PAPER MILL WASTEWATER TREATMENT: OFF LINE MEASUREMENT CORRELATIONS FOR MONITORING

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Abstract

This paper deals with the measurement problem on activated sludge process for industrial wastewater treatment. For an efficient monitoring of the process, frequent measurement update is essential but can not be realized with standard methods which are time consuming. In order to reduce the required time to obtain a measurement and easily data for modelling or observation validation, several correlations between main measurements have been established: BOD\textsubscript{21} vs. BOD\textsubscript{5}, BOD\textsubscript{5} vs. COD\textsubscript{S}, VSS vs. TSS and TSS vs. COD\textsubscript{P}. All the results have been collected on a semi-industrial pilot process provided with a real paper-mill effluent.

Keywords: wastewater treatment, measurements strategy, monitoring, activated sludge, paper mill

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