NEWS AND NOTES

International Field Workshop on the Vindhyan Supergroup – Mukund Sharma, BSIP, Lucknow; Email: mukund sharma@bsip.res.in)

The Palaeontological Society of India convened the workshop at Birbal Sahni Institute of Palaeobotany, Lucknow to address some of the important questions related to palaeobiological conundrum, geochronology of the basin, palaeomagnetism and sedimentary environment of different geological formations of the basin. Participants from India and Abroad attended the workshop. Four topical lectures by Prof. Adolf Seilacher (Tubingen University), Dr. N. J. Butterfield (Cambridge University), Dr. O.P. Pandey (NGRI) and Dr. Bijai Prasad (ONGC) were delivered. During field work of over 10 days, the participants examined the crucial sections exposed in Uttar Pradesh and Madhya Pradesh.

On 22nd, the participants were shown the Vindhyan rocks exposed in the Chitrakoot area. The "controversial" spot of the entire field workshop was the Janki Kund section where good exposures of the Tirohan limestone are seen in the Mandakini River Valley. The delegation collected samples from this spot.

Next day participants saw cavernous Tirohan limestone well exposed in two caves at the Gupt Godavari and the Bhander limestone at Sajjanpur on the way to Rewa. Dolf Seilacher explained the genesis of Kenneyia structures to all the participants.

Lithostratigraphic successions related to Upper Vindhyan were covered from camp at Rewa district. On 24th, an excellent exposure of Ganurgarh shale and the Bhander limestone was examined near

Ramnai. Most complete section of the Rewa Group was noted in Drummondganj Ghat section on Rewa-Mirzapur National Highway.

On 25th, delegates studied the type section of the Govindgarh sandstone, Rohtas limestone and Chorhat sandstone of Rewa district. There was extensive debate on the genesis of molar tooth structure and intraformational conglomerate in the Rohtas limestone. Chorhat sandstones show profuse development of ripple marks, mud cracks and syneresis cracks. Seilacher and co-workers in 1998 described trace fossils (triploblastics) from this area.

From Rewa, members moved to next camp at Maihar. On the way, good outcrops of the Bhander limestone were studied in the Tons River section near Emaliva. In the Girgita Mines, participants noticed profuse development of stromatolites, stylolites, syneresis cracks, intraformational and edgewise conglomerates, molar tooth structures and flat ellipsoidal black chert nodules. Carbonaceous remains have been recorded from the shales exposed in the Tons River beds. Siltstone layers in the basal part are rippled and mudcracked. Excellent preservation of salt pseudomorph bearing shales were collected by the participants in the Lilji creek. A thin limestone pockets within the Sirbu shale, showing domal stromatolites designated as Maiharia maiharensis, were observed in the Pathera creek.

Participants collected carbonaceous megafossils Chuaria - Tawuia assemblage.

The Shikaoda sandstone occurs as capping of the Sirbu shale, variety of sedimentary structures were shown to the participants.

The Kajrahat limestone of the Semri Group is noted in the Khutesar mines. Carbonate fabrics are typical of Palaeoproterozoic and early Mesoproterozoic carbonate sequences world over.

On day 8, participants noted the silicified shales of the Bhagwar shale exposed in north of Badanpur in the nala cuttings. From this horizon, Azmi in 1998 had reported the presence of small shelly fauna. The Kaimur sandstone was noticed on either side of the road cuttings. It is overlain by the rocks of the Rewa Group. In Maihar, the Rewa Group is represented by two upper lithostratigraphic units i.e. Jhiri shale and Govindgarh sandstone. Its contact with underlying Kaimur Group is conformable. A very good section is exposed in a road side quarry on Maihar-Dhanwahi road. At several place, the cross-strata are locally overturned and present recumbent fold. Most expanded section of Rohtasgarh limestone and Bhagwar shale are exposed in Bistara Mines in Jukehi area of Katni district. The Kaimur sandstone and intruding kimberlite pipe were examined in the open cast mine of NMDC.

After visiting Panna diamond mines the participants moved to Khajuraho for valedictory session. In the concluding session all the participants presented their assessment, suggestion and future collaboration about the field workshop.