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NEW TECHNIQUE FOR SPEEDING UP THE WASTEWATER TREATMENT SIMULATIONS

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Abstract

The Landra Wastewater Treatment Expert System is developed by the University of Pannonia (Hungary, Veszprém). The flexible, simulation-based software provides the possibility to choose the built-in mathematical models or the user may create a new one arbitrarily. A customized program codes can be created according to the technological description, the input data and the control strategy provided by the user. This way the efficiency and reliability of the system is significantly enhanced. An important part of the program is the differential equation solving system. This paper presents the development of a new technique for speeding up the process of solving differential equations required for wastewater treatment simulations.

Key words: differential equation, simulation, solving methods, wastewater treatment

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