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WATER MONITORING AND QUALITY ASSESSMENT

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The Water Framework Directive aims at reaching the good ecological status of the surface waters. The objective was to devise a method for the quality assessment of waters with special focus on the water chemistry parameters as defined in the Water Framework Directive and pertaining legal regulations. Quality classes have been defined for every water chemistry parameter in light of the legal limit values of the water parameters. In addition to these weight indices were calculated on the basis of the outcome of the paired comparison of water chemistry parameters and normalized matrix. This was followed by the parametric level analysis of the water chemistry parameters and finally the aquatic environment index (AEI) was calculated, which provided general information on the quality of water regarding the water chemistry parameters. The method was illustrated on Lake Balaton in which case water samples taken from the Lake were analyzed and evaluated with the method devised.

Keywords: *Water chemistry parameters, aquatic environment index, surface water assessment, Lake Balaton*

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