

### ***Obsidian hydration dating***

Obsidian is unstable under normal surface conditions. It is typically covered by visible cortex in geological perspectives that does not look „glassy” at all. In the process of some thousands of years, on the fresh cut surface of obsidian implements the formation of „hydration rind” is starting to take place, which is measurable and is proportional to the time elapsed since the fresh breakage. This phenomenon is the basis for the direct dating of obsidian, applied in large series mainly in the United States. As climatic factors and chemical composition of the glass have direct effect on the formation of the hydration layer, we have found the application of the method more problematic in Europe. Application of the isotopic paleothermometry can improve precision of the method. Moreover, the measurement of the „hydration rind” involves the production of preparata by cutting the valuable artefacts. Can we have more reliable results and less destruction to prehistoric samples?