Assimilation System (ILDAS) for identifying Hydrologic Extremes	
Tea Break (10:50 am to 11:15 am)				
7	11:15 am to 11:25 am	Shweta Mishra	Solar Insolation forecasting using Satellite derived product and Pyranometer data	
8	11:25 am to 11:35 am	Mohul Kundu	Socio-Economic Vulnerability: An Integrated Approach to Drought Management	
9	11:35 am to 11:45 am	Y. S. Rao	Deformation Mapping in Joshimath: A Comparative Study of INSAR Time Series Analysis with LICSBAS, OpenSARLAB and Stamps	
10	11:45 am to 11:55 am	Kalyani V. Nair	Characterisation of Outdoor Thermal Comfort in Urban Environs – A Case Study of Hyderabad	
11	11:55 am to 12:05 pm	Mallika Manu	Job Volume Forecasting Model in Freight Forwarding: An Ensemble Approach with LSTM and Time Series Models	
12	12:05 pm to 12:15 pm	Mainak Mukhopadhyay	Influence of Environmental and Meteorological Factors on Forest Productivity and Climate Resilience in Tropical Deciduous Forest	
13	12:15 pm to 12:25 pm	Satish N. Pardeshi	Mangrove Extent Characterization using Sentinel-1 and Sentinel-2 Satellite Imagery in Google Earth Engine: Leveraging the advantages of both Sensors	
14	12:25 pm to 12:35 pm	Narendra Kumar V.	Use of Mango Libraries for Hyperparameter Tuning of ARIMA In Modelling of NDVI TimeSeries	
15	12:35 pm to 12:45 pm	Reshma K. N.	Long-Term Morphological Analysis of a Coastal Inlet: Insights from Nawabpet Beach, Andhra Pradesh, India	
Lunch Break (01:00 pm to 02:00 pm) /Poster Session				

TECHNICAL PROGRAMME

	**Day II	29th November 2023**		
	Theme: Smart Geospatial Governance **Venue: Training Room 3, Sandipani**		
	Key Note Speaker & Chairperson Dr. Sameer Saran DGM, Regional Remote Sensing Centre-North		
Sr. No	**Time**	**Author**	**Paper Title**
1	02:00 pm to 02:30 pm	**Key Note Talk**	
2	02:30 pm to 02:40 pm	Macchidranath T. Wadghane	Fusion of Multi-Spectral Satellite data with statistical techniques for Estimation of Soil Nutrients
3	02:40 pm to 02:50 pm	Yamini Agrawal	Automatic Multi-Scale Segmentation of Brick kilns using YOLOv7 from EO Data for Inventory Creation
4	02:50 pm to 03:00 pm	Saikat Das	Spatial Data Clustering for Water Allocation and Demand Assessment: A Case Study of MSTG-River Interlinking Canal Command Area
5	03:00 pm to 03:10 pm	Karthik Nagarajan	Capacity Building through Space Science and Technology Awareness Training (START) program in rural villages through IIRS ISRO Outreach Program and ISRS Mumbai Chapter – A Design Thinking Approach
6	03:10 pm to 03:20 pm	Anju Bajpai	Synergic use of Web & GIS technologies for Management of Electrical Transmission Infrastructure
7	03:20 pm to 03:30 pm	Abhishek Kumar	Geospatial Analysis for Estimating Early Neo-natal, Post Neo-natal and Infant Mortality through Child Birth and Infant Death Tracking System
8	03:30 pm to 03:40 pm	Hemant Jain	Normative Analysis of Indian Space Policy 2023
9	03:40 pm to 03:50 pm	Anjana N. Vyas	Assessment of Learning Pedagogy in Geospatial Technology and Spatial Information Science Education
10	03:50 pm to 04:00 pm	Disha Vinod Ingole	Semantically enriched Geospatial Web Service: RDF, Ontology and GeoSPARQL
11	04:00 pm to 04:10 pm	Rajarshi Saha	Geospatial Data Analysis using Fuzzy Analytical Hierarchy Process for Village Level Groundwater Source and Sustainability planning in Deccan Basaltic Province
12	04:10 pm to 04:20 pm	Govindaraj Vellaiyan	Indices –Based Monitoring/ Impact Assessment of MGNREGA (Drought Proofing) Asset through Sentinel-2 and Landsat-7 data in Telangana State, India
	Tea Break (04:20 pm to 05:00 pm)		

