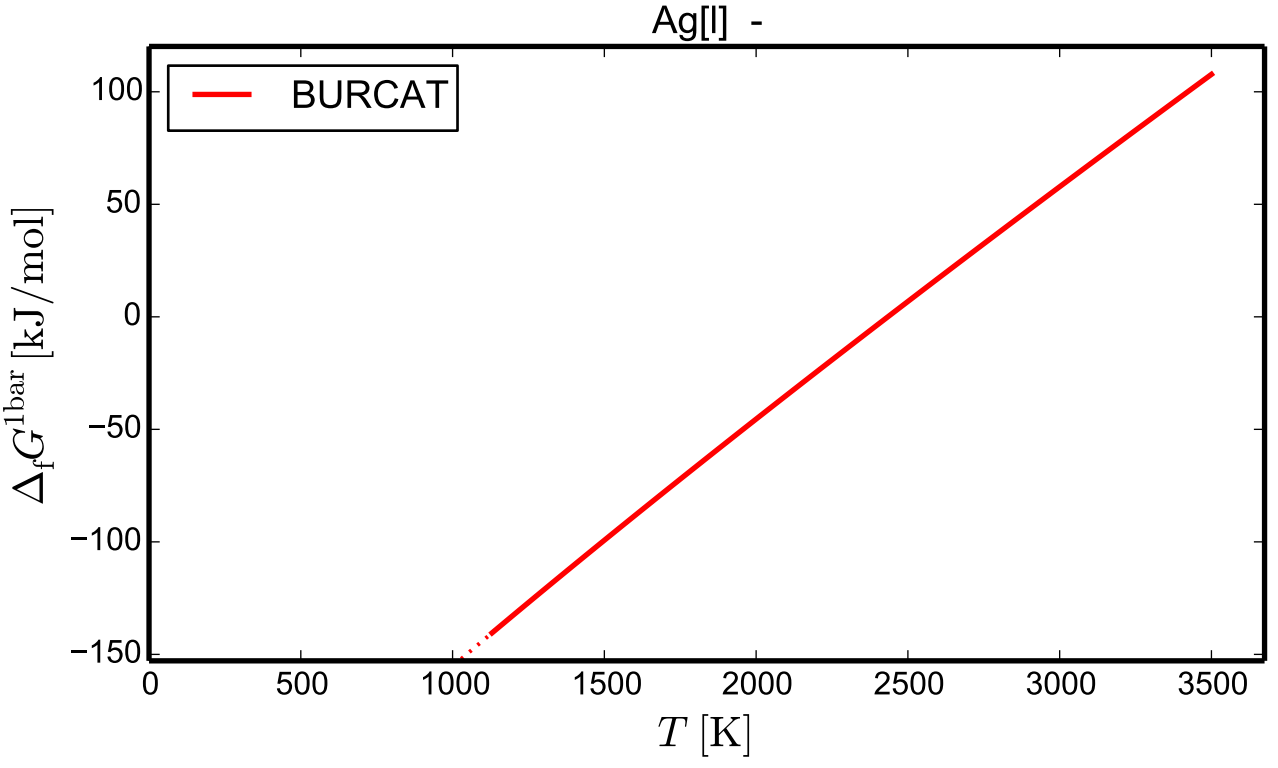
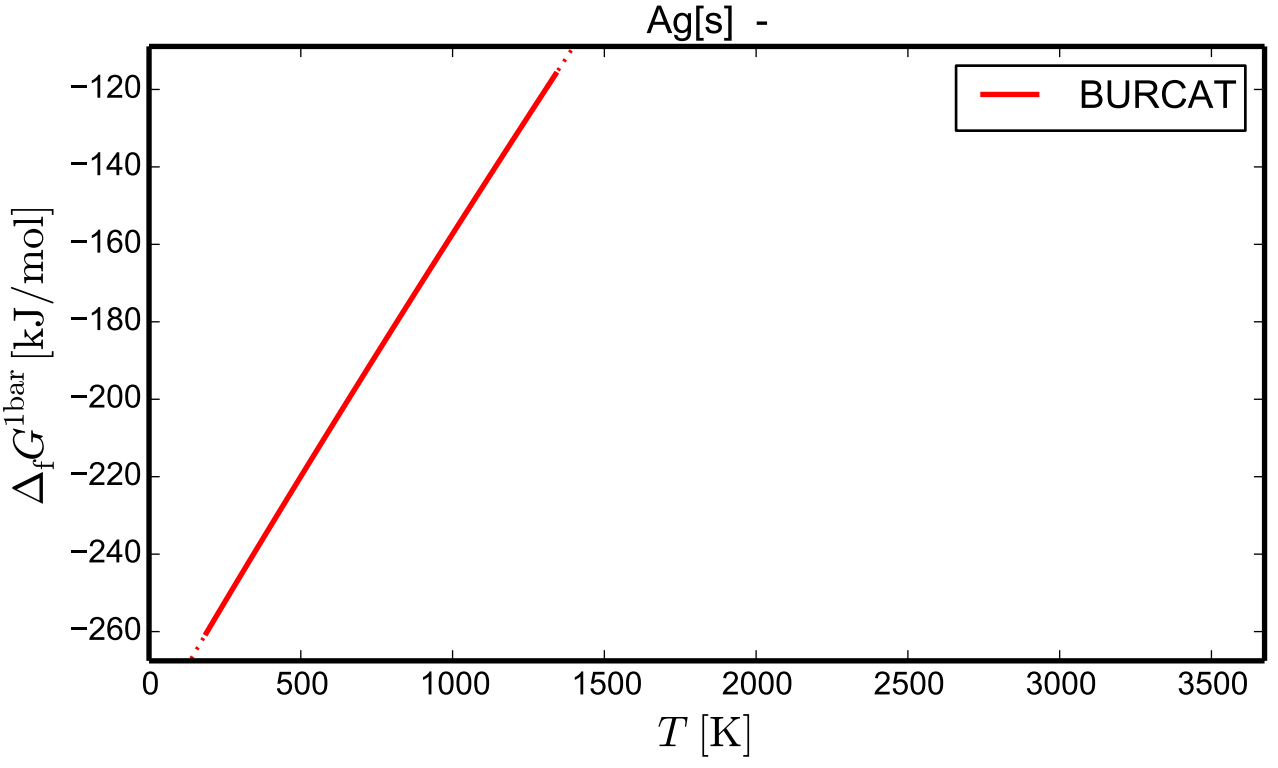
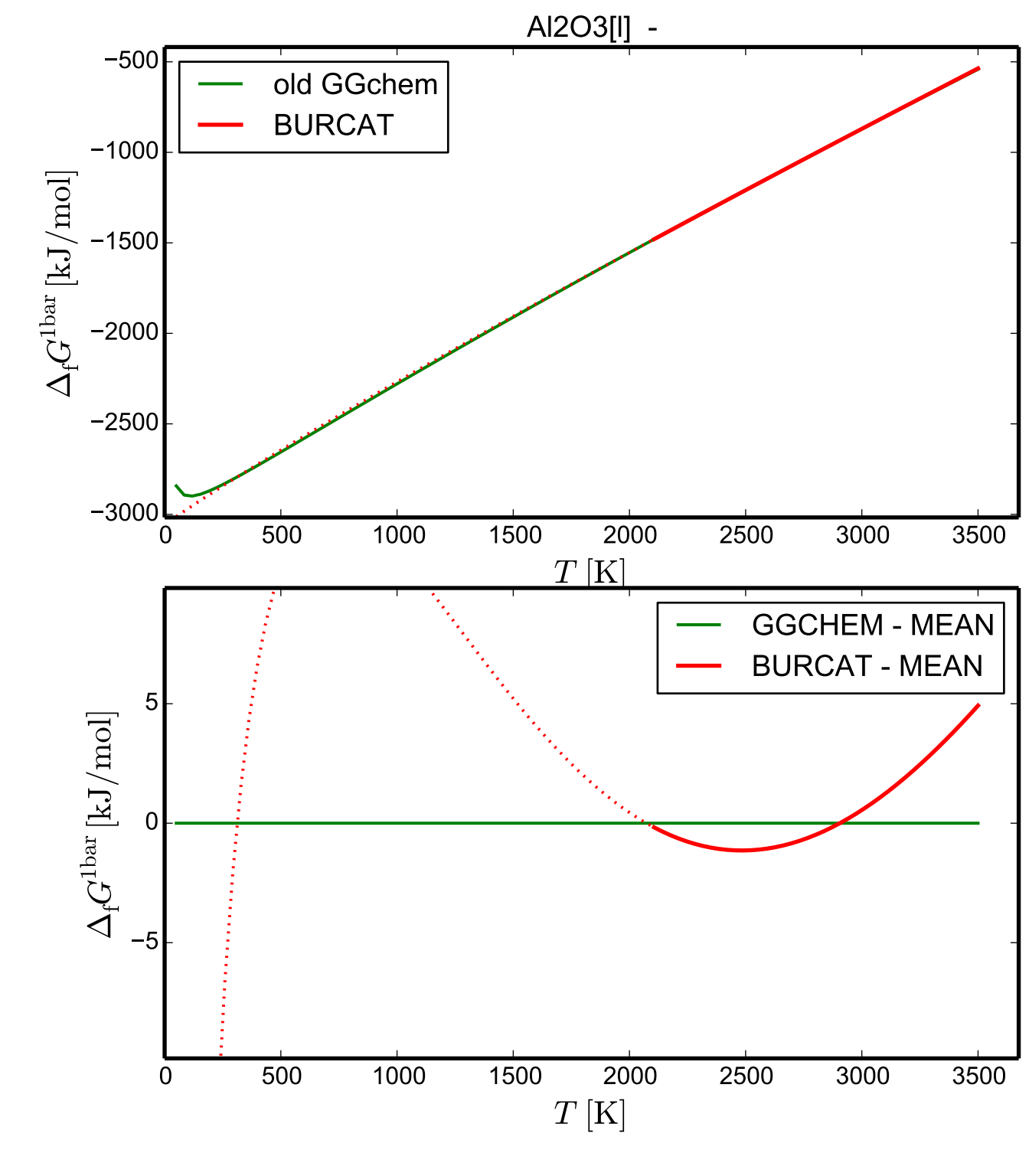
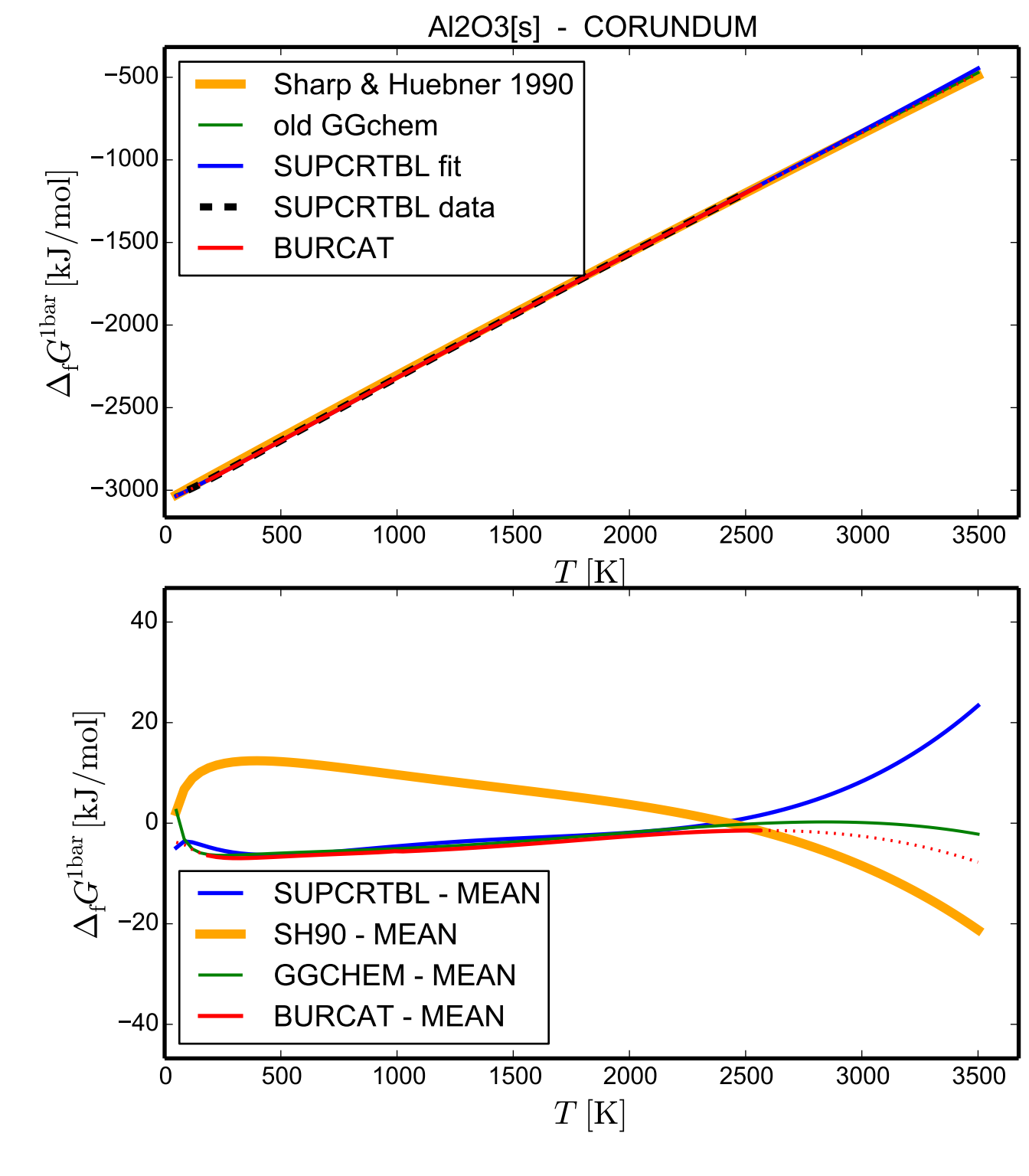
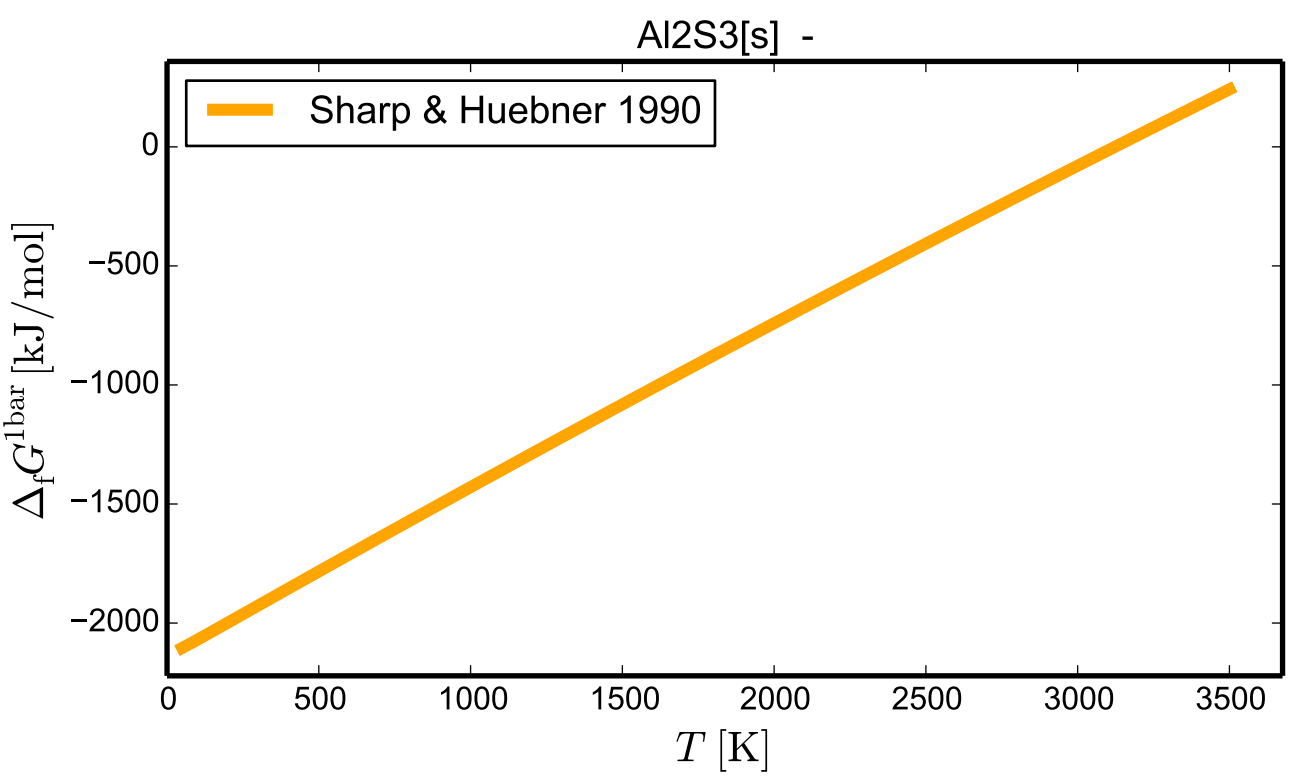
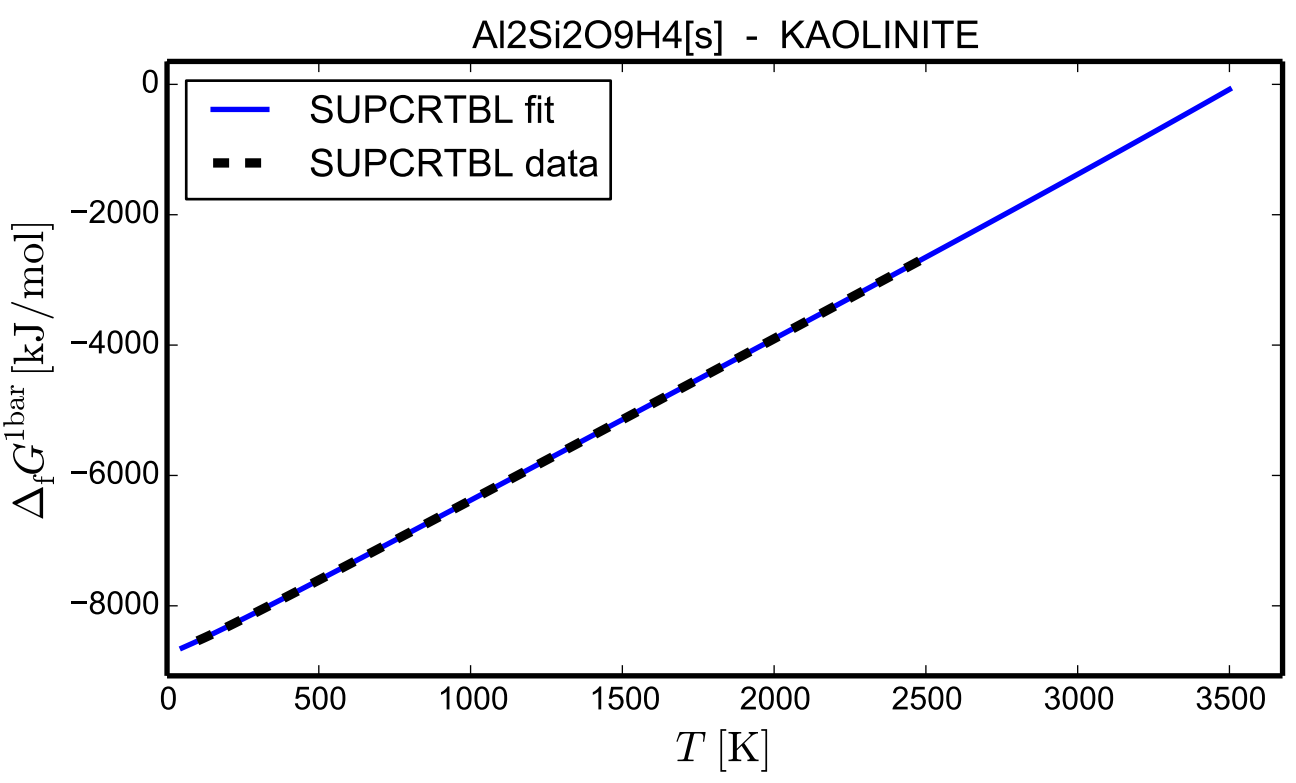

Ag[l] -
BURCAT
100
50
0
−50
−100
−150
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

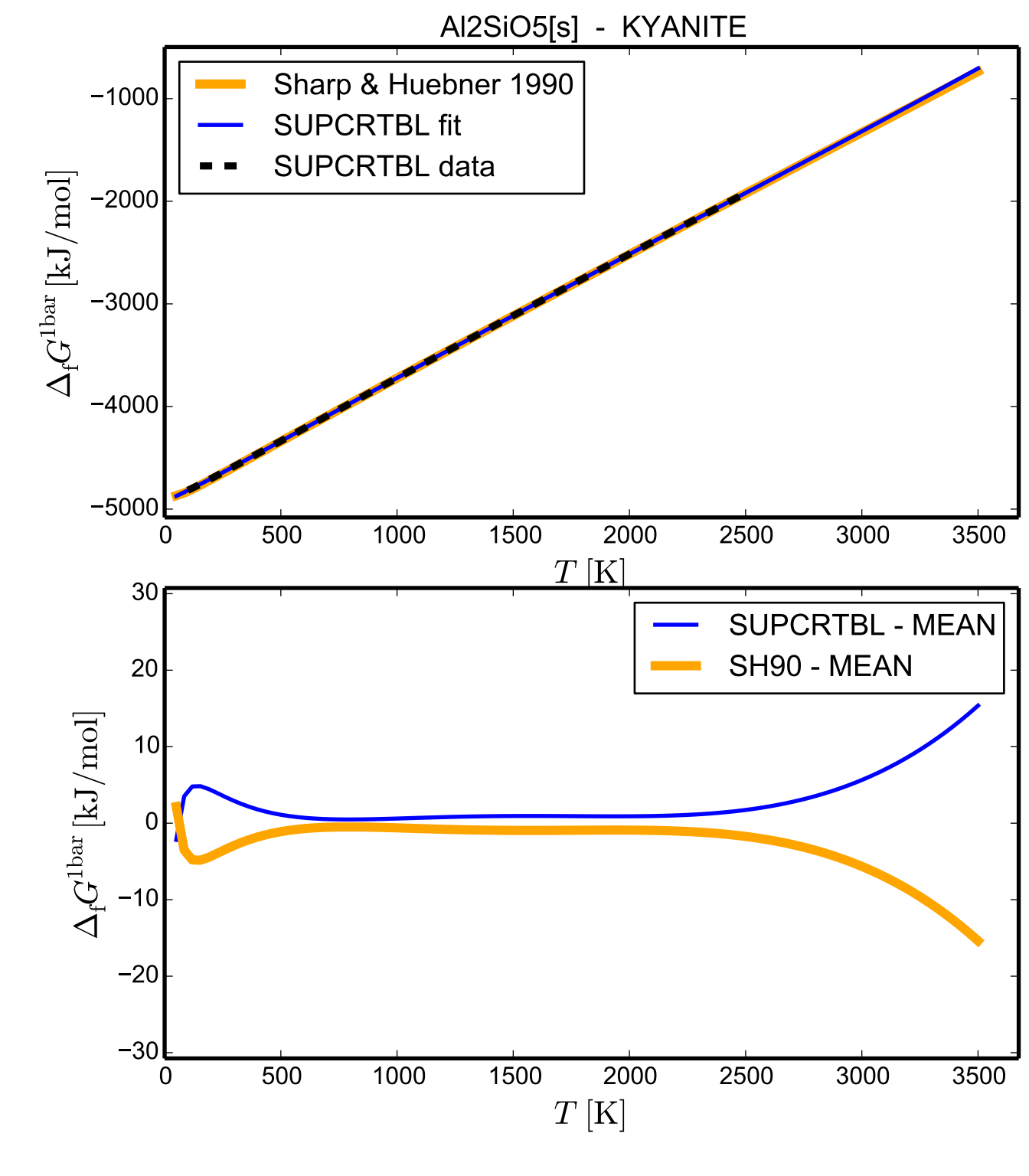

Ag[s] -
BURCAT
−120
−140
−160
−180
−200
−220
−240
−260
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

