Background

Natural resources are under tremendous pressure in the recent decades due to interaction between human and nature. The human footprints have been extending over the pristine natural environmental landscape and the equilibrium of the natural system is getting disturbed. It accentuates the occurrence and intensity of natural extreme events, causes enormous damage in our geoenvironment as well as losses of human lives and properties around the world. The warming and climate change trend are particularly significant in the current century because of it's unequivocally the effects of anthropogenic activities, mainly since mid-20th century and continuing at an unprecedented rate. Humaninduced climate change is directly connected to the intensity of fossil fuel burning, released aerosol, deforestation and land used land cover alteration. Furthermore, climate change accelerates the recurrent disasters in the last few decades, which threading the survival of humans on the earth. The climatic change has doubled the burden of inequality; like, the higher economic strata emit more proportionally Greenhouse Gases (GHGs) and the lower economic group are more vulnerable to it's associated impacts.

The Remote Sensing based measurement with integration of geospatial pathways bridged the earth surface data and science to unfold the complex geo-environmental processes and their causalities. The efficiency of data processing, analyzing and visualizing platforms are getting more optimized and sophisticated to handle a large volume (big data) of data over planetary and long temporal scale. The fusion of advance statistical modelling, machine learning (ML) and deep learning (DL) tools with remote sensing and geospatial pathways bestowed another height to advance the geospatial researches. The outcomes from academic and industrial research might benefit the policymakers to bring an appropriate strategy in policymaking and implementation. **Chief Patron** – Prof. Kshiti Bhushan Das, Hon'ble Vice Chancellor, Central University of Jharkhand, Ranchi

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International Conference (virtual)

on

Geospatial Pathways and Big Data Analytics in Natural Resource Applications and Climate Change





http://cujisg2022.unaux.com/

Organised Virtually on 16-17th June 2022

Organized Jointly by:

Department of Geoinformatics, Central University of Jharkhand & Indian Society of Geomatics (ISG)-Ranchi Chapter &

Wigyan Bharati Jharkhand

Themes

- Geospatial applications in Agriculture, Forestry and Hydrology, and Urban Environments
- Microwave Remote Sensing: Data Processing and Applications
- Advance Geospatial Technologies (e.g. Machine Learning, LiDAR, UAV, Hyperspectral)
- Earth Observation and Big Data Analytics for Natural Resources Application and Climate Change
- Geospatial Technologies in Disaster Management and Climate Resilience

Objectives

- To address the utility of Geospatial technologies and Big Data Systems for Natural Resources Application and Climate Change.
- To develop interface among science, technology, policy, and society for better governance and societal benefit through Earth Observation Satellite Data and Big Data Systems.



Working modality for the Conference

The two days international Conference will include invited special lectures, technical sessions with oral and poster presentations on recent development of geospatial pathway and big data analytics. The motive of the technical session is to focus the application of geospatial pathways and big spatial data on environmental, human and climate change.

Participants

This conference expects to bring around 150 participants from various prestigious regional, national, and international public and private organizations, academic and research institutions including:

- Faculty and scientist from academic and research institutions, decision-makers from government agencies (Remote Sensing Centres, Space Application Centres, Ministry of Environment-Forest and Climate Change, Water resources, Disaster management etc.)
- Students and Researchers involved in the use of Earth observation in the theme areas of the conference.
- Representatives of the private sector involved with Space and Earth observation, disaster management, environmental monitoring, etc.)

Plenary presenter

Dr. V. K. Dadhwal, Indira Gandhi Chair Professor, NIAS Bengaluru

List of Invitee Speakers

- Prof. M.D. Behera, Professor, CORAL, Indian Institute of Technology (IIT) Kharagpur
- Prof. Santosh K Panda, University of Alaska Fairbanks, USA
- Dr. Surajit Ghosh, IWMI, Sri Lanka
- Dr. Navneet Kumar, Bonn University Germany
- Dr. Pankaj Kumar, The University of Adelaide

About CUJ

The Central University of Jharkhand (CUJ) was established through the Central University Act, 2009. The University started with a vision to focus on relevant present age educational drives with an emphasis on research in cutting edge technologies. It offers 5-year integrated (UG/PG), Postgraduate and Ph.D. programmes in various streams.

Department of Geoinformatics offers M.Sc Geoinformatics and Ph.D. in several research areas such as Vegetation Remote Sensing, GIS. GPS, Disaster Management, etc. The department has equipped with RS and GIS Lab for research using space technologies.

Important Dates

Submission of Abstract ends- **31 May 2022** Acceptance of Abstract/ Last date of registration- **4 June 2022** Final submission of **Full Paper** and **Poster- 8 June 2022**

You are required to submit an abstract (500 word limit) as per the template (Abstract2022_CUJ.docx). Compendium of abstract will be provided to all registered participant. Only selected Full paper (maximum of 10 pages) can be considered for publications in **Scopus Indexed Journals**. Best paper award certificate will be given based on Expert Committee. E-certificate will be provided for all registered participants.

Contact & Queries: Dr. Bikash Ranjan Parida

geoinfo.conference@gmail.com or bikash.parida@cuj.ac.in

Registration:	Students/Scholar/IGS Members	NIL
inegioti attorn	Academicians	₹ 500
	Industries	₹ 1000
	Foreign Delegates	\$ 20

The registration fee needs to pay via NEFT/RTGS. Bank A/C Number: **7277000100006806** A/C Name: INDIAN SOCIETY OF GEOMATICS-RANCHI CHAPTER; IFSC code: PUNB0727700 Address: Punjab National Bank at Brambe, Ranchi

How To Apply: https://forms.gle/Rk78MYRzQr3Kk81G8

Languages: The working language of the Conference is English.

Dates and Venue: The virtual conference will be conducted through online mode during **16-17 June2022**.

