## DISCRETE SIMULATION APPROACH FOR SIMULATING WATER QUALITY IN DISTRIBUTION SYSTEMS

## Camelia GAVRILĂ, Grațiela TÂRLEA

Technical University of Civil Engineering Bucharest, ROMANIA 124, Lacul Tei Blvd, Tel:+40-21-242.12.08, Fax:+40-21-242.07.81 E-mail: cgavrila2003@yahoo.com, gratielatarlea@k.ro

## **ABSTRACT**

The solution of the time-varying water-quality problem is obtained in an event-oriented system-simulation framework. This allows for dynamic water-quality modeling that is less sensitive to the structure of the network and to the length of the simulation process itself than previously proposed method. In addition, numerical dispersion of concentration front profile resolution is nearly eliminated. The performance of the method is demonstrated by application to one example water distribution network.

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