

# Experimental investigation of the seismic effects during blasting works

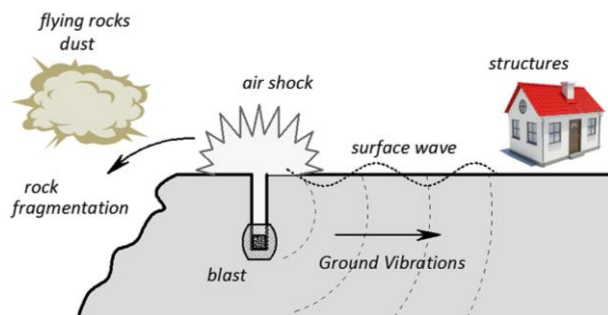
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**Abstract.** The interested part of dynamic analysis is the blasting work effects propagation through soil. This type of the dynamic load can be significant when the soil structure dynamic interaction hasn't favourable conditions. It can cause structural failures on buildings. The main aim of the paper is to investigate how we can estimate the magnitudes of the seismic waves during blasting works. The results are based on experimental studies.

## 1 Introduction

Nowadays is just technical seismicity part of the environmental issues. The increase in vibration induced by different sources have an unfavourable impact on buildings, structures and the people living there. Very often the sources of technical seismicity is the blasting work. These activities near residential areas have become a problems. Vibration induced by explosion is propagating through the geological subsoil into great distances [6]. The objects standing near the quarries are highly influenced by vibrations from technical seismicity. Results of this extremely load can be occurrence of various disorders on the structures [5]. Environmental effect of blasting is schematically shown on Fig. 1.



**Fig. 1.** Environmental effect of blasting.

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