

Annexure-1 to Final Circular

42 INCA INTERNATIONAL CONGRESS 09-11 NOV 2022 TECHNICAL SESSION PROGRAM

Day 01		ENDOWMENT LECTURES	09 Nov 2022
Time: 1400 to 1440			
Venue: Inaugural Session Area			
Ser	Speaker	Memorial Lecture Series	
1	VAdm SK Jha (Retd) PVSM, AVSM, NM Ex Chief Hydrographer & Past President INCA	Todar Mal Memorial Lecture	
2	Dr Prakash Chauhan, Director National Remote Sensing Centre /ISRO	S.P. Chatterjee Memorial Lecture	

Day 01		POSTER PRESENTATIONS	09 Nov 2022
Chair: Prof Premlata Singhi, INCA EC Member			
Member: Shri RJ Kushwaha, PCHO, National Hydrographic Office			
Time: 1530 to 1630			
Venue: Exhibition Area			
Ser	Author	Paper Title	
1	Shivani Pathak ESRI, Delhi	Brahmaputra River Channel Shift and Flood Vulnerability Assessment using Multispectral Satellite Imagery	
2	Monika Tiwari Amity University, Noida	The Spatial Non-Stationary Effect of Land Use and Landcover on Water Logging in Mumbai	

Day 01		INDUSTRY PRESENTATIONS	09 Nov 2022
Chair: Captain GA Mathew, Indian Navy			
Rapporteur: Cdr Rahul Bhatt, Indian Navy			
Time: 1530 to 1630			
Venue: Assembly Hall			
Ser	Organisation		
1	PAN India Consultants Private Limited		
2	Hexagon Geosystems AG		
3	KONGSBERG		
4	Census of India		
5	IIC Technology Private Limited		
6	Deekay International Private Limited		
7	ESRI India		

DAY 02		10 NOV 2022
<u>TECHNICAL SESSION – 1</u>		
TRENDING CARTOGRAPHY – PAST, PRESENT AND FUTURE		
Chair: Dr S Murali Krishnan, NRSC/ISRO		
Rapporteur: Cdr PP Chakraborty, Indian Navy		
Time: 09:00 hrs to 10:15 hrs		
Venue: Assembly Hall		
Ser	Author	Paper Title
1.1	Dr AN Satyanarayana, NRSC, Hyderabad	Data Acquisition in Ka-band Frequency Range to meet Cartography Applications <div>Lead Paper</div>
1.2	Amitabh K Suresh SAC, Ahmedabad	High Resolution Topographic Mapping of Lunar surface from Multi view images of Chandrayaan-2 Orbiter High Resolution Camera (OHRC) using Generic Sensor Model.
1.3	Dr BK Ramprasad NHO, Dehradun	Nautical Cartography- An Extinct Art of making Charts?
1.4	MV Srivally <i>ADRIN, Department of Space</i>	Comparison of different image fusion techniques using CARTOSAT-3 images
1.5	Vikash Tyagi <i>ADRIN, Department of Space</i>	A Novel Approach for Image De-stripping in case of cloud and water
1.6	Dr Swapna Saha NATMO, Kolkata	Modern Cartographic Tools for making Tribal Development Maps
1.7	Dr Stalin M SOI, Meghalaya	Challenges and solutions for large scale mapping of Mountainous and Forest covered areas of North Eastern India using high resolution Drone Images

Day 02:

10 Nov 2022

TECHNICAL SESSION – 2

**MODERN PRECISION SURVEYING & MAPPING
&
APPLICATION OF ARTIFICIAL INTELLIGENCE TOOLS FOR URBAN PLANNING AND
RESOURCE MANAGEMENT**

Chair: Capt YV Ramakrishna, Indian Navy

Rapporteur: Shri Pankaj Kumar, Survey of India, Sec Gen-INCA

Time: 09:00 hrs to 10:15 hrs

Venue: Conference Hall

Ser	Author	Paper Title
2.1	Stalin M SOI, Meghalaya	Smart solutions to develop smart city using RS & GIS- A case study of Tumakuru, Karnataka
2.2	Cdr Rahul Bhatt Indian Navy	Hydrographic services essential towards advancing Blue economy goals of India
2.3	Adity Mishra Ranchi University Ranchi	Application of Artificial Intelligence tools for Urban Planning and Resource Management
2.4	Devesh Kumar ADRIN,	Super-Resolution Reconstruction of Remote Sensing Images Using Generative Adversal Networks
2.5	Cdr Sahil Sagoch INS Nirupak	Fishing and Hydrography-Amalgamation of Artificial Intelligence for Sustainable Future
2.6	Archana P, ADRIN	Planimetric Accuracy Assessment of Cartosat-2S and Google Earth Imagery in a semi-urban scenario -A Case Study
2.7	NM Balan, ADRIN	Cloud Detection and Percentage Estimation in compressed JPEG for Indian Remote Sensing Satellite Data
2.8	Nidhi Chaubey, ADRIN	Ship detection for multi band, multi polarization and multi resolution SAR sensors based on the wavelet transform

