

A Detailed Report on

39th

CONVENTION OF INDIAN ASSOCIATION OF SEDIMENTOLOGISTS

Dec. 06th to 08th, 2023

Tamil Nadu, INDIA

International Conference on

**Voyage of Sedimentology from the Mountains
to the Oceans: An Innovative Trajectory**



IAS@AU - 2023



DEPARTMENT OF EARTH
SCIENCES

ANNAMALAI
UNIVERSITY



39th Convention of Indian Association of Sedimentologists

&

International Conference

on

Voyage of Sedimentology from the Mountains to the Oceans: An Innovative Trajectory

Organised By

Department of Earth Sciences Annamalai University, Annamalai
Nagar, Chidambaram, Tamil Nadu, India

Convener

Dr. S Vasudevan, Associate Professor

Advisor

Prof. T. Ramkumar

Organizing Secretaries

Dr. M.V. Mukesh, Associate Professor

Dr. P. Anandhan, Assistant Professor

Dr. G. Ramesh, Assistant Professor

Venue

Tech-Park - Auditorium
Kumararajah Muthiah Chettiar Building
Annamalai University Annamalai Nagar
Chidambaram - 608 002, Tamil Nadu, India



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- Vice Presidents** : **Prof. G. M. Bhat, Jammu University**
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Supporting Researchers:

- Dr. P. Balamurugan, Dr. R. Selvaganapathi, Dr. G. Sathiyamoorthy**
Mr. S. Baranidharan, Mr. J. Vigneshwar, Mr. P. Sivaranjan, and
Mr. S. Pravinraj

The 39th Annual Convention of the Indian Association of Sedimentologists (IAS) and the International Conference on "**Voyage of Sedimentology from the Mountains to the Oceans: An Innovative Trajectory**" took place from December 6th to 8th, 2023, at the Department of Earth Sciences, Annamalai University. This event was organized under the auspices of the IAS and held in anticipation of the impending centenary year of Annamalai University and the Azadi Ka Amrit Mahotsav.

The conference was meticulously conceptualized to showcase various aspects of sedimentary processes, environments, and resources, aligning with the overarching themes of the approaching centenaries. It aimed to bring together experts, researchers, academicians, and professionals in sedimentology to share their groundbreaking research, ideas, and experiences related to sedimentary processes, environments, and resources. As a multidisciplinary field, Sedimentology plays a pivotal role in elucidating Earth's history, managing energy and mineral resources, addressing environmental concerns, mitigating geological hazards, studying climate change, and supporting civil engineering and construction projects. The significance of sedimentology lies in its ability to provide invaluable insights into the processes and environments shaping our planet, contributing to various practical applications with profound societal, economic, and environmental implications.

With a comprehensive agenda, the conference featured the International Association of Sedimentologists Lecture series, keynote speeches, invited talks, oral and poster presentations, and Workshops centered on identified themes. Additionally, post-conference field excursions were organized to enhance participants' understanding and exploration of sedimentological concepts in practical settings.

Considering the expansive range of research topics and their credibility within the field of sedimentology, we have identified ten overarching scientific themes. These themes span various disciplines and employ multidisciplinary approaches, reflecting the diverse and dynamic nature of sedimentological research. The ten major scientific themes are as follows:

1. Ancient Earth : Unveiling the Climate & Environment of Deep Time
2. Forces Beneath : Exploring Tectonics & Volcano Sedimentology
3. Life Through Layers : Understanding Biological Processes in Sedimentation

4. From Land to Sea : Decoding Continental Depositional Systems
5. Oceanic Mysteries : Unraveling Marine Depositional Systems
6. Shaping the Present : Modern Sedimentary Processes Unveiled
7. Treasures of the Earth: Unlocking Resources through Sedimentology
8. Earth's Vulnerability : Investigating Environmental & Hazard Sedimentology
9. Chemical Clues : Insights into Sedimentary Geochemistry
10. Cutting-Edge Sedimentology : Exploring New Technologies in the Field

In facilitating a post-conference field excursion, the intention was to acquaint young researchers with the intricacies of field-based sedimentology in the Coastal Geomorphology (Explore the unique mangrove forests of Pichavaram and the picturesque Pondicherry Beach). The participants were exposed to the activities of Lignite Opencast Mining, Neyveli (Gain firsthand experience of lignite mining and power generation by visiting Neyveli, home to NLC India Limited).

