

Files generated by R.E.D. Server Development/PyRED
Force field generation for the *N*-terminal fragment of the dimethylalanine residue
Programs interfaced: Gaussian 2009 & RESP 2.4

Mol m1

Mol m1/File4REDDDB m1.pdb
Mol m1/JOB1-gau m1-1.gjf
Mol m1/JOB1-gau m1-1.out
Mol m1/JOB2-gau m1-1-1.gjf
Mol m1/JOB2-gau m1-1-1.out
Mol m1/JOB2-gau m1-1-2.gjf
Mol m1/JOB2-gau m1-1-2.out
Mol m1/Mol-sm m1-c1.mol2
Mol m1/Mol-sm m1-charge.txt
Mol m1/Mol m1-c1-qmra.pdb
Mol m1/Mol m1-c1-rbra1.pdb
Mol m1/Mol m1-c1-rbra2.pdb
Mol m1/Statistics m1.txt
Mol m1/esmpot-sm m1.pdb
Mol m1/esout-sm m1.out
Mol m1/espot m1.dat
Mol m1/espot m1-1-1.dat
Mol m1/espot m1-1-2.dat
Mol m1/esp-sm m1.pdb
Mol m1/esqpot-sm m1.pdb
Mol m1/input1-sm m1.in
Mol m1/input2-sm m1.in
Mol m1/output1-sm m1.log
Mol m1/output2-sm m1.log
Mol m1/punch1-sm m1.dat
Mol m1/punch2-sm m1.dat
Mol m1/qout1-sm m1.dat
Mol m1/qout2-sm m1.dat

Mol m2

Mol m2/File4REDDDB m2.pdb
Mol m2/JOB1-gau m2-1.gjf
Mol m2/JOB1-gau m2-1.out
Mol m2/JOB1-gau m2-2.gjf
Mol m2/JOB1-gau m2-2.out

Mol. 1 single molecule (sm)

PDB file for project submission in R.E.DD.B.
QM Geometry optimization input mol. m1 conf. 1
QM Geometry optimization output mol. m1 conf. 1
QM MEP computation input mol. m1 conf. 1 orient. 1
QM MEP computation output mol. m1 conf. 1 orient. 1
QM MEP computation input mol. m1 conf. 1 orient. 2
QM MEP computation output mol. m1 conf. 1 orient. 2
Force field library mol. m1 conf. 1
Charge values before and after rounding off error corrections
Optimized geometry - QM orientation
Optimized geometry - mol. m1 conf. 1 orient. 1 used in MEP computation
Optimized geometry - mol. m1 conf. 1 orient. 2 used in MEP computation
Different types of charge values are compared
PDB-like file with MEP values computed with charges in the TempFactor field
esout file
All espot related to molecule 1 concatenated into a single file
espot file mol. m1 conf. 1 orient. 1
espot file mol. m1 conf. 1 orient. 2
PDB-like file with relative residual in the TempFactor field
PDB-like file with input MEP values in the TempFactor field
Single molecule resp input stage 1
Single molecule resp input stage 2
Single molecule resp log/output stage 1
Single molecule resp log/output stage 2
Single molecule resp punch stage 1
Single molecule resp punch stage 2
Single molecule charge values stage 1
Single molecule charge values stage 2

Mol. 2 single molecule (sm) with intra-mcc (ia)

PDB file for project submission in R.E.DD.B.
QM Geometry optimization input mol. m2 conf. 1
QM Geometry optimization output mol. m2 conf. 1
QM Geometry optimization input mol. m2 conf. 1
QM Geometry optimization output mol. m2 conf. 2

