Editorial Note

The present issue of GeoChronicle Panorama (Volume 5, Issue 1, 2025) brings together a diverse and insightful collection of articles that reflect the dynamic breadth of contemporary Earth, environmental, and interdisciplinary sciences. This issue highlights scientific advancements, policy perspectives, and emerging research themes that are increasingly relevant in the context of global environmental change, resource sustainability, and societal resilience.

The issue opens with an authoritative reflection by Mishra (2025) on the *Major Achievements of the Ministry of Earth Sciences (MoES), Government of India in 2025*, providing a comprehensive overview of technology-driven innovations across climate, Earth, and ocean sciences. This contribution sets the tone for the issue by underscoring the critical role of scientific institutions in addressing national and global challenges.

Environmental governance and sustainability are explored through the lens of democratic processes in the article by Pradhan and Goswami (2025), which examines the ecological implications of electoral activities in India. Complementing this perspective, Tiwari (2025) offers geophysical insights into groundwater exploration, addressing one of the most pressing resource challenges of the present era.

Several contributions in this issue focus on Earth materials and geological processes. Patel (2025) discusses uranium deposits linked to hydrothermal systems, while Suresh Gandhi et al. (2025) provide a comprehensive overview of minerals, their formation, identification, and multifaceted applications in science and society. The significance of strategically important resources is further elaborated by Mishra (2025) through a detailed review of the geology, global distribution, and importance of critical minerals.

The issue also embraces interdisciplinary and educational dimensions of Earth sciences. Datta (2025) presents a thought-provoking narrative tracing connections between volcanic processes and the origins of life, whereas Mohapatra (2025) highlights the often-overlooked role of microbes in shaping environmental and human health. The temporal dimension of Earth history is addressed by Nagendra and Reddy (2025) through their exploration of the fossil record as an environmental chronometer.

Finally, the issue emphasizes societal preparedness and capacity building through the article by Mishra (2025) on strengthening disaster preparedness via student education, offering global perspectives with specific implications for Odisha, India.

Collectively, the articles in this issue of *GeoChronicle Panorama* showcase the journal's commitment to fostering scientific dialogue across disciplines, scales, and societal contexts. We hope that this issue will stimulate critical thinking, inspire future research, and contribute meaningfully to the understanding of Earth systems and their interaction with society.

Dr. Rudra Mohan Pradhan
Solid Earth Research Group, National Centre for Earth Science Studies
Thiruvananthapuram, Kerala-695 011, India
E-mail address: rudra.pradhan@ncess.gov.in

Available online: 30 December 2025