

Files generated by R.E.D. Server Development/PyRED
Force field generation for dimethylalanine dipeptide and its three molecular fragments
Programs interfaced: Gaussian 2009 & RESP 2.4

Mol_m1

Already described in previous examples

Mol_m2

Already described in previous examples

Mol_m3

Already described in previous examples

[...]

Mol_m6

Already described in previous examples

Mol_MM

Mol_MM/Mol_mm1-c1.mol2

Mol_MM/Mol_mm1-c2.mol2

Mol_MM/Mol_mm2-c1.mol2

Mol_MM/Mol_mm3-c1.mol2

Mol_MM/Mol_mm3-c2.mol2

Mol_MM/Mol_mm4-c1.mol2

Mol_MM/Mol_mm4-c2.mol2

Mol_MM/Mol_mm5-c1.mol2

Mol_MM/Mol_mm6-c1.mol2

Mol_MM/Mol_mm6-c2.mol2

Mol_MM/Mol_mm-charge.txt

Mol_MM/Statistics_mm.txt

Mol_MM/esmpot_mm.pdb

Mol_MM/esout_mm.out

Mol_MM/espot_mm.dat

Mol_MM/esp_mm.pdb

Mol_MM/esqpot_mm.pdb

Mol_MM/input1_mm.in

Mol_MM/input2_mm.in

Mol_MM/output1_mm.log

Mol_MM/output2_mm.log

Mol_MM/punch1_mm.dat

Mol_MM/punch2_mm.dat

Mol_MM/qout1_mm.dat

Mol_MM/qout2_mm.dat

Multiple molecules

Force field library for mol. 1 conf. 1 (dipeptide used in the central fragment)

Force field library for mol. 1 conf. 2 (dipeptide used in the central fragment)

Force field library for mol. 2 conf. 1 (methylammonium)

Force field library for mol. 3 conf. 1 (dipeptide used in the N-term. fragment)

Force field library for mol. 3 conf. 2 (dipeptide used in the N-term. fragment)

Force field library for mol. 4 conf. 1 (dipeptide used in the C-term. fragment)

Force field library for mol. 4 conf. 2 (dipeptide used in the C-term. fragment)

Force field library for mol. 5 conf. 1 (acetate)

Force field library for mol. 6 conf. 1 (dipeptide itsef)

Force field library for mol. 6 conf. 2 (dipeptide itsef)

Charge values before and after rounding off error corrections

Different types of charge values are compared

PDB-like file with MEP values computed with charges in the TempFactor field esout file

All espot concatenated into a single file - all mol. all conf. all orient.

PDB-like file with relative residual in the TempFactor field

PDB-like file with input MEP values in the TempFactor field

Multiple molecules - resp input stage 1

Multiple molecules - resp input stage 2

Multiple molecules - resp log/output stage 1

Multiple molecules - resp log/output stage 2

Multiple molecules - resp punch stage 1

Multiple molecules - resp punch stage 2

Multiple molecules - charge values stage 1

Multiple molecules - charge values stage 2

Mol_MM/INTER
INTER/m2-c1_m2-c1_f1.mol2
INTER/m2-c1_m2-c1.mol2
INTER/m2-c1_m2-c2_f1.mol2
INTER/m2-c1_m2-c2.mol2
INTER/m4-c1_m5-c1_f1.mol2
INTER/m4-c1_m5-c1.mol2
INTER/m4-c2_m5-c1_f1.mol2
INTER/m4-c2_m5-c1.mol2
Mol_MM/INTER/mm1
INTER/mm1/m1-c1_f1.mol2
INTER/mm1/m1-c1_f2.mol2
INTER/mm1/m1-c1_f3.mol2
INTER/mm1/m1-c2_f1.mol2
INTER/mm1/m1-c2_f2.mol2
INTER/mm1/m1-c2_f3.mol2
Mol_MM/INTER/mm2
Mol_MM/INTER/mm3
Mol_MM/INTER/mm4
Mol_MM/INTER/mm5

Data-Default-Proj/

Data-Default-Proj/Configuration.py
Data-Default-Proj/Mol_red1.pdb
[...]
Data-Default-Proj/Mol_red6.pdb
Data-Default-Proj/Project.config
Data-Default-Proj/frcmod.correspondence
Data-Default-Proj/frcmod.known
Data-Default-Proj/frcmod.unknown
Data-Default-Proj/leaprc.ff13q4mdfft
Data-Default-Proj/readme.txt
Data-Default-Proj/P2N

mol. 2 + mol. 3 conf. 1: N-term. fragment
mol. 2 + mol. 3 conf. 1
mol. 2 + mol. 3 conf. 2: N-term. fragment
mol. 2 + mol. 3 conf. 2
mol. 4 conf. 1 + mol. 5: C-term. fragment
mol. 4 conf. 1 + mol. 5
mol. 4 conf. 2 + mol. 5: C-term. fragment
mol. 4 conf. 2 + mol. 5

mol. 1 conf. 1 intra-mcc 1: fragment 1
mol. 1 conf. 1 intra-mcc 2: fragment 2
mol. 1 conf. 1 intra-mcc 1 + 2: Central fragment
mol. 1 conf. 2 intra-mcc 1: fragment 1
mol. 1 conf. 2 intra-mcc 2: fragment 2
fastermol. 1 conf. 2 intra-mcc 1 + 2: Central fragment

fragment, that derives from methylammonium
fragments, that derive from dipeptide 3
fragments, that derive from dipeptide 4
fragment, that derives from acetate

Configuration.py used in the job
PDB input file for **mol. 1** - optimized geometry

PDB input file for **mol. 6** - optimized geometry
Project.config used in the job
List of force field parameters determined by analogy to known ones
List of known force field parameters for dimethylalanine and its different fragments
List of unknown force field parameters for dimethylalanine and its different fragments
LEaP script: loads the generated force field for dimethylalanine and its different fragments
Documentation is always printed
List of P2N files to be used with the former versions fo R.E.D. (perl)