

Birbal Sahni Institute of Palaeosciences
Monthly summary on Research Activities
(February, 2022)

1. Areas of Focus:

The institute carries out research on fundamental as well as applied aspects of Palaeosciences that includes Evolutionary history of biota, Paleoclimate, studies of past civilization, Human history and contemporary Climate Change issues, following an integrated and multi-disciplinary approach.

Key research activities under following objectives:

- Understanding origin and evolution of life through time and space.
- Understanding climate change in recent and deep geological times.
- Understanding past civilization and human history.
- Application of Palaeosciences in exploration of fossil fuel and coal industry.

2. Important Highlights of Major Research Programmes

a) National Girl Child Day (January 24, 2022)

Institute celebrated the National Girl Child day to raise awareness about the rights of a girl child and to promote the importance of their education, health and nutrition. On this occasion BSIP staff members shared their views and opinion in an online discussion on the topic “Mentoring a girl child for career in science”.

b) Republic Day (January 26, 2022)

BSIP celebrated 73rd Republic Day by hoisting the national flag and singing the national anthem on 26th January 2022 within its campus. In view of the rampant spike in covid cases, the flag hoisting was restricted to a limited number, comprising of only the Director BSIP, Registrar, Project Coordinators/Cocoordinators, Senior technical officers and a few support staff following Covid protocols.

c) International Mother Language Day (February 21, 2022)

Institute celebrated the International Mother Language Day on February 21, 2022. Dr. Vandana Prasad, Director BSIP delivered the Welcome address for the event. Dr. Ravi Mishra, Scientist E, National Centre for Polar and Ocean Research delivered an invited talk on “Languages in the dissemination of Science”. BSIP staff including research scholars and associates attended the lecture through online platform.

List of research publications (February, 2022)

