All are cordially invited!

An Invited Talk

Organised jointly by

National Centre of Experimental Mineralogy and Petrology (NCEMP)

and

Department of Earth and Planetary Sciences,

University of Allahabad, India

(Date: 16-03-2023; Time: 11 a.m.; Venue: NCEMP Lecture Hall, UoA)

on

How and why to look for new meteorite impact craters on Earth?

by

Dr.LudovicFerrière (Natural History Museum Vienna, Austria)

Purpose of this present visit*:* The main objective of Dr.LudovicFerrière visit in India is to further confirm the impact origin of the Ramgarh structure (i.e., so far very limited shock diagnostic evidences have been reported). Field exploration will be completed. Petrographic thin sections will be prepared from the collected samples and will be searched for shock metamorphic features such as planar deformation features (PDFs) in quartz using optical microscopyand Universal Stage (U-Stage).At the occasion of his visit in India, the two other confirmed impact structures, namely Dhala and Lonar, will be explored and samples collected for the impactite collection of the Natural History Museum Vienna (Austria). The visit to the laboratory of Prof. Jayanta Kumar Pati, University of Allahabad and fieldwork together with his students Anuj Kumar Singh and Shivanshu Dwivedi will also allow to initiate future collaborations.

Short bio-data of Ludovic: Dr.Ludovic Ferrière, born in 1982, is a French geologist, expert on meteorites and impact craters. He completed a Master in Planetology at the University Pierre and Marie Curie in Paris (France), and learnt about meteorites at the Museum of Natural History. He finally completed his PhD thesis in Vienna (Austria) in 2009, on the geological and geochemical aspects of impactites from the Bosumtwi crater (Ghana), before to move again to Canada for his postdoctoral researches on shatter cones and associated shock-induced microdeformations in minerals (at the University of Western Ontario, London). He is the Chief Curator of the prestigious meteorite collection and of the impactite collection at the Natural History Museum Vienna (Austria). He has, together with colleagues,confirmed so far five meteorite impact craters (i.e., Keurusselkä in Finland, Luizi in the Democratic Republic of Congo, Hummeln in Sweden, Yallalie in Australia, and Nova Colinas in Brazil), and discovered (and classified) a number of meteorites.He is author and co-author of more than 100 peer-reviewed scientific papers published in international journals, over 225 abstracts presented at international conferences, and of a book on meteorites.