

Report

40TH CONVENTION OF INDIAN ASSOCIATION OF SEDIMENTOLOGISTS & NATIONAL CONFERENCE ON AN ODYSSEY OF SEDIMENTOLOGY FROM PRECAMBRIAN TO ANTHROPOCENE: SIGNIFICANT CONTRIBUTIONS IN ENVIRONMENTAL CLIMATIC AND ENERGY RESEARCH

11th-13th December, 2024

SEDIMENTOLOGY, a microcosm and subset of geology, plays a fundamental role in deciphering depositional environments, which are essential for constructing the narrative of origin of life. Recognizing its importance, the Indian Association of Sedimentologists (IAS) annually

organizes a national conference, providing a collaborative platform for researchers from varied disciplines to exchange ideas, compare methodologies, and disseminate their findings. This year, the 40th Convention of the Indian Association of Sedimentologists and National Conference, themed *An Odyssey of Sedimentology from Precambrian to Anthropocene: Significant Contributions in Environmental, Climatic, and Energy Research*, was hosted at the Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow, from December 11th to 13th, 2024. The conference was meticulously organized under the leadership of Dr. Arvind Kumar Singh (Scientist D, BSIP) as the Convener and Dr. Santosh Kumar Pandey (Scientist D, BSIP) as the Co-Convener, whose dedicated efforts ensured its resounding success. The 40th Convention was sponsored by Department of Science & Technology (DST), Science and Engineering Research Board (SERB), Ministry of Earth Sciences (MOES), Oil and Natural Gas Corporation Limited



Release of the Abstract volume of the 40th IAS by the distinguished luminaries present on the dais during inaugural ceremony (From Left to Right: Dr. Arvind Kumar Singh (Convener), Prof. Mahesh G. Thakkar (Director BSIP), Ms. Sushma Rawat (Director-Exploration, ONGC and Chief Guest), Prof. S.K. Tondon (IISER Bhopal), Prof. GN Nayak (President IAS), Santanu Banerjee, (Vice-President IAS).



A view of 40th IAS convention at Birbal Sahni Institute of Palaeosciences, Lucknow.

(ONGC), Wadia Institute of Himalayan Geology, Dehradun, Council of Scientific and Industrial Research (CSIR), and Waygate Technologies (a Baker Hughes business).

The conference was honored by the presence of luminaries in the field of geology, with Ms. Sushma Rawat, Director (Exploration) ONGC serving as the Chief Guest and Prof. S.K. Tandon from IISER, Bhopal as the Guest of Honour. The convention was graced with the presence of Prof. G.N. Nayak (Goa University & IAS President), Prof. Santanu Banerjee (IIT-Bombay & IAS Vice-President), and Prof. M. Erfan A. Mondal (AMU, Aligarh & Secretary, IAS) along with distinguished experts, including Dr. O.P. Mishra (Director NCS, New Delhi), Dr. M.P. Singh (Retired

Professor Lucknow University), Prof. Subir Sarkar (Jadavpur University, Kolkata), Prof. Partha Pratim Chakraborty (Delhi University), Dr. Aninda Mazumdar (NIO, Goa), Dr. Waliur Rehman (NCPOR, Goa), Prof. Bhawanisingh Desai (PDEU, Gandhinagar), Mr. Hemant Kumar (GSI, Lucknow), Prof. Vimal Singh (University of Delhi), Prof. B.P. Singh (BHU, Varanasi), Prof. Dhruv Sen Singh, (Lucknow University, Lucknow) and the Director of the host institute, Prof. Mahesh G. Thakkar. Their presence elevated the significance and intellectual depth of the occasion.

Prof. G. N. Nayak (IAS president) addressed the gathering and formally introduced about the IAS and its objective. The conference encompassed ten diverse themes, addressing a



A keynote talk given by Dr. O.P. Mishra (Director, NCS-New Delhi) during the conference.



Interactive poster session with experts.