Synoptic View of the Conference Content:

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8	Post-Conference Field Visit	2
9	Total Abstracts	172

The opening session of the **39th Convention of the Indian Association of Sedimentologists (IAS)** and the International Conference on "**Voyage of Sedimentology from the Mountains to the Oceans: An Innovative Trajectory**" took place at the Tech Park Auditorium of Annamalai University. Professor RM Kathiresan, Vice-Chancellor of Annamalai University, delivered the inaugural address. He spoke on the sediments' importance, characteristics, and influence on agricultural activities. Enhanced Soil and sediments are the life to the river, plants, and living organisms, which is the propulsive vitality for the country's socio-economic growth.



Professor Ganapathy Shanmugam, University of Texas at Arlington, USA, gave the convention address. At the same time, Professor Daniel Ariztegui from the University of Geneva, Switzerland, served as the Guest of Honour. Professor G.N. Nayak, President of the Indian Association of Sedimentologists, delivered a special address. Professor R.S. Kumar, Head of the Department, warmly welcomed the attendees. Professor T. Ramkumar, the Advisor, provided detailed insights into the conference, and Dr. S. Vasudevan, the Convener, expressed gratitude in the form of a vote of thanks during the inaugural function of the convention and International conference. Afterward, an abstract volume was released during the inauguration.

CONVENTION ADDRESS:

Distinguished Annamalai University alumnus **Professor Ganapathy Shanmugam**, currently affiliated with the University of Texas at Arlington, USA, delivered an enlightening discourse on the challenges within sedimentological research. His insightful presentation not only elucidated the intricacies of this field but also underscored the tremendous opportunities it presents. Drawing upon his illustrious 40-year career, Professor Shanmugam generously shared his wealth of experience with the conference delegates, inspiring them to strive for success. During this event, he delivered a captivating address titled "My Scientific Journey from Annamalai University to America and Beyond (1962 – 2023): Process Sedimentology, Appalachian Tectonics, Physical Oceanography, Fossil Fuels, Climate Change, and J. Robert Oppenheimer."



Professor Shanmugam recounted his rich experiences, highlighting an impressive portfolio of almost 150 completed projects and over 380 publications in esteemed Indian and international journals. Noteworthy is his role as a principal investigator for various scientific projects, including fan delta and braid deltas, estuarine sedimentation, hyperpycnal flows, submarine fans, MTD (Mass Transport Deposits), and more. His invaluable contributions in diverse scientific domains reflect the depth of his expertise and the breadth of his impact. Professor Shanmugam's address served as a beacon for aspiring researchers, providing profound insights into the complexities of sedimentological research while exemplifying the potential for exploration and achievement in this dynamic field.

INTERNATIONAL ASSOCIATION OF SEDIMENTOLOGISTS LECTURE SERIES:

Renowned scholar **Professor Daniel Ariztegui**, former President of the International Association of Sedimentologists and affiliated with the University of Geneva, Switzerland, delivered a compelling discourse that propelled the advancement of global sedimentological research. Professor Ariztegui's presentation, titled "Biotic and Abiotic Signatures in Lacustrine Carbonates and Their Application to the Earth and Planetary Fossil Record," delved into the fascinating realm of lacustrine carbonates and their significance in deciphering the Earth and planetary fossil record. Emphasizing the crucial role of microbialites, he underscored their importance in geological evidence of the planet's ecosystem.



