



Chemical Analysis of some Toxic Elements in Water Resources of Kosova

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Abstract: The main research field was qualitative identification, electrochemical characterization and determination of some environmental toxic elements in water resources of Kosova. Mass concentration of Cd (II); Pb (II) and Cu (II) ions in all samples were determined electrochemically with anodic stripping voltammetry between pH range from (pH = 1.85 – 2.30) while for Zn(II) ions at pH = 3.7 - 4.10. For determination of aquatic toxic elements in the same samples we have done the ICP/MS analyses and then the results have been compared with the results of ASV techniques. The results of toxic elements of surface water are compared with the results of underground water, where is no present anthropogenic effect. Is the matter of fact that the main resources of potable water, and food industry are the rivers that flow within the territory of Kosova, it is of major priority to keep the quality of water in these rivers and the mineral water sources. Considerable amount of these environmental toxic elements are continuously emitted in aquatic environment from anthropogenic sources. Environment including water resources has an incontestable role, therefore the parameters determining the preservation of natural conditions of aquatic life which is endangered by growing human activities, are of special interest for the entire humanity. The water resources in Kosova should be observed permanently and this will be a big challenge and of very importance for in the future.

Key words: *anodic stripping voltammetry, trace metals, river water, mineral water. ICP/MS.*

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