

# DEVELOPMENT OF VBA-EXCEL SOFTWARE PACKAGE FOR SIMULATION CHEMICAL KINETICS TASKS

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**Abstract** – A software package has been developed for solving direct and inverse problems of chemical kinetics. The package is implemented as a VBA-Excel add-in and can be easily integrated with any other applications. The package includes three integrators of different levels of complexity, which taken together allow modeling dynamics of virtually any chemical and biological system, including hybrid ones, i.e. containing events that change the model structure itself. The package is characterized by a user-friendly interface and ease of use.

*Keywords:* Cauchy problem, direct and inverse chemical kinetics problem, Gaussian quadrature.