Professor Ariztegui also shared insights from his research conducted in the challenging habitats of Argentinean and Chilean Patagonia. The examination focused on unraveling the characteristics of microbialites through a meticulous analysis of fabric, mineralogy, and geochemistry attributes. The research findings elucidated the intricate coupling of microbiological and mineralogical activities, offering valuable insights into bio-mineralization processes. Highlighting the significance of microbial carbonates, Professor Ariztegui emphasized their pivotal role in enhancing the reconstruction of environmental conditions. The

research outcomes contribute crucial data that enhances our understanding of the Earth's history and provides valuable perspectives for future exploration and scientific inquiry. Professor Ariztegui's comprehensive presentation illuminated the profound interplay between microbiology and mineralogy in sedimentological research.

Esteemed international speaker **Professor Matthieu J.B. Cartigny** from the University of Durham, United Kingdom, delivered an enlightening presentation on the intriguing subject, "Demystifying Turbidity Currents through Ocean Floor Observation." Profoundly sharing his expertise, he shed light on the dynamics of sediment density flows and how turbidity currents instigate transformative alterations in the ocean floor.



Professor Cartigny's research not only unraveled the significance of turbidity currents but also accentuated their role in sediment fluxes, emphasizing their connection to the carbon cycle. He articulated how these currents play a vital role in sustaining ecological communities on the deep ocean bed, contributing to the intricate web of marine life.

Through rigorous exploration, Professor Cartigny underscored the hazards of turbidity currents to submarine infrastructures, making a compelling case for a comprehensive understanding of these phenomena. The insights shared by Professor Cartigny deepen our knowledge of turbidity currents and bring attention to their far-reaching ecological implications and potential risks to underwater structures. His presentation, anchored in ocean floor observations, is valuable to sedimentological research and underscores the interconnectedness of marine processes with broader ecological systems.

Esteemed international speaker **Professor Tracy D. Frank** from the University of Connecticut, USA, delivered a thought-provoking presentation on the intricate topic, "Pace, Magnitude, and Nature of Terrestrial Climate Change through the End-Permian Extinction in Southeastern Gondwana." Her research delved into

the critical aspects of rapid climate change and environmental shifts, focusing on their significant role in extinction at the end of the Permian period.



Professor Frank's study, centered on eastern Australia's Bowen and Sydney basins, presented a stratigraphically complete upper Permian to middle Triassic succession. This accumulation occurred in coastal alluvial plains within retro-arc foreland basin settings. The research offered valuable insights into the End-Permian extinction horizon, revealing the abrupt disappearance of coal-forming forest communities. The inference drawn from Professor Frank's meticulous study illuminated the profound impact of acidification on the persistence of moisture-loving terrestrial flora. The immediate extinction observed was coupled with the constant moisture nature, which facilitated the formation of coal-forming vegetation in the Mid-Triassic period.

This presentation contributes significantly to our understanding of the End-Permian extinction event and underscores the intricate interplay between climate change, environmental shifts, and terrestrial ecosystems. Professor Frank's research enriches the scientific discourse on paleoclimatology and extinction events, emphasizing the importance of studying geological records for insights into our planet's dynamic environmental history.

KEYNOTE ADDRESS:

The 12 keynote addresses delivered during the conference served as a collective powerhouse of knowledge, seamlessly merging diverse perspectives and cultivating a profound understanding of sedimentological research across various domains. Each keynote speaker contributed unique insights, enriching the conference with their expertise. The comprehensive range of topics covered during these addresses facilitated a holistic exploration of sedimentology, bringing together



Prof. G.N. NAYAK



Prof. A.V. JOSHI



Dr. R.K. SINGHAL



Prof. M. E. A. MONDAL

scholars, researchers, and professionals from different disciplines. The wealth of knowledge shared through these keynotes elevated the conference and laid the foundation for continued advancements and discoveries in the dynamic field of sedimentology.

President of the Indian Association of Sedimentologists, Professor G.N. Nayak from Goa University, delivered a compelling keynote address that delved into the theme, "Weathering and Climate Fluctuations during the Last ~6000 Years: An Investigation through a Sediment Core, off Mahanadi River Mouth, Western Bay of Bengal." His presentation captivated the audience, shedding light on the intricate interactions between weathering processes and climate variations over the past millennia.