Day 02		<u>TECHNICAL SESSION – 3</u>	10 Nov 2022
GEOSPATIAL SOLUTIONS FOR SUSTAINABLE WATER RESOURCE MANAGEMENT			
Chair : Dr Bimal Kumar Kar, Guwahati University			
Rapporteur : Cdr PK Shahrawat, Indian Navy			
Time: 10:30 hrs to 13:00 hrs			
Venue: Assembly Hall			
Ser	Author	Paper Title	
3.1	Dr G Bhaskaran University of Madras	Catchment assessment for Sustainable Lake Water Management in Kolavi Lake, Peri-Urban area of Chennai City – Lead paper	
3.2	Atul M Jethe CT Bora College, Shirur(dt.) Pune	Prioritization of sub basins based on surface runoff using NRCS-SCS Curve number method for conservation planning: A case Study	
3.3	Ashish Mani Amity University, Noida	A GIS Based Assessment of Asan River Basin for Watershed Management.	
3.4	Santu Guchhait Panskura Banamali college	Identifying Groundwater Risk Zones using Frequency Ratio Model in Purulia District in West Bengal, India	
3.5	Sumitra N Nikam SP College, Pune	Estimation of Ground water potential recharge zones using Analytic Hierarchy Process (AHP) and validation by Trend Surface Analysis – A Case study	
3.6	Muhsin MC Calicut University Kerala	Micro watershed delineation for sustainable land-use planning	
3.7	Sucheta Mukherjee Kalyani University, WB	An assessment of water quality of Bhagirathi river using geospatial techniques for Murshidabad district, India	
3.8	Ravishankar	E-Governance for types and distribution of water sources in Gumla town, Jharkhand	
3.9	Suman Das Vidyasagar University, WB	A comparative study on Sentinel -1A SAR and Sentinel -2A Optical data for wetland mapping: A case study in G plot and L block, Sundarban , West Bengal, India	
3.10	Sachin Kerketta	Water Resources, Problem, solution and management in the context of 'Lohardaga' Jharkhand	
3.11	Aishwarya Ramachandran Birla Institute of Technology, Ranchi	Seasonality of streams in the Doon Valley	

3.12	Balak Ram Jodhpur, Rajasthan	Mapping the rivers of Rajasthan and appraisal of their condition
3.13	N.Priyanka, University of Madras	Multiple indices-based Drought Risk Prediction in Chengalpattu District of Tamil Nadu, South India – A Geo-spatial approach
3.14	T. Harikrishnan University of Madras	Analysis of Land Use change and Water Quality of different Catchment Influenced Tanks (CIT) - A case study of Kancheepuram District, TamilNadu, India
3.15	Prof. R. K. Trivedi University of Sagar	Feasibility Study & Water Budgeting for Water Conservation and Augmentation of Ground Water of Vikrampur Village, Panna, M. P

DAY 02		10 NOV 2022
<u>TECHNICAL SESSION -4 (CONFERENCE HALL)/ PARALLEL SESSION</u>		
GIS APPLICATIONS FOR CLIMATE CHANGE AND ENVIRONMENTAL STUDIES		
Chair : Dr M K Stalin, SOI		
Rapporteur : P Krishnaiah, INCA		
Time: 10:45 hrs to 13:00 hrs		
Venue: Conference Hall		
Ser	Author	Paper Title
4.1	Jyoti Saini, Amity University, Noida	Spatio-Temporal analysis of the Heat Waves in Dehradun City, Uttarakhand: Causes and effects <div>Lead Paper</div>
4.2	Dr Tuli Sen Sagar Mahavidyalaya, West Bengal	Extent and type of tidal flats in Sagar and Nayachar Islands of the Hugli Estuary
4.3	Tanmay Patra Panskura Banamali, West Bengal	Environment and Socio-Economic Vulnerability to the Women: A GIS based analysis of Purulia Dist., WB
4.4	Subrata Ghosh Vidyasagar University, West Bengal	Analyzing the Urban Ecological Security of Kolkata Metropolitan area: A new approach to forecasting the ecological health of the city.
4.5	Dipankar Bera Vidyasagar University, West Bengal	Integrated Influencing Mechanism of Potential Drivers on Seasonal Variability of LST I n Kolkata Municipal Corporation, India

4.6	Lalit M Thakare SP College, Pune	Appraisal of morphological changes and GIS-DSAS technique for shoreline change detection analysis along Karul beach, Ratnagiri district, Western Coast of India
4.7	Ayan Bhakat Panskura Banamali college	Tourism and Land –Environment: A temporal Analysis of Birbhum district of West Bengal using Geospatial Techniques
4.8	Krishnendu Roy University of North Bengal	Determination of the spatial temporal changes of the boundaries of North Bengal using remote sensing and GIS
4.9	Capt. Kuldeep Singh NHO, Dehradun	Hydrospatial Information for Marine Environment
4.10	Zarjij Alam Panskura Banamali college, WB	Mapping of Geo-Environmental aspect along Indo-Bangladesh boarder districts of West Bengal: A GIS analysis-
4.11	Diksha Rana Amity University, Noida	Flood hazard zonation of Majuli, Assam, India
4.12	Tanushree Basu Roy, Vidyasagar University, WB	Assessment of forest fragmentation in Sundargarh and Keonjhar Districts, Odisha using Geospatial Technique
4.13	Debarati Bera Vidyasagar University, WB	Analysing Spatio-temporal Drought Characteristics and Trends in Indian Gangetic Basin (1901-2021)
4.14	Piyasa Gayen Vidyasagar University, WB	Estimation of cropping intensity in South Bengal using SAR Images and Machine Learning Techniques