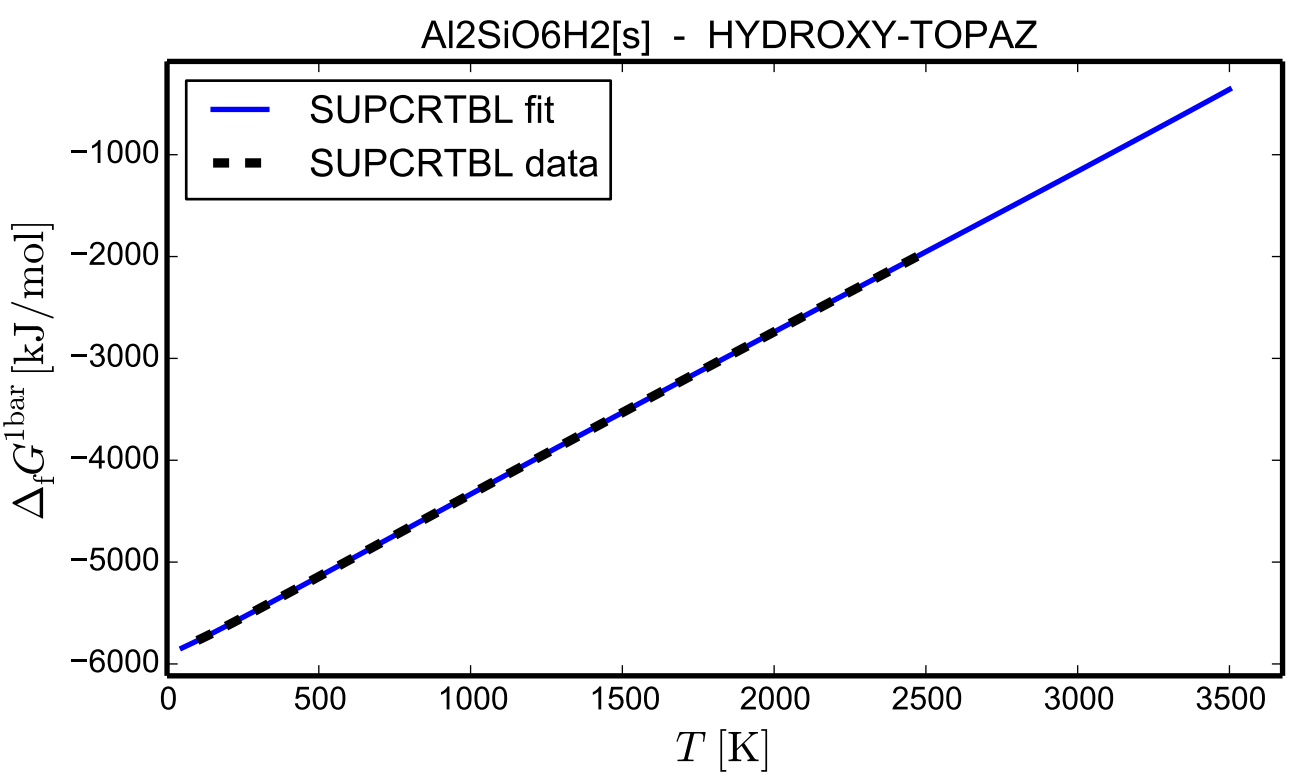

Al2O3[l] -
old GGchem
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

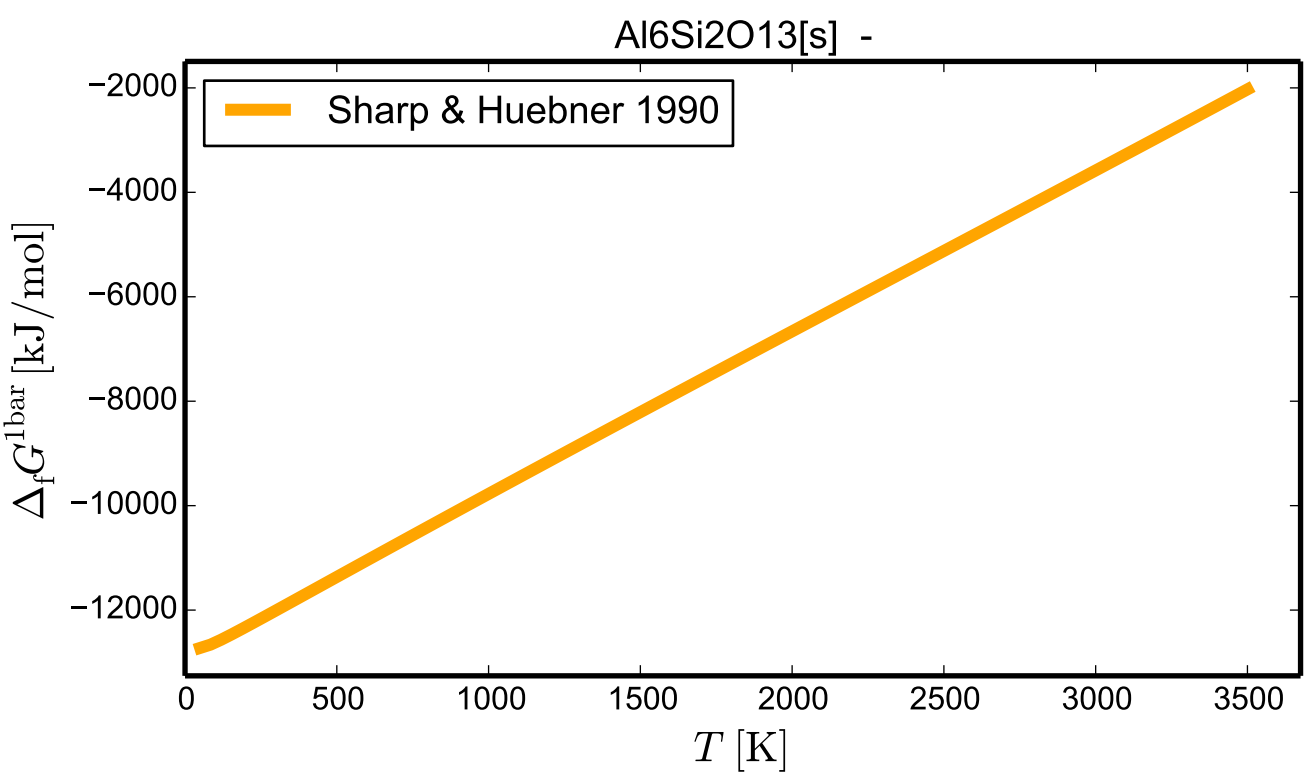

Al2O3[s] - CORUNDUM
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

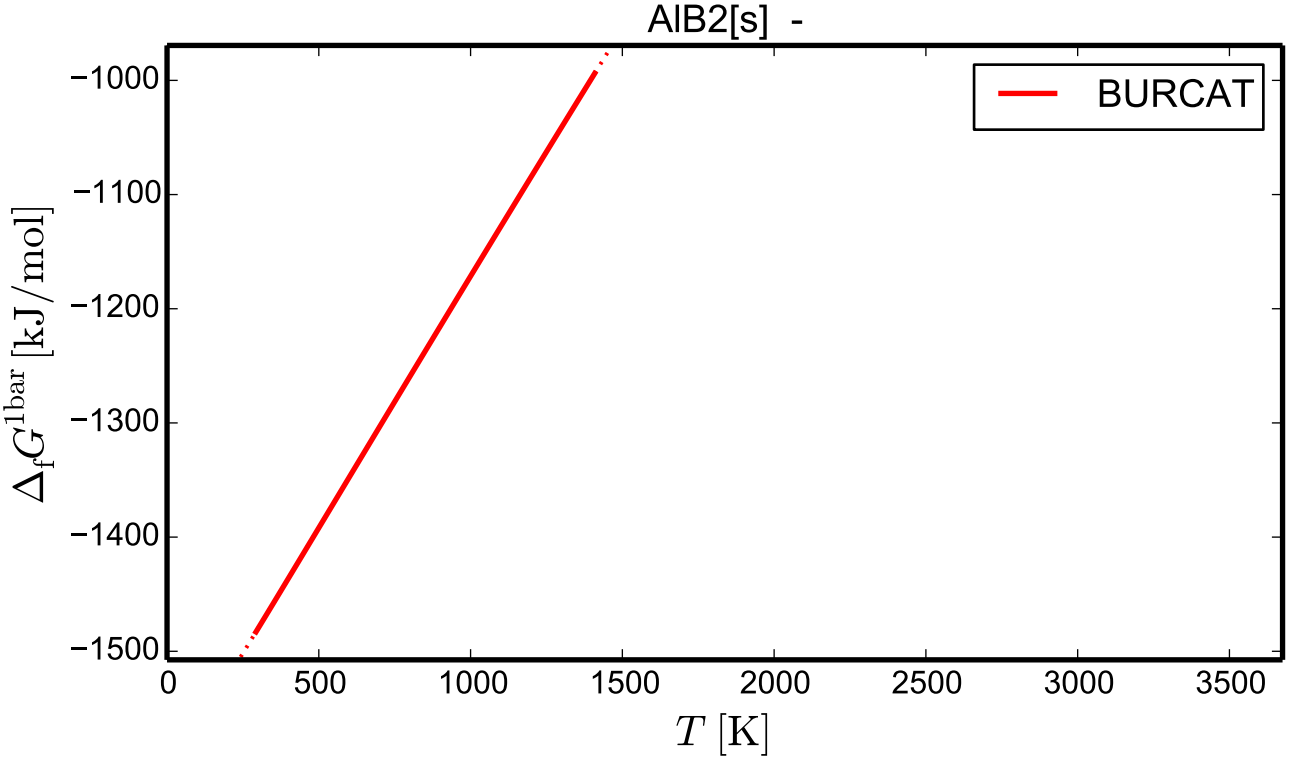

Al2S3[s] -
Sharp & Huebner 1990
0
−500
−1000
−1500
−2000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

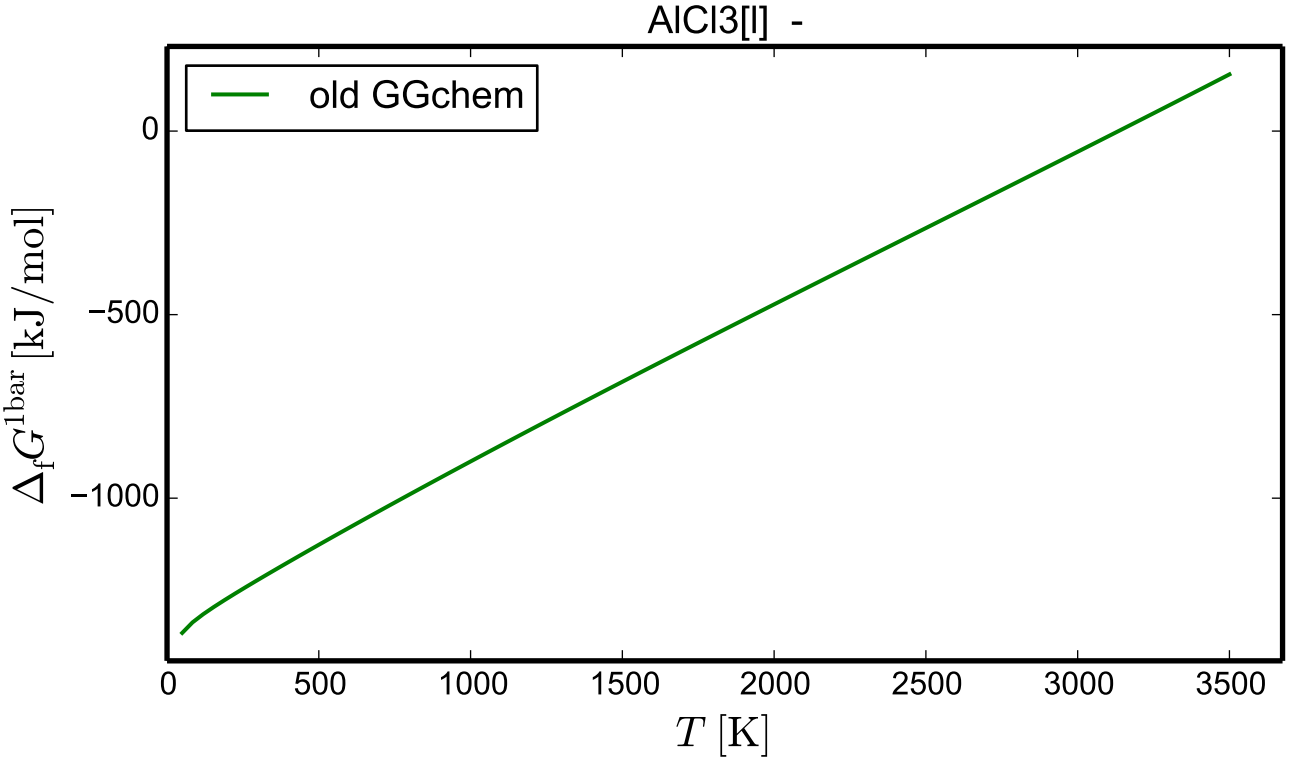

Al2Si2O9H4[s] - KAOLINITE
SUPCRTBL fit
SUPCRTBL data
0
−2000
−4000
−6000
−8000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

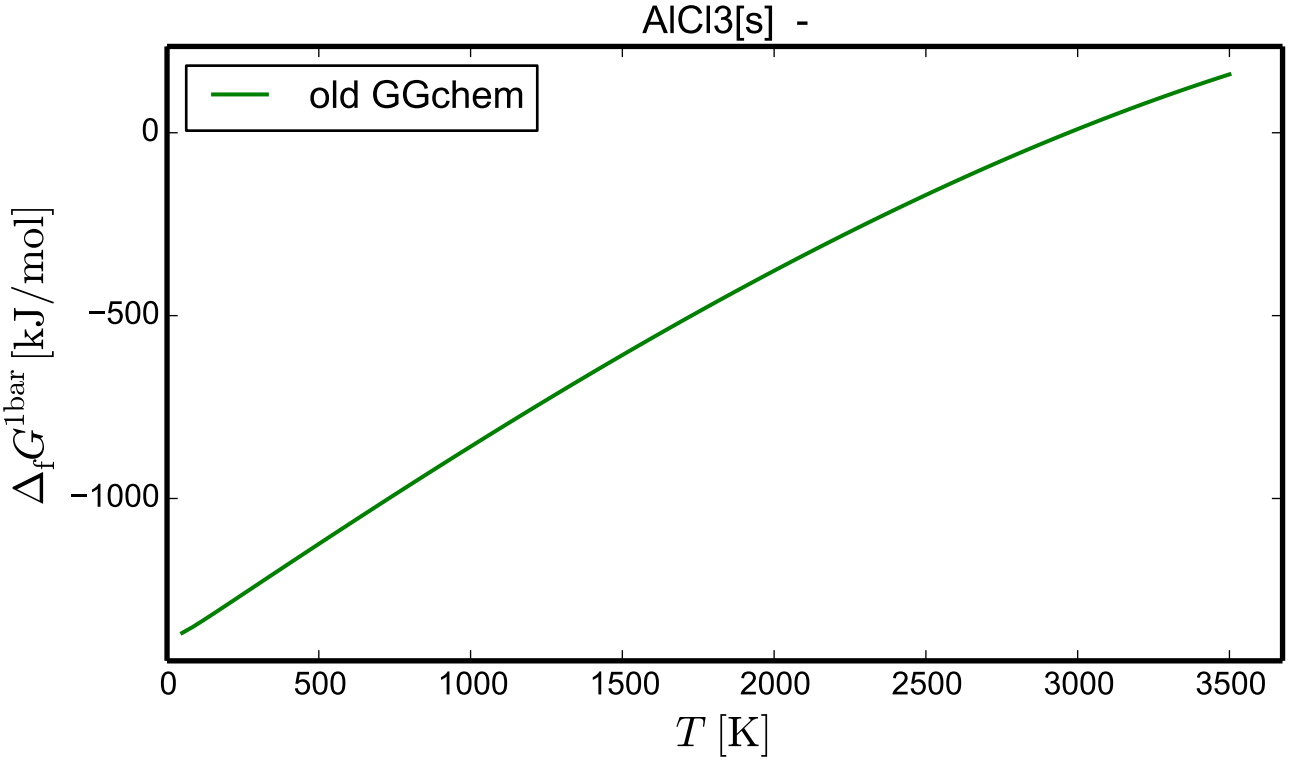

Al2SiO5[s] - KYANITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

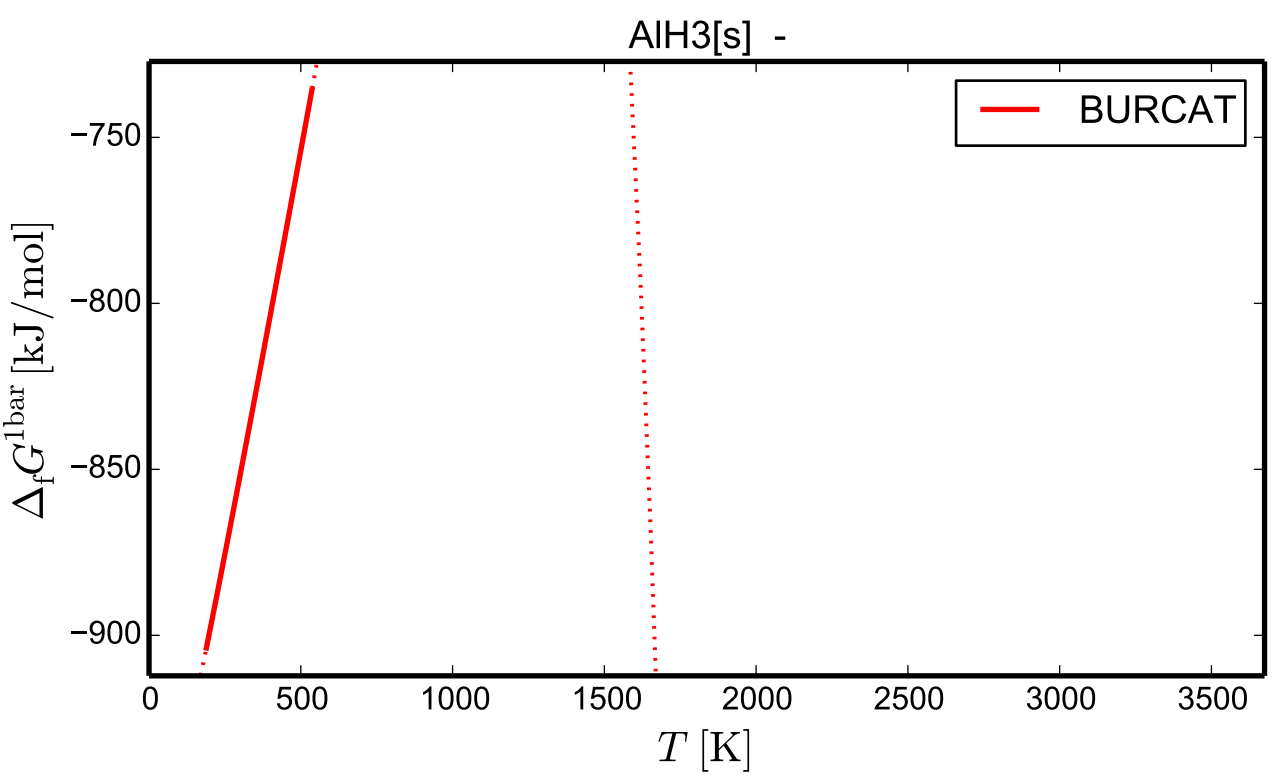

Al2SiO6H2[s] - HYDROXY-TOPAZ
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

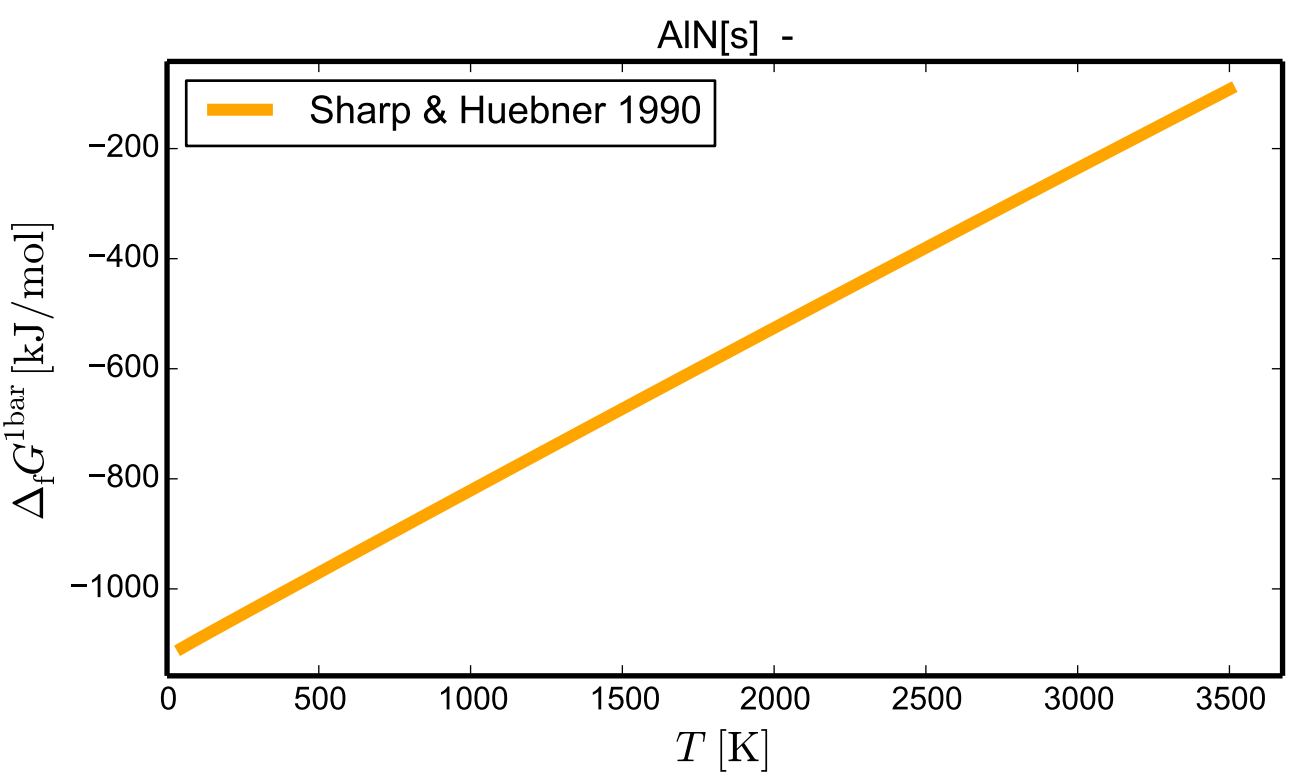

Al6Si2O13[s] -
Sharp & Huebner 1990
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

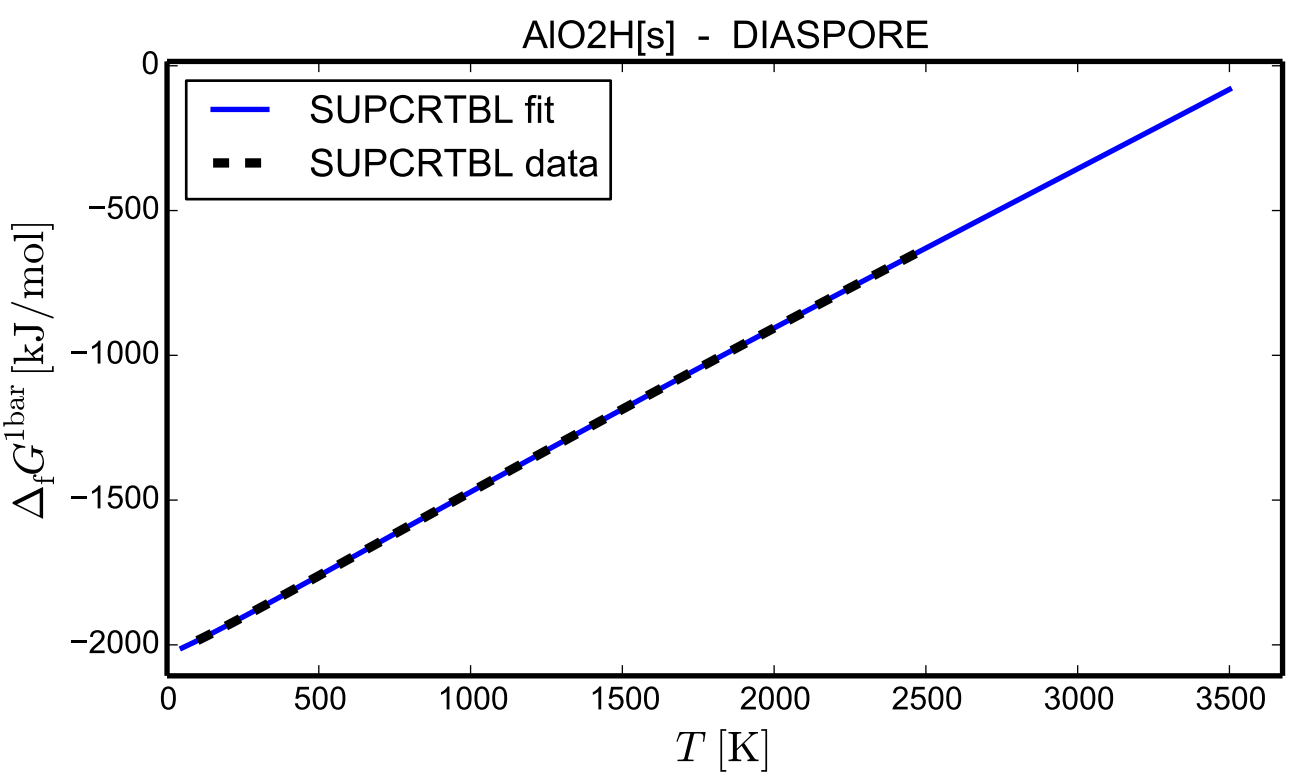

AlB2[s] -
BURCAT
−1000
−1100
−1200
−1300
−1400
−1500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

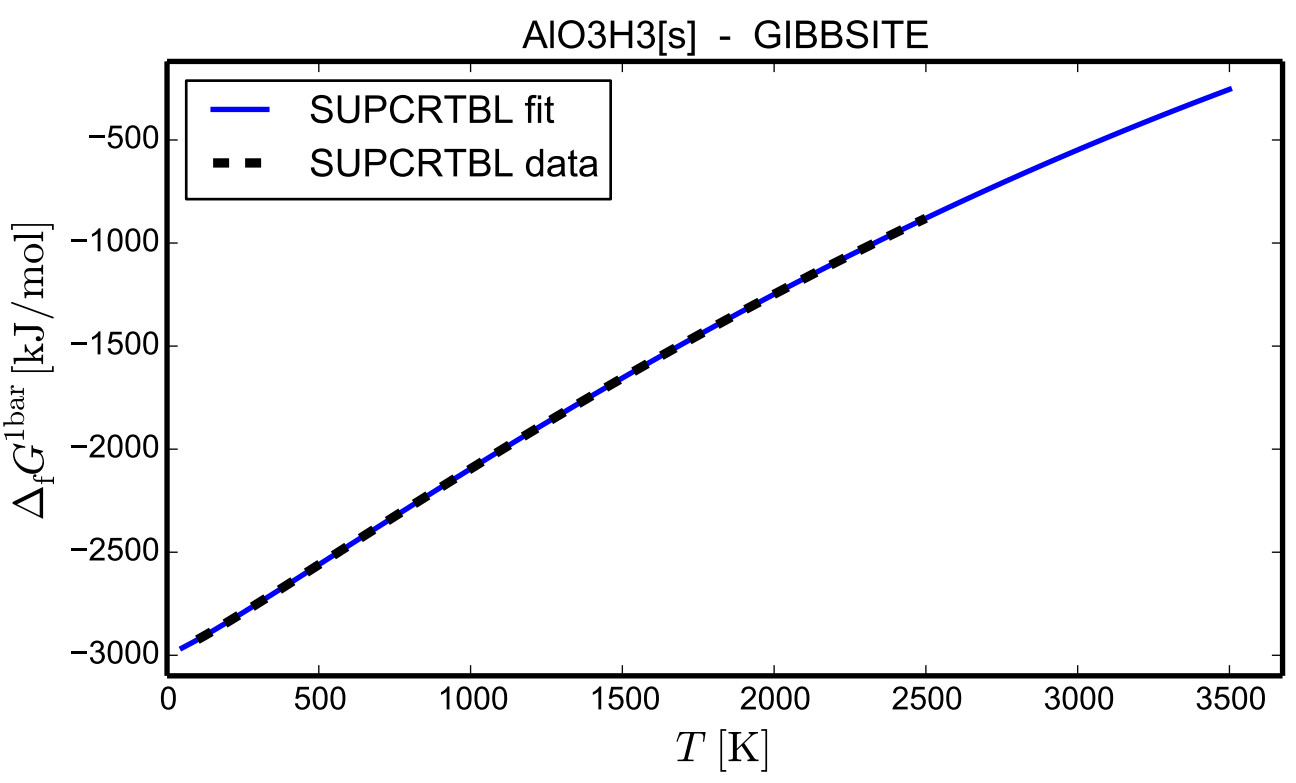

AlCl3[l] -
old GGchem
0
−500
−1000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

