

Files generated by R.E.D. Server/R.E.D. IV
Charge derivation & force field library building for the different fragments
of a new nucleotide.

Programs interfaced: Gaussian 2003 & RESP

Parent_directory

Mol_m1

File4REDDb_m1.pdb
JOB2-gau_m1-1-1.com
JOB2-gau_m1-1-1.out
JOB2-gau_m1-1-2.com
JOB2-gau_m1-1-2.out
JOB2-gau_m1-1-3.com
JOB2-gau_m1-1-3.out
JOB2-gau_m1-1-4.com
JOB2-gau_m1-1-4.out
Mol_m1-01-gmra.pdb
Mol_m1-01-rbra1.pdb
Mol_m1-01-rbra2.pdb
Mol_m1-01-rbra3.pdb
Mol_m1-01-rbra4.pdb
Mol_m1-01.mol2
esout_m1
espot_m1
espot_m1-1-1
espot_m1-1-2
espot_m1-1-3
espot_m1-1-4
input1_m1
input2_m1
output1_m1
output2_m1
punch1_m1
punch2_m1
gout1_m1
gout2_m1

Single molecule charge derivation

m1 = molecule 1
Gaussian input: m1-1-1: molecule 1; conformation 1; orientation 1
Gaussian output

conformation 1; Orientation of opt. geometry based on the Gaussian program
Rigid-body re-orientation algorithm: conformation 1; orientation 1

conformation 1; Force field library

RESP output
Four espots of molecule 1 concatenated in a single file
m1-1-1: molecule 1; conformation 1; orientation 1

RESP input - single molecule (stage 1)
RESP input - single molecule (stage 2)
RESP output - single molecule (stage 1)
RESP output - single molecule (stage 2)
RESP output - single molecule (stage 1)
RESP output - single molecule (stage 2)
RESP output (charge values - stage 1)
RESP output (charge values - stage 2)

Mol_m2

File4REDDb_m2.pdb
JOB2-gau_m2-1-1.com
JOB2-gau_m2-1-1.out
JOB2-gau_m2-1-2.com
JOB2-gau_m2-1-2.out
JOB2-gau_m2-1-3.com
JOB2-gau_m2-1-3.out
JOB2-gau_m2-1-4.com
JOB2-gau_m2-1-4.out
Mol_m2-01-gmra.pdb
Mol_m2-01-rbra1.pdb
Mol_m2-01-rbra2.pdb
Mol_m2-01-rbra3.pdb
Mol_m2-01-rbra4.pdb
Mol_m2-01.mol2
esout_m2
espot_m2
espot_m2-1-1
espot_m2-1-2
espot_m2-1-3
espot_m2-1-4
input1_m2
input2_m2
output1_m2
output2_m2
punch1_m2
punch2_m2
gout1_m2
gout2_m2

Single molecule charge derivation

m2 = molecule 2
Gaussian input: m2-1-1: molecule 2; conformation 1; orientation 1
Gaussian output

conformation 1; Orientation of opt. geometry based on the Gaussian program
Rigid-body re-orientation algorithm: conformation 1; orientation 1

conformation 1; Force field library

RESP output
Four espots of molecule 2 concatenated in a single file
m2-1-1: molecule 2; conformation 1; orientation 1

RESP input - single molecule (stage 1)
RESP input - single molecule (stage 2)
RESP output - single molecule (stage 1)
RESP output - single molecule (stage 2)
RESP output - single molecule (stage 1)
RESP output - single molecule (stage 2)
RESP output (charge values - stage 1)
RESP output (charge values - stage 2)

See next page...

Mol_MM	Multiple molecules charge derivation
esout_mm	RESP output - multiple molecules (stage 1) (with inter-mcc)
espot_mm	8 espot of molecules 1 & 2 concatenated in a single file
input1_mm	RESP input - multiple molecules (stage 1) (with inter-mcc)
input2_mm	RESP input - multiple molecules (stage 2) (with inter-mcc)
mm1-o1.FG1.mol2	Molecule 1 - conformation 1 - fragment 1
mm1-o1.mol2	Molecule 1 - conformation 1
mm2-o1-CT-A.mol2	Central fragment - Molecule 2 - conformation 1 - Topology A
mm2-o1-CT-B.mol2	Central fragment - Molecule 2 - conformation 1 - Topology B
mm2-o1-OX-A.mol2	X'-terminal fragment - Molecule 2 - conformation 1 - Topology A
mm2-o1-OX-B.mol2	X'-terminal fragment - Molecule 2 - conformation 1 - Topology B
mm2-o1-OY-A.mol2	Y'-terminal fragment - Molecule 2 - conformation 1 - Topology A
mm2-o1-OY-B.mol2	Y'-terminal fragment - Molecule 2 - conformation 1 - Topology B
mm2-o1.FG1.mol2	Molecule 2 - conformation 1 - fragment 1
mm2-o1.mol2	Molecule 2 - conformation 1
output1_mm	RESP output - multiple molecules (stage 1) (with inter-mcc)
output2_mm	RESP output - multiple molecules (stage 2) (with inter-mcc)
punch1_mm	RESP output - multiple molecules (stage 1) (with inter-mcc)
punch2_mm	RESP output - multiple molecules (stage 2) (with inter-mcc)
qout1_mm	RESP output - multiple molecules (stage 1) (with inter-mcc)
qout2_mm	RESP output - multiple molecules (stage 2) (with inter-mcc)