TECHNICAL PROGRAMME

Day II	29th November 2023

Theme: Spatial Economics and Sustainability (Track I) Venue: Training Room 4, Sandipani

Key Note Speaker & Chairperson Dr. Gautam Talukdar Scientist -F, Wildlife Institute of India, Dehradun	Co-Chairperson Dr. Alpana Shukla Assoc. Prof., M.G. Science Inst., Ahmedabad

Sr. No	Time	Author	Paper Title
1	09:30 am to 10:00 am	Key Note Talk	
2	10:00 am to 10:10 am	Adeeba Mumtaz	Groundwater Potential Zone Mapping using Geospatial and Machine Learning Approach of Pune District
3	10:10 am to 10:20 am	Payel Mani	Enhanced Vegetation Species Classification using Hybrid Gram-Schmidt Fusion of Hyperspectral and Multispectral Image
4	10:20 am to 10:30 am	Piyasa Gayen	Machine Learning based Method for Paddy Yield Prediction Integrating with Remote Sensing and Weather Data
5	10:30 am to 10:40 am	Nikhil Lele	A Two-decade Analysis of changes in Sundarbans Mangroves and resultant losses in Carbon Sequestration
6	10:40 am to 10:50 am	Anuradha Joon	Forest Canopy Density monitoring, using Satellite Images-a Case Study of Yamunanagar District of Haryana, India
Tea Break (10:50 am to 11:15 am) /Poster Session			
7	11:15 am to 11:25 am	Reenu Sharma	Spatio-temporal shift in surface urban heat island across major cities in different agro-climatic regions of Indian Punjab
8	11:25 am to 11:35 am	Khushi Kaushik	Assessing Habitat Suitability of Pangolin Species (*Manis crassicaudata*) in Uttarakhand Region using Maxent Modelling for Effective Conservation Strategies
9	11:35 am to 11:45 am	Anusmita Dey	Multi-Decadal Appraisal of Mangrove Cover & Health Monitoring over Indian Sundarbans using Geospatial Techniques
10	11:45 am to 11:55 am	Debojyoti Ganguly	Changes in Ocean Fluorescence following the Passage of Cyclone Mandous and developing a relationship between Chlorophyll Concentration and Fluorescence Line Height (FLH) in Cyclone Induced Blooms
Lunch Break (01:00 pm to 02:00 pm)			

TECHNICAL PROGRAMME

Day II | 29th November 2023			
Theme: Spatial Economics and Sustainability (Track II) **Venue: Training Room 4, Sandipani**			
Key Note Speaker & Chairperson Dr. Gautam Talukdar Scientist -F, Wildlife Institute of India, Dehradun		**Co-Chairperson** Dr. Alpana Shukla Assoc. Prof., M.G. Science Inst., Ahmedabad	
Sr. No	**Time**	**Author**	**Paper Title**
1	02:00 pm to 02:30 pm	**Key Note Talk**	
2	02:30 pm to 02:40 pm	Shubham Kumar	Evaluation of the SAARC Region's Water and Carbon usage efficiency for Ecological Resilience in the face of Climate Change
3	02:40 pm to 02:50 pm	Kajal Barman	Comparison of Blue Carbon and Forest Carbon in the northern Western Ghats: a Case Study of 3 villages
4	02:50 pm to 03:00 pm	Laxmikant Sharma	Geospatial Approach for Land Use Assessment of World's Primitive Hills Range "*Aravalli*" in Changing Climatic Scenario
5	03:00 pm to 03:10 pm	Om Prakash Maurya	Assessing Anthropogenic Influences on the *Vamsadhara* River's Morphology near the Bay of Bengal Confluence: A Combined Satellite Imagery and Field-Based Investigation
6	03:10 pm to 03:20 pm	Reshma B. Raskar Phule	Sustainable Approach of Estimation and Mapping of Safe Bearing Capacity of Soils in an Urban City like Mumbai by using Open-Source Quantum GIS
7	03:20 pm to 03:30 pm	Aditya Nishith Dharaiya	Detecting the Dynamics: Geospatial Monitoring of the newly assigned Ramsar site "The Wadhwana Wetland" in Central Gujarat, India
8	03:30 pm to 03:40 pm	Rabindra Kumar Nayak	Impact of ENSO on Drought and Vegetation Net Primary Productivity in India during 2001-2023
9	03:40 pm to 03:50 pm	Prafulla Kumar Panda	Soil Properties Analysis using Geospatial approach-A Case Study of R. Sitapur, Odisha
Tea Break (03:40 pm to 04:00 pm)			

