

Joint seminar of the NPI of the CAS

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Kristýna Hošková (DRD): *Modern phytolith analysis: development of possible solutions for (paleo-) ecological problems*

Abstract:

Phytoliths are microscopic particles of biogenic opal precipitated in plants. After the decomposition of plant parts, phytoliths are deposited in soil as well as various sediments including calcareous. As such, they can be used as valuable fossils for paleoenvironmental reconstruction where other biological evidence (e.g. pollen) is not preserved. Despite this obvious advantage, phytolith analysis faces problems related to taxonomic resolution of phytoliths or dating of the sediments in which they accumulate. In this presentation, I will address these problems using examples from different sedimentary environments in testing 1) holocene continuity of species-rich meadows from the White Carpathians (Czechia); 2) postglacial dynamics of paleoenvironmental conditions and associated human adaptation to non-aquatic conditions in NE Africa (Sudan).