भारत सरकार अन्तरिक्ष विभाग राष्ट्रीय सुदूर संवेदन केन्द्र बालानगर, हैदराबाद-500 037, तेलंगाना, भारत टेलिफोन : +91 40 23884001 / 04



Government of India Department of Space **National Remote Sensing Centre** Balanagar, Hyderabad-500 037, Telangana, India Telephone: +91 40 23884001 / 04

डॉ. प्रकाश चौहान / Dr. Prakash Chauhan उत्कृष्ट वैज्ञानिक & निदेशक Outstanding Scientist & Director

MESSAGE

Indian National Cartographic Association (INCA), a non-profit making professional body, is devoted primarily to promote cartographic research and its applications in the country. INCA is organising annual conferences at different locations on contemporary topics of national relevance since its inception in 1979. These annual conferences offer platform for brainstorming sessions that lead to more informed and sustainable ecosystems.

The 43rd INCA International Congress was hosted at Regional Remote Sensing Centre – West, National Remote Sensing Centre, ISRO, Jodhpur during 06-08 November 2023 with special emphasis on use of

geospatial technologies to address the pressing issues especially in the western part of the country characterized by the arid environment.

I am delighted to inform you that the conference was a grand success resulted with a great number of scientific deliberations alighted with its theme '*Emerging Trends in Digital Cartography for Sustainable Ecosystems and Geospatial Economy.*'

I thank all the distinguished speakers and authors who have shared their knowledge, wisdom, and geo-experiences with the audience. I also extend my appreciations to all the sponsors and exhibitors for their generous support towards making the conference a grand success.

The topics covered in the conference are comprehensive with a wide gamut of domains that have applied geospatial technology in their core methods, and I am sure the scientist, researchers, students and other stakeholder will benefit from this conference proceedings.

I complement the INCA National Advisory committee and the Local Organizing committee of the 43rd INCA for the excellent team work which has resulted in successful organization of this event as well as bringing out this publication.

(Prakash Chauhan) President, 43rd INCA & Director, NRSC, Hyderabad

भारतीय अन्तरिक्ष अनुसंधान संगठन Indian Space Research Organisation



Proceedings of the 43rd INCA International Conference, Jodhpur, 06–08 November 2023.