In his keynote address, **Professor A.V. Joshi**, from the Department of Earth Sciences at M.S. University of Baroda, Vadodara, delivered a comprehensive overview under the title "Lower Tapti Basin of Gujarat – Example of Quaternary Fluvial Sedimentation and Neo-Tectonism." This illuminating presentation provided valuable insights into the intricate processes at play in the Lower Tapti Basin. It offered a profound understanding of the dynamics of Quaternary fluvial sedimentation and neo-tectonism in the region.

Dr. Rakesh Kumar Singhal, Former Head of the Analytical Chemistry Division at Bhabha Atomic Research Center, Mumbai, delivered an insightful address on "Application of Radioisotope in Assessment of Potential Ecological Risk due to

Sedimentation and Accumulation of Trace Metals." Dr. Singhal's presentation highlighted the complexities of these environmental processes and underscored the importance of employing advanced analytical techniques for a comprehensive understanding of ecological dynamics.

Professor M. E. A. Mondal, General Secretary of the Indian Association of Sedimentologists at Aligarh Muslim University (AMU), Aligarh, delved into "Clastic Sediment Geochemistry – A Tool for Enhancing Provenance Understanding." He has showcased the critical importance of geochemical analyses in unraveling sediment provenance, contributing to a more nuanced comprehension of geological processes and environmental dynamics.

In his keynote address, **Dr. Rajat Mazumder**, from the Department of Applied Geosciences at the German University of Technology in Oman, delved into "Precambrian Terrestrial Sedimentation on the Singhbhum Craton, India." With a focus on this ancient geological formation, Mr. Mazumder provided a compelling glimpse into Earth's terrestrial history during the Precambrian era. His presentation shed light on the intricate processes that shaped the terrestrial sedimentation on the Singhbhum Craton, contributing valuable insights to our understanding of the geological evolution of this significant region.

Professor S.M. Ramasamy, Professor of Eminence in the Department of Remote Sensing at Bharathidasan University, Tiruchirappalli, shared his profound expertise in a keynote address titled



Dr. RAJAT MAZUMDER



Prof. S.M. RAMASAMY



Prof. D. PADMALAL



Dr. D. GNANASUNDAR &
Prof. SM USSAIN

"Earth Systems and The Depositional Dynamics." Through his presentation, Professor Ramasamy provided a holistic perspective highlighting Earth's systems' interconnectedness and elucidated the intricate dynamics governing deposition processes. His address showcased his eminence in the field and contributed valuable insights into the complex interplay between Earth's systems and the resulting depositional phenomena.

Professor D. Padmalal, Scientist G and Group Head of the Hydrology Group (HyG) at the National Centre for Earth Science Studies in Thiruvananthapuram, Kerala, delivered a keynote address titled "Late Quaternary Coastal Evolution of Kerala, Southwest India: Selected Case Studies Using Multiproxy Analysis." In his presentation, Professor Padmalal presented compelling case studies that utilized multiproxy analysis to unravel the intricate details of the late Quaternary coastal evolution in Kerala. His address not only showcased his leadership as a scientist but also demonstrated the application of advanced analytical techniques in understanding the geological history of the region.

Dr. D. Gnanasundar, Senior Joint Commissioner-III at the National Hydrology Project, Ministry of Jal Shakti, India, delved into the intricacies of "Decoding Sequential Stratification (Sediment Stratigraphy) of Coastal Aquifers to Understand Aquifer Hydraulics for Decisive Management of Coastal Aquifers." Dr. Gnanasundar provided valuable insights into the dynamic world of aquifer stratigraphy and hydraulics through his exploration. His presentation demonstrated his leadership in the field and contributed significant

knowledge to the understanding and managing of coastal aquifers.