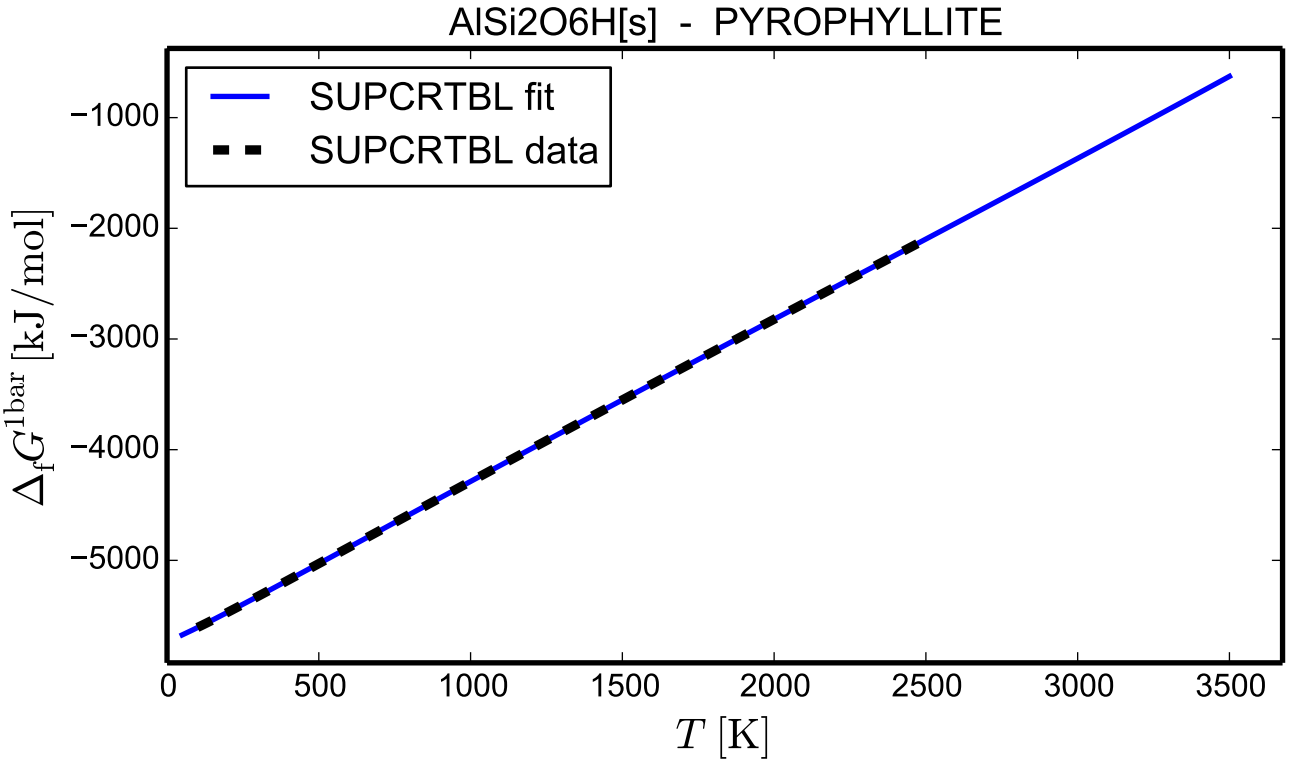

AlCl3[s] -
old GGchem
0
−500
−1000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

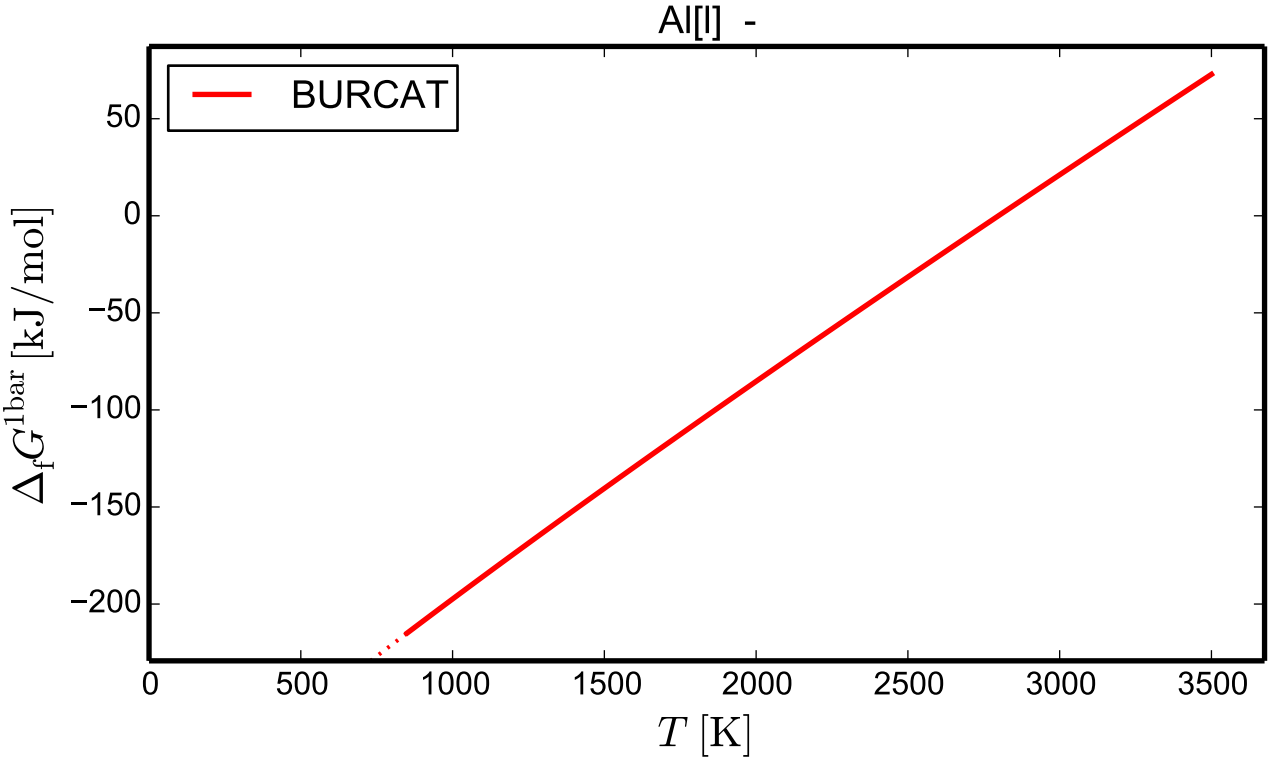

AlH3[s] -
BURCAT
−750
−800
−850
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

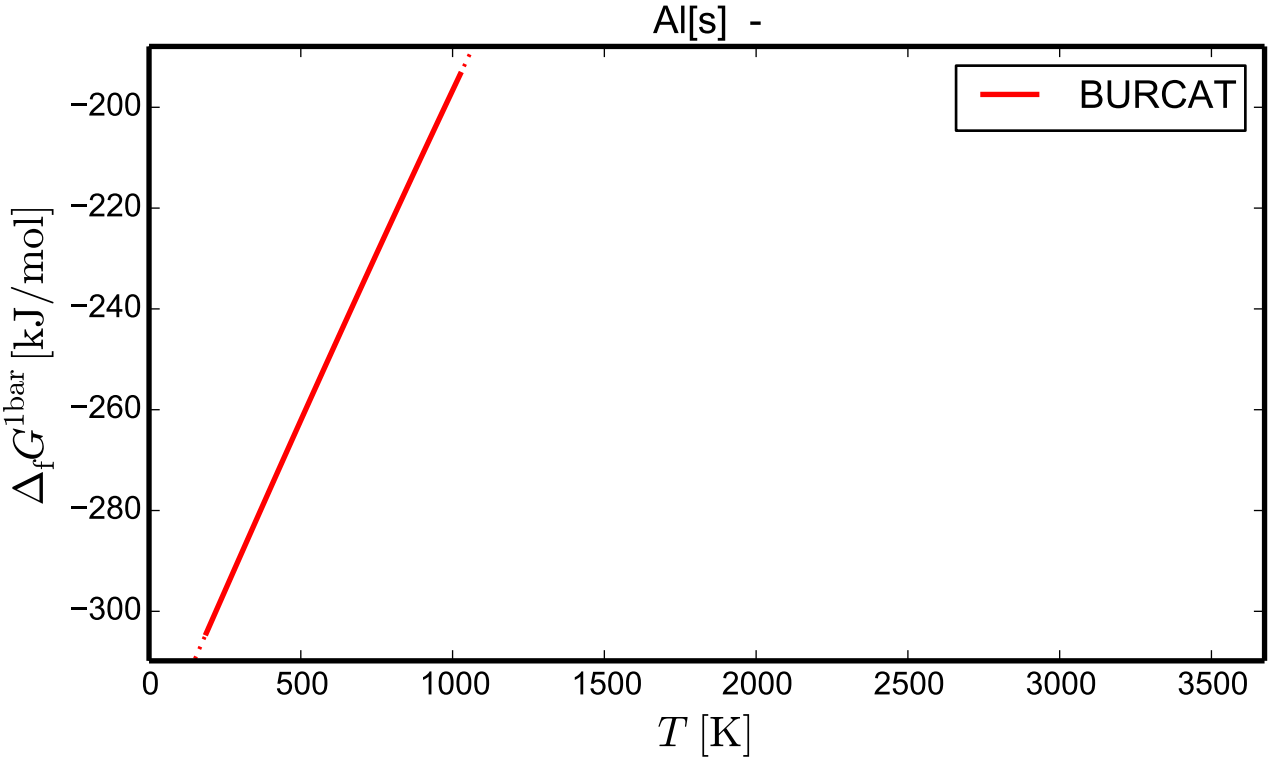

AlN[s] -
Sharp & Huebner 1990
−200
−400
−600
−800
−1000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

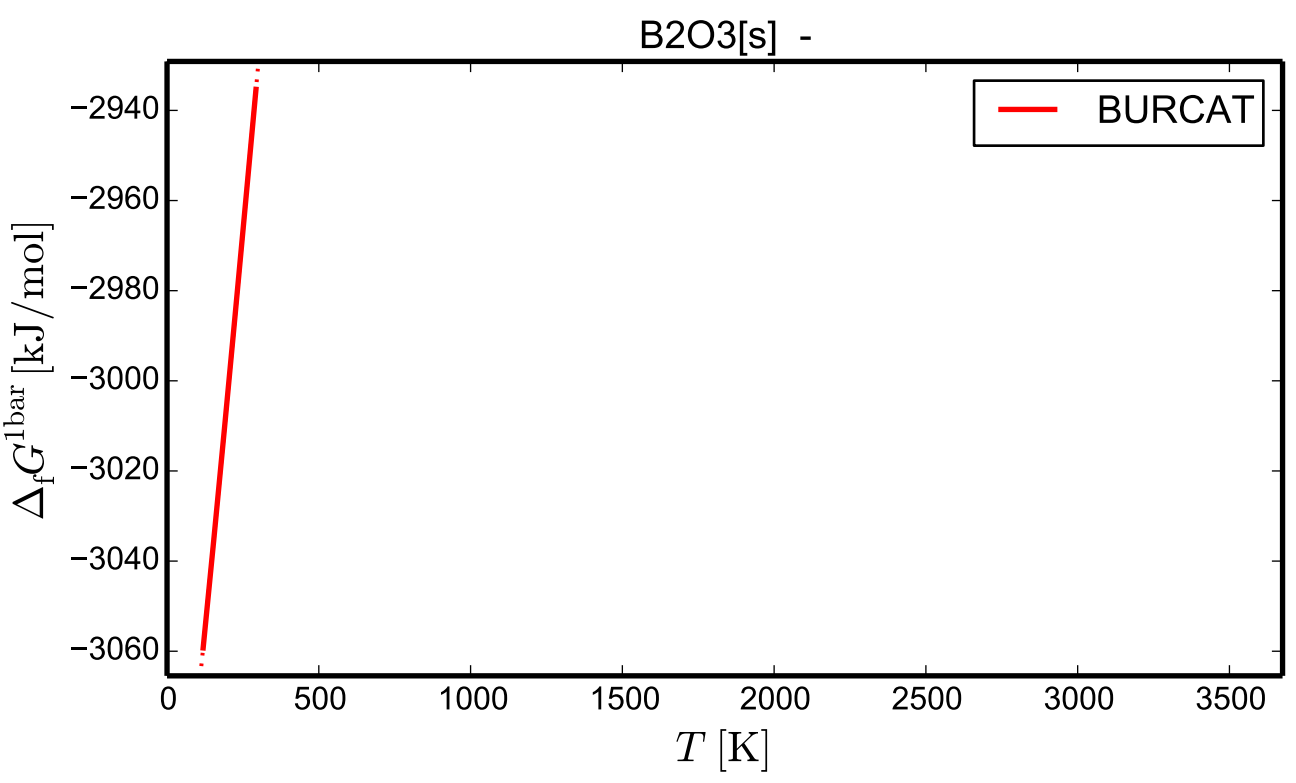

AlO2H[s] - DIASPORE
SUPCRTBL fit
SUPCRTBL data
0
−500
−1000
−1500
−2000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

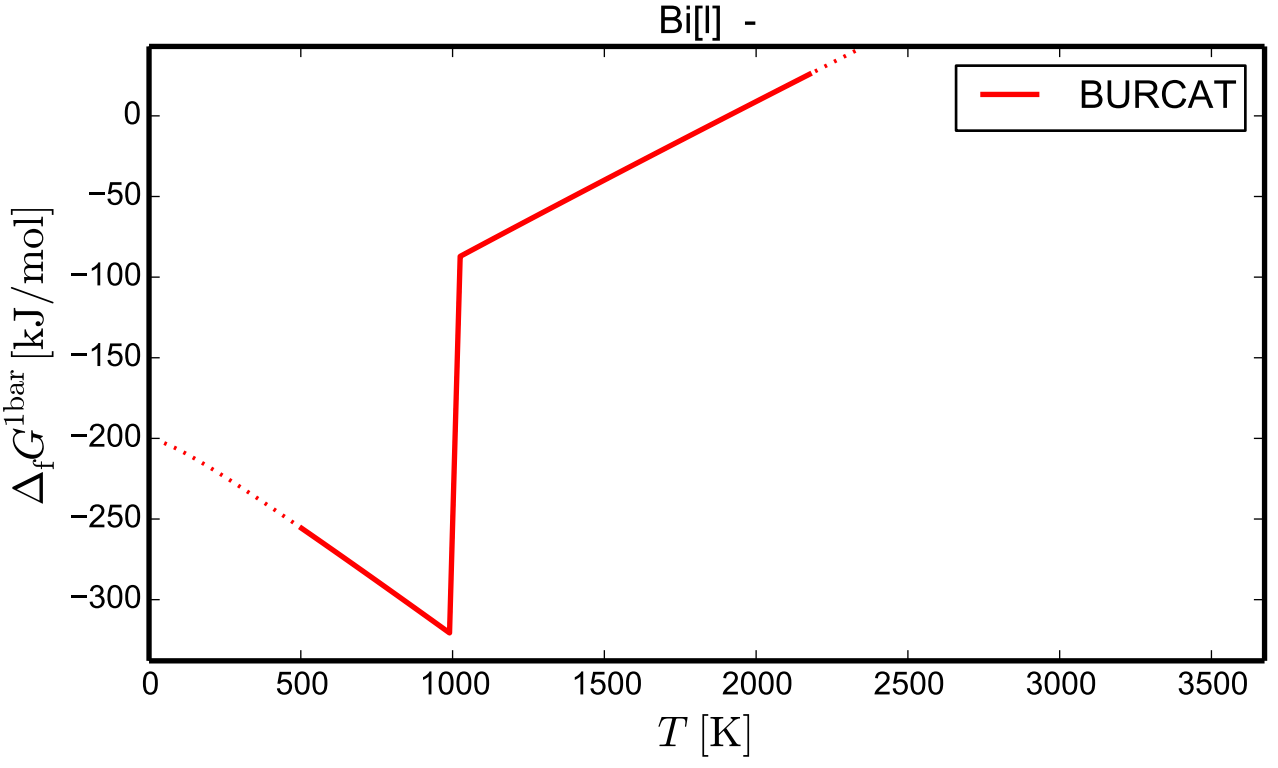

AlO3H3[s] - GIBBSITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

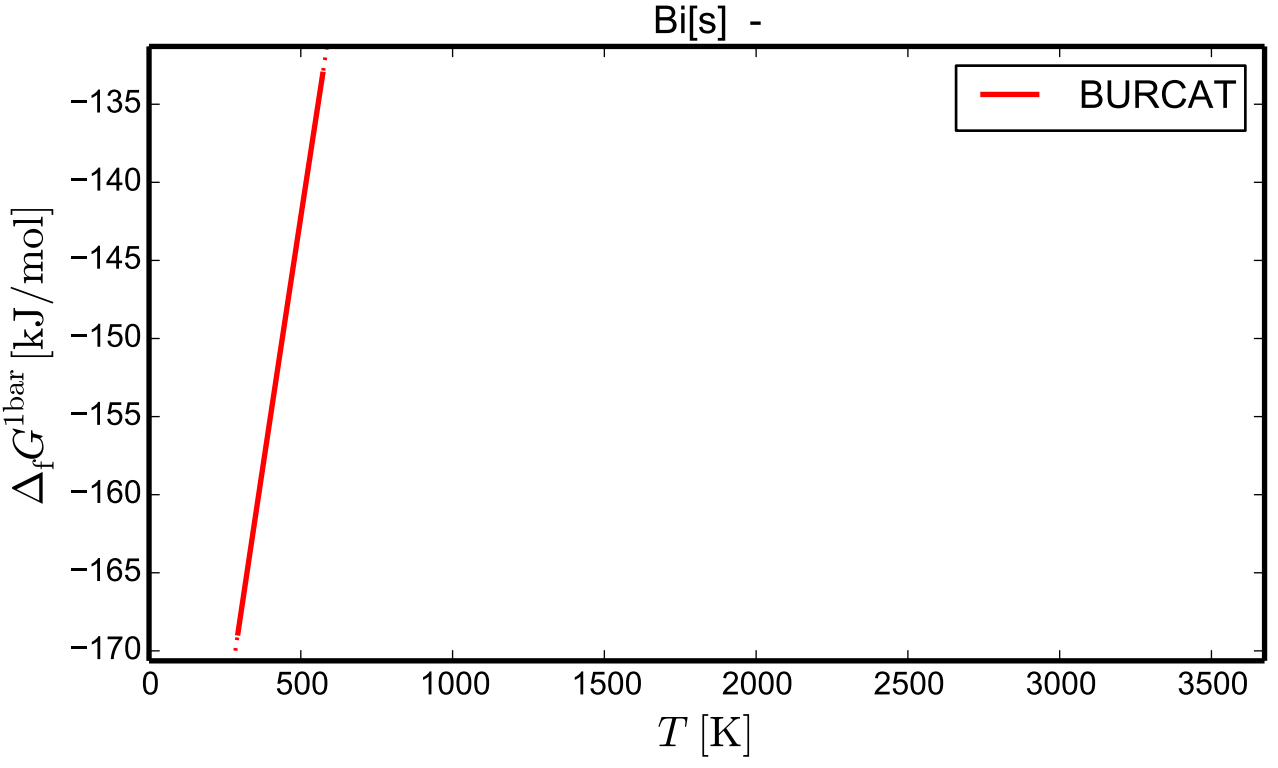

AlSi2O6H[s] - PYROPHYLLITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

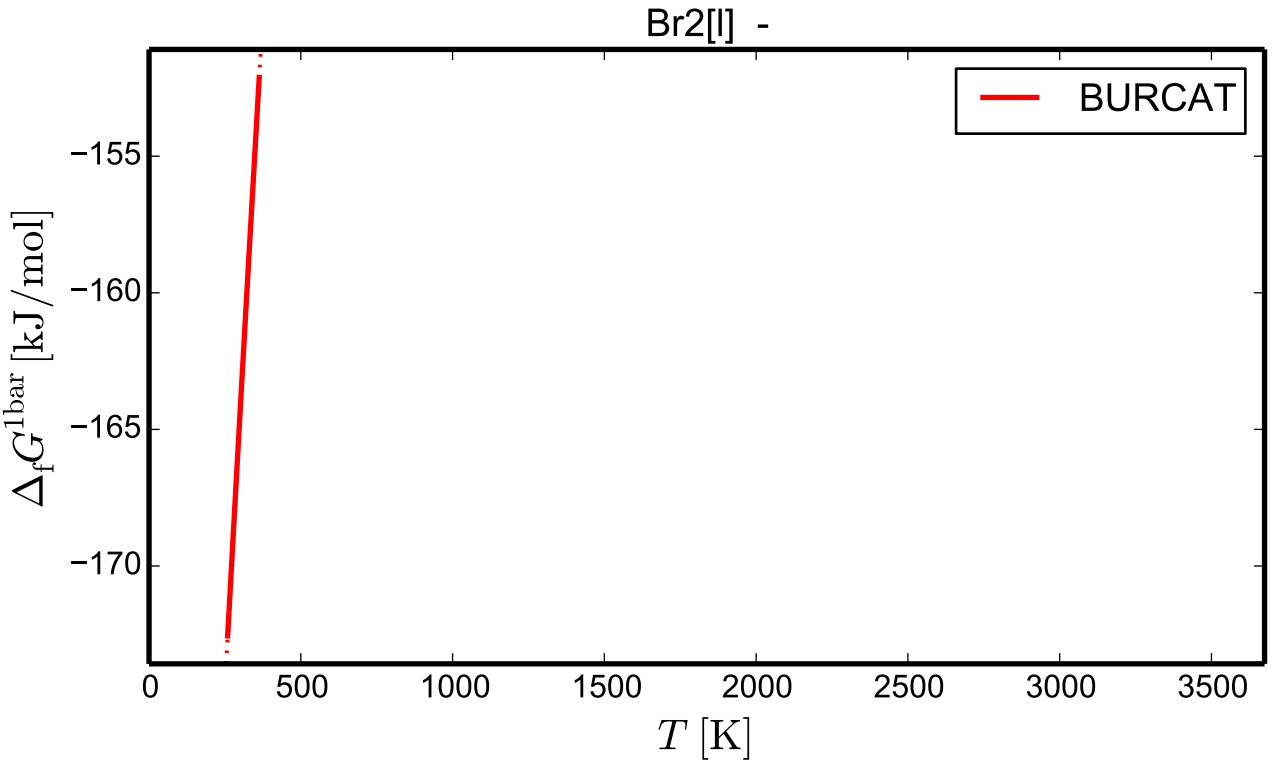

Al[l] -
BURCAT
50
0
−50
−100
−150
−200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

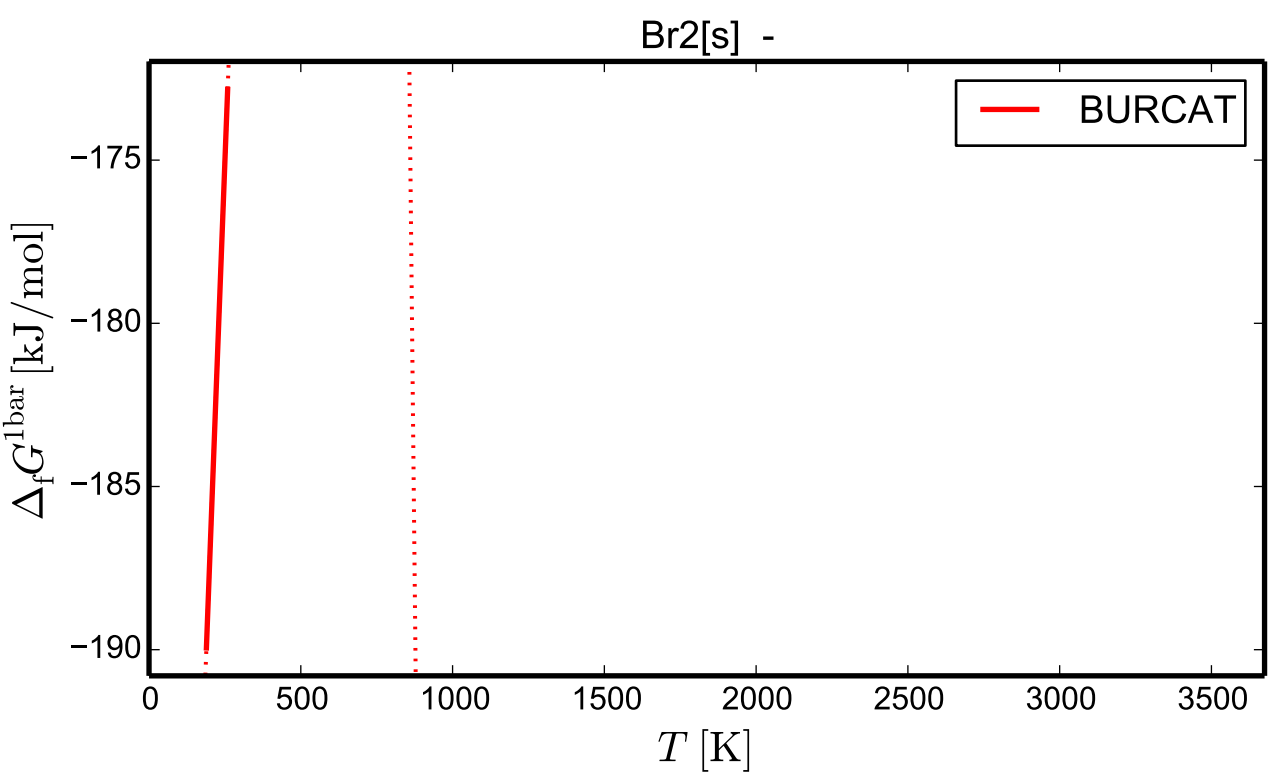

Al[s] -
BURCAT
−200
−220
−240
−260
−280
−300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

