



## **Artificial Intelligence: application of swarms' particles to determine the environmental quality in the Macheta River Watershed (Cundinamarca, Colombia)**

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**Abstract :** This paper considers artificial intelligence as an important tool for determining the concurrent environmental quality in the River Basin Machetá, able to integrate the varying water quality (BOD,TSS, N-NO<sub>2</sub> and P<sub>total</sub>) and precipitation in a collaborative model, using the artificial intelligence swarm of particles technique to emulate the assessment performed by a group of experts.

**Key Words :** Swarm particles, watershed, environmental quality.

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