Prof. Shaik Mohammad Hussain, from the Department of Geology at the University of Madras, provided a comprehensive address on "Sediment-Ostracoda Relationship In Freshwater, Brackish Water, And Marine Environments Of Tamil Nadu: Implications On The Siltation And Paleoenvironment." Prof. Hussain unveiled the intriguing relationship between sediment and ostracoda in diverse aquatic environments in his presentation. This exploration demonstrated his expertise and illuminated the implications of this relationship on siltation patterns and paleoenvironmental reconstructions.

In her keynote address, **Dr. Binita Phartiyal**, Scientist-F at the Birbal Sahni Institute of Palaeosciences in Lucknow, U.P., shed light on "Landscape Evolution, Sediment Characterization, and Climatic Record of Northwest Trans-Himalaya during Late Quaternary." Through her comprehensive presentation, Dr. Phartiyal provided valuable insights into the dynamic processes of landscape evolution, sediment characterization, and climatic records in the Northwest Trans-Himalayan region during the Late Quaternary period.

In his keynote address, **Dr. Himanshu Bali**, from the Department of Geology at the Central University of Tamil Nadu, delved into the intriguing topic of "Decoding Tectonic History and Related Paleooceanographic Shifts through Biogenous Sediments: Exploring the Applications of Foraminifera." His presentation gave unique

perspective on utilizing foraminifera to decode geological and paleoceanographic shifts. His expertise and exploration of this microscopic marine life enriched the symposium by providing valuable insights into the historical changes in Earth's tectonic activity and paleoceanographic conditions.

DISTINGUISHED LECTURES

The conference featured a series of distinguished lectures, each offering valuable insights into various aspects of sedimentological research. Here is an enhanced description of the distinguished lectures:



Glimpses of Distinguished Lectures

- **Dr. Ananya Chutia** delivered an illuminating lecture on the "Paleocene-Eocene Thermal Maximum Event – In Search of Its Evidence from Eastern Himalaya, Arunachal Pradesh," providing a comprehensive exploration of the geological evidence of this significant climatic event.
- **Dr. Arvind Kumar Singh's** lecture on "Shales: An Essential User Guide to Understand Sediment Dynamics, Operative Processes, and Ancient Environments" offers a detailed guide to deciphering sediment dynamics and ancient environments through studying shales.
- **Dr. Santanu Banerjee** presented insights on "Reverse Weathering through Geological Time and Its Implications," unraveling the geological processes of reverse weathering and its broader implications.
- **Dr. Sandip Kumar Roy** explored the topic of "In Quest of Big Hydrocarbon Discoveries from Indian Sedimentary Basins," shedding light on the search for significant hydrocarbon reserves in Indian sedimentary basins.
- **Dr. S.K Srivastava** discussed "Cenozoic Sedimentation in Parts of Inner Fold Belt, Nagaland, India: Changes Through Time," providing a temporal perspective on sedimentation dynamics in the Inner Fold Belt of Nagaland.
- **Dr. Suchana Taral** shared insights on "Trace Fossils as a Proxy for Recognizing Depositional Environment in Stratigraphic Record: A Case Study from the Siwalik Succession of the Eastern Himalaya, Arunachal Pradesh," highlighting the utility of trace fossils in understanding depositional environments.
- **Dr. Seema Singh's** lecture on "Palaeosol Micromorphology as a Tool in Geological Investigations: Indian Context" explored the application of palaeosol micromorphology as a valuable tool in geological studies within the Indian context.
- **Dr. Priyabrata Das** provided insights into "Rhythmic Stratifications in the Martian Rock Records," offering a fascinating

perspective on the rhythmic stratifications observed in the rock records of Mars.