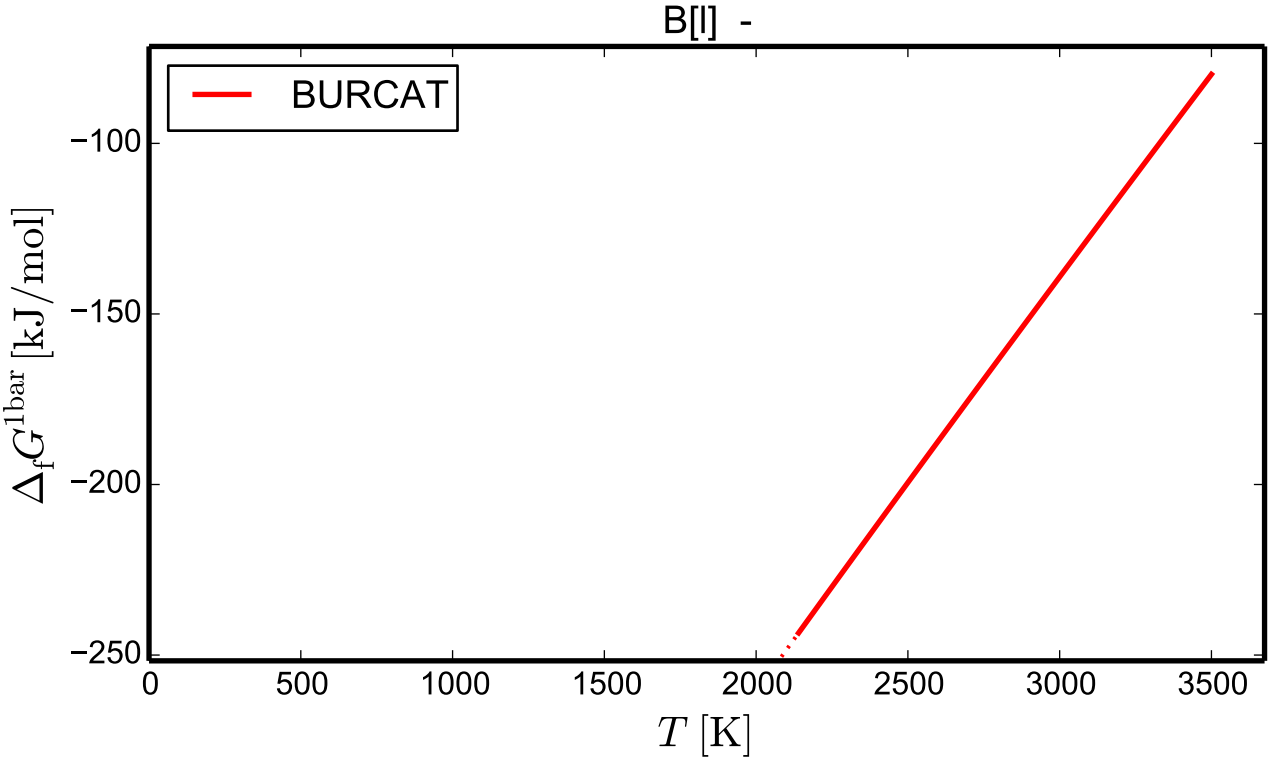

B2O3[s] -
BURCAT
−2940
−2960
−2980
−3000
−3020
−3040
−3060
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

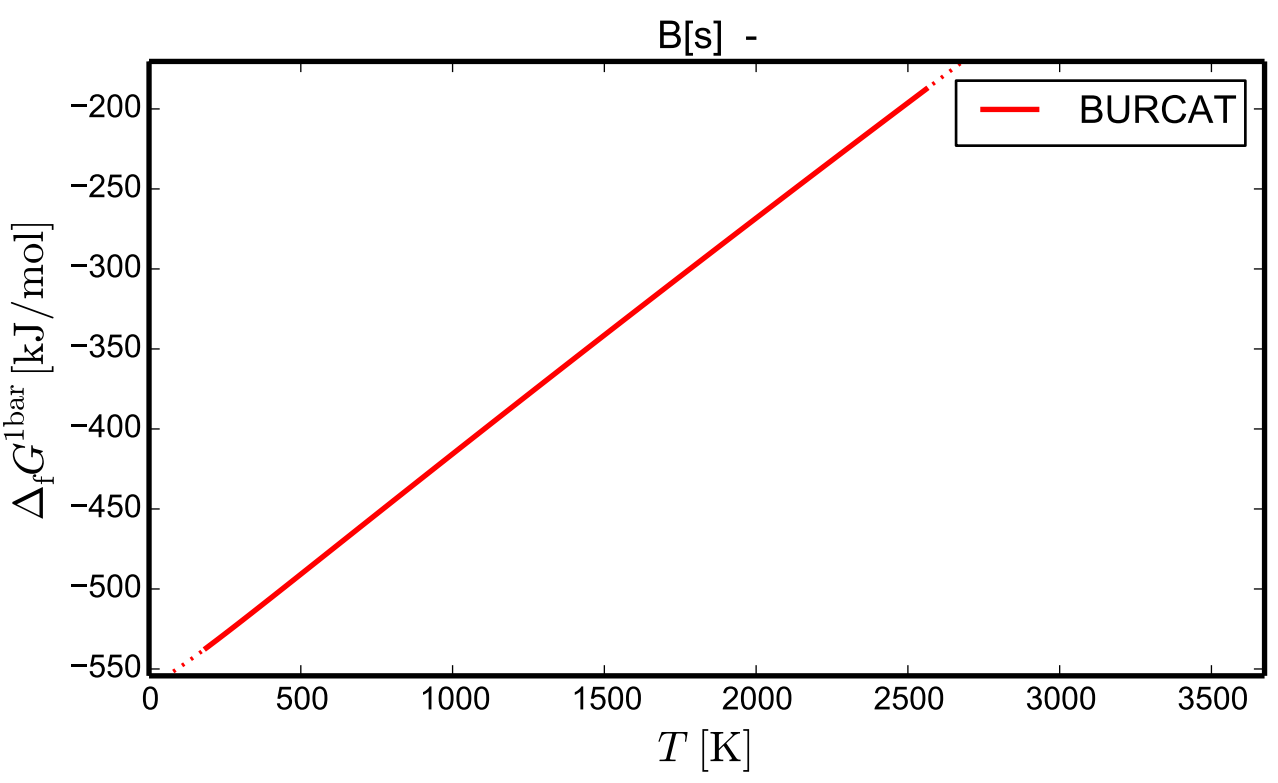

Bi[l] -
BURCAT
0
−50
−100
−150
−200
−250
−300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

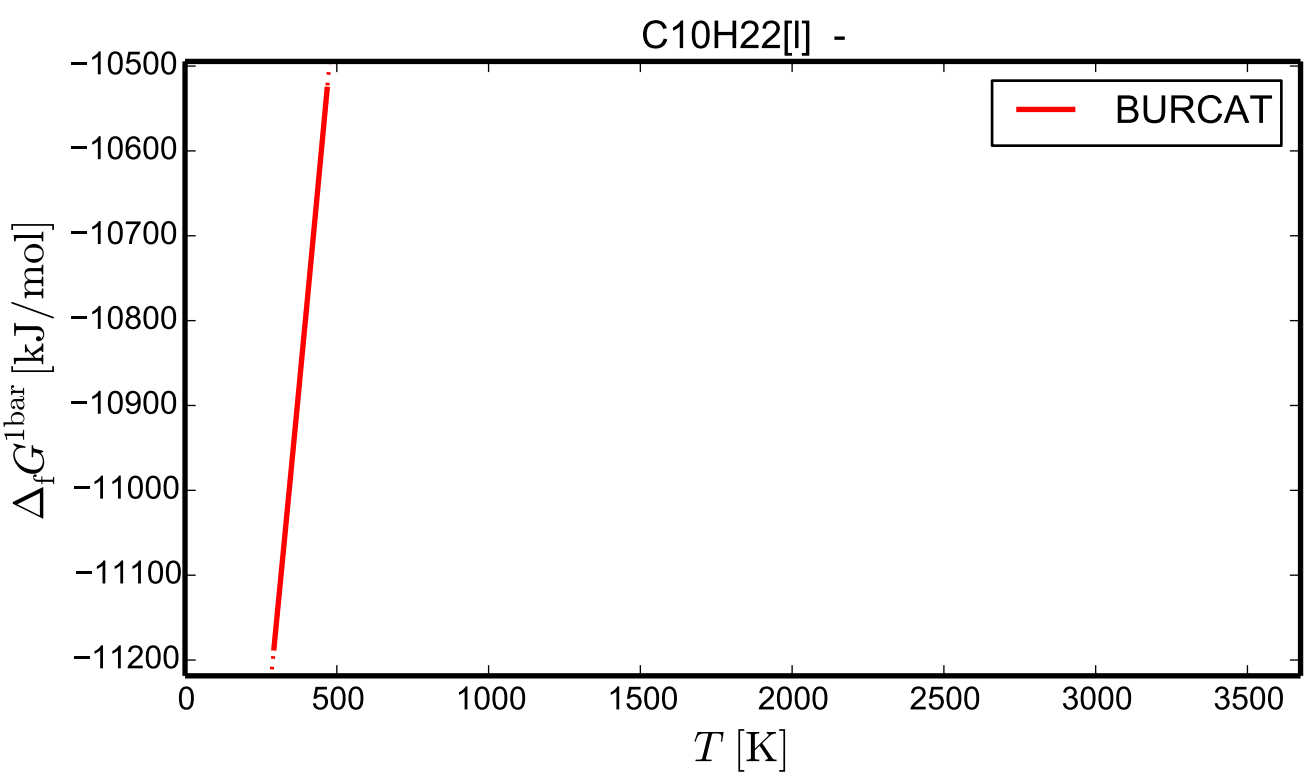

Bi[s] -
BURCAT
−135
−140
−145
−150
−155
−160
−165
−170
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

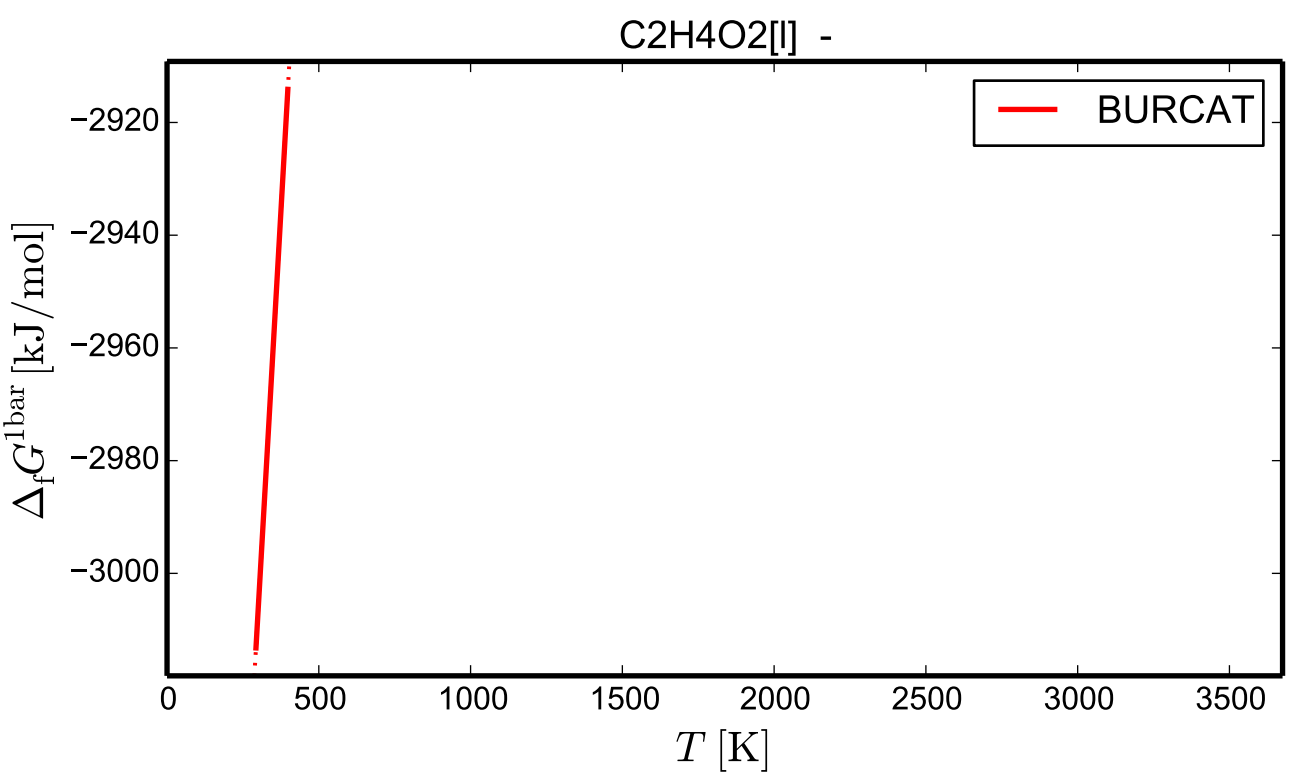

Br2[l] -
BURCAT
−155
−160
−165
−170
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

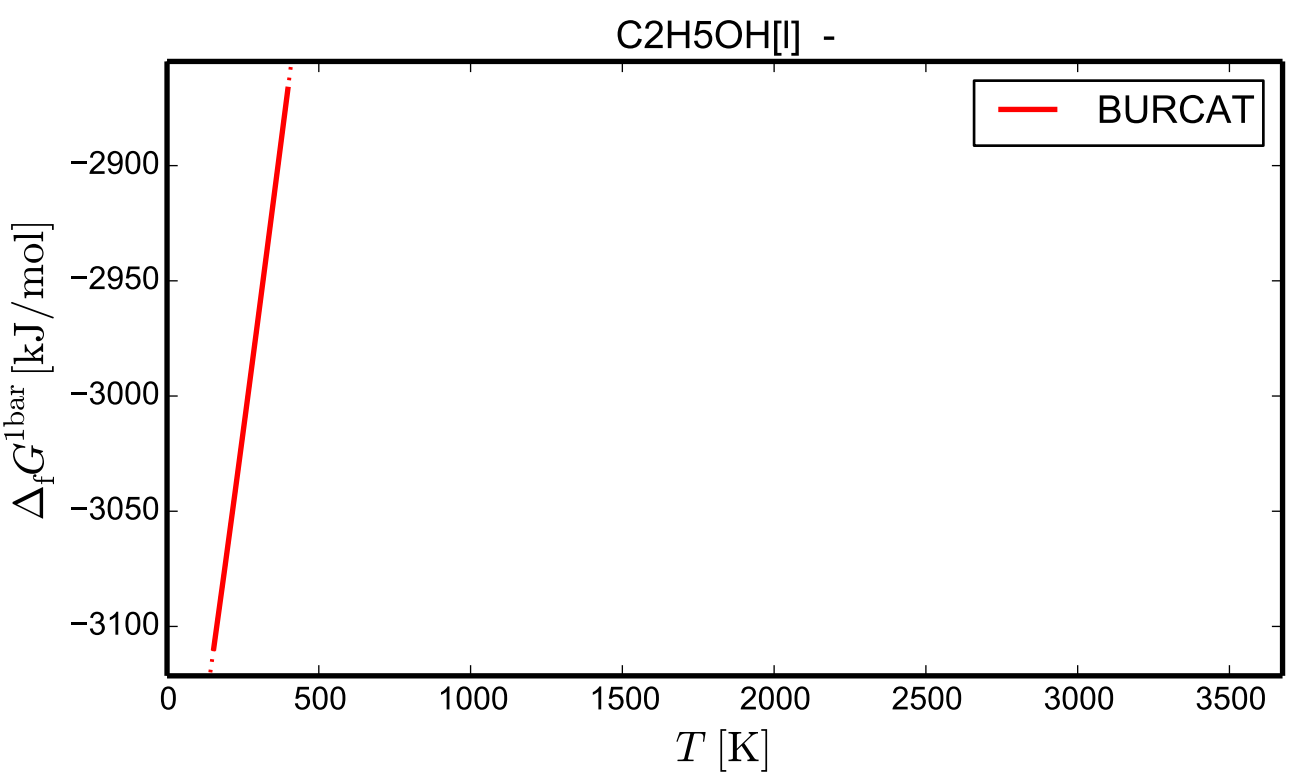

Br2[s] -
BURCAT
−175
−180
−185
−190
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

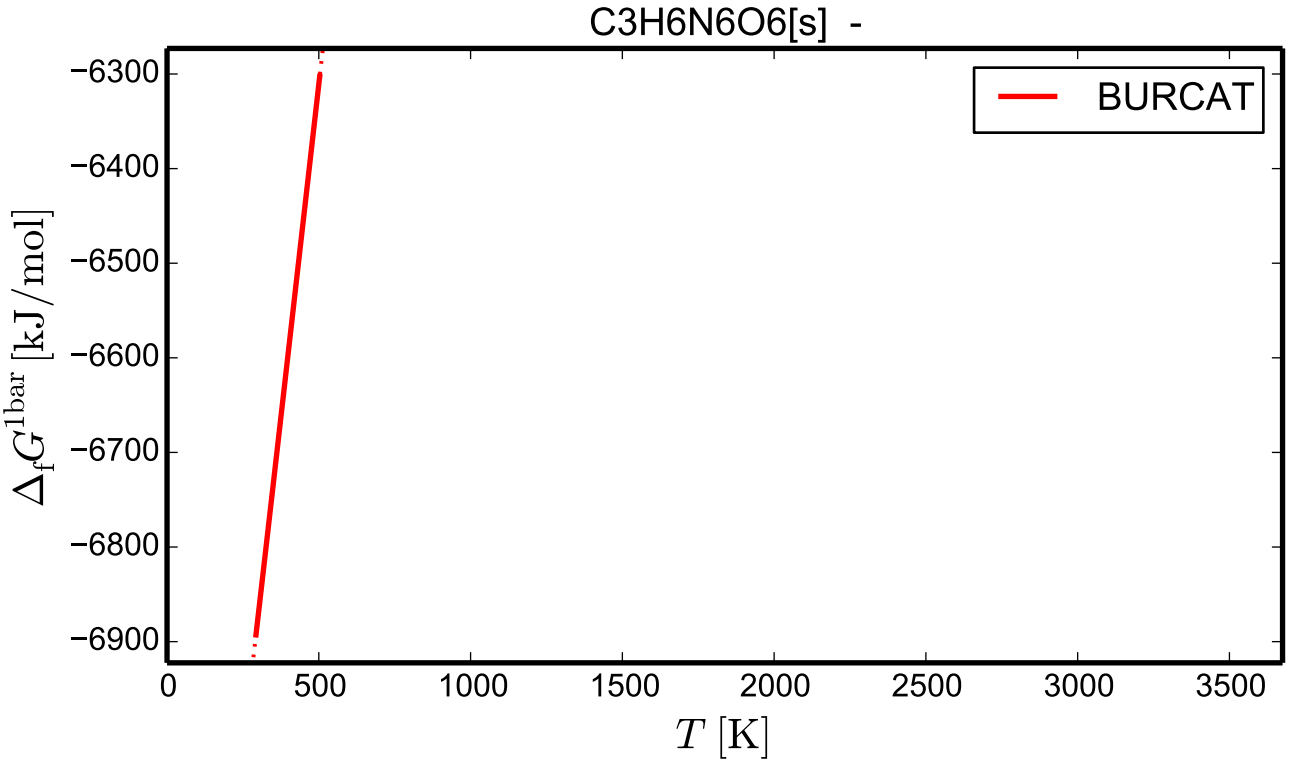

B[l] -
BURCAT
−100
−150
−200
−250
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

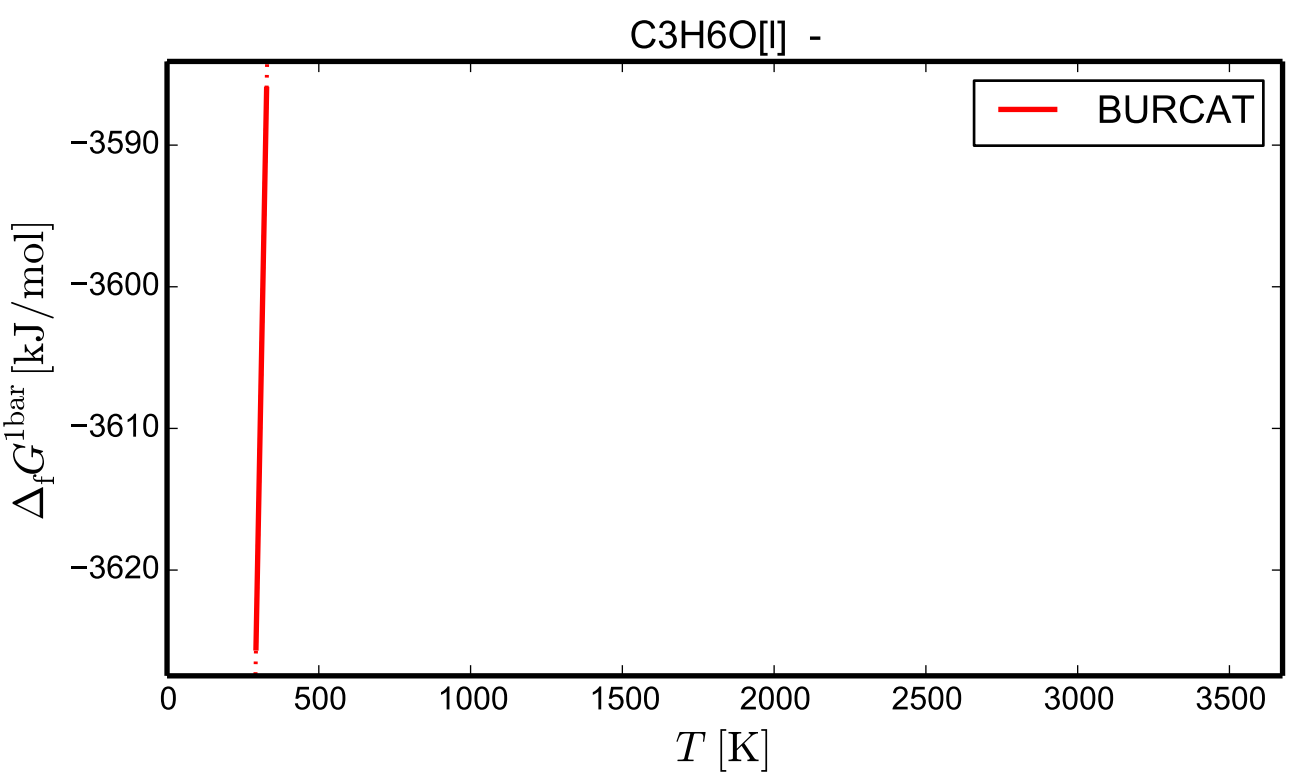

B[s] -
BURCAT
−200
−250
−300
−350
−400
−450
−500
−550
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

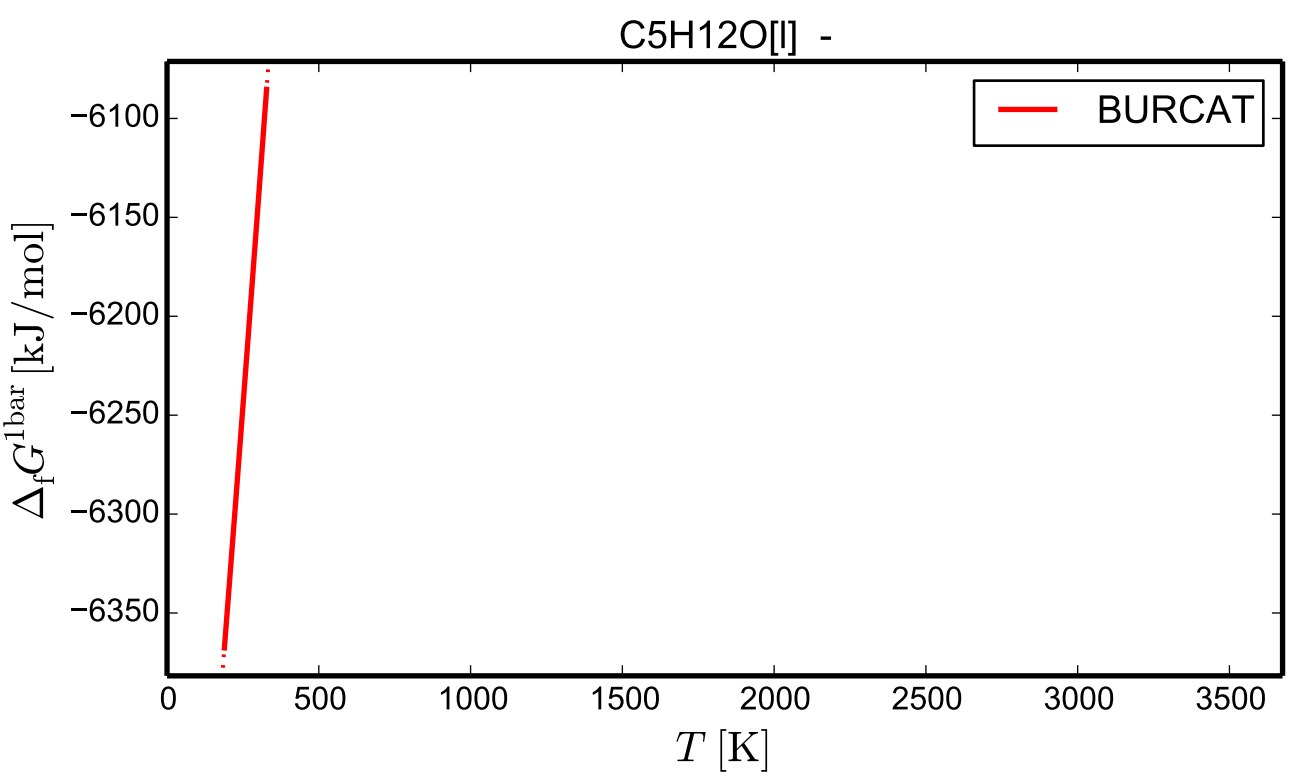

C10H22[l] -
BURCAT
−10500
−10600
−10700
−10800
−10900
−11000
−11100
−11200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

