

Numerical reservoir flow simulations

[Numerical Model](#) of the [reservoir flow](#) dynamics.

It simulates the evolution in space and time of the following dynamic variables:

Pressure	Temperature	Phase Saturation	Phase flow velocity	Fluid composition in-situ	Inflow/Outflow well rates at sand interface
$p(t, \mathbf{r})$	$T(t, \mathbf{r})$	$s_{\alpha}(t, \mathbf{r})$	$\mathbf{u}_{\alpha}(t, \mathbf{r})$	$w_C(t, \mathbf{r})$	$q_{\alpha}(t, \mathbf{r})$

The simulations can be performed in [1D](#), [2D](#) or [3D](#) space.

See Also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Field Study & Modelling](#) / [Reservoir Flow Simulation](#)

[[Pressure Testing](#)]