

**Monthly Summary Report- March 2026**  
**Birbal Sahni Institute of Palaeosciences**

**Any significant development/achievement that you feel warrants being brought to Cabinet Secretary's notice:**

This study integrates biotic (pollen) and abiotic (granulometric) proxies from a 150 cm deep sediment profile of an endangered wetland on Majuli Island, Assam, within the Indo-Burma biodiversity hotspot and under the influence of the Indian Summer Monsoon (ISM). Pollen analysis, supported by modern analogues from 25 surface samples, enabled reconstruction of Mean Annual Temperature (MAT) and Mean Annual Precipitation (MAP) across five pollen zones (SW-I to SW-V) using the Coexistence Approach (CA). The earliest phase (SW-I; 2090–310 BCE/4040–2260 cal. yrs. BP) indicates warm, humid conditions (MAT ≈ 30 °C; MAP ≈ 3000 mm) with dense forest cover, suggesting regional climatic resilience during the globally arid 4.2 ka event. The presence of *Rhododendron* and *Castanopsis* points to episodic flooding under unstable conditions. Between 310 BCE and 490 CE (SW-II; 2260–1460 cal. yrs. BP), vegetation became more open, warm and relatively less humid with fluctuating flood activity. A subsequent increased moist interval (850–1450 CE; SW-IV; 1100–500 cal. yrs. BP) corresponds to the Medieval Climatic Anomaly (MCA), marked by renewed deciduous forests and elevated MAP (~ 2750 mm). Post-1450 CE (SW-V; 500 cal. yrs. BP onwards), declining MAT (13–22 °C) and MAP (500–1092 mm) indicate relatively less humid climate, in consonance to Little Ice Age cooling and enhanced human impact, evident by anthropic pollen and savanna-like vegetation. Granulometric shifts reveal transitions from low- to high-energy fluvial regimes through time. Overall, the record highlights monsoonal variability in the region during mid-late Holocene and underscores the importance of Majuli's depositional archives for assessing the resilience and sensitivity of tropical systems to past and future abrupt climate change. (Pandey et al 2026; Review of Palaeobotany and Palynology).

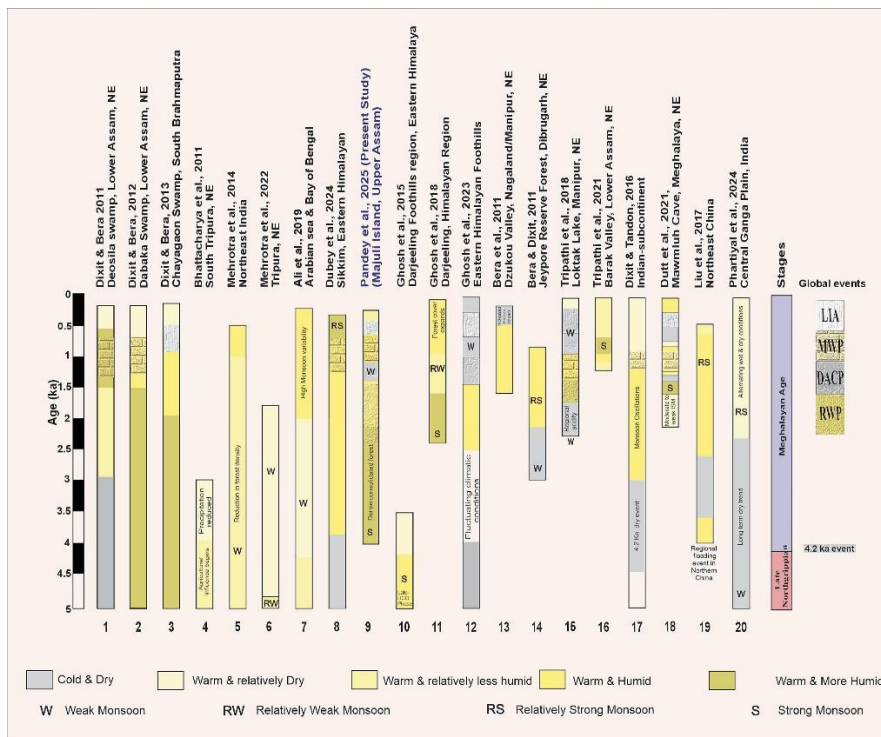


Figure 1: Comparative pollen-based reconstruction of vegetation and climate over the last 5 ka from Northeast India, adjacent Indo-Burma regions, and the Central Ganga Plain.