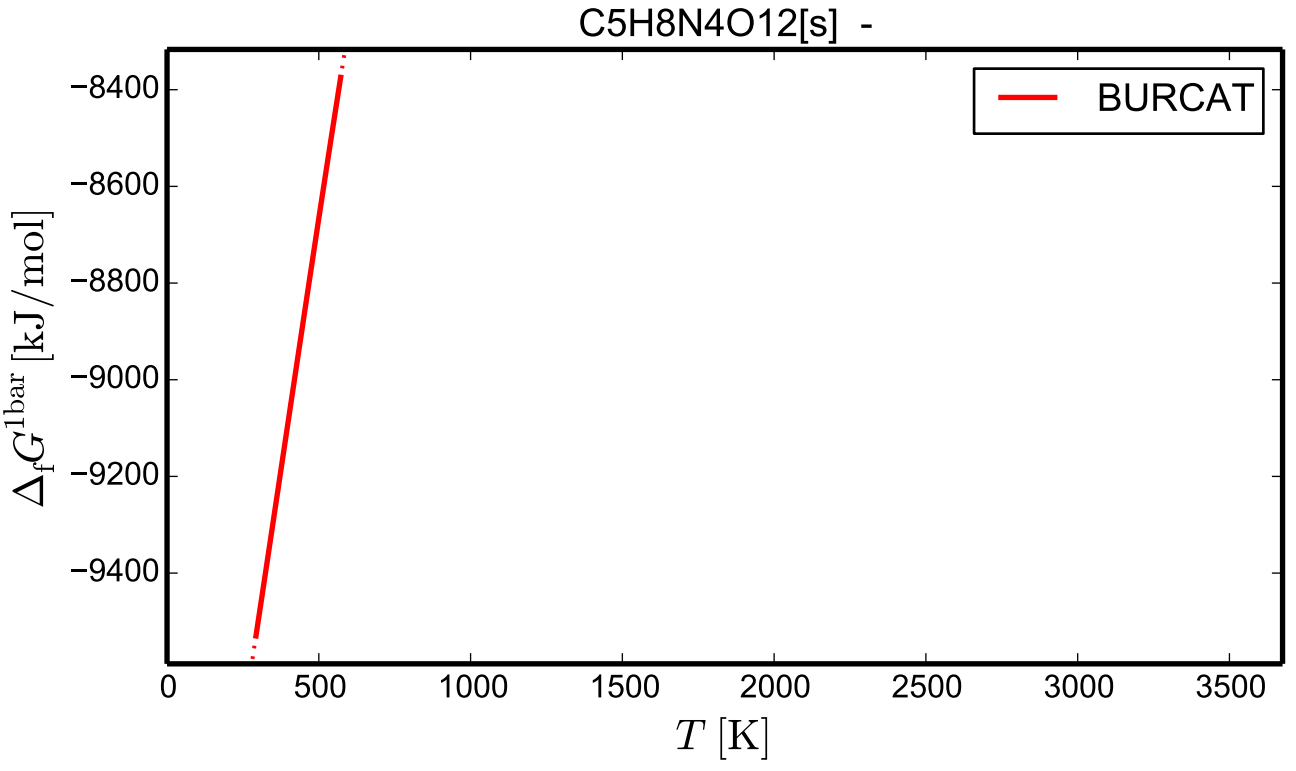

C2H4O2[l] -
BURCAT
−2920
−2940
−2960
−2980
−3000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

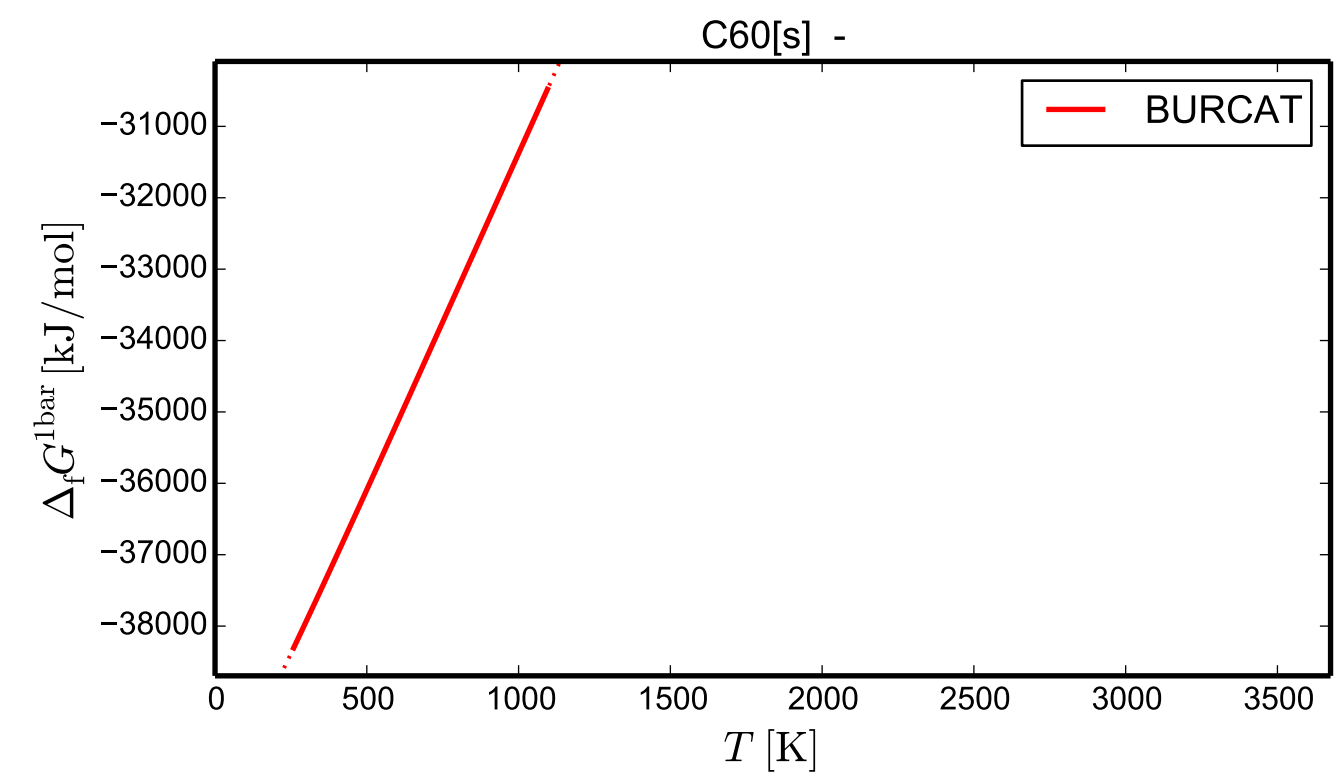

C2H5OH[l] -
BURCAT
−2900
−2950
−3000
−3050
−3100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

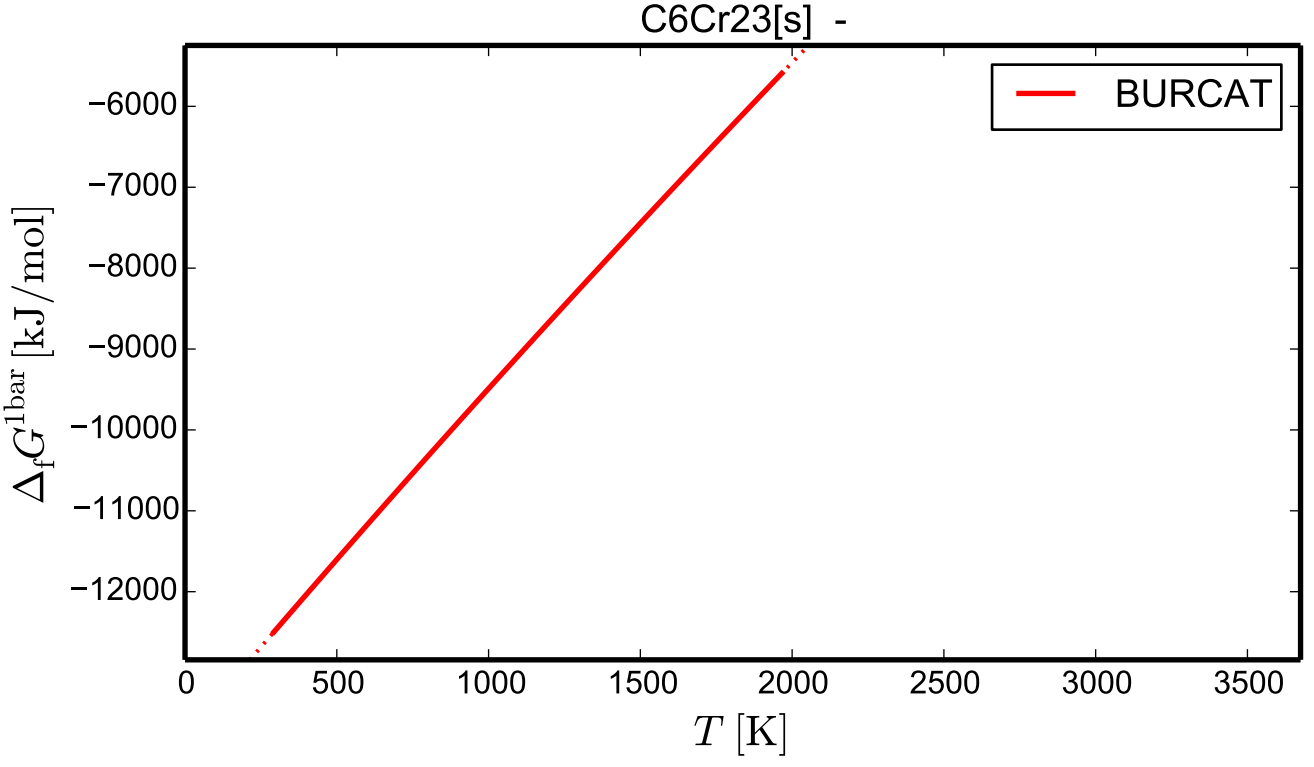

C3H6N6O6[s] -
BURCAT
−6300
−6400
−6500
−6600
−6700
−6800
−6900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

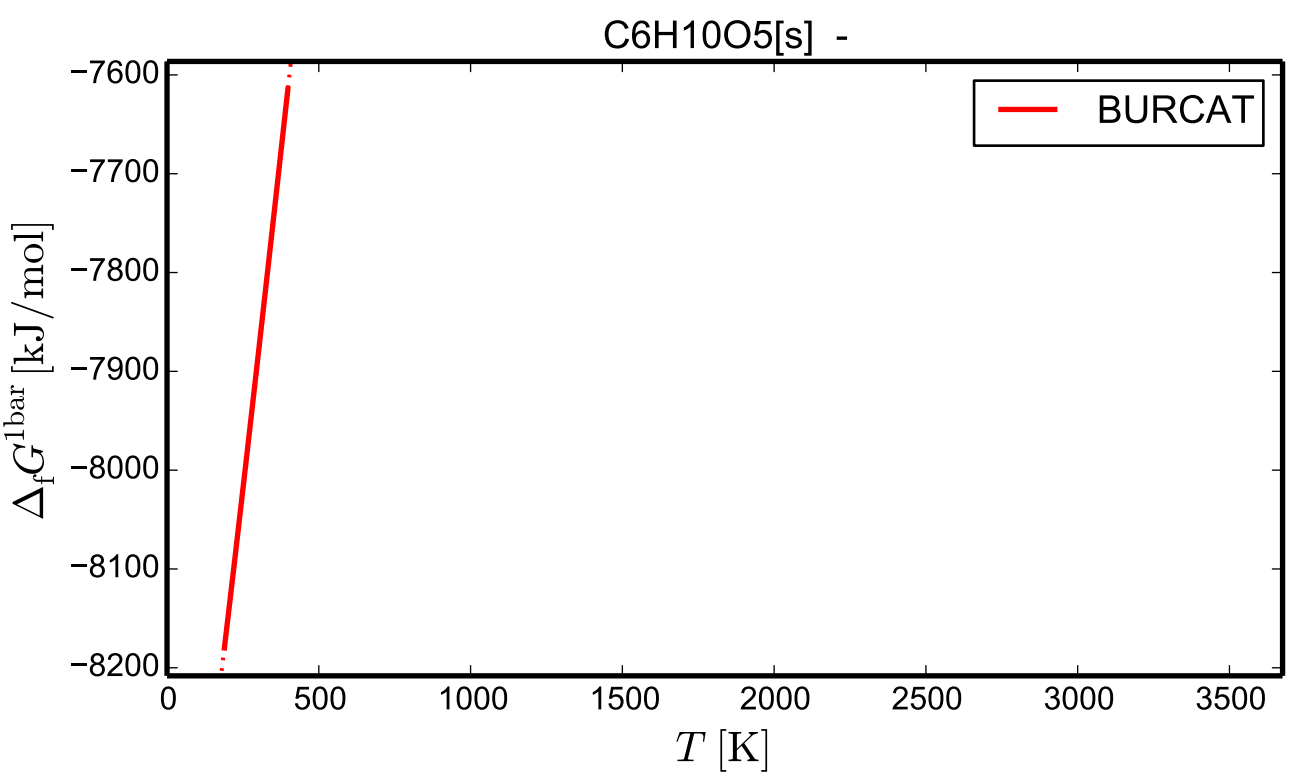

C3H6O[l] -
BURCAT
−3590
−3600
−3610
−3620
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

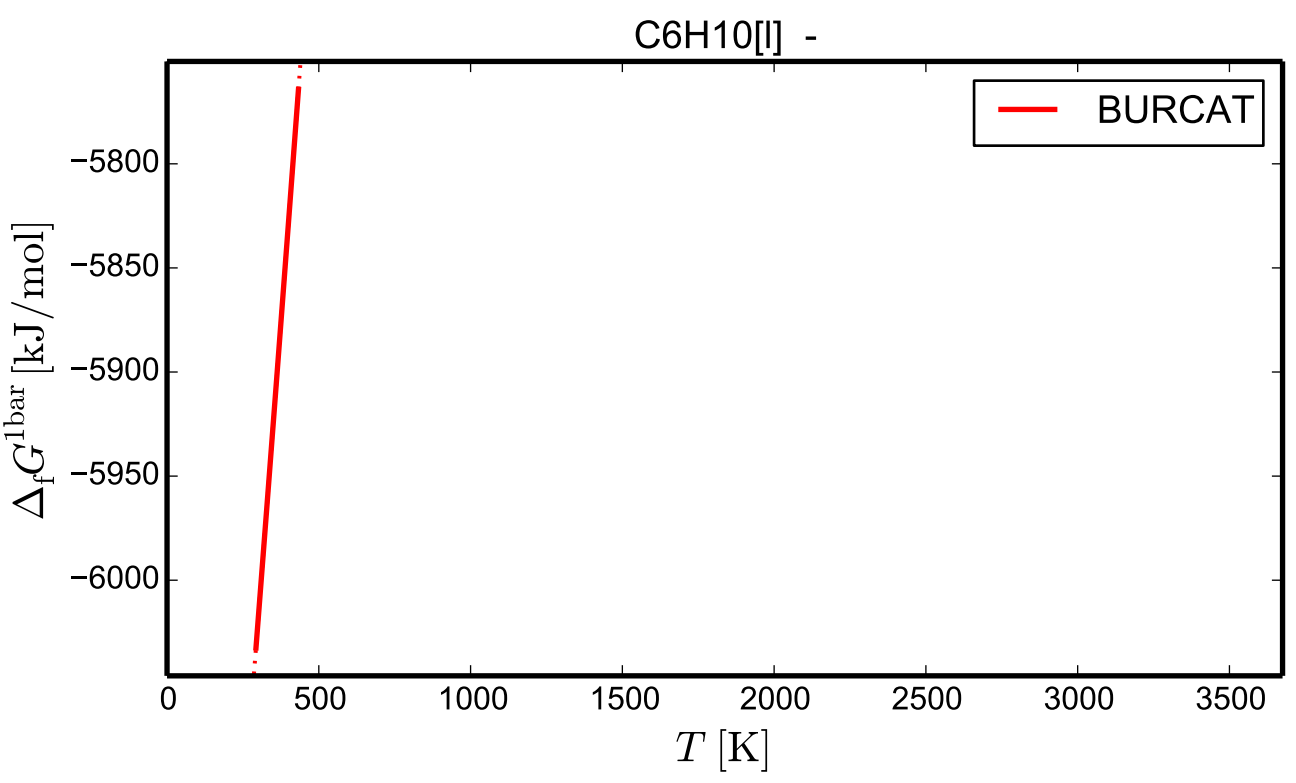

C5H12O[l] -
BURCAT
−6100
−6150
−6200
−6250
−6300
−6350
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

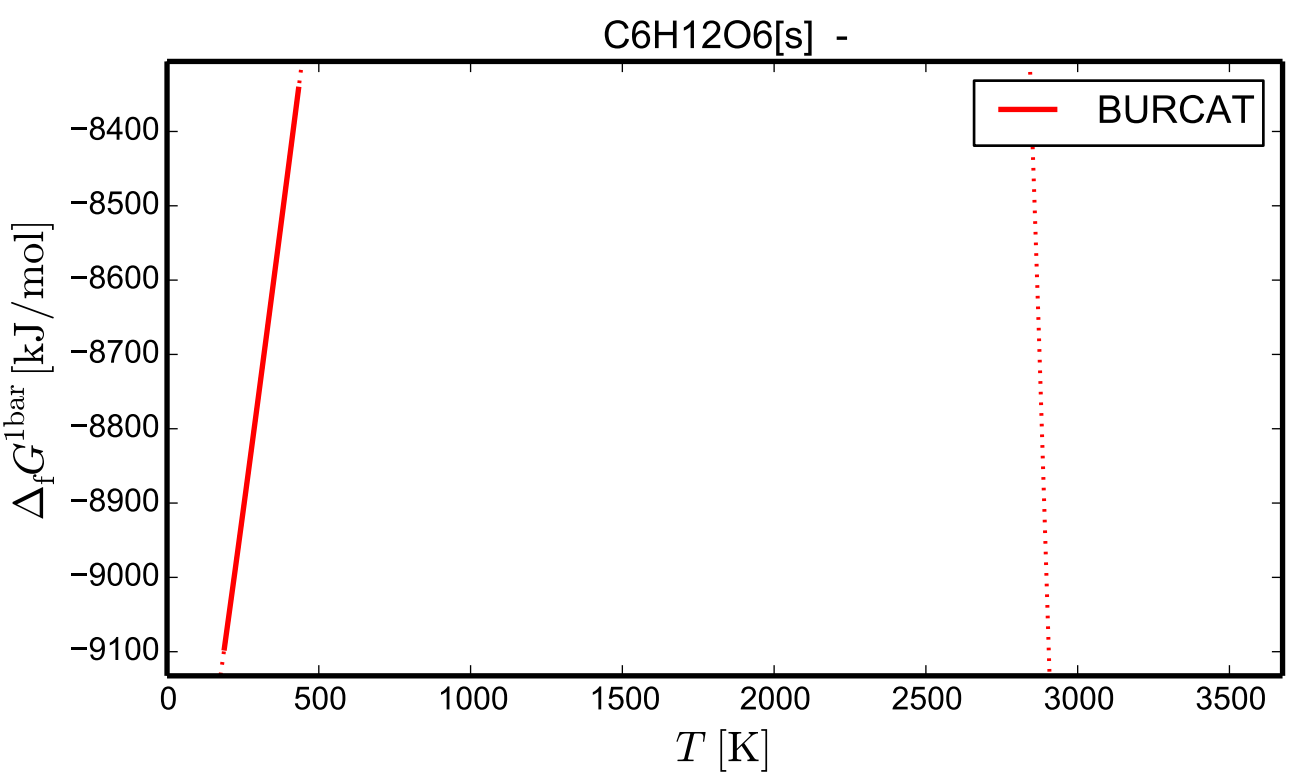

C5H8N4O12[s] -
BURCAT
−8400
−8600
−8800
−9000
−9200
−9400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

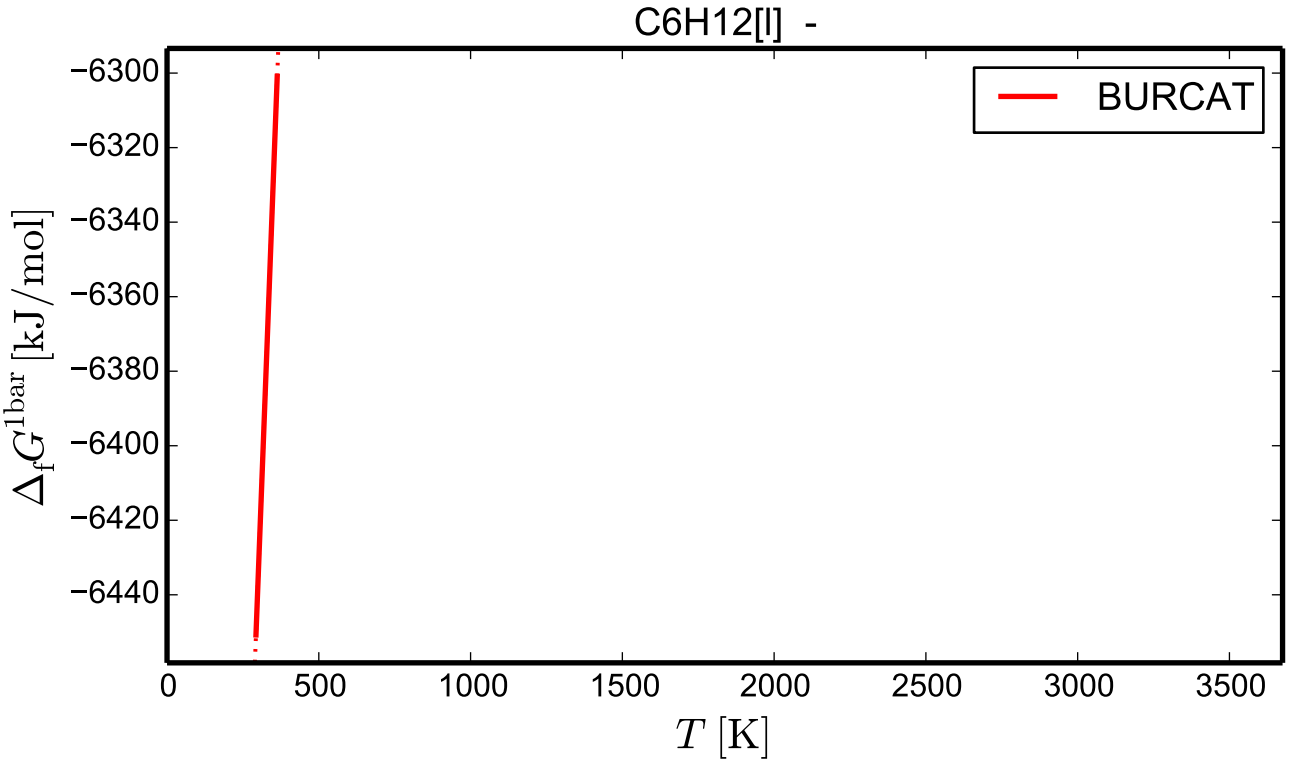

C60[s] -
BURCAT
−31000
−32000
−33000
−34000
−35000
−36000
−37000
−38000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

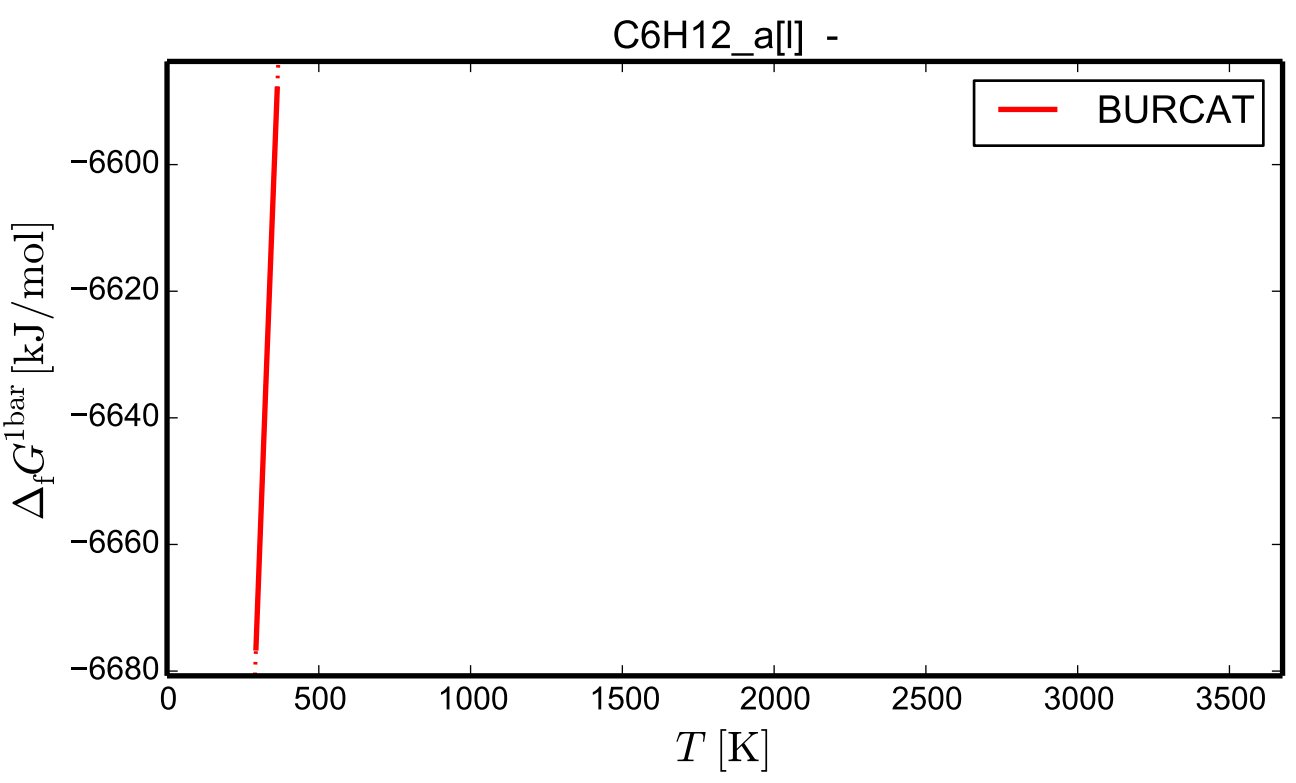

C6Cr23[s] -
BURCAT
−6000
−7000
−8000
−9000
−10000
−11000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

