

SUMMARY

Determination of the provenance of decorative and dimension stones is one of the essential steps in various types of research, be it conservator, architectural or archaeological. A knowledge about localization of abandoned and forgotten quarries, sampling of these locations, description and classification by means of petrographic and materialographic methods, determination of basic physical, technological, and other properties represent a premise for a successful emplacement of artistic artefacts. Using present-day technologies it is possible to perform a detailed study of rocks and also to compile previously published and new data and to present them in an appropriate form.

This work presents a possible way to construct a database of decorative stones of the Czech Republic by means of modern programming tools: MySQL, HTML, PHP, and JavaScript. Combining them we get an efficient instrument to process geological data about decorative and dimension stones. The programming took from the start into account further extensions to magmatic and metamorphic types of rocks and possible attribute addition of particular rocks.

The database was tested on various data, obtained mainly by investigation of polishable limestones from the Barrandian area. This research was performed simultaneously with the database construction within this diploma thesis and its results are also presented here.