

Study of the Depuration Capacity of a River, Considering the Propagation of a Dynamic Wave.

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Abstract – This paper intends to evaluate the capacity of self-purification of a river, on the influence of a dynamic wave. Therefore, it was developed a mathematical modeling, where it were used Hydrodynamic Equations, combined with the Advective - Diffusive Equation, to describe the behavior of the transport processes in urban rivers. The results showed that the hydraulic parameters play an important game in the behavior of the concentration of these bodies of water.

Keywords – Water Conservation, Water Quality Model, Pollutant Transport