1. **Aggarwal, N., Patel, R., Goswami, S.** (2022). A study on megafloral, palynofloral, and palynofacies of Barakar sediments at and around Balaram Opencast Coal Project, Talcher Basin, Odisha, India: inferences on palaeodepositional settings, palynodiversity, palaeovegetation, and palaeoclimate. *Arabian Journal of Geosciences* 15(3). DOI. 10.1007/s12517-022-09554-w (**Impact factor: 1.827**).
2. Anoop, S., **Manoj, M.C., Kawsar, M.,** Sivasdas, S.K., Beevi, M.R. (2022). Spatio-temporal distribution of heavy metals in sediments of Biyyam Backwater, Kerala, Southwest India; its environmental implications. *Environmental Nanotechnology Monitoring & Management* 17. DOI.: 10.1016/j.enmm.2022.100662.
3. **Bansal, M.,** Morley, R.J., Nagaraju, S., Dutta, S., **Mishra, A.K.,** Selveraj, J., Kumar, S., Niyolia, D., Harish, S.M., Abdelrahim, O.B., Hasan, S.E., Ramesh, B.R., Dayanandan, S., Morley, H.P., Ashton, P.S., **Prasad, V.** (2022). Southeast Asian Dipterocarp origin and diversification driven by Africa-India floristic interchange. *Science* 375 (6579), 455–460. DOI.: 10.1126/science.abk2177 (**Impact factor: 47.728**).
4. Dhyani, R., Bhattacharyya, A., Rawal, R.S., Joshi, R., **Shekhar, M., Ranhotra, P.S.** (2022). Is tree ring chronology of Blue pine (*Pinus wallichiana* A. B. Jackson) prospective for summer drought reconstruction in the Western Himalaya? *Journal of Asian Earth Sciences*. DOI.: 10.1016/j.jseaes.2022.105142 (**Impact factor: 3.449**).
5. Dhyani, R., Joshi, R., **Ranhotra, P.S., Shekhar, M.,** Bhattacharyya, A. (2022). Age dependent growth response of *Cedrus deodara* to climate change in temperate zone of western Himalaya. *Trees, Forests and People*. DOI.: 10.1016/j.tfp.2022.100221.
6. Gupta, G., Deval, R., **Rai, N.,** Nizamuddin, S.N., Upadhyay, S., Pasupuleti, N., Ng, H.K.T., Singh, P.K., V.R.Rao, V.R. (2022). Genome-wide association study for suicide in high-risk isolated historical population from north east India. *Journal of Affective Disorders Reports*. DOI.: 10.1016/j.jadr.2022.100327.
7. **Gupta, S., Saxena, A., Shabbar, H., Murthy, S.,** Singh, K.J., Bali, R. (2022). First record of late Carboniferous palynoassemblage from Ganmachidam Formation, Spiti Valley: Implications for age assessment and extent of Glossopterid elements in the Tethyan realm. *Geological Journal*. DOI.: 10.1002/gj.4400 (**Impact factor: 2.468**).
8. **Kapur, V.V.,** Carolin, N., Bajpai, S. (2022). Early Paleogene mammal faunas of India: a review of recent advances with implications for the timing of initial India-Asia contact. *Himalayan Geology* 43(1B), 337–356 (**Impact factor: 1.293**).
9. **Kumar, M., Saikia, K., Agrawal, S., Ghosh, R., Sheikh Ali, S.N., Arif, M.,** Singh, D.S., **Sharma, A., Phartiyal, B.,** Bajpai, S. (2022). Climatic control on the C3 and C4 plant abundance during the late Pleistocene – Holocene in the northern Gangetic Plain, India. *Palaeogeography Palaeoclimatology Palaeoecology* 591(1). DOI.: 10.1016/j.palaeo.2022.110890. (**Impact factor: 3.318**).
10. Ritchey, M.M., Sun, Y., Matuzeviciute, G.M., Shoda, S., **Pokharia, A.K.,** Spate, M., Tang, L., Song, J., Li, H., Dong, G., Vaiglova, P., Frachetti, M.D., Liu, X. (2022). The wind that shakes the barley: the role of East Asian cuisines on barley grain size. *World Archaeology*. DOI.: 10.1080/00438243.2022.2030792.
11. Shah, A.P., **Farooqui, S.,** Maurya, D.M., **Sharma, A.,** Archana, G. (2022). Linkage of microbial parameters with sediment physicochemical properties in subsurface fluvial sediment deposits of the Mahi River Basin, Western India. *Indian Journal of Microbiology*. DOI.: 10.1007/s12088-021-00998-4. (**Impact factor: 2.461**).
12. Shukla, V., Rao, K.S., **Tripathi, D.** (2022). Pollen diversity of honey from northern and southern Prayagraj district Uttar Pradesh, India. *Grana*. DOI.: 10.1080/00173134.2021.1993329. (**Impact factor: 1.359**).
13. **Singh, V., Mishra, K.G.,** Singh, A.D., Yadav, R.R. (2022). Increasing incidence of droughts since later part of little ice age over North-Western Himalaya, India. *JGR Atmospheres*. DOI.: 10.1029/2021JD036052. (**Impact factor: 4.261**).
14. Spate, M., Yattoo, M.A., Shen, H., **Pokharia, A.K.,** Shah, M.A., Betts, A. (2022). Cereal size, AMS and charcoal data from phase 1 of the Kashmir Prehistory Project. *Journal of Archaeological Science: Reports* 42. DOI.: 10.1016/j.jasrep.2022.103369.

Photographs showing important highlights of major programs/research activities organized during February, 2022:



बीरबल साहनी पुराविज्ञान संस्थान
लखनऊ

आज़ादी का अमृत महोत्सव
एवं
संस्थान का प्लैटिनम जुबली वर्ष
आंतर्राष्ट्रीय मातृभाषा दिवस
(21 फरवरी 2022)
(अपराह्न 3:00 बजे से)
स्वागत संबोधन
निदेशक : डॉ. वंदना प्रसाद

व्याख्यान

डॉ. रवि मिश्रा, वैज्ञानिक 'ई'
(राष्ट्रीय ध्रुवीय एवं समुद्री अनुसंधान केंद्र, गोवा)
द्वारा
"विज्ञान के लोकप्रसार में भाषाएं"

75 Azadi Ka Amrit Mahotsav | 75 PLATINUM JUBILEE | Digital India | Skill India

