**ASSESSMENT OF WATER QUALITY ON GODAVARI RIVER USING QUAL2K**

**ABSTRACT**

Most of drinking water basins on the World are under the risk of pollution due to anthropological activities. Therefore, development of an efficient basin management plan is essential. The identification of water quality parameters in space and time dimensions is required for a good management plan. For this purpose, computer based simulation models have improved and applied on a wide area. QUAL2K Water Quality Model (one of the mostly used surface water quality model) is examined and applied in this presented study. QUAL2K is a computer program packet which is used to estimate the levels of pollution and the pollution sources by modeling of water quality. In the present study, firstly model is introduced and inputs, characteristics of the model is explained. Then, a part of Godavari Basin, which is one of the most important drinking sources of Godavari, is modeled.. The results obtained, reveal the level of the magnitude of the pollution on the tributary, which helps the decision-makers.