TECHNICAL PROGRAMME

Day II	29th November 2023

Theme: Geoinformatics for Renewable Energy and Rural Urban Infrastructure
Venue: Training Room 5, Sandipani

Key Note Speaker & Chairperson	Co-Chairperson
Dr. Sanjay Patil	Dr. Stutee Gupta
Scientist-F & Head, MRSAC, Maharashtra	Scientist-D, NRSC Hyderabad

Sr. No	Time	Author	Paper Title
1	09:30 am to 10:00 am	Key Note Talk	
2	10:00 am to 10:10 am	Rina Bonnie Fernandez	Impact of Urban Built-Up Spaces on the Growth of Impervious Surface in Pune City
3	10:10 am to 10:20 am	Leena Dhruwa	Large-Scale 3D Mapping using Advanced Geospatial Tools for Urban and Rural Development
4	10:20 am to 10:30 am	Arjun Vyas	Spatial and Temporal Trends of Downward Shortwave Radiation Over Ahmedabad City, India During 2013-2022
5	10:30 am to 10:40 am	Gaurav Mahant	Sustainable Production and Integration of Synthetic Fuels for Mobility
6	10:40 am to 10:50 am	Sharad Kumar Alha	Monitoring of IWMP Watershed Project using Geospatial Technique – Sagar District, Madhya Pradesh
	Tea Break (10:50 am to 11:15 am)		
7	11:15 am to 11:25 am	Debanu Ghosh	Appraisal of Geospatial Technology for Identifying Suitable Site for Ground-Mounted and Grid-connected Photovoltaic Solar Power Plants in Purulia, West Bengal
8	11:25 am to 11:35 am	Sudha Panda	Understanding the Impact of Urban Sprawl, Population Density and Urban Form On City Development- Case Of Bhubaneswar City, Odisha
9	11:35 am to 11:45 am	Saiveena Suresh	Built-up area extraction using S and C band microwave data
	Lunch Break (01:00 pm to 02:00 pm) /Poster Session		

TECHNICAL PROGRAMME

Day II	29th November 2023

Theme: Emergency and Disaster Management
Venue: Training Room 5, Sandipani

Key Note Speaker & Chairperson	Co-Chairperson
Dr. Manoj Khare	Dr. Binay Kumar
Senior Director & HoD, C-DAC Pune	Associate Director, C-DAC Pune