- **Dr. Pratima M. Kessarkar** delved into the question, "Are the Himalayas a Major Source of Sediments to the Bay of Bengal during the Recent Past?" examining the role of the Himalayas in contributing sediments to the Bay of Bengal in recent geological history.
- **Dr. Adrita Choudhuri's** lecture on "Evolution of a Confined Gravelly River to a Braided- Meandering River in the Lake Cretaceous Khasi Group, Southern Shillong Plateau, NE India," traced the evolutionary path of a river system in the Lake Cretaceous Khasi Group.
- **Dr. Rasikh Barkat** explored "Continental Sedimentation Preceding the Emergence of Terrestrial Plants: An Example from Neoproterozoic Banganapalle Formation, Kurnool Group, India," shedding light on continental sedimentation patterns before the emergence of terrestrial plants during the Neoproterozoic era.

Each distinguished lecture added depth and breadth to the symposium, contributing valuable perspectives to the field of sedimentology

ORAL, VIRTUAL and POSTER PRESENTATION

The conference features an array of captivating presentations spanning sedimentology, with a particular focus on diverse topics such as:

- Unveiling the Provenance and Geochemical Traits of Argillaceous Sedimentary Rocks within the Paleoproterozoic Formations of the Cuddapah Basin, India.
- Exploring Sedimentological Signatures of Ramp-Rimmed Carbonate Platform Settings within the Palaeoproterozoic Vempalle Formation, Papaghani Group, Cuddapah Basin.
- Analyzing Microfacies and Diagenetic Processes in the Limestones of the Middle-Jurassic Fort Member, Jaisalmer Formation, Western Rajasthan, India, and their Implications for Depositional Environments and Reservoir Quality.
- Investigating Floral Diversity and Depositional Environments of Early Permian Sequences in the Chirimiri Coalfield, Son Basin, India.



Glimpses of Delegates Presentation

- Unraveling the Geochemical Makeup of Siliciclastic Sedimentary Rocks in the Paleoproterozoic Bijawar Basin, Bundelkhand Craton, Central India, and its Insights into Provenance, Paleoweathering, and Geodynamics.
- Architectural Analysis of Late Miocene Middle Siwalik Fluvial Sequences in the Himalayan Foreland Basin, India.
- Deciphering the Sedimentation History of the Deformed and Metamorphosed Paleoproterozoic Parsoi Formation within the Mahakoshal Group, Central India Tectonic Zone, for Insights into Paleoproterozoic Back-Arc Rift Basin Sedimentation Patterns.
- Shedding Light on the Origin of Ooids through Insights from the Hamira Member, Jaisalmer, India.
- Exploring the Environmental Significance of Seismite and Tsunamite as Key Signatures for Sedimentary Environments and Tectonics in the Proterozoic Vindhyan Basin, India.
- Investigating Seismicity Forcing in an Immature Passive Margin Basin through a Case Study from the Lower to Middle Member of the Jhuran Formation, Kutch, India.
- Understanding Seismic-Induced Basin Subsidence across Siliciclastic to Carbonate Transitions in the Early-Middle Jurassic Succession of Jaisalmer, Rajasthan.



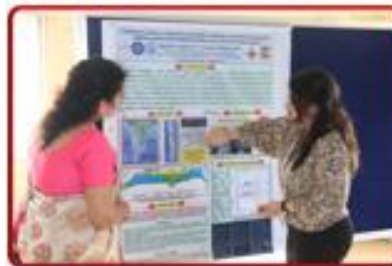
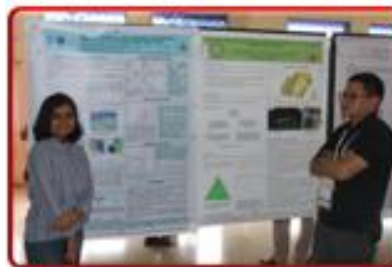
Best Paper Presentation:

**1st Prize Awarded to Mr. Kumil Ahmad, BSIP, Lucknow, and
2nd Prize to Ms. Concy Gomes, CSIR-NIO Goa**

India, and their Interpretation as Benthic Seaweeds.