Participants in the field excursion sitting/standing on the Tirohan Limestone of Semri Group, Jankikund area, Chitrakut, Satna Dist., M.P.

wide spectrum of sedimentology and stratigraphy. These sessions stimulated discussions on geological processes spanning various eras and fostered an exchange of insights among researchers, academicians, and professionals. The Themes listed are 1) Early Earth Lithosphere-Hydrosphere-Atmosphere-Biosphere evolution through sedimentary record,

2) Spatial and temporal evolution of siliciclastic deposition from continent to ocean, 3) Carbonate Depositional systems, 4) Astro-biological analogs, Biological Processes and Palynofacies in Sedimentary Record, 5) Recent developments in Stratigraphy and Geochronology, 6) Geomagnetism and Volcano-sedimentology, 7) Natural and Anthropogenic



Facilitation of Prof. Partha Pratim Chakraborty after delivering a Keynote speaker by Prof. G.N. Nayak (IAS President).



Ms. Sabhabana Lenka (Senior Research Fellow) from CSIR-NIO, Goa receiving the Young Sedimentologist Award (YSA) for the year 2024 in 40th IAS at DST-BSIP, Lucknow.

Hazards and Environmental Sedimentology, 8) Exploring Earth Surface through Chemical Sedimentology and hydrocarbon exploration, 9) Application of cutting-edge technology and modelling in sedimentology, 10) Quaternary sedimentary system (Aeolian, Fluvial, Glacial, Lacustrine, Coastal, Marine). All the themes were categorized under 5 technical session runs parallel and poster sessions. The event featured plenary sessions, keynote addresses by leading geoscientists, invited talks, oral presentations, and poster sessions, offering a dynamic platform for sharing innovative research. A session dedicated to the Young Sedimentologists Award highlighted the commitment to nurturing emerging talent in the field of sedimentology. 10 creative research poster and 5 best oral talks have also been critically accessed and given specially to the young research scholars.

In addition to the technical sessions, the conference featured two specialized workshops designed to empower early-career researchers with both theoretical knowledge and practical skills. **Workshop 1**, titled *Palynology and Its Applications in Climate Change Studies*, was conducted by Dr. Ratan Kar (BSIP, Lucknow), while **Workshop 2**, on *Sequence Stratigraphy: Siliciclastic and Carbonates—A New Look*, was led by Prof. Subir Sarkar (Jadavpur University, Kolkata). Both the workshops were full packed with young researchers particularly. A standout feature of the event was the post-conference field excursion to the Chitrakoot region, focusing on Precambrian sedimentology and geobiology led by the eminent Prof. Mukund Sharma (Emeritus, Ex-Scientist G, BSIP) and Dr Santosh Kumar Pandey as an expert in the Vindhyan Geology. The excursion provided 15 participants with a unique opportunity to explore geological formations firsthand, gaining invaluable experience in analyzing sedimentary processes on-site.

The conference was garnered by the participation of 10 eminent Keynotes speakers, 76 oral talks and 86

posters presentations. These contributions sparked dynamic discussions and fostered the exchange of innovative ideas, underscoring the collaborative spirit of the event. I personally presented an oral presentation on the suite of fossils discovered in the Sonia Sandstone of the Jodhpur Group, Marwar Supergroup. My research highlighted the significance of these findings in refining the biostratigraphy of the basin, offering new insights beyond previously established understandings. The interactions during the conference created a rich environment for collaboration, skill development, and intellectual growth, enabling participants to venture into new frontiers of sedimentological research. The 40th Convention of the Indian Association of Sedimentologists and National Conference proved to be a resounding success. It inspired participants and equipped them to tackle emerging challenges in sedimentology. With its diverse thematic focus, engaging workshops, and insightful field excursion, the conference deepened understanding of geological processes while emphasizing the critical role of sedimentology in addressing environmental and industrial challenges. The proceedings are set to serve as a cornerstone for future exploration and research in sedimentology, further solidifying India's contributions to global advancements in the field of sedimentology and allied disciplines. This landmark event not only opened new pathways in sedimentological research but also strengthened the collaborative ethos of the geoscientific community.

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