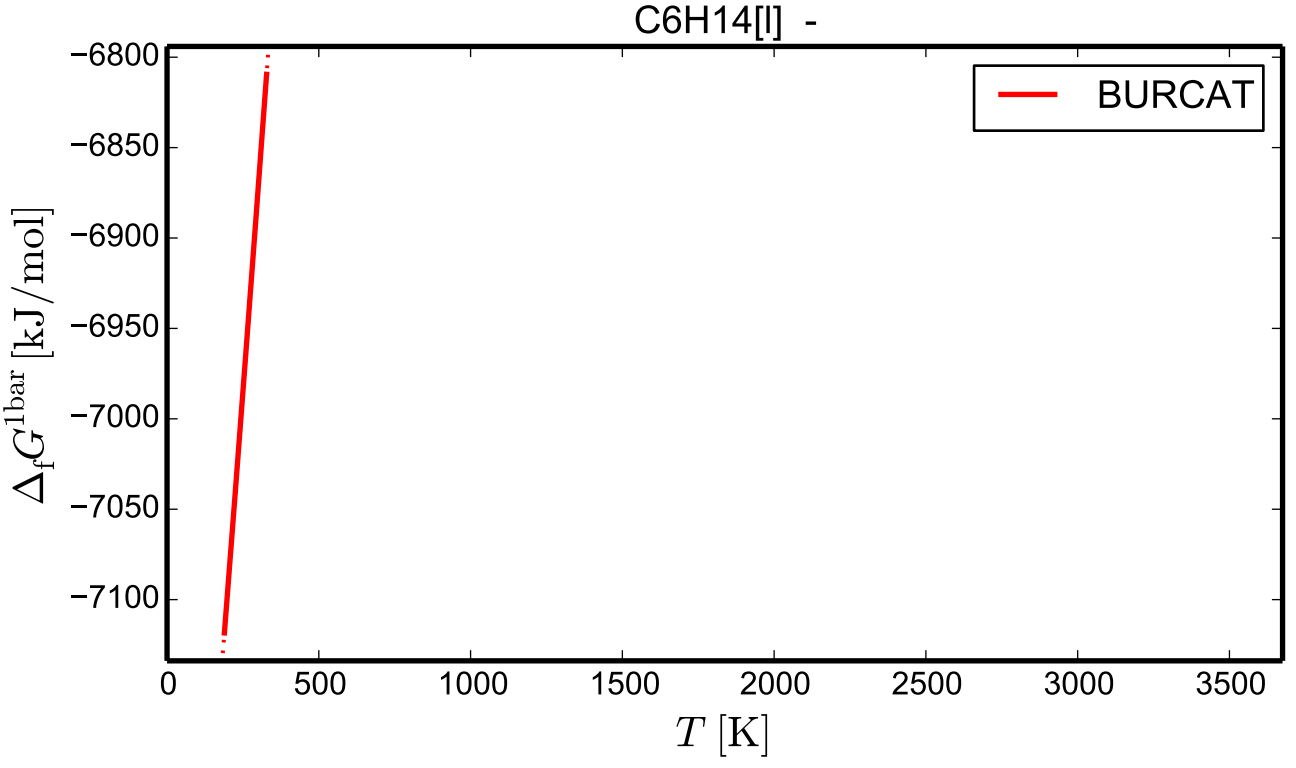

C6H10O5[s] -
BURCAT
−7600
−7700
−7800
−7900
−8000
−8100
−8200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

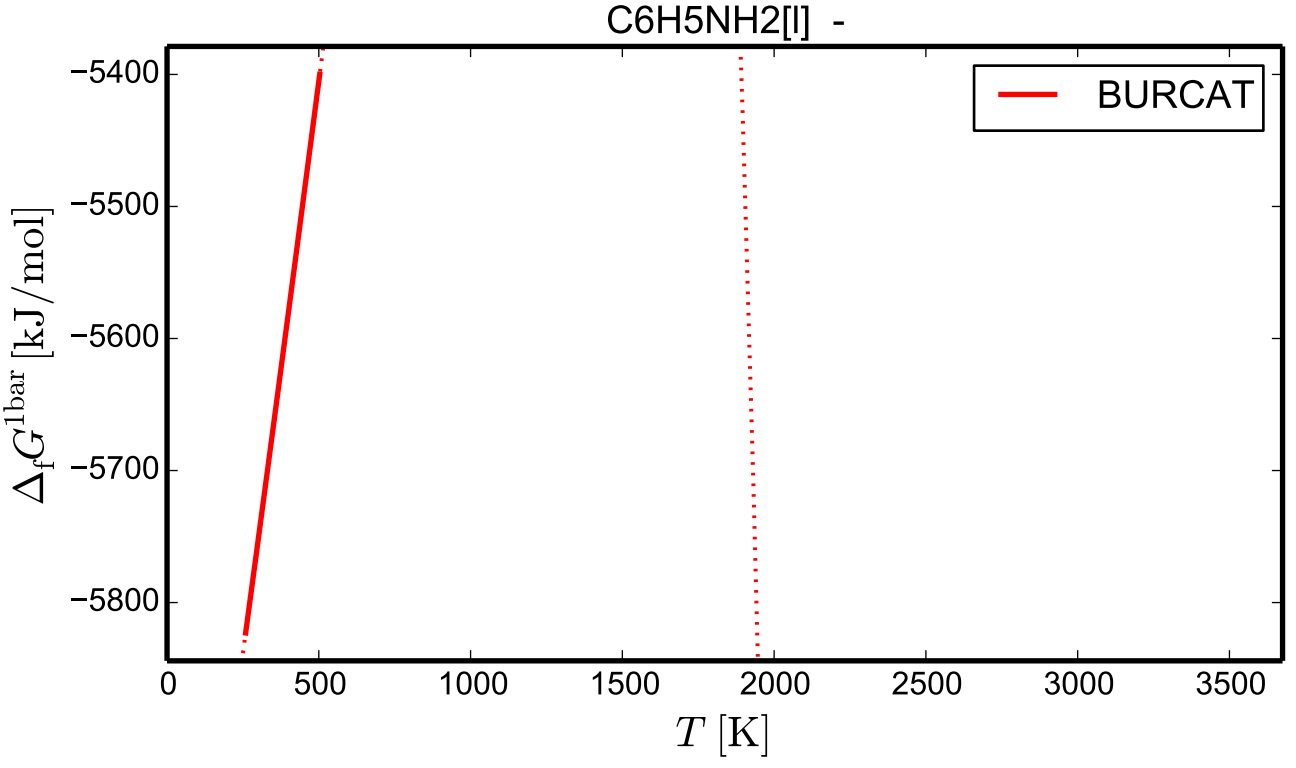

C6H10[l] -
BURCAT
−5800
−5850
−5900
−5950
−6000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

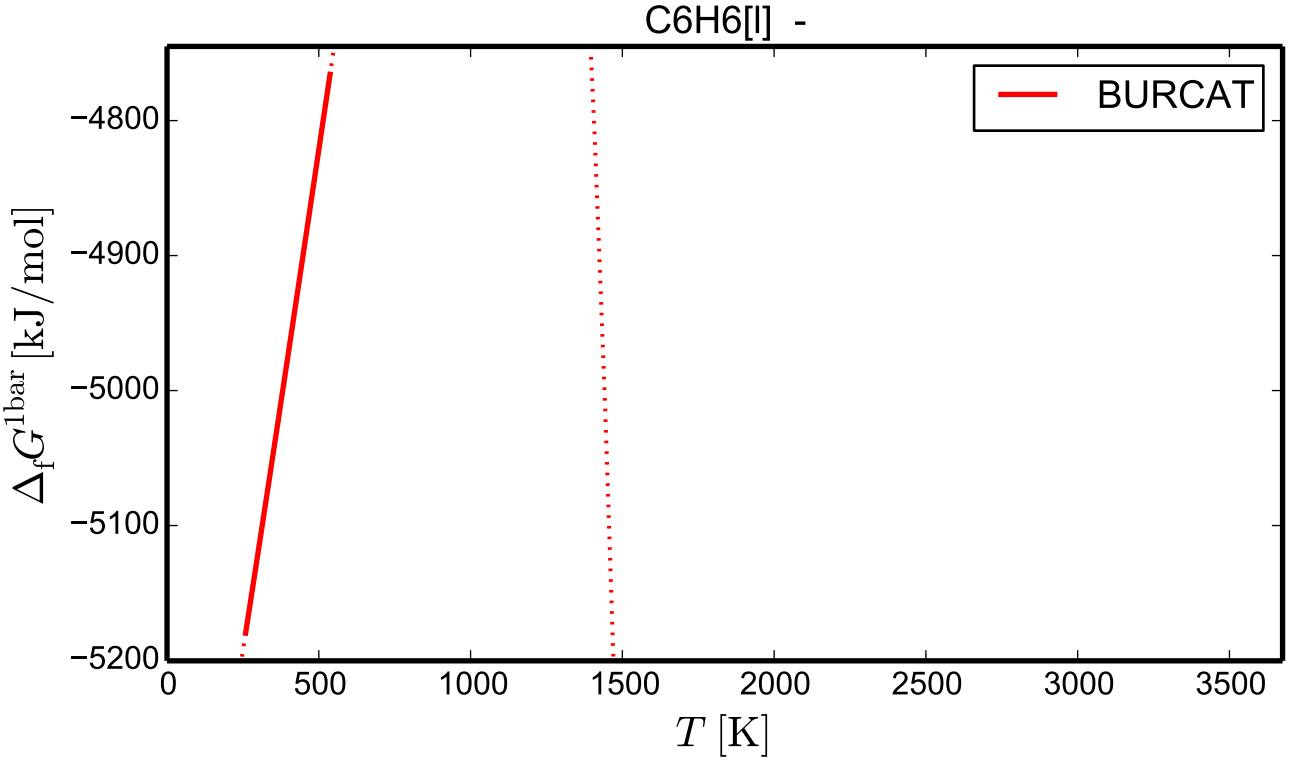

C6H12O6[s] -
BURCAT
−8400
−8500
−8600
−8700
−8800
−8900
−9000
−9100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

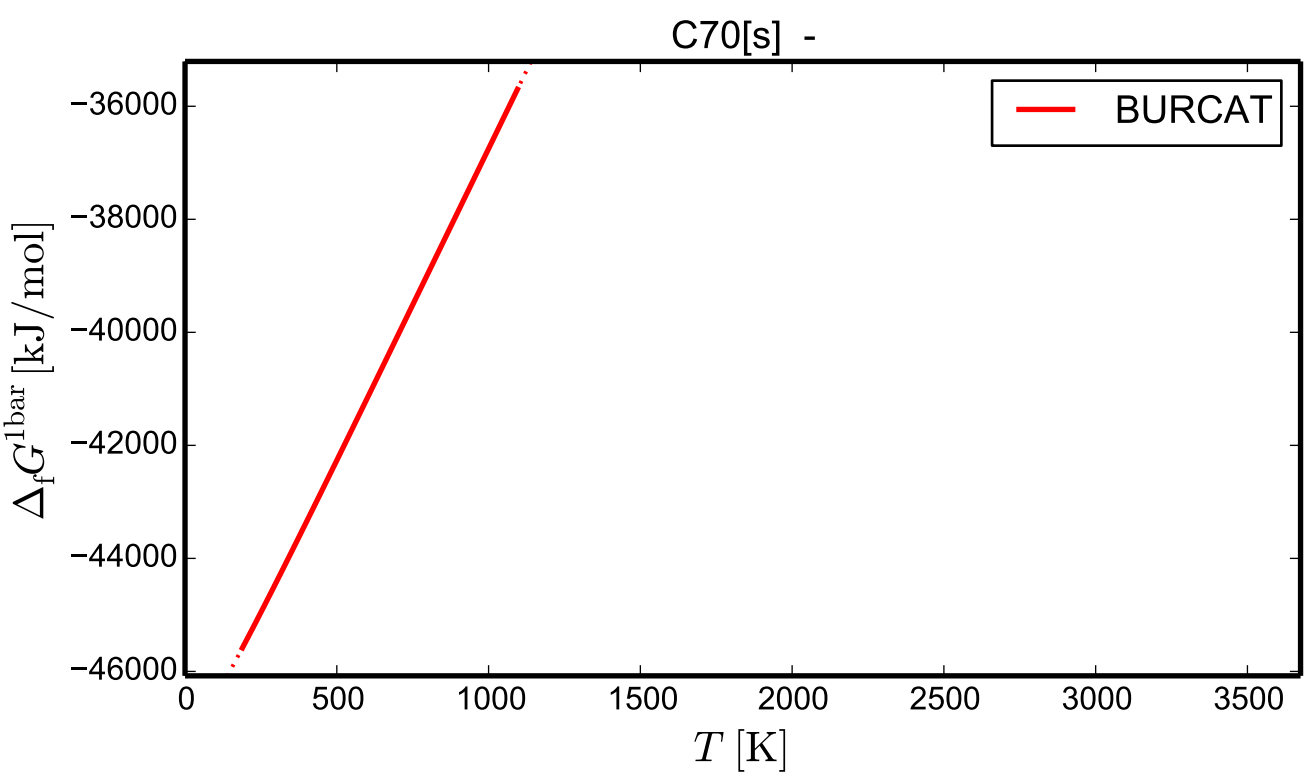

C6H12[l] -
BURCAT
−6300
−6320
−6340
−6360
−6380
−6400
−6420
−6440
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

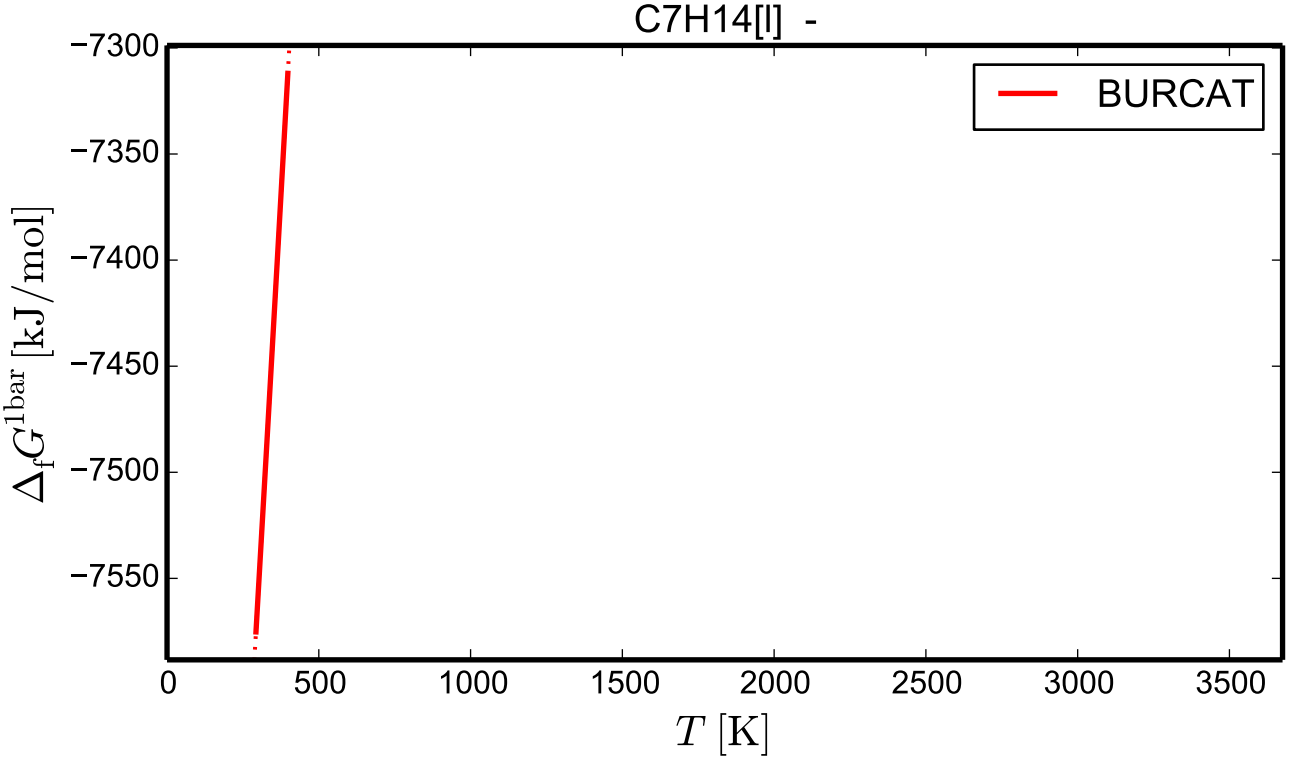

C6H12_a[l] -
BURCAT
−6600
−6620
−6640
−6660
−6680
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

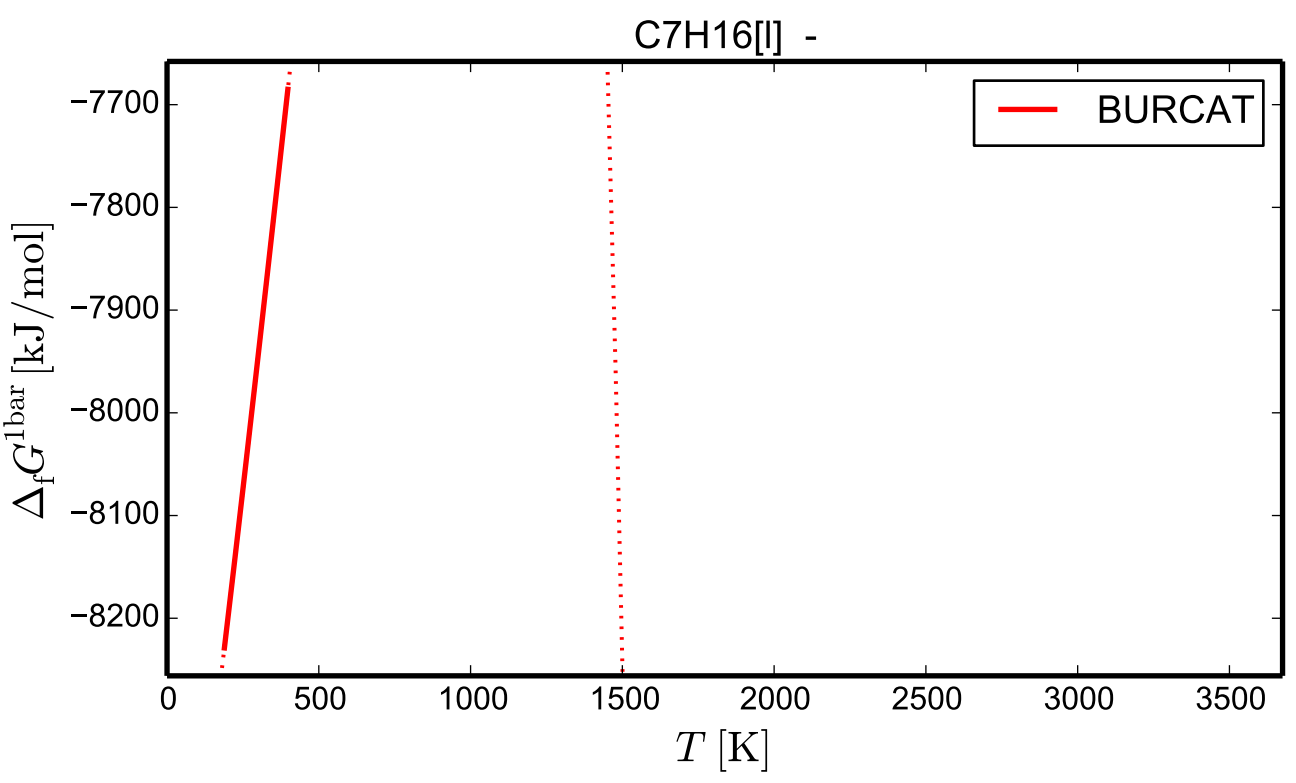

C6H14[l] -
BURCAT
−6800
−6850
−6900
−6950
−7000
−7050
−7100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

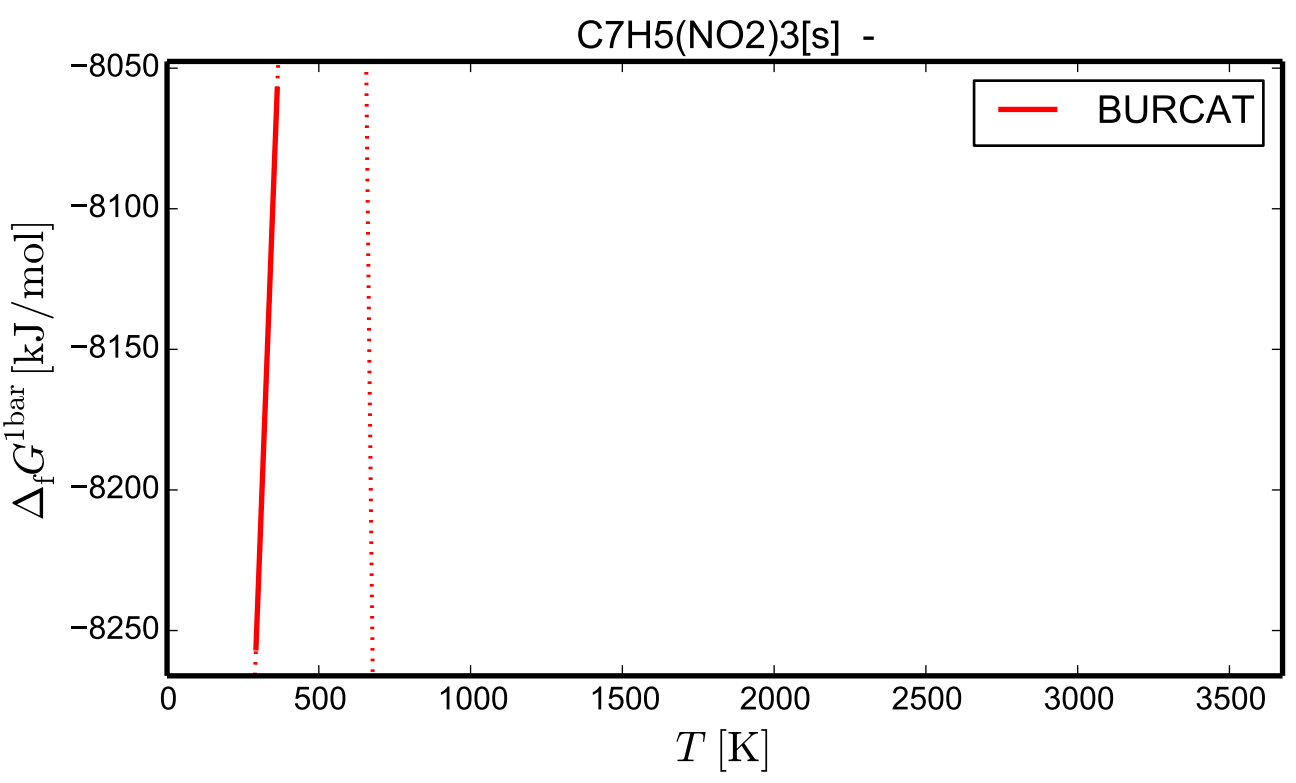

C6H5NH2[l] -
BURCAT
−5400
−5500
−5600
−5700
−5800
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

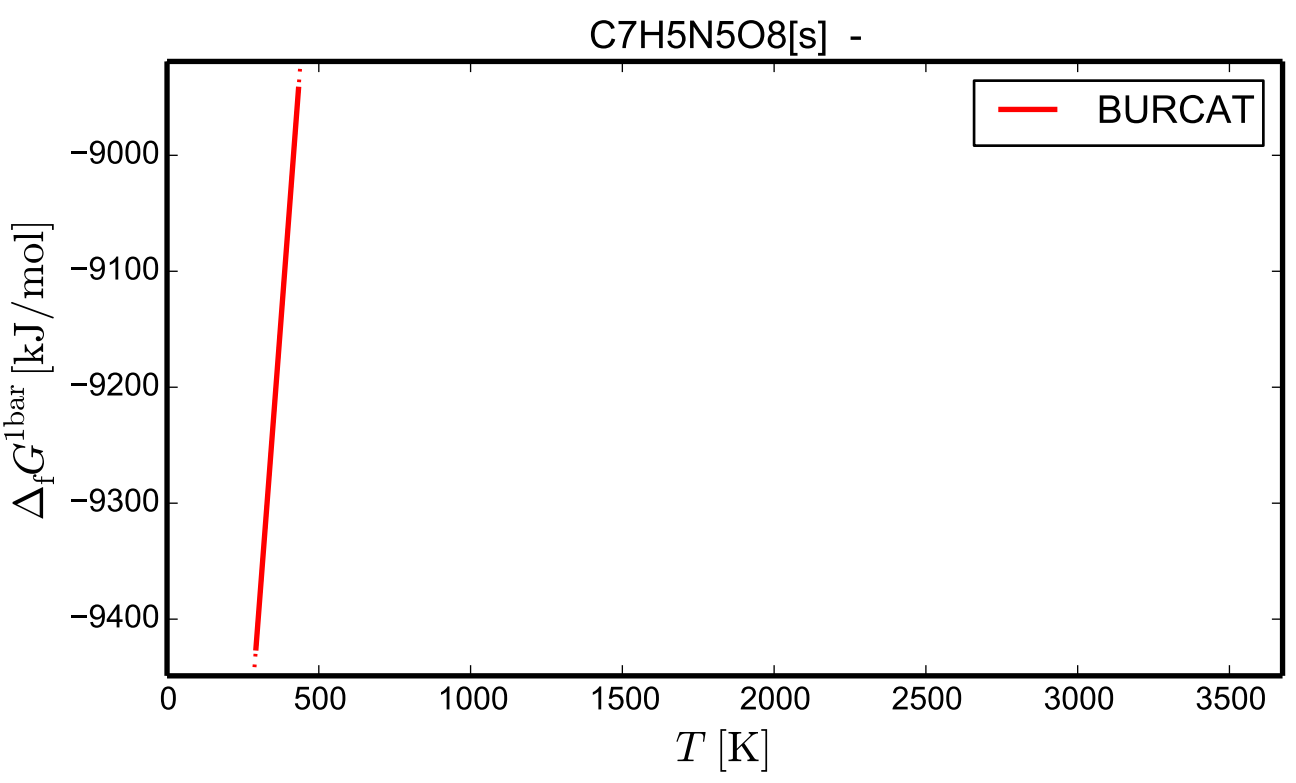

C6H6[l] -
BURCAT
−4800
−4900
−5000
−5100
−5200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