Mol_m2/JOB2-gau_m2-1-1.gjf	QM MEP computation input mol. m2 conf. 1 orient. 1
Mol_m2/JOB2-gau_m2-1-1.out	QM MEP computation output mol. m2 conf. 1 orient. 1
Mol_m2/JOB2-gau_m2-1-2.gjf	QM MEP computation input mol. m2 conf. 1 orient. 2
Mol_m2/JOB2-gau_m2-1-2.out	QM MEP computation output mol. m2 conf. 1 orient. 2
Mol_m2/JOB2-gau_m2-2-1.gjf	QM MEP computation input mol. m2 conf. 2 orient. 1
Mol_m2/JOB2-gau_m2-2-1.out	QM MEP computation output mol. m2 conf. 2 orient. 1
Mol_m2/JOB2-gau_m2-2-2.gjf	QM MEP computation input mol. m2 conf. 2 orient. 2
Mol_m2/JOB2-gau_m2-2-2.out	QM MEP computation output mol. m2 conf. 2 orient. 2
Mol_m2/Mol-ia1_m2-c1.mol2	Force field library - Fragment 1- mol. m2 conf. 1 - with intra-mcc
Mol_m2/Mol-ia1_m2-c2.mol2	Force field library - Fragment 1- mol. m2 conf. 2 - with intra-mcc
Mol_m2/Mol-ia_m2-charge.txt	Charge values before and after rounding off error corrections (with intra-mcc)
Mol_m2/Mol-sm_m2-c1.mol2	Force field library mol. m2 conf. 1
Mol_m2/Mol-sm_m2-c2.mol2	Force field library mol. m2 conf. 2
Mol_m2/Mol-sm_m2-charge.txt	Charge values before and after rounding off error corrections (without intra-mcc)
Mol_m2/Mol_m2-c1-qmra.pdb	Optimized geometry - QM orientation mol. m2 conf. 1
Mol_m2/Mol_m2-c1-rbra1.pdb	Optimized geometry - mol. m2 conf. 1 orient. 1 used in MEP computation
Mol_m2/Mol_m2-c1-rbra2.pdb	Optimized geometry - mol. m2 conf. 1 orient. 2 used in MEP computation
Mol_m2/Mol_m2-c2-qmra.pdb	Optimized geometry - QM orientation mol. m2 conf. 2
Mol_m2/Mol_m2-c2-rbra1.pdb	Optimized geometry - mol. m2 conf. 2 orient. 1 used in MEP computation
Mol_m2/Mol_m2-c2-rbra2.pdb	Optimized geometry - mol. m2 conf. 2 orient. 2 used in MEP computation
Mol_m2/Statistics_m2.txt	Different types of charge values are compared
Mol_m2/esmpot-ia_m2.pdb	PDB with MEP values comput. with charges in TempFact. field (fit with intra-mcc)
Mol_m2/esmpot-sm_m2.pdb	PDB with MEP values comput. with charges in TempFact. field (fit without intra-mcc)
Mol_m2/esout-ia_m2.out	esout file (fit with intra-mcc)
Mol_m2/esout-sm_m2.out	esout file (fit without intra-mcc)
Mol_m2/espot_m2.dat	All espot files related to molecule 1 concatenated into a single file
Mol_m2/espot_m2-1-1.dat	espot file mol. m2 conf. 1 orient. 1
Mol_m2/espot_m2-1-2.dat	espot file mol. m2 conf. 1 orient. 2
Mol_m2/espot_m2-2-1.dat	espot file mol. m2 conf. 2 orient. 1
Mol_m2/espot_m2-2-2.dat	espot file mol. m2 conf. 2 orient. 2
Mol_m2/esp-ia_m2.pdb	PDB with relative residual in TempFact. field (fit with intra-mcc)
Mol_m2/esp-sm_m2.pdb	PDB with relative residual in TempFact. field (fit without intra-mcc)
Mol_m2/esqpot-ia_m2.pdb	PDB with input MEP values in TempFact. field (fit with intra-mcc)
Mol_m2/esqpot-sm_m2.pdb	PDB with input MEP values in TempFact. field (fit without intra-mcc)
Mol_m2/input1-ia_m2.in	Single mol. - 2 conf. - 2 orient. resp input stage 1 (fit with intra-mcc)
Mol_m2/input1-sm_m2.in	Single mol. - 2 conf. - 2 orient. resp input stage 1 (fit without intra-mcc)
Mol_m2/input2-ia_m2.in	Single mol. - 2 conf. - 2 orient. resp input stage 2 (fit with intra-mcc)
Mol_m2/input2-sm_m2.in	Single mol. - 2 conf. - 2 orient. resp input stage 2 (fit without intra-mcc)
Mol_m2/output1-ia_m2.log	Single mol. - 2 conf. - 2 orient. resp log/output stage 1 (fit with intra-mcc)
Mol_m2/output1-sm_m2.log	Single mol. - 2 conf. - 2 orient. resp log/output stage 1 (fit without intra-mcc)

