

APPLICATIONS OF DIATOMS IN ARCHEOLOGY

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This paper provides an overview of a number of applications of diatoms in archeological science. Diatoms are microscopic unicellular algae that form a tiny bipartite, robust skeleton of biogenic silica. The geographic distribution of diatoms – they occur from the poles towards the tropical regions – depends on the environmental conditions of their habitats. Their ecological variability and the fact that diatom shells have a high preservation potential make diatoms superb indicators of environmental change in modern and past times. Diatoms are also increasingly used in archeological sciences in a number of applications. Diatoms from archeological deposits may for example provide valuable information on local or regional environmental conditions such as salinity, trophic level and disturbance. Or diatoms extracted from pottery shards may tell something about the provenance of the studied artifacts. A number of examples (pottery material provenance, paleo-salinity, depositional environment reconstruction) is provided illustrating the value of diatoms for setting archeological material in a broader site and landscape context.