Please consider the following while running this modified RUPTURA code.

1. Some of the properties and parameters need to be specified in the breakthrough.cpp file (initialize function).

2. The equations are solved in terms of non-dimensioanlized variables.

3. The non-dimensioanlized variables are initialized in the breakthrough.cpp file (initialize function).

4. However the results are reported in the column.data file in terms of dimensioanlized variables.

2. I have implemented all the MATLAB code, however there are some differences:

a) The MATLAB code uses the WENO scheme, but in modified-RUPTURA we do not use the WENO, instead, I am using the same type of discretization as was implemented in the original RUPTURA.

b) The MATLAB code uses an Outlet ghost node for storing the process variables during the integration, such that the total number of grid points are (N+2). However, in this code, I have maintained the original RUPTURA scheme with (N+1) grid points.

3. The code uses the Dual-site Langmuir (DSL) model for pure component isotherm. The mixture adsorption is modeled using extended DSLF model.