Mol_m2/output2-ia_m2.log
Mol_m2/output2-sm_m2.log
Mol_m2/punch1-ia_m2.dat
Mol_m2/punch1-sm_m2.dat
Mol_m2/punch2-ia_m2.dat
Mol_m2/punch2-sm_m2.dat
Mol_m2/qout1-ia_m2.dat
Mol_m2/qout1-sm_m2.dat
Mol_m2/qout2-ia_m2.dat
Mol_m2/qout2-sm_m2.dat

Mol_MM

Mol_MM/Mol_mm2-c1.mol2
Mol_MM/Mol_mm2-c1.mol2
Mol_MM/Mol_mm2-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

Mol_MM/INTER

INTER/m1-c1_m2-c1.mol2
INTER/m1-c1_m2-c1_f1.mol2
INTER/m1-c1_m2-c2.mol2
INTER/m1-c1_m2-c2_f1.mol2
INTER/mm1
INTER/mm2

Single mol. - 2 conf. - 2 orient. resp log/output stage 2 (fit with intra-mcc)
Single mol. - 2 conf. - 2 orient. resp log/output stage 2 (fit without intra-mcc)
Single mol. - 2 conf. - 2 orient. resp punch stage 1 (fit with intra-mcc)
Single mol. - 2 conf. - 2 orient. resp punch stage 1 (fit without intra-mcc)
Single mol. - 2 conf. - 2 orient. resp punch stage 2 (fit with intra-mcc)
Single mol. - 2 conf. - 2 orient. resp punch stage 2 (fit without intra-mcc)
Single mol. - 2 conf. - 2 orient. Charge values stage 1 (fit with intra-mcc)
Single mol. - 2 conf. - 2 orient. Charge values stage 1 (fit without intra-mcc)
Single mol. - 2 conf. - 2 orient. Charge values stage 2 (fit with intra-mcc)
Single mol. - 2 conf. - 2 orient. Charge values stage 2 (fit without intra-mcc)

Multiple molecules (with intra-mcc & inter-mcc)

Force field library for mol. 1 conf. 1
Force field library for mol. 2 conf. 1
Force field library for mol. 2 conf. 2
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 (with intra-mcc & inter-mcc)
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 (with intra-mcc & inter-mcc)
Multiple molecules - resp input stage 2 (with intra-mcc & inter-mcc)
Multiple molecules - resp log/output stage 1 (with intra-mcc & inter-mcc)
Multiple molecules - resp log/output stage 2 (with intra-mcc & inter-mcc)
Multiple molecules - resp punch stage 1 (with intra-mcc & inter-mcc)
Multiple molecules - resp punch stage 2 (with intra-mcc & inter-mcc)
Multiple molecules - charge values stage 1 (with intra-mcc & inter-mcc)
Multiple molecules - charge values stage 2 (with intra-mcc & inter-mcc)

N-terminal fragment mol. 1 + mol.2 conf. 1: mol. fusion

N-terminal fragment mol. 1 + mol.2 conf. 1: mol. fusion & remove the caps

N-terminal fragment mol. 1 + mol.2 conf. 2: mol. fusion

N-terminal fragment mol. 1 + mol.2 conf. 2: mol. fusion & remove the caps

Fragments related to mol. 1 in the multiple molecule job

Fragments related to mol. 2 in the multiple molecule job

Data-Default-Proj/

Data-Default-Proj/Configuration.py

Data-Default-Proj/Mol_red1.pdb

Data-Default-Proj/Mol_red2.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

Configuration.py used in the job

PDB input file for mol. 1 - optimized geometry

PDB input file for mol. 2 - 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 the *N*-terminal fragment of dimethylalanine

List of unknown force field parameters for the *N*-terminal fragment of dimethylalanine

LEaP script: loads the generated force field for the *N*-terminal fragment of dimethylalanine

Documentation is always printed

List of P2N files to be used with the former versions fo R.E.D. (perl)