- Documenting a New Record of Ediacaran Complex Acanthomorphic Palynoflora (ECAP) from the Mahi Formation of the Krol Belt, Lesser Himalaya, India.
- Establishing the Chronostratigraphic Status of the Bilara Carbonate within the Marwar Supergroup, Western India.
- Investigating Body Size-Ornamentation Covariation in Pisotrigonia from Kutch, Western India, and its Ecological and Evolutionary Implications.
- Developing a Depositional Model and Sequence Stratigraphic Framework for the Paleoproterozoic to Mesoproterozoic Lokapur Subgroup of the Bagalkot Group, Kaladgi Basin, Karnataka.
- Tracing Sediment Provenance and Dispersal Patterns from the Bay of Bengal to Antarctica.
- Analyzing Changes in Arabian Sea Denitrification Intensity off Goa through Inferences from a Sediment Core.
- Conducting X-ray diffraction Studies of Minerals and Sediment Textures of Saltpan Core from Mahabalipuram, Tamil Nadu, India.

- Tracing the Transition from Estuarine to Fluvial Environments through Records from the Middle Part of the Bhuj Formation, Kutch Mainland, India.
- Analyzing Architectural Elements of the Upper Part of the Bhuj Formation, Gadhsisa, Western Kutch, India.
- Field Identification of Paleosol with Continental Ichnofabric: A Case Study from the Early Miocene KhariNadi Formation in the Kutch (Kachchh) Basin, Gujarat.
- Exploring Exceptionally Preserved Macroscopic Carbonaceous Compression Fossils from the Early Mesoproterozoic Singhora Group, Chhattisgarh Supergroup,



Glimpses of Delegates Poster Presentation

- Investigating Petrographic and Granulometric Properties of Rocks from the Motur Formation (Middle Permian) around Imlikheda Area, Betul District, Madhya Pradesh.
- Unveiling Modern Sedimentary Processes through Research on the Source of Chemical Ions and Recharge Estimation in the Groundwater of Kandi Belt, Jammu District, Jammu and Kashmir, India.

This list captures the essence of each presentation with clarity and coherence, enhancing its overall appeal and comprehension for conference attendees.



YOUNG SEDIMENTOLOGISTS AWARD PRESENTATION



Young Sedimentologists Award Competitors Acknowledged for Their Efforts: Congratulations to Mr. Baranidaran, Annamalai University and Ms. Pratiksha P. Bagul, Savitribai Phule Pune University



**Best Poster Paper Presentation:
1st Prize Awarded to Mr. Gursewak Singh, BSIP, Lucknow, and
2nd Prize to Ms. Samhabana Lenka, CSIR-NIO, Goa**



Young Sedimentologists Award presented to Ms. Shifali Chip, Jammu University

WORKSHOPS



Prof. T. RAMKUMAR, from the Annamalai University, Tamil Nadu, India, led a comprehensive workshop titled "Chemical Clues: Coastal Sediment Geochemistry." During this workshop, he delved into the critical aspects of sedimentology, emphasizing the significance of geochemical factors, metal accumulation in sediments, bioavailability, partitioning, sequential extractions, and their implications for environmental management and risk assessments. Prof. Ramkumar's insightful session gave attendees valuable insights into the intricate interplay between chemical clues and coastal sediment dynamics, paving the way for informed decision-making and sustainable environmental practices.

Dr. ALEXANDER BRAISER, from the University of Aberdeen, King's College, Scotland, UK, hosted an enlightening workshop titled "Navigating the Publishing Process in Sedimentology." In the workshop, Dr. Braiser provided invaluable insights into the expectations of sedimentological editors, debunked myths surrounding the peer-review process, and underscored the importance of publication ethics. His engaging session empowered researchers with the knowledge and tools to navigate manuscript preparation and submission, guiding them toward successful publication in internationally renowned sedimentology journals.

CULTURAL PROGRAM



As a highlight of the conference, an enchanting cultural program titled "Bharathanatyam" dance was graced on the evening of December 6th, 2024. The captivating performance featured the students of the Department of Music at Annamalai University. Choreographer, Dr. A. Esther Pradeeba, an Associate Professor of Music, orchestrated the intricate movements and expressions, adding depth and finesse to the display of this classical dance form.

