

**Codes added:**

1. canteraChemistryReader: used for reading cantera formatted mechanisms. Please use this type of chemistry reader if you are going to use the cantera-openFoam interface.
2. reactingMixtureI.H: added to calculate the species mass diffusivity
3. canteraChemistryModel: added to replace the kinetic related functions in standardChemistryModel.
4. CVODE: added to use the CVODE stiff ODE solver in Sundials.
5. canteraPsiThermo.C: added to calculate the mixture thermal diffusivity and viscosity.

**Codes modified:**

1. Most of the files in thermoPysicalModels/reactionThermo and thermoPhysicalModels/chemistryModel and thermoPysicalModels/basic.
2. ODE/ODESolvers

**Solver added:**

CTreactingFoam which can be used for premixed/non-premixed flame simulations with detailed chemistry.