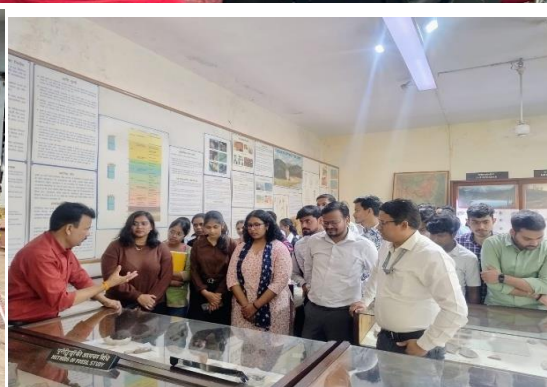
**Events during March 2026:**

1. Dr. Biswajit Thakur, Scientist-F, BSIP, Lucknow, delivered the two Friday Lectures at Seekers Interaction Forum (SIF), BSIP on 12 and 19 March 2026
2. Dr. K.R. Surange Memorial Lecture was delivered by Dr. Shreekrishna Deshpande, former Head of Corporate Planning and former Head of Exploration (Northeastern States), ONGC, on 23 March 2026 at BSIP, Lucknow.
3. Dr. M.N. Bose Memorial Lecture was delivered by Shri Rajinder Kumar, Geological Survey of India, Ministry of Mines, Government of India, on 25 March 2026 at BSIP, Lucknow.
4. Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow, in collaboration with Community Radio Station "KGMU Goonj (89.6 MHz)", launched the science outreach radio program titled "Kahani Dharti Ki".
5. AcSIR Students Celebrated International Women's Day at BSIP
6. On 12 March 2026, a group of undergraduate and postgraduate students in Geology from BSNV PG College, Lucknow (KKV), visited the Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow, as part of an academic outreach initiative coordinated by Dr. K. G. Misra, Scientist 'E', BSIP.
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8. A Lecture-cum-Training Programme on the topic "Application of Indian-Multilingual Translation Sarathi Software" was organized at the institute on 20 March 2026 under the first Language Workshop of the year. Shri Bihari Kumar, Translation Officer, CSIR–Central Pharmaceutical Research Institute (CDRI), Lucknow, delivered the keynote address.
9. The Ph.D. viva-voce examination of Mr. Ravi Kumar Maurya, AcSIR Ph.D. Scholar (Enrollment No. 10PP20J64004), was conducted on 30 March 2026.
10. The Ph.D. viva-voce examination of Mr. Nagendra Prasad, AcSIR Ph.D. Scholar, was conducted on 24 March 2026.
11. The Pre-Thesis Open Colloquium (PTOC) of Mr. Pushpendra Pandey, AcSIR Ph.D. Scholar, BSIP, Lucknow, was held on 09 March 2026.
12. Adhra Renny presented her work titled "Deciphering the Sedimentary Responses of the Monsoon Seasonality and Intermediate Water Circulation in the Southeastern Arabian Sea during the Last 200 ka" at the Ocean Sciences Meeting 2026, from 22 to 27 February in Glasgow, Scotland.
13. Mitra Rajak presented her work titled "Critical Glacial Lakes and Emerging Threats in the Indian Central Himalaya" at the Climate and Cryosphere (CliC) Open Science Conference 2026, held from 9–12 February 2026 in Wellington, New Zealand.
14. Dr. Rimpay Chetia (CSIR-RA) presented a holistic approach to understanding the Palana lignite and its critical mineral potential at the National Conference on Geoscience, Climate Change and Sustainable Environment (GEOCON-2026), held at Lucknow University (13–14 March 2026).
15. Dr. Swati Tripathi (Scientist-E) presented at the National Conference on Geoscience, Climate Change and Sustainable Environment (GEOCON-2026), Lucknow University (13-14 March 2026), emphasizing that modern biotic-abiotic analogues from CGP interfluvial provide critical reference frameworks for accurate palaeoecological reconstruction.
16. 50 students of BSc (ZBC) accompanied by two faculty members from the Department of Applied Sciences and Humanities at Invertis University, Bareilly, visited the BSIP Museum and Laboratories on 27 February 2026.

17. 40 MSc. Physics students from Department of Physics Babasaheb Bhimrao Ambedkar University, Raebareli road, Lucknow visited BSIP Museum and Laboratories on 26 Feb 2026.

**Total 09 Research Papers published in high impact international journals during this month.**

**Photographs showing important highlights of major programs/research activities organized during March 2026:**



**Information to be provided quarterly**

<b>Sr. No.</b>	<b>Indicator</b>	<b>Current Quarter (January-March 2026)</b>
1.	(i) No. of technologies developed	NIL
2.	(ii) No. of technologies commercialized	NIL