



## **Assessment of the technological installations vulnerability to natural hazards**

Gabriela Boca, Alexandru Ozunu, and Serban Nicolae Vlad

Babes Bolyai University , The Environmental Science Faculty, Cluj Napoca, Romania (coordonareboca@yahoo.co.uk)

**Abstract:** Natural disasters may have a forcing effect over technological establishments containing significant quantities of hazard materials. In view of the ongoing global warning and the increasing frequency of extreme weather events, technical solutions alone will not be adequate to ensure security in the long term. The vulnerability assessment is a key factor in determining and minimizing risk, as highlighted on the 2005 World Conference on Disaster Reduction, held in Kobe, Japan.

This work proposes a methodology for the assessment of technological installations vulnerability to natural hazards in the area of the Transylvanian Plateau.

Vulnerability was measured by a range of indicators, using also some weight values. The basic criteria for choosing vulnerability indicators was that they should cover both damage potential and coping capacity, as well as the range of all three vulnerability dimensions (economic, social and environmental). In this context a crucial task was to find the right balance between the accuracy of data and the limited data available.

The analysis shows the technological installations vulnerability to natural hazards in the area of the Transylvanian Plateau is not negligible.

**Key words:** natural hazards, technological hazards, Natech,