Sr. No	Time	Author	Paper Title
1	02:00 pm to 02:30 pm		**Key Note Talk**
2	02:30 pm to 02:40 pm	Prakher Mishra	Modelling and Quantifying the Extreme Event of Cloud Burst by application of Remote Sensing and GIS
3	02:40 pm to 02:50 pm	Kakali Deka	GIS-based Assessment of Flood-Induced Ecological Vulnerability and Risk in Flood-Prone Areas: A Study of Dhemaji and Dibrugarh Districts, Assam
4	02:50 pm to 03:00 pm	Advaith Pillai	Quantifying Rock Glacier displacement in the Jhelum Basin, Western Himalaya Using Sentinel-1 SAR Interferometry
5	03:00 pm to 03:10 pm	Manisha Giri	Vulnerability Assessment on Urban Disaster Management for Urban Planning - A Case Study of Nongstoin (West Khasi Hills District), Meghalaya
6	03:10 pm to 03:20 pm	Manish Singh Rana	Flash Floods in Himalayan rivers: Debris movement and Damage using satellite imagery and field investigation
7	03:20 pm to 03:30 pm	Pramita Dasgupta	A Study on Coastal Vulnerability of Sagar Island over Bay of Bengal using Geospatial Technologies
8	03:30 pm to 03:40 pm	Oishani Chatterjee	Impact Measurement Analysis of Cyclone *Sidr* Over Bay of Bengal using Geospatial Technologies
9	03:40 pm to 03:50 pm	Layana Vijayan	Assessment of LiDAR derived DEM for flood inundation mapping in Karamana basin, Thiruvananthapuram
		Tea Break (03:50 pm to 04:15 pm)	
10	04:15 pm to 04:25 pm	Swati Upadhyay	Automatic Oil Spill Detection using RICIAN Estimate in SAR Images
11	04:25 pm to 04:35 pm	Dhritisha Saikia	Quantification of Rainfall from Bay of Bengal Cyclones: A GPM Data Analysis
12	04:35 pm to 04:45 pm	Priyabrata Rautray	Urban Flood Risk Assessment and development of Resilient Spatial Plan - A Case Study of Bhubaneswar
13	04:45 pm to 04:55 pm	Rohini Gopinath Kale	Multi-Source Elevation Extraction for Improved Hydrodynamic Modeling and Flood Simulation
14	04:55 pm to 05:00 pm	Sreyasi Biswas	Investigation of Meteorological Processes associated with the Intense Fog Episode of 2017 in the Indian region
15	05:00 pm to 05:10 pm	Sudhanshu Raghubanshi	Unveiling the Complexity of Relative Active Tectonics: A Case Study of the Mandakini Basin
16	05:10 pm to 05:20 pm	Athul B.	Space-Based Landslide Susceptibility Assessment of Wayanad, Northern Kerala: A Statistical Approach
17	05:20 pm to 05:30 pm	Reedhi Shukla	Trend Analysis of SO2 Over India using TROPOMI Data
18	05:30 pm to 05:40 pm	Mohit Arora	Flood Inundation Mapping over Indian Punjab during 2023 using Threshold Detection Approach from Sentinel-1 in Google Earth Engine

TECHNICAL PROGRAMME

Day II	29th November 2023			
Theme: Super Resolution and Image Mapping **Venue: Training Room 6, Sandipani**				
Key Note Speaker & Chairperson Col. Sunil Fatehpur Head, SCRI, College of Military Engineering			**Co-Chairperson** Dr. Rajesh Dhumal Assistant Professor, SIG Pune	
Sr. No	**Time**	**Author**	**Paper Title**	
1	09:30 am to 10:00 am	**Key Note Talk**		
2	10:00 am to 10:10 am	Latha James	Super-Resolution of Satellite Imagery using Iterative Refinement via Deep Learning	
3	10:10 am to 10:20 am	Poonam Seth Tiwari	Integration of Terrestrial Laser Scanning and Close Range Photogrammetry for Estimating Horizontal Deformation of Tall Heritage Structure	
4	10:20 am to 10:30 am	Nidhi Chaubey	A Novel Approach for Data Fusion of EOS-4 and Sentinel-2 Data	
5	10:30 am to 10:40 am	Bhanupratap Singh	Effect of Modulation Transfer Function on Classification Accuracy of Multi-Resolution Remote Sensing Imagery	
6	10:40 am to 10:50 am	Reedhi Shukla	SAMD: Automatic Mapping and 3D Visualization of Drone Data Case Study: Mapping buildings and trees for Kanchipuram City	
Tea Break (10:50 am to 11:30 am)				

TECHNICAL PROGRAMME

Day II	29th November 2023

Theme: Digital Agro-ecosystem
Venue: Training Room 6, Sandipani

Key Note Speaker and Chairperson	Co-Chairperson
Mr. Sandeep Kr. Srivastava	Dr. B.K. Handique
Consultant Strategic Project, C-DAC Pune	Scientist-F & Head, NESAC, ISRO

