

"Gh. Asachi" Technical University of Iasi, Romania

## ICEEM/03 – ENVIRONMENTAL ENGINEERING SECTION

Environmental Modelling, Simulation and Optimization

## MODELING OF THE ENVIRONMENTAL IMPACT OF COMPLEX STORAGE LAKES

Ion Giurma<sup>\*</sup>, Ioan Craciun, Catrinel-Raluca Giurma

Technical University of Iasi, Faculty of Hydrotechnics, Blvd. D.Mangeron 65, 700050, Iasi, Romania

## **Abstract**

The storage lakes are hydro technical constructions which satisfy the necessary of water for the users. Unfortunately, they induce unexpected changes in the natural environment. The evaluation of the all impact elements can offers solutions regarding the measures which have to be adopted for minimizing the negative effects of these antropic products and finding of solutions according to sustainable development principles. The mathematical modeling is an useful tool for impact assessment of the storage lake on environment.

*Keywords*: environment, pollution and risk, environment's constraints, mathematical modeling, impact assessment

<sup>\*</sup> Author to whom all correspondence should be addressed: Phone/Fax: +0400.232.231041, e-mail: igiurma@hidro.hidro.tuiasi.ro