

**Files generated by R.E.D. Server Development/PyRED**  
**Force field generation for ten organic molecules**  
**Programs interfaced: Gaussian 2009 & RESP 2.4**

**Mol\_m1**

Mol\_m1/File4REDDB\_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**

Similar files but with \_m2 instead \_m1

[...]

**Mol\_m10**

Similar files but with \_m10 instead \_m1

**Mol. 1 single molecule (sm)**

PDB file for project submission in R.E.D.D.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 mol. 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\_MM

Mol\_MM/Mol\_mm1-c1.mol2  
Mol\_MM/Mol\_mm2-c1.mol2  
[...]  
Mol\_MM/Mol\_mm10-c1.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

## Data-Default-Proj/

Data-Default-Proj/Configuration.py  
Data-Default-Proj/Mol\_red1.pdb  
Data-Default-Proj/Mol\_red2.pdb  
[...]  
Data-Default-Proj/Mol\_red10.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

## Multiple molecules

Force field library for mol. 1 conf. 1  
Force field library for mol. 2 conf. 1

Force field library for mol. 10 conf. 1

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

Configuration.py used in the job

PDB input file for mol. 1 - optimized geometry

PDB input file for mol. 2 - optimized geometry

PDB input file for mol. 10 - 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 ten organic molecules

List of unknown force field parameters for ten organic molecules

LEaP script : loads the generated force field for ten organic molecules

Documentation is always printed

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