

## HYDROGEOLOGICAL CATEGORISATION OF TERRAIN OF THE SANICA RIVER BASIN

**Emir Temimovic**, University of Sarajevo, Faculty of Science, Department of Geography, Zmaja od Bosne 33-35, Sarajevo, Bosnia and Herzegovina  
emirtemimovic@yahoo.com

**Ahmed Dzaferagic**, Student of Master studies, University of Sarajevo, Faculty of Science, Department of Geography, Zmaja od Bosne 33-35, Sarajevo, Bosnia and Herzegovina  
ahmed\_dz@windowslive.com

*Considering the material composition of rock masses, the structure of porosity, the mutual spatial relationship of geological units and the water permeability of rocks, the hydrogeological categorization of terrain and rock masses in the basin of Sanica was performed. Three basic hydrogeological units have been identified. The first unit consists of terrain with aquifers of karst porosity, the second unit consists of terrain with aquifers of intergranular, intergranular and/or fracture and fracture porosity, and the third unit consists of terrain without aquifer.*

*Spatially, the largest part of the basin includes terrain with aquifers of karst and fracture porosity, and the largest part of the researched terrain is characterized by karst hydrography. Consequences of this have been pointed out and also the vulnerability of groundwater to pollution. This, along with the hydrogeological categorization of the terrain, represents an important part of the research, primarily aimed at clarifying the spatial and temporal distribution of waters in the basin, depending on the basic natural conditions. The research is based on the results of previously conducted researches which with the results of original researches and the application of numerous, general and special scientific research procedures, enabled the development of a large-scale hydrogeological map.*

**Key words:** *the Sanica River basin, permeability of rocks, karst, springs, hydromorphological evolution of karst, hydrogeological map*