

```
#####
set nCARBONS           ;# 6,8,10,12,14
set nQUARTERS          ;# 0,1,2,3,4
set TIME               ;# total time at end of this simulation (directory) (ie: 06)

set MOLECULE           tsb35-c${nCARBONS}
set GUEST
set LATTICE             ${MOLECULE}_0${nQUARTERS}-quarter_with-${GUEST}

set temperature        ;# in Kelvin

set minSteps           ;# number of steps in minimization
set runSteps           ;# number of steps in this simulation
#####

timestep               1.0
firsttimestep          0
stepspercycle          4

cutoff                 10.0
switching              on
switchdist             8.0
pairlistdist           12.0
margin                 1.0

coordinates            ../../${LATTICE}_simPDB.pdb
structure              ../../${LATTICE}_simPSF.psf
parameters             ../../../CHARMM-parameters/${MOLECULE}_charmm.params
paraTypeCharmm         on

if {1} {
if {$nQUARTERS == 0} {
    cellBasisVector1 152.490 8.520 0.000
    cellBasisVector2 68.866 136.320 0.000
    cellBasisVector3 0.000 0.000 100.000
    cellOrigin
#} elseif {$nQUARTERS == 1} {
#    cellBasisVector1 156.179 10.650 0.000
#    cellBasisVector2 68.866 140.580 0.000
#    cellBasisVector3 0.000 0.000 100.000
#    cellOrigin
} elseif {$nQUARTERS == 2} {
    cellBasisVector1 159.868 12.780 0.000
    cellBasisVector2 68.866 144.840 0.000
    cellBasisVector3 0.000 0.000 100.000
    cellOrigin
#} elseif {$nQUARTERS == 3} {
#    cellBasisVector1 163.558 14.910 0.000
#    cellBasisVector2 68.866 149.100 0.000
#    cellBasisVector3 0.000 0.000 100.000
#    cellOrigin
} elseif {$nQUARTERS ==4} {
    cellBasisVector1 167.247 17.040 0.000

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cellBasisVector2  68.866   153.360   0.000
cellBasisVector3  0.000    0.000   100.000
cellOrigin        79.912   57.515   0.000
}
} else {
  puts "Cell basis vectors not set."
{
}

wrapAll          on
wrapNearest      on

exclude          scaled1-4
1-4scaling       0.4

temperature      $temperature
rescaleFreq      10
rescaleTemp      $temperature

CoMmotion        no
rigidBonds       all

fixedAtoms       on
fixedAtomsFile   ../../${LATTICE}_fixedPDB.pdb
fixedAtomsCol    B

outputname       ${LATTICE}_${temperature}K_${TIME}ns_OUTPUT
binaryoutput     no
outputEnergies   1000

restartname      ${LATTICE}_${temperature}K_${TIME}ns_RESTART
restartfreq      5000

DCDfile          ${LATTICE}_${temperature}K_${TIME}ns_DCD.dcd
DCDfreq         1000

minimize         $minSteps

run              $runSteps

```