Sr. No	Time	Author	Paper Title
1	11:30 am to 12:00 pm	Key Note Talk	
2	12:00 pm to 12:10 pm	Anima Biswal	Spectral Characterisation of Terminal Heat Stress in Wheat crop in India
3	12:10 pm to 12:20 pm	Rushikesh D. Jadhav	Virtual Water Accounting of Agriculture in Pune District
4	12:20 pm to 12:30 pm	Mohammad S. Khan	Yield modelling of Citronella (*Cymbopogon winterianus Jowitt.*) crop based on hyperspectral sensing
5	12:30 pm to 12:40 pm	Raj Setia	Modelling Interrelationships among Paddy Transplanting, Crop Residue Burning and Crop Yield using Optical, Microwave and Thermal Remote Sensing
6	12:40 pm to 12:50 pm	Akarsh S. G.	Estimation of Gross Primary Production in Rice-Wheat System using Satellite based VPM Model
7	12:50 pm to 01:00 pm	B. Diangngan	GIS- based Site Suitability study for Expansion of Pineapple in Ri Bhoi District of Meghalaya, India
	Lunch Break (01:00 pm to 02:00 pm) /Poster Session		
8	02:00 pm to 02:10 pm	Shikha Sharda	Wheat Lodging Assessment from Sentinel-2 Data using Machine Learning Algorithms
9	02:10 pm to 02:20 pm	Prince Dhiman	Sensitivity analysis of the RUSLE Erosion Model to Soil Erodibility factor for North-Eastern parts of Punjab using Geospatial Technology
10	02:20 pm to 02:30 pm	Justin George K.	Development of a Smart Phone-based Soil Quality parameters' estimation Application (SSQ-App) at farmer's field level based on Quantitative Colour Measurement
11	02:30 pm to 02:40 pm	Sonakshi Mehrotra	Mapping *Pinus roxburghii* using an Innovative Training Approach of Fuzzy Models in Western Himalayan Forests
12	02:40 pm to 02:50 pm	Pramit Kumar Deb Burman	Assessing the Performance of SIF Datasets in Tracking the Photosynthetic Activity of an Indian Forest
13	02:50 pm to 03:00 pm	Upasana Singh	A Semi-Physical approach using Remote Sensing based Net Primary Productivity (NPP), Spatial, Spectral & Temporal Paddy Yield Model Development for the State of Assam
	Tea Break (03:00 pm to 03:30 pm)		

ISG ISRS National Symposium 2023
GeoDiscover: Unravelling India's Spatial Frontier
Exploring Geospatial Ecosystem, Trend and Innovations

PROGRAMME SCHEDULE DAY III
TECHNICAL PROGRAMME

Day III	30th November 2023

Theme: Advanced Remote Sensing and Navigation **Venue: Training Room 1, Sandipani**

Key Note Speaker & Chairperson Dr. Mehul Pandya Group Director & Scientist-G, SAC