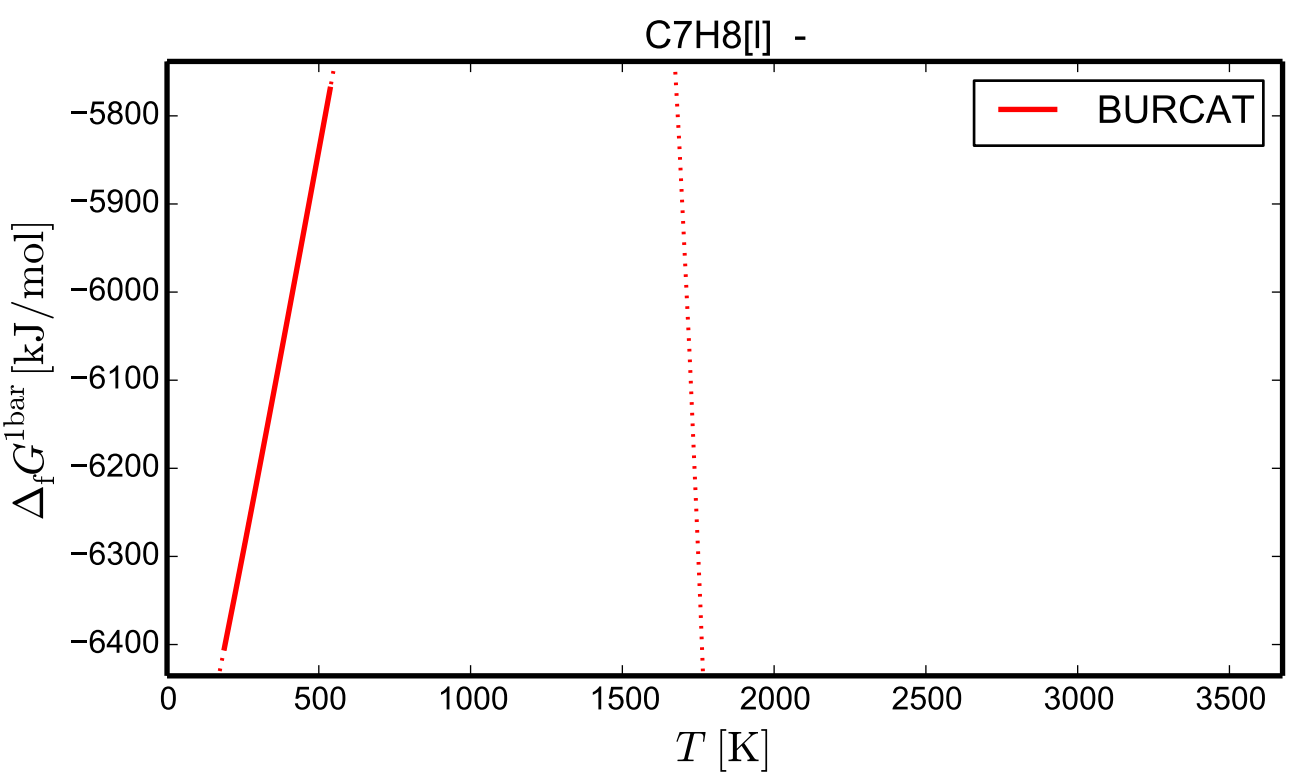

C70[s] -
BURCAT
−36000
−38000
−40000
−42000
−44000
−46000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

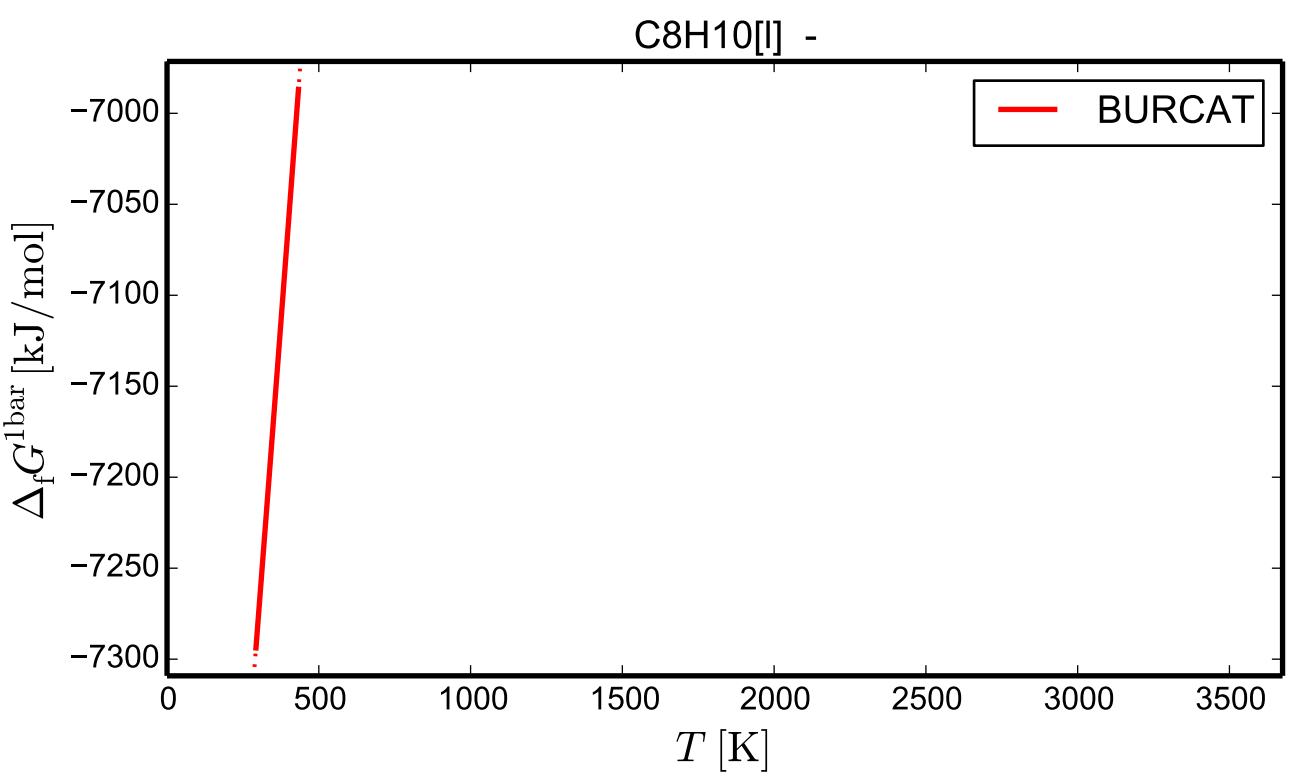

C7H14[l] -
BURCAT
−7300
−7350
−7400
−7450
−7500
−7550
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

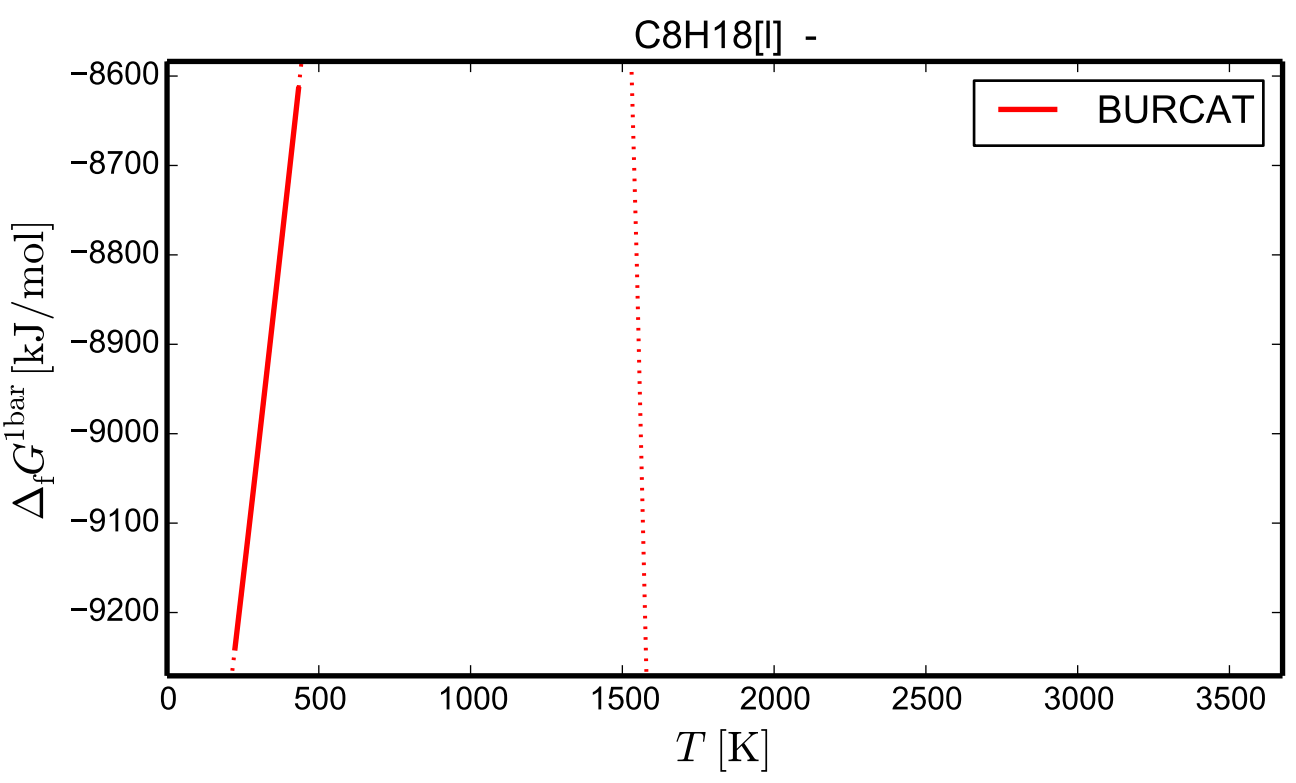

C7H16[l] -
BURCAT
−7700
−7800
−7900
−8000
−8100
−8200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

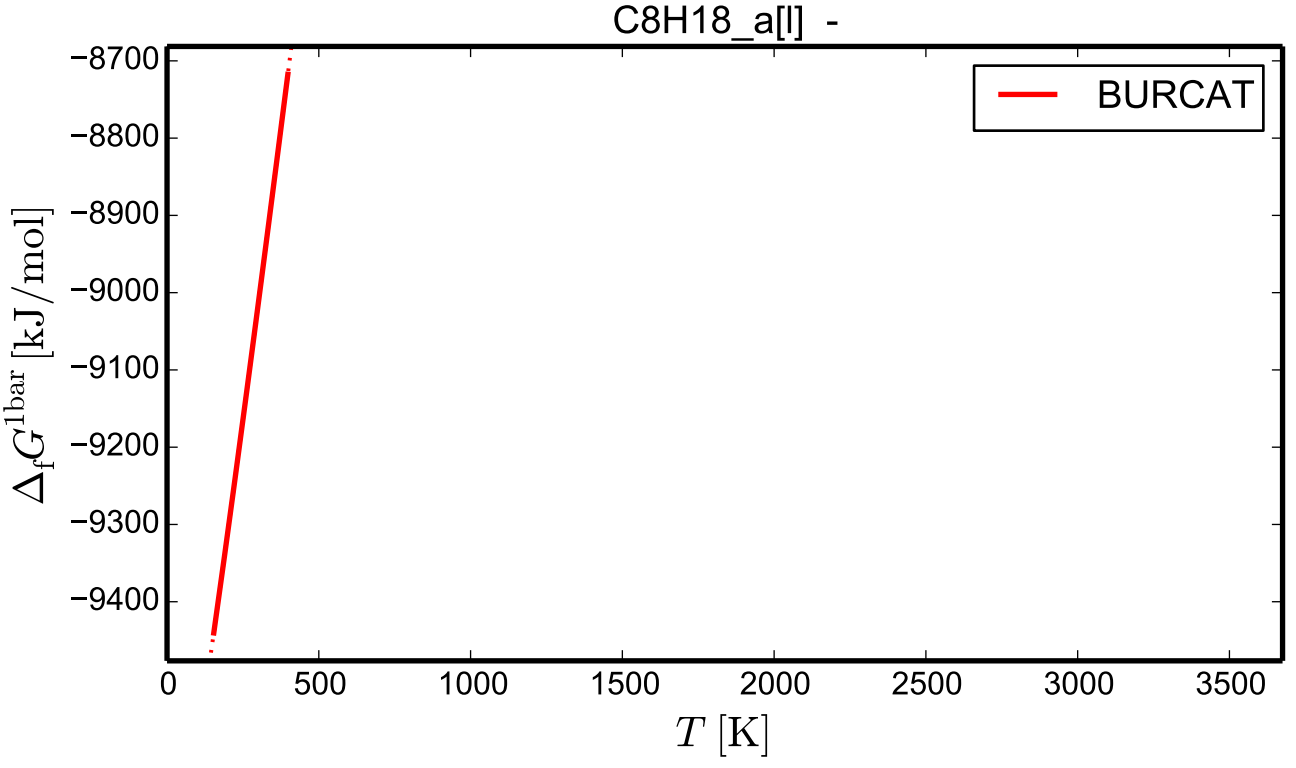

C7H5(NO2)3[s] -
BURCAT
−8050
−8100
−8150
−8200
−8250
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

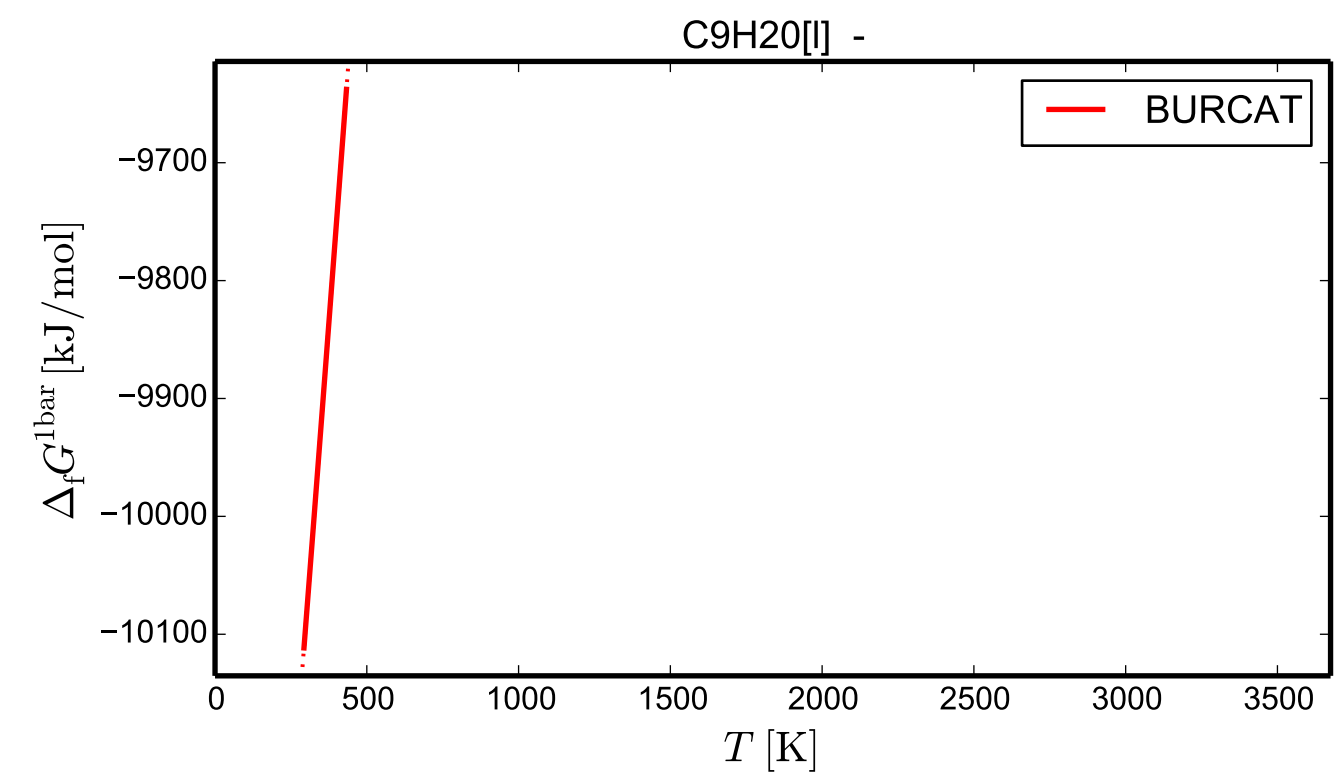

C7H5N5O8[s] -
BURCAT
−9000
−9100
−9200
−9300
−9400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

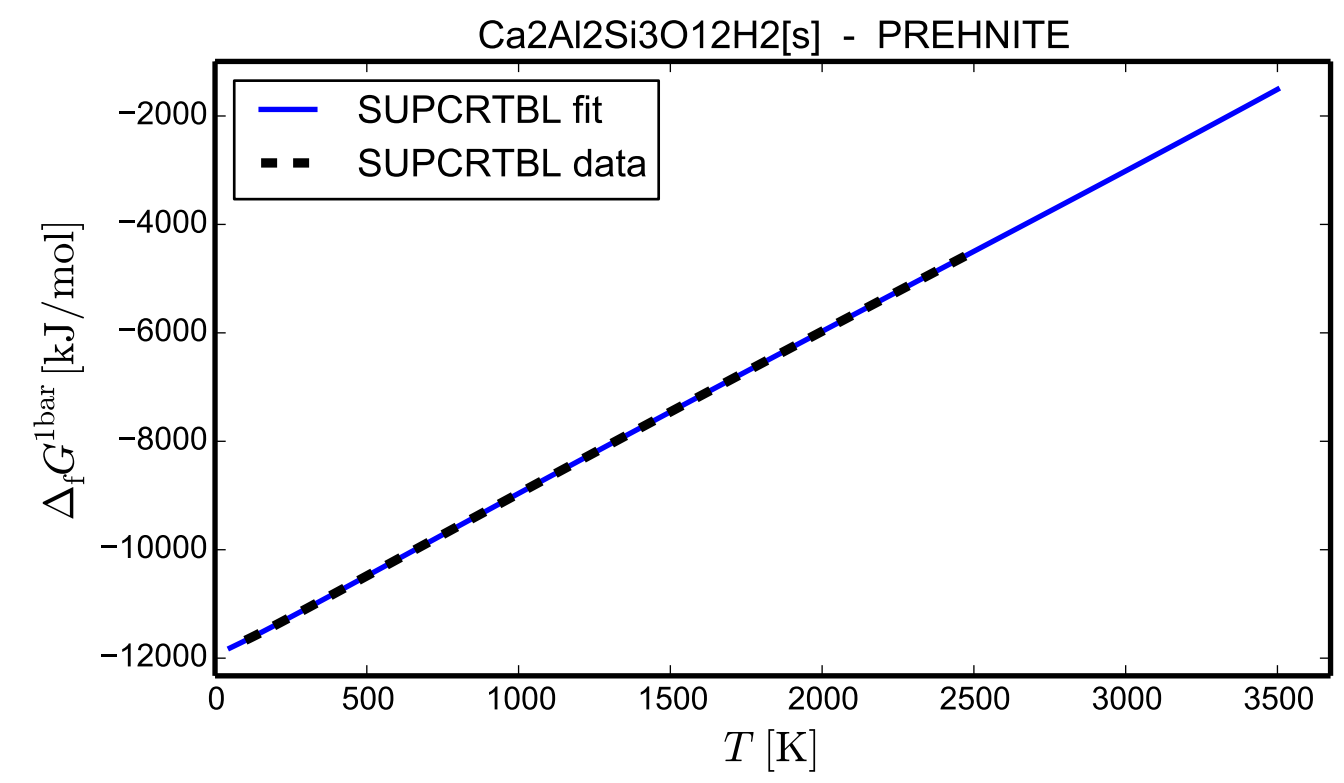

C7H8[l] -
BURCAT
−5800
−5900
−6000
−6100
−6200
−6300
−6400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

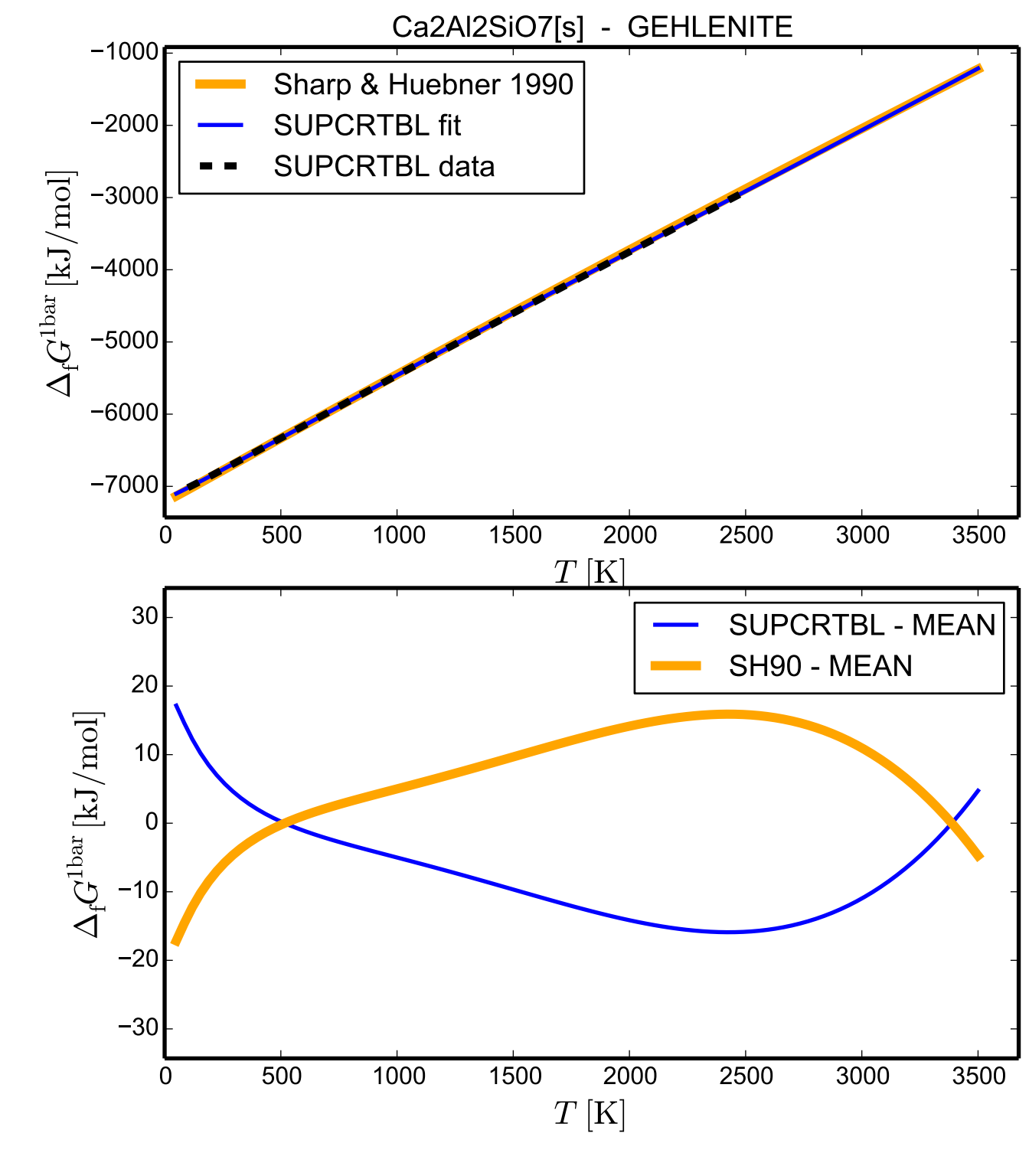

C8H10[l] -
BURCAT
−7000
−7050
−7100
−7150
−7200
−7250
−7300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

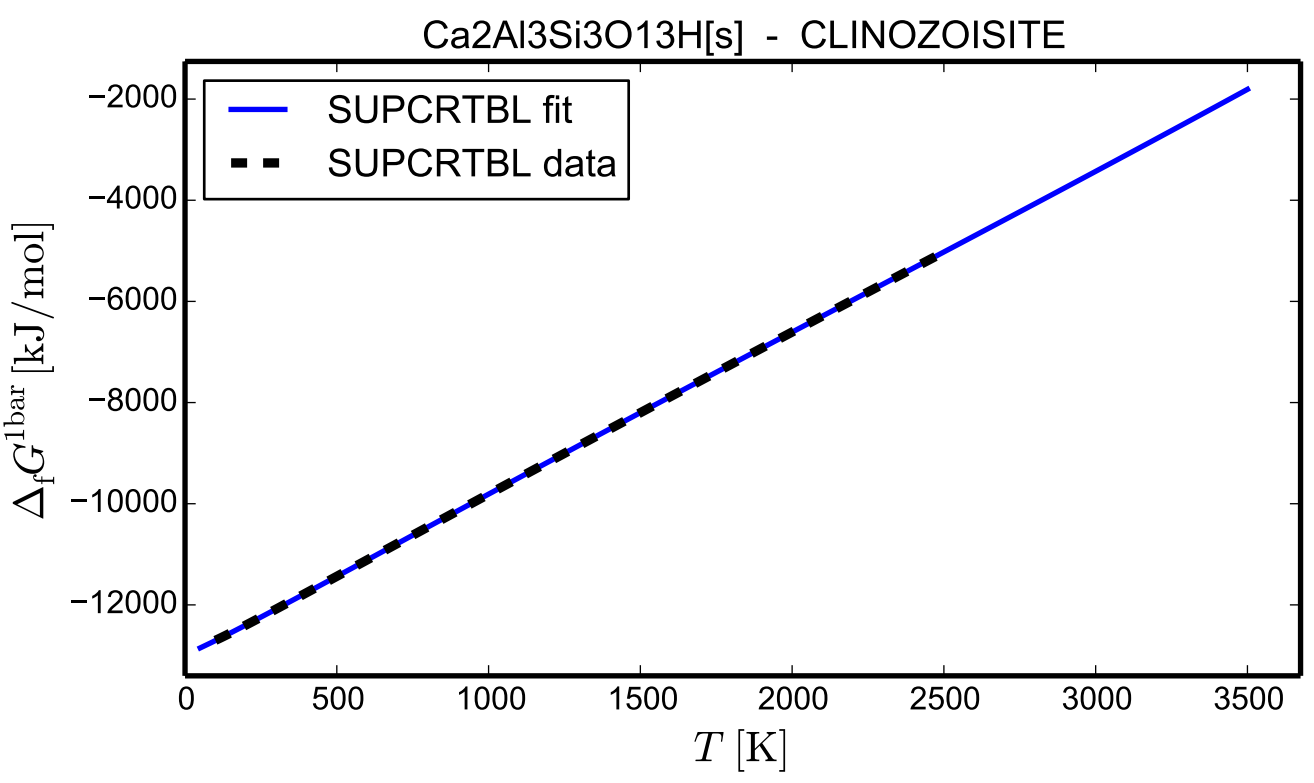

C8H18[l] -
BURCAT
−8600
−8700
−8800
−8900
−9000
−9100
−9200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