DAY-02		10 NOV 2022
<u>TECHNICAL SESSION - 5 (ASSEMBLY HALL)</u>		
MAPPING SOLUTIONS FOR RISK ASSESSMENT, MITIGATION MEASURES AND DISASTER MANAGEMENT		
Chair : Dr. Sucheta Mukherjee, Kalyani University		
Rapporteur : Cdr Victor Paul, Indian Navy		
Time: 14:00 hrs to 15:30 hrs		
Venue: Assembly Hall		
Ser	Author	Paper Title
5.1	Dipjyoti Gogoi University of Madras, Chennai	Flood vulnerability assessment in the Adyar Watershed from an urban perspective, Chennai Basin, Tamil Nadu-A Geospatial approach -Lead Paper
5.2	Kalyan Sardar Ranchi University	Impact of Climatic Variability on crop productivity in the Coastal area of Indian Sundarban: A Case Study

5.3	Kousik Das Vidyasagar University, WB	Examine the variability of ground level annual PM _{2.5} and PM ₁₀ in Kolkata Municipal Corporation (KMC) using a Landuse Regression Model.
5.4	Dr Swati Mandal Anskura Banamali college	Severity and Management of Cyclone Hazard : A study at Eastern Coast of India
5.5	Olympia Banerjee University of North Bengal	Assessment of soil erosion susceptibility zones using modified morphometric prioritization method computed through Remote Sensing and GIS approach in Darakeswar river basin, India
5.6	Sumit Panja University of Calcutta, Kolkata	Mapping Agricultural vulnerability of coastal areas in the context of climate variability: An evidence from Purba Medinipur Coast, East Coast of India
5.7	Santanu Dinda Vidyasagar University, WB	Analyzing urbanization and spatial carbon emission pattern in an Eastern Himalayan City: An approach towards sustainable management by improving city resilience capacity.
5.8	Arshad Peer Mohamed IIRS, Dehradun	An Object Based Image Classification Approach for Mapping Different Types of Building Urban Area

Time: 16:00 hrs to 17:00 hrs		
Venue: Assembly Hall		
Ser	Author	Paper Title
5.9	Dr. Jitendra Shukla	Climatic Vulnerability of Drought-Prone area of Palamu Division, Jharkhand <div>Lead paper</div>
5.10	Rima Das University of Calcutta, WB	Geoinformatics based assessment of Socio-economic vulnerability and Risk Analysis due to Cyclone Hazard along the Coastal Odisha, East Coast of India
5.11	Lal Mohammad Vidyasagar University, WB	Air Quality Index Mapping from Satellite-derived Aerosol Optical Depth over the Jharkhand state, India
5.12	Dr Debdip Bhattacharjee Sukanta Mahavidyalaya, Dhupguri, WB	Modeling the relationship between land use / land cover and land surface temperature in Siliguri Municipal Corporation (SMC) West Bengal using CA-ANN algorithm
5.13	Papia Guba Jadavpur University, Kolkata	Identification of major hazard or cyclone prone regions of Indian Sundarban by amalgamation of geospatial and geostatistical techniques
5.14	Komal Priya Singh, Disaster Management Institute, Patna	Technology-enabled Risk Mitigation and Preparedness for Lightning in Bihar

5.15	Gopika S Nath Bangalore University, Bengaluru	Landslide risk assessment in Idukki district of Kerala – Ensembled Machine Learning Approach
5.16	Ravikumar Ranchi University	Changing pattern of Sex Ratio and child sex ratio in Jharkhand

Day 03		11 Nov 2022
<u>TECHNICAL SESSION – 6</u>		
HYDROGRAPHIC SURVEYING AND MAPPING FOR COASTAL ZONE MANAGEMENT		
Chair: Capt Vishal Sharma, Indian Navy		
Rapporteur: Shri CM Doss, PCHO, National Hydrographic Office		
Time: 09:00 hrs to 10:30 hrs		
Venue: Assembly Hall		
Ser	Author	Paper Title
6.1	Captain Mathew G Abraham INS Sarvekshak	Hydrography- Providing framework for coastal zone management for effective land sea governance in support of Blue Economy- <div>Lead Paper</div>
6.2	Manik Mahapatra NCSCM, Chennai	Coastal Zone Management in India- A legislative approach
6.3	Shivani Pathak ESRI Inc. R&D, Delhi	Coastal Extraction and Classification using Band Ratio and Deep Learning
6.4	Dr Stutee Gupta NRSC, Hyderabad	Small Scale Fishery and Satellite Images: Potentials and Challenges
6.5	Lt.Cdr. Shibin Babu INS Jamuna	Hydrographic surveys and mapping for Coastal zone management

Plenary Session followed by Valedictory: 11:00 hrs onwards