POST-CONFERENCE FIELD VISITS

A captivating two-day field excursion (9 and 10 December 2023) unfolded with a diverse itinerary to immerse participants in the rich tapestry of natural landscapes and human activities.

On the first day, participants embarked on a journey to Kodyampallyam and Pudhupalayam beaches, where they were treated to a firsthand exploration of coastal geomorphology. Amidst the picturesque beach environments, attendees witnessed the fascinating formations of groins, dunes, small cliffs, and the telltale imprints of longitudinal drift currents. The highlight of the day was an enchanting voyage into the heart of the unique mangrove forest of Pichavaram, expertly guided by boat through the labyrinthine waterways that wind their way through this remarkable ecosystem.





VALEDICTORY OF THE CONFERENCE AND GENERAL BODY MEETING OF THE INDIAN ASSOCIATION OF SEDIMENTOLOGISTS

The valedictory function of the 39th Annual Convention of the Indian Association of Sedimentologists (IAS) and the International Conference on "Voyage of Sedimentology from the Mountains to the Oceans: An Innovative Trajectory" marked the culmination of a stimulating and insightful event that brought together experts, researchers, and enthusiasts from around the world to explore the dynamic field of sedimentology.

Under the leadership of Prof. G. N. NAYAK, President, and Prof. M.E.A. MONDAL,

The second day of the excursion took participants to the heart of lignite opencast mining. From a panoramic viewpoint, attendees gained insight into the scale and scope of mining activities. Participants were granted access inside the mines, providing a rare opportunity to witness firsthand the intricacies of extraction processes. Moreover, the expedition ventured into the afforestation regions, offering a glimpse into efforts to restore and preserve the ecological balance amidst the mining landscape.



General Secretary of the Indian Association of Sedimentology, the activities and reports of the Association spanning from 2022 to 2023 were presented to the esteemed General Body and unanimously approved by its members. This reaffirmed the Association's commitment to advancing sedimentological knowledge and fostering collaboration within the community.

Dr. M. V. MUKESH, Organizing Secretary-1, warmly welcomed all attendees, expressing heartfelt gratitude for their invaluable contributions to the conference's success. Following this, **Dr. P. ANANDHAN**, Organizing Secretary-2, provided a concise overview of the conference's key themes and highlights, showcasing the diverse array of topics explored and the depth of discussions undertaken. The presidential address, delivered by **Dr. R.S. KUMAR**, Professor and Head of the Department of Earth Sciences, set the tone for the ceremony, highlighting the significance of the conference and the promising future of sedimentology research.

Distinguished speakers and experts were then invited to share their reflections on the conference and offer insights into the future directions of sedimentological studies, emphasizing emerging trends, technological advancements, and interdisciplinary collaborations.

Dr. A. RAGUPATHY, Director of DARE at Annamalai University, delivered a compelling valedictory address, encapsulating the essence of the conference and stressing the importance of sustained collaboration and knowledge exchange in propelling sedimentology forward. **Prof. SM. RAMASAMY**, Professor of Eminence at Bharathidasan University, Tamil Nadu, echoed these sentiments, underlining the significance of interdisciplinary approaches and innovative methodologies in addressing contemporary challenges in sedimentary processes.

During the ceremony, distinguished recognition was bestowed upon exemplary contributors and achievers in sedimentology research. Achievement Awards were presented to those who exhibited outstanding dedication and impact through their exceptional work, thereby acknowledging their significant contributions to the advancement of the field.

During the ceremony, recognition was bestowed upon outstanding contributors to sedimentology research. **Dr. G. RAMESH**, Organizing Secretary-3, lauded the exemplary achievements of **Prof. T.**



RAMKUMAR, Advisor at the Department of Earth Sciences, Annamalai University, before presenting him with the esteemed Special Achievement Award. This accolade honored Prof. RAMKUMAR's unwavering dedication and profound impact on the field of sedimentology.