Sr. No	Time	Author	Paper Title
1	09:30 am to 10:00 am		**Key Note Talk**
2	10:00 am to 10:10 am	Ravi Kant	Comparative Analysis of Vertical Water Vapor Distribution Between GNSS Tomography and GFSReanalysis Data
3	10:10 am to 10:20 am	Ashish K. Shukla	A Novel Approach for GPS, NavIC and PseudoliteCombined User Position Algorithm
4	10:20 am to 10:30 am	Abhineet Shyam	A Fully Empirical Model Function based on Statistical Characterization for Retrieval of Ocean Surface Wind Speed from GNSS-R Observations
5	10:30 am to 10:40 am	Anant Dikshit	Machine Learning based Spatial-Spectral-Contextual-Analysis for Water Quality Mapping using Airborne Hyperspectral Imagery
6	10:40 am to 10:50 am	Vinay Kumar	Hyperspectral Image Analysis for Water QualityAssessment of Ganga River stretch at Buxar
		Tea Break (10:50 am to 11:15 am)	
7	11:15 am to 11:25 am	Hari Priya S.	Analysis of the Polarimetric Scattering Mechanisms and Semantic Segmentation using EOS-04 SAR
8	11:25 am to 11:35 am	Jincy Rachel Mathew	Delineation of Alpine Tree-Line Ecotone in Sikkim Himalaya using space-borne LiDAR data
9	11:35 am to 11:45 am	Dyvavani Krishna K	Applicability of Satellite LiDAR Remote Sensing for assessing the influence of vertical structure of urban landscape on Urban Heat Islands in Delhi
10	11:45 am to 11:55 am	Amit Kumar	Hyperspectral Remote Sensing and Artificial Intelligence for Disease Detection in Commercially Important Crop
11	11:55 am to 12:05 pm	Disha B. Kardani	Estimation of Downwelling Radiance in Thermal Infrared Region using Radiative Transfer Model for ECOSTRESS Bands
12	12:05 pm to 12:15 pm	P. Punya	Detection of Water Quality Parameters using Hyperspectral Imagery along the Cochin Coastal Waters
13	12:15 pm to 12:25 pm	Navita J. Thakkar	AstroBrowse: A Gateway to AstroSAT Data
14	12:25 pm to 12:35 pm	Shweta Sharma	Design, development and testing of in-house developed points targets for NISAR Data Calibration
15	12:35 pm to 12:45 pm	Sanjay K. Singh	Relative Aspect Computation using AstroSAT UVITdatasets
16	12:45 pm to 12:55 pm	Ashish K. Shukla	Pseudolite-based Rover Navigation for Future Interplanetary Mission
17	12:55 pm to 01:05 pm	Sowkhya Badatala	Performance Evaluation of Deployed Corner Reflectors in Antarctica for SAR radiometric calibration
18	01:05 pm to 01.15 pm	Dhulipala V.N.S. Narayana Murthy	M-Delta Decomposition of Single-Look Complex SAR Image Data of RISATt1 Satellite using Reconfigurable FPGA Device for Earth Observations
		Lunch Break (01:15 pm to 02:00 pm) /Poster Session	

TECHNICAL PROGRAMME

Day III	30th November 2023		
Theme: Biosphere, Cryosphere and Hydrosphere **Venue: Training Room 2, Sandipani**			
Key Note Speaker & Chairperson Dr. M.D. Behera Associate Professor, IIT Kharagpur		**Co-Chairperson** Dr. Manish Kale Joint Director, ESEG, C-DAC Pune	
Sr. No	**Time**	**Author**	**Paper Title**
1	09:30 am to 10:00 am	**Key Note Talk**	
2	10:00 am to 10:10 am	Dipanwita Dutta	Spatio-temporal changes in Groundwater Storage and Identification of Groundwater Stress Zones in Indian Ganga Basin using Multi-temporal Satellite Datasets
3	10:10 am to 10:20 am	Rachit	Assessing the Impact of Urbanization on Yamuna River Discharge using Hydrological Modeling
4	10:20 am to 10:30 am	Chethan V. A.	Intra and Inter-Annual Groundwater Storage Assessment using Gravity based Terrestrial Water Storage from GRACE and GRACE-FO Data in Ganga-Brahmaputra River Belt
5	10:30 am to 10:40 am	Gauri Deshpande	Tracking Plate Velocity and Motion of Himachal Pradesh and Uttarakhand using CORS data
6	10:40 am to 10:50 am	A. K. Dubey	River Discharge Estimation using SWOT Simulator and Potential of SWOT satellite observations in River Hydraulics
	Tea Break (10:50 am to 11:15 am)		
7	11:15 am to 11:25 am	Jaya Thakur	Spatio-temporal characteristics of Scatterometer Radar Cross Section on the Snow and Ice Surface of Greenland
8	11:25 am to 11:35 am	Kavya Bonyal	Synergistic use of SAR, optical multispectral anddigital elevation data for Detection of Potential Buried Palaeo-drainage
9	11:35 am to 11:45 am	Venkatesh Degala	Study on WRF-ELEC model predictions of Cloud to Ground Lightning Strikes over the Indian region using different Initial/Boundary conditions
10	11:45 am to 11:55 am	Rishitosh K. Sinha	Martian Gullies formed by Terrestrial Debris-Flow like Processes in the Past
11	11:55 am to 12:05 pm	Ashwin Gujrati	The Seasonal Dynamics of Aquatic Vegetation in Indian Ramsar Wetlands
12	12:05 pm to 12:15 pm	Rahul Kashyap	Changes in Biosphere-Atmosphere-Hydrosphere interactions in India during recent decades
13	12:15 pm to 12:25 pm	Gopal Sharma	Multi-Temporal InSAR-based Deformation patterns across Geologic Fault: A Possible Earthquake Precursor Signature Prior to the 2023 Turkey Earthquake
14	12:25 pm to 12:35 pm	Divya B. Mhalaska	Assessment of Bleaching Stress Vulnerability of Lakshadweep Islands using Google Earth Engine
15	12:35 pm to 12:45 pm	Amitansu Pattanaik	Analysis of Landscape Change and Land Movement in Landslide-Prone Rudraprayag, Uttarakhand using InSAR Data
16	12:45 pm to 12:55 pm	Ritu Anil Kumar	Snowed-In: An Interactive Web-based Platform for understanding Snow Cover Dynamics of Sikkim and Arunachal Pradesh
	Lunch Break (01:00 pm to 02:00 pm) /Poster Session		

