Birbal Sahni Institute of Palaeosciences Monthly summary on Research Activities (July, 2021)

1. Areas of Focus:

The institute carries out research on fundamental as well as applied aspects of Palaeosciences that includes Evolutionary history of biota, Palaeoclimate, 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) Hindi workshop (25th June, 2021)

Under aegis of Hindi workshop, Dr Arti Garg, Scientist-E, Botnaical Survey of India, Prayagraj delivered a lecture on the topic "मध्य भारत की रामसर नमभूमियों की वानस्पतिक विविधता" on June 25th, 2021. The Hindi workshop was attended by all the scientists, research scholars and technical staff of institute.

b) Students Colloquium (2ndJuly -3rd July 2021)

Association of Quaternary Researchers (AOQR) organized anonline colloquium of six hours, spreadover two days, 2-3 July 2021. Post graduate students and research scholars of the Quaternary Sciences presented their research to a wide range of early career researchers, expert panellists and faculty members. In total, there were five sessions with 17 talks covering various themes in Quaternary research. Each session had a session chair and an exclusive peer scholar discussant for each talk, to ensure constructive discussions. The sessions were followed by a general discussion and summary which gave a good platform to

the young researchers of Quaternary Sciences to share their work and build engaging collaborations.

List of research publications (July, 2021)

- **1. Ghosh, R.**, Shukla, U.K., Srivastava, P., **Sharma, A.** (2021). Constraints of lithostratigraphy on the landscape evolution in response of erosion, climate and tectonics in the Marginal Ganga Plain, India. Journal of Asian Earth Sciences. Article no. 104892. DOI.: 10.1016/j.jseaes.2021.104892. (**Impact factor: 3.44**).
- 2. Quamar, M.F., Thakur, B., Singh, V.K., Pandey, S.K. (2021). Pollen heteromorphism in *Schleichera* Lour. (Sapindaceae), observed in surface soil samples from central India. Acta Palaeobotanica 61(1), 32–41. DOI.: 10.35535/acpa-2021-0003.
- **3. Quamar, M.F., Tiwari, P., Thakur, B.** (2021). The modern pollen–vegetation relationship in Jammu, India: a comparative appraisal. Acta Palaeobotanica 61(1): 1–19. DOI.: 10.35535/acpa-2021-0001.
- **4.** Yadav, A., Muneer, W., Lahajnar, N., Gaye, B., **Misra, S.**, Jehangir, A., Ambili, A., Mishra, P.K. (2021). Long term natural and anthropogenic forcing on aquatic system evidence based on biogeochemical and pollen proxies from lake sediments in Kashmir Himalaya, India. Applied Geochemistry. Article no. 105046. DOI.: 10.1016/j.apgeochem.2021.105046(**Impact factor: 3.52**).
- **5. Quamar, M.F.**, Bera, S.K. (2021). A 8400-year pollen records of vegetation dynamics and Indian Summer Monsoon climate from central India: Signatures of Global Climatic Events. Journal of Palaeontological Society of India 66(1):12–22. (Impact factor: 0.705).
- **6. Saxena, A., Gupta, S.**, Singh, K.J., **Murthy, S.**, Prakash, A., Singh, P.K. (2021). Diversity of the Genus *Gangamopteris* McCoy in the Early Permian Sequences of Singrauli Coalfield, Son-Mahanadi Basin, India. Journal of Palaeontological Society of India 66(1): 23–34. (**Impact factor: 0.705**).

Photographs showing important highlights of major programs/research activities organized during July, 2021:

