



FIXLAB USER REPORT

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Project Title Assessment of provenance of marbles from the gothic cloister of Žďár nad Sázavou (Czech Republic): contribution of small angle neutron scattering

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1. Project objectives

Establishing analytical protocols for the determination of provenance of archaeological marbles and a database of local sources

2. Main achievements and difficulties encountered

A total of 30 samples have been measured with both Small angle neutron scattering (SANS) and Prompt gamma activation analysis (PGAA). Full data treatment is still in progress, however, preliminary results confirm that the analytical technique can help in the characterization of marble samples. Full interpretation will be done by bringing together already obtained results from other analytical techniques in order to identify the components which might be linked to

each site of provenance of the samples. According to our previous experience with SANS, the samples did not pose particular difficulties, with the exclusion of some textural effect, which must be evaluated during the data reduction and analysis. Due to the nature of some of the samples, time for data collection for

PGAA, in order to obtain high precision, resulted in long counting times (several hours). However, in complex, the time available for the experiment was enough to characterize more samples than those essential for the experiment.