

An Artificial Intelligence Supported QUAL2K Model for the Simulation of Various Physiochemical Parameters of Water

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Abstract : Water pollution puts people's health at risk, and it can also impact the ecology. For practitioners of integrated water resources management (IWRM), water quality modelling may be useful for informing decisions about pollution control (such as discharge permitting) or demand management (such as abstraction permitting). To comprehend the current pollutant load, movement of effective load movement of contaminants generates effective relation between pollutants, mathematical simulation, source, and water quality is regarded as one of the best estimating tools. The current study involves the Qual2k model, which includes manual simulation of the various physiochemical characteristics of water. To this end, various sensors could be installed for the automatic simulation of various physiochemical characteristics of water. An artificial intelligence model has been proposed for the automatic simulation of water quality parameters. Models of water quality have become an effective tool for identifying worldwide water contamination, as well as the ultimate fate and behavior of contaminants in the water environment. Water quality model research is primarily conducted in Europe and other industrialized countries in the first world, where theoretical underpinnings and practical research are prioritized.

Keywords : artificial intelligence, QUAL2K, simulation, physiochemical parameters

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