



## **The level concentration of lead, cadmium, copper, zinc and phenols in the water river of Sitnica**

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**Abstract:** The Sitnica River is surrounded by agricultural land and settlements with unresolved wastewater discharge positioned downstream from the significant industrial plants. The purpose of this work was to determine the amount of lead, cadmium, copper, zinc and phenols in the water of River Sitnica and to identify potential pollutants in the flow of this River. For this reason four sample places were chosen: Fushë Kosova (A<sub>1</sub>), Obiliq (A<sub>2</sub>), Vragolia (A<sub>3</sub>) and Mitrovica (A<sub>4</sub>). Managing and water protection from pollution have a strategic importance for our country. Experimental results show that quality of this water is endangered from heavy metals (Pb, Cd, Cu, Zn) and phenols. The concentration level of phenols in A<sub>2</sub> and A<sub>3</sub> ample places and heavy metal concentration in all sample places exceeded allowed values of the fourth category of the quality of surfaced waters. Supporting these values we can conclude that water of this river is polluted in such level so that it can't be used for supply, irrigation, recreation, etc. To this condition contributed considerably industrial water from Kosovo power plants in Obiliq and urban central water which with no pretreatment flow into the river Sitnica. To prevent the pollution and to begin the revitalization of the bed of this river it is the last moment for the adequate measures to be undertaken.

**Keywords:** *The Sitnica River, Heavy metals, Phenols, Water quality.*

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