

# Linking FLUENT and ChemApp for the simulation of a stirred water tank

K.Penttilä, VTT, Helsinki

## Abstract

The concept of “local equilibrium” is added on to classical CFD calculations using FLUENT. Thus it is possible to integrate chemical reactions into the fluid dynamics calculations. In the present case this combined approach is used to simulate the pH neutralization in a stirred water tank. An acid is added to a basic solution by a nozzle that is located in the center of the tank. The flow pattern is linked with the pH distribution.