

ROCK FLOW DYNAMICS LTD.



FOUNDED

in 2005 r. [Grant received]

CORE OF THE INNOVATION

Development, implementation and support of an interactive package for hydrodynamic modeling of the deposit beds and data analysis.

FIELD OF ACTIVITY

Using supercomputer technologies for solving strategic problems of modeling exploitation of oil and gas deposits.

APPLICATIONS

New technologies allow substantially increase quality, resolution and realistic representation of 3D models of the deposits, and therefore increase effectiveness of the decisions made for their exploitation.

PEOPLE

GENERAL DIRECTOR: Vasily G. Shelkov, PhD in High Energy Physics

Peculiarities of the product



There have been developed new methods that let manifold increase the existing rates of model calculations for oil and gas deposits. This software is much better and faster than its best analogues both at the modern personal desktops with shared memory and at the multiprocessor clusters with distributed memory.



For the first time there has been realized an interactive 3D interface that provides controlling supercomputer calculations in real time. It substantially increases effectiveness and opens new opportunities for implementing "electronic deposits" and cloud calculations. A possibility of modeling complicated physical and chemical processes is used.