POSTER DETAILS

Sr. No.	Author	Paper Title
1	Santosh Vishwakarma	Integrated use of Vegetation Indices and Machine Learning techniques for Delineation of *Boro* Rice in Assam
2	Vimalashree H.	Prediction of Soil Texture with Machine Learning models based on the Spectral Response of Soil samples in Visible-Near Infrared (VIS-NIR) region
3	Medhansh Jain	Solar Panel Detection: A Deep Learning approach for Urban Areas
4	Ishita Bhavesh Kumar Kariya	Phenological Trait Recognition of Understory Invasive Species using Machine Learning Algorithms
5	Poonam Seth Tiwari	Ship Detection from Satellite Images using Deep Learning-based Algorithm
6	Puyam S. Singh	Towards effective crop health monitoring and prescriptive analytics from multispectral drone imagery
7	Anup Das	Urban Planning using UAV data and 3d Modeling for Building in Nongstoin Block, West Khasi Hills District, Meghalaya
8	Shivanshu Singh	Effective Afforestation by utilising Drone Technology
9	Sai Krishna C.	QGIS-based Tool for Site Selection of Ice-Towers in Ladakh utilizing Satellite Remote Sensing derived datasets
10	Utkarsh	Comparative analysis of reconstructing techniques for NDVI time series
11	Sumith Satheendran	Comprehensive study of Land-Use/ Land-Cover Change and its Ecological Impact on Andaman and Nicobar island with Special Reference to Coral Reefs
12	Jyotsna Singh	Spatiotemporal Variability in Near-Surface Air Temperature over the Indus River Basin
13	Kishore Kowtham	Modeling of Urbanisation and its Impact on Regional and Local Surface Temperature of Coastal City using Neural Network Architecture
14	Suneeta Jatwa	Morphological studies of River Ganga using Satellite Remote Sensing Techniques for Sustainability of Thermal Power Station – A Case Study
15	Shubham Nileshbhai Kela	Decadal Vegetation Cover Change Assessment in Ahmedabad City, India using Landsat-8 NDVI dataset during 2013- 2022
16	Sashikanta Sahoo	Burnt Area Detection and Hotspot Identification using Time Series Satellite Data for Central Punjab, India
17	Viral Dineshbhai Patel	Spatial and Temporal Trends of Aerosol Loading over Ahmedabad City, India during 2013- 2022
18	Kandarp Parmar	A Spatio-Temporal Variation of day time and night time Land Surface Temperature using MODIS and GEE: A Study of Vadodara Urban Area, Gujarat
19	Aniket Kishor Sonawane	GIS-based Land Suitability Analysis of Wind Farms for the State of Maharashtra
20	Alankritha Maheshwaran	Geothermal Energy Resource Assessment in Puga Valley, Ladakh: A Comparative Study with Potential Zones in India, using Geospatial Technology

