Simulation of Gradostat Using FMI (Functional Mock-up Interface) Standard

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System simulations are used for modeling real dynamical processes that can be expressed in terms of ordinary differential equations, differential algebraic equations and discrete event simulation. There are many system simulation software tools and nearly all of them are suitable for modeling and simulation of gradostats. Most of them also support the FMI (Functional Mock-up Interface) standard for model exchange between them which gives us an opportunity to create much more reusable simulation softwares.

In this paper we demonstrate how to model and run system simulations of gradostat model using FMI standard.