POSTER DETAILS

Sr. No.	Author	Paper Title
21	Santosh Basagonda Nagarale	Integrated Spatial Analysis of Air Quality and Meteorological Parameters in Delhi: Trends, Interpolation, and Forecasting
22	Brahadeesh V.R.A.	Coordinated Robots for Effective Disaster Management
23	Ronak Jain	Palaeo-Proterozoic Talc and Clay Mapping using Space-borne Imaging Spectrometer PRISMA data through derived Spectral Indices
24	Mohd. Aazim	Improving the Accuracy of Snow Cover Mapping in the Kashmir Himalayas using a New Snow Index Threshold method
25	Rajeev Shashikant Kale	Interlinking of Rivers of Palghar District using QGIS
26	Akshita Tomar	Land Use/Land Cover dynamics in Central India and its Hotspot Analysis using Geospatial Technology
27	Mohd. Siddique Akbar	Spatio-Temporal Land Use/Land Cover Changes due to Coal Mining in parts of Talcher Coalfield, Odisha: A Study based on Remote Sensing & GIS
28	Kanchi Bhargavi	Mirroring the Magnificent: Digital Twinning, AI, ML and IOT Approach to Mapping the Fish Biodiversity of the Artificial Coral Reefs
29	Kusum Kusum	Assessment of Wheat Lodging Areas using Sentinel 2 data of tehsil Ludhiana West
30	Sohan Pruthviraj Kanse	Geospatial Technology for Automating Near-Real Time trend of Crop Water Requirement and Evapotranspiration for Cotton Crop in Beed District of Maharashtra, India
31	Debarati Bera	Mapping Cropping Intensity using HLS datasets and Google Earth Engine (GEE) for two Contrast Years in the Western part of West Bengal
32	Dharshan Shylesh	Visualization of UAV generated 3D Models in an Immersive Virtual Environment: Methods and Approaches
33	Aparna Pradeep	Geospatial Approach for Urban Crime Mapping: A Case Study of Ernakulam District, Kerala
34	Chaithra P.	Ionospheric TEC Responses for Variations in Geomagnetic Storms
35	Prajjwal Tank	Urban Sprawl in Medium Hilly Town – A Case Study of Udaipur
36	Hrishikesh Kumar	Interferometric Synthetic Aperture Radar Measurements for Monitoring Groundwater Depletion Hotspots
37	Neha Gaur	Open Geoinformatics: Advancements in Data and Tools

VALEDICTORY FUNCTION
30th November 2023
02:00-04:00 pm

Venue: Convention Centre, Symbiosis International (Deemed University), Lavale Campus, Pune, MH, India

Time	Program	
02:00-02:10	Welcome address	Dr. T.P. Singh, Chairman ISG Pune Chapter/ Secretary ISRS - Pune Chapter, Director SIG
02:10-02:20	Felicitation of Guests	
02:20-02:30	Symposium Recommendation	Dr. Yogesh Singh, Organizing Secretary
02:30-02:45	Felicitation & Award Ceremony	• Felicitation of the Resource Persons of Pre-symposium tutorials • ISRS iCON Award • Best Paper Award Oral & Poster
02:45-02:55	Participants Feedback	Moderated By Organizing Secretory
02:55-03:10	ISG-ISRS President Address	Dr. Prakash Chauhan, President ISG/ISRS, Director, National Remote Sensing Centre (ISRO), Hyderabad
03:10- 03:25	Address by	Guest of Honor: Co. A.K. Nath (Retd.), Executive Director, C-DAC Pune
03:25 -03:35	Address By	Chief Guest: Padmashri Dr. Pramod Kale, Former Director, SAC, Ahmedabad and VSSC Thiruvananthapuram
03:35-03:45	Vote of Thanks	Dr. Yogesh Singh, Organizing Secretory
03:45	Group Photo	
04:00	High Tea	

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