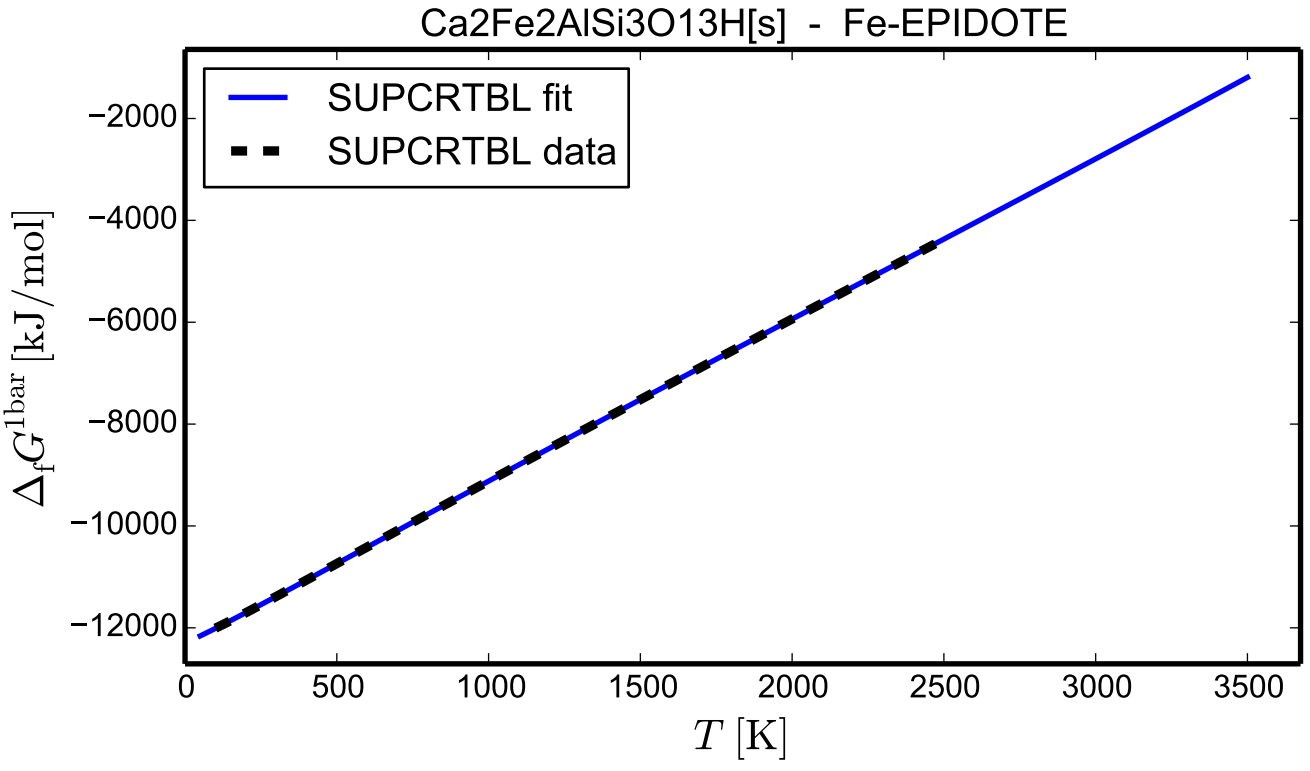

C8H18_a[l] -
BURCAT
−8700
−8800
−8900
−9000
−9100
−9200
−9300
−9400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

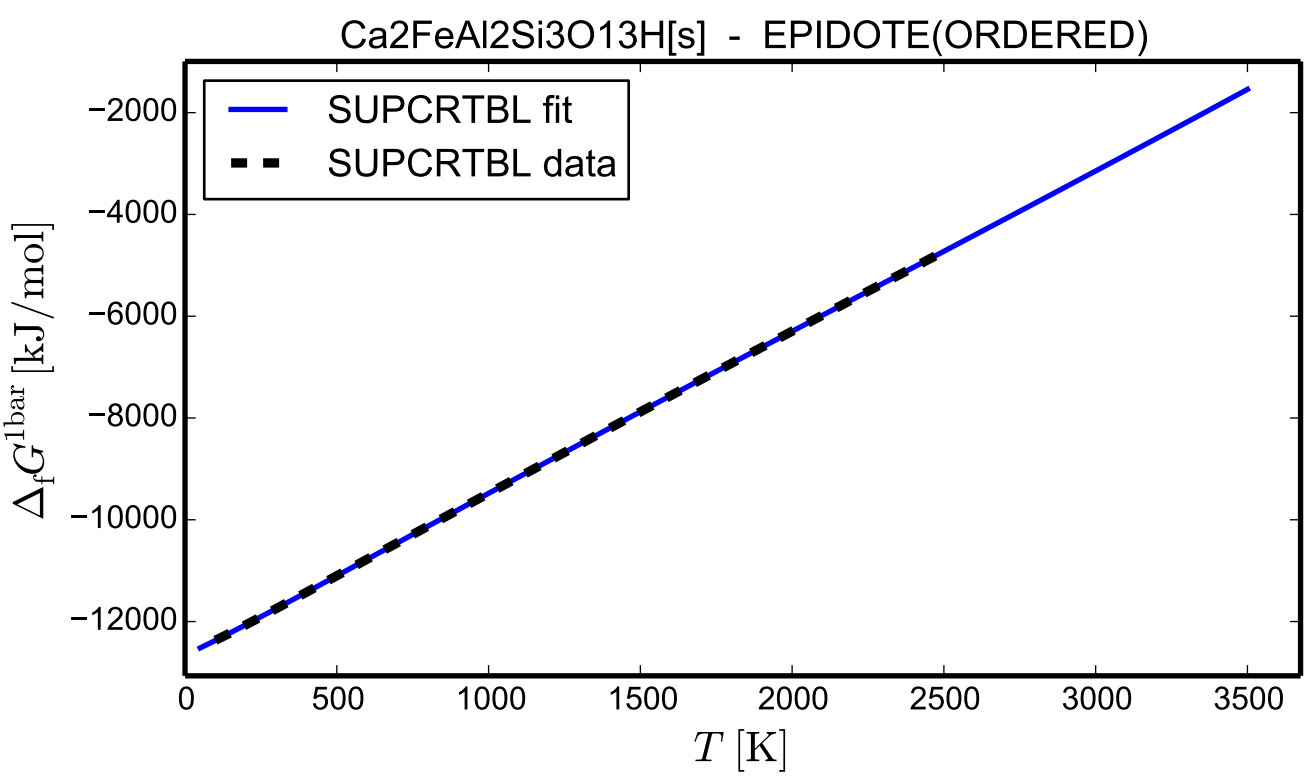

C9H20[l] -
BURCAT
−9700
−9800
−9900
−10000
−10100
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

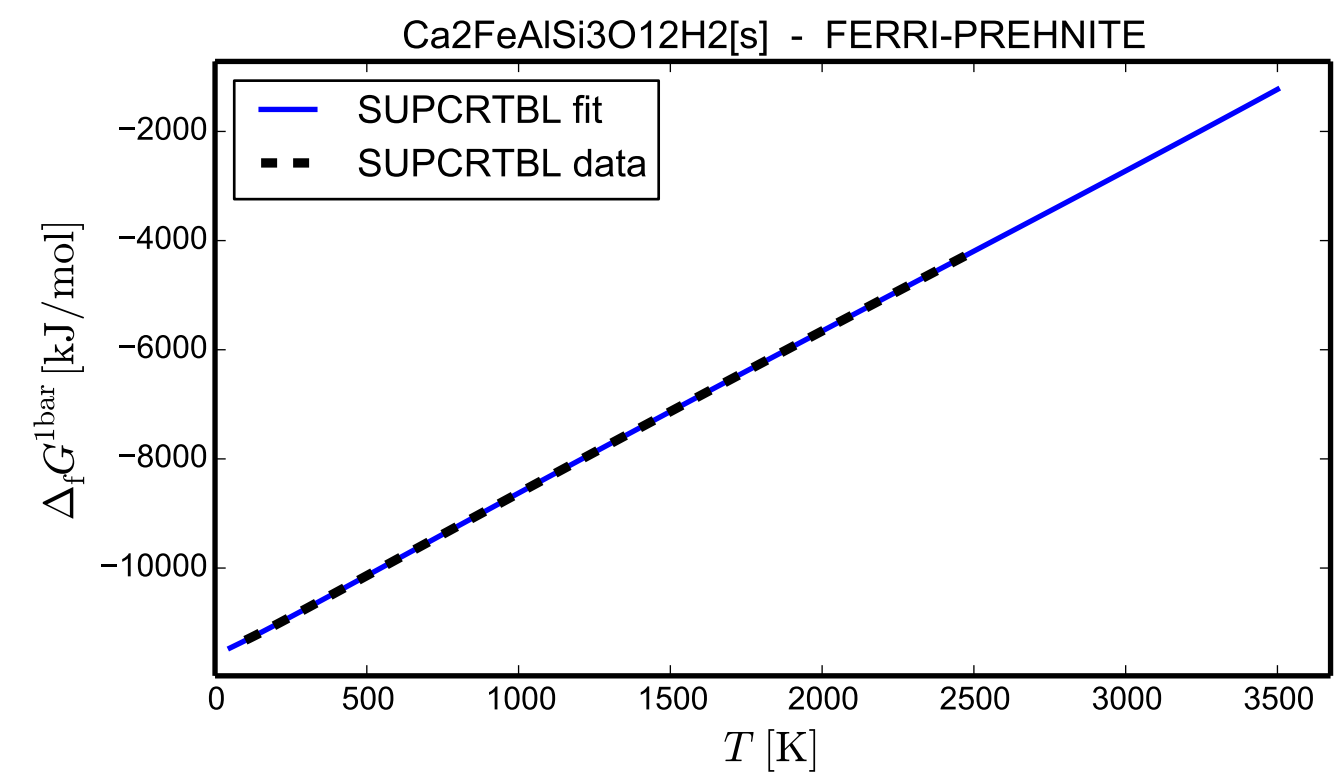

Ca2Al2Si3O12H2[s] - PREHNITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

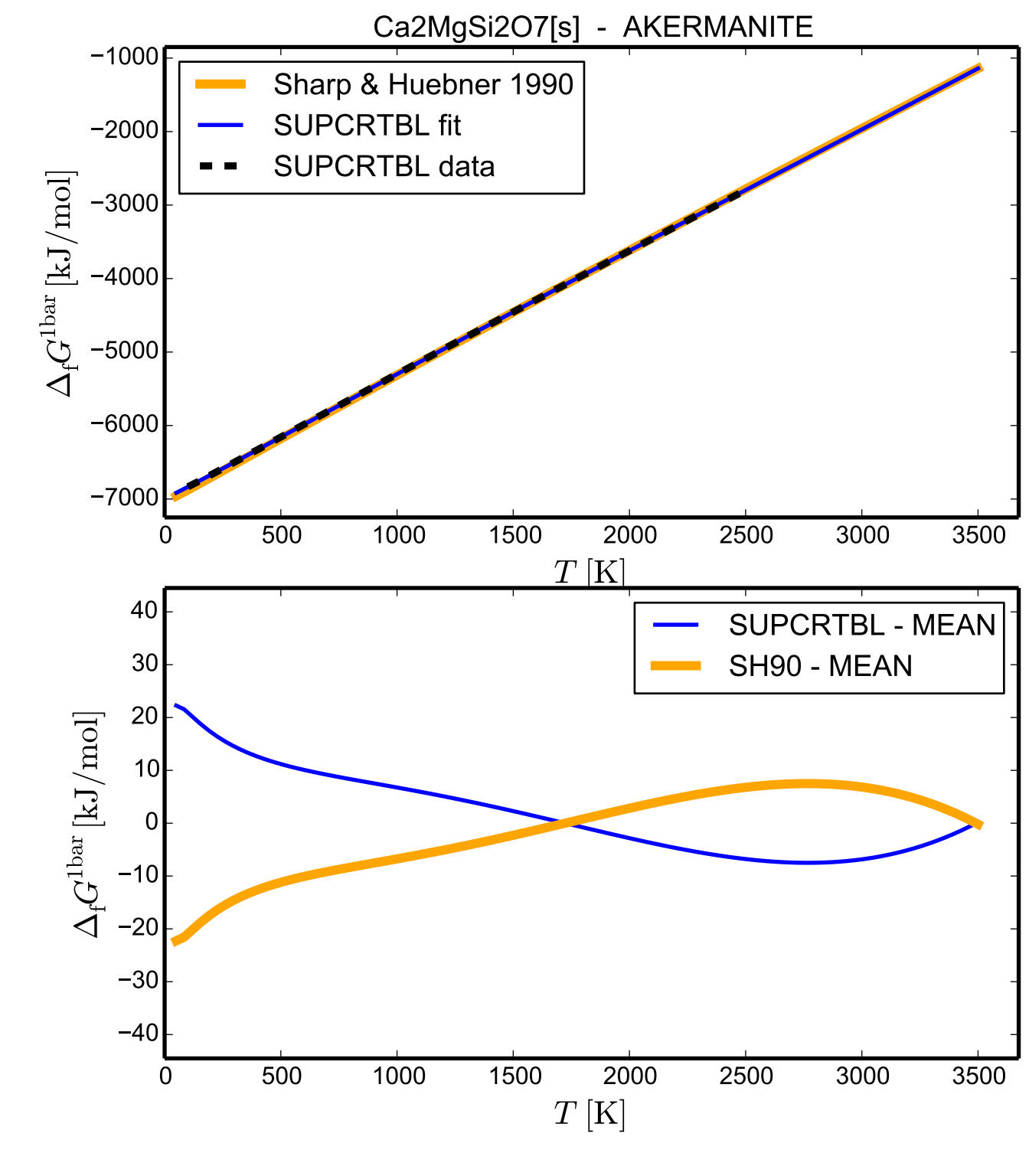

Ca2Al2SiO7[s] - GEHLENITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

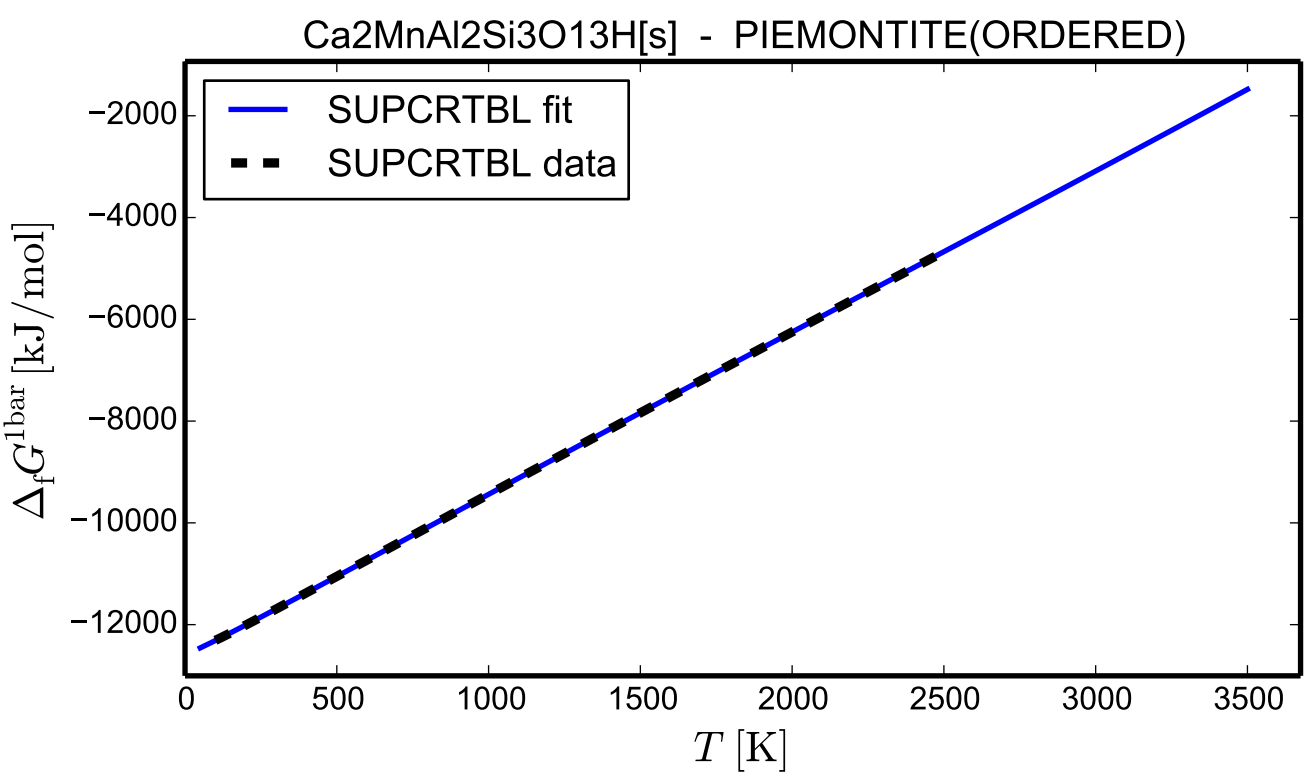

Ca2Al3Si3O13H[s] - CLINOZOISITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

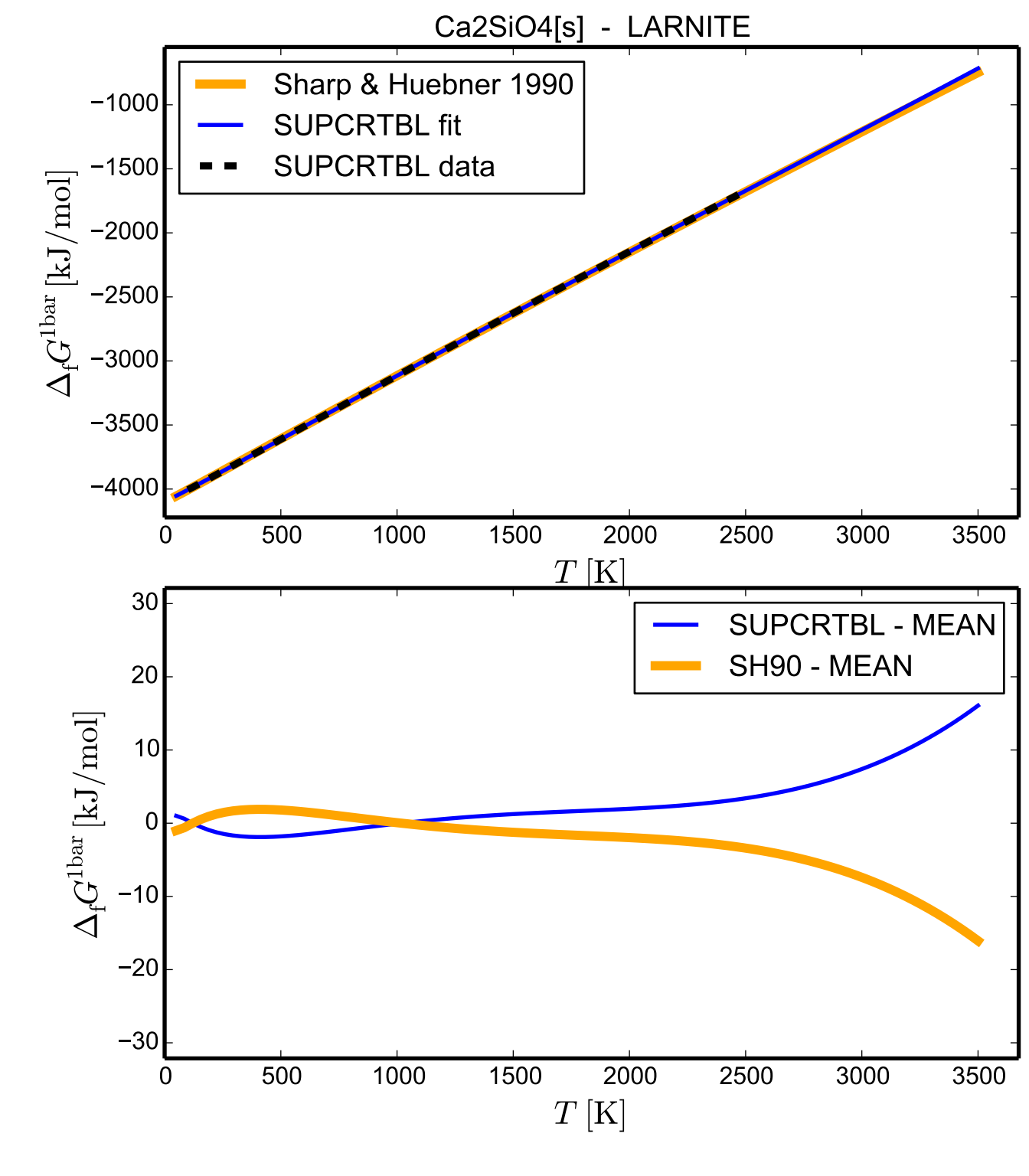

Ca2Fe2AlSi3O13H[s] - Fe-EPIDOTE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

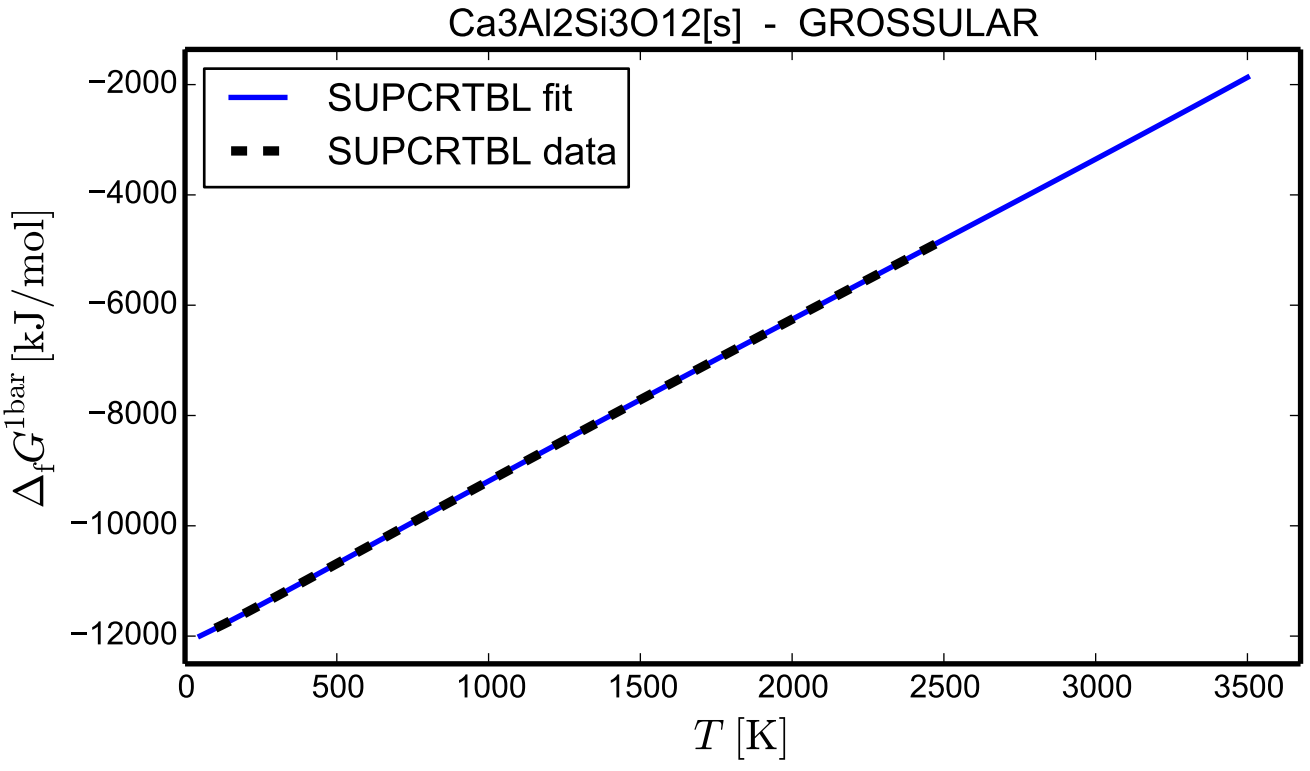

Ca2FeAl2Si3O13H[s] - EPIDOTE(ORDERED)
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

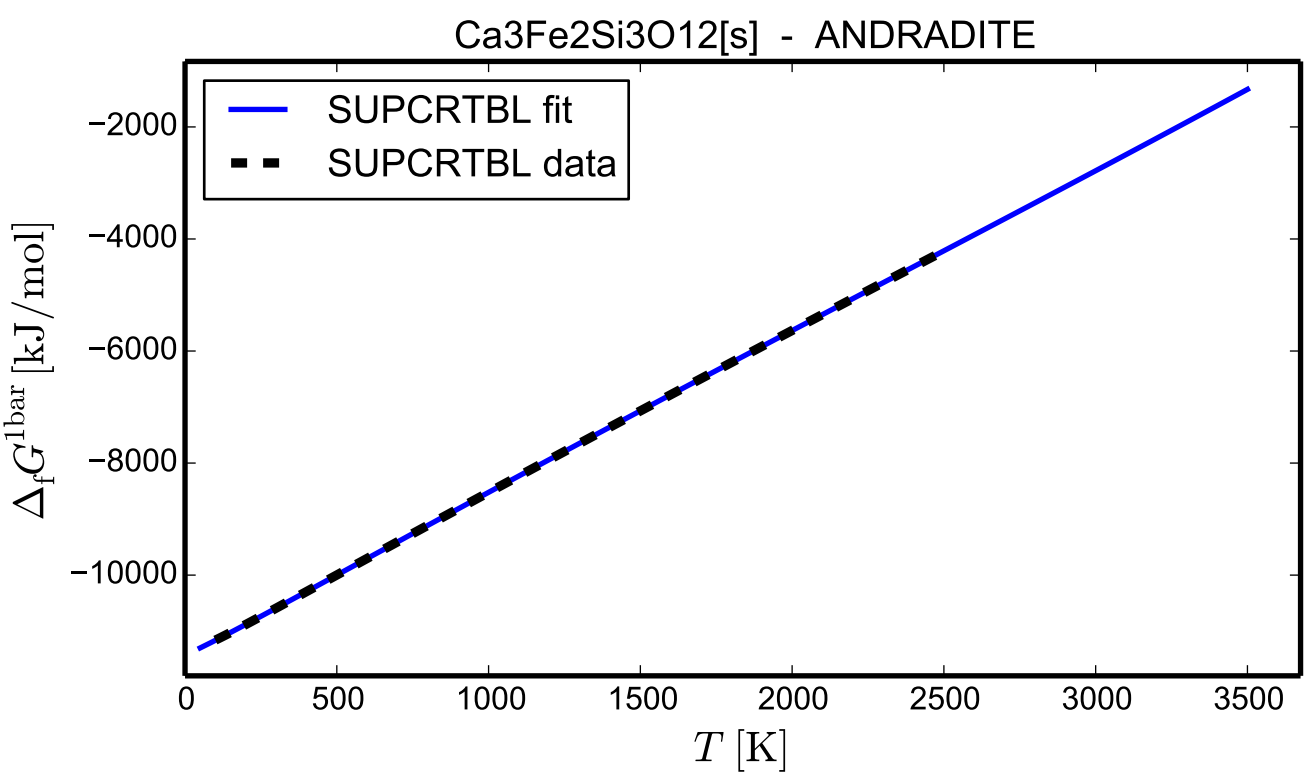

Ca2FeAlSi3O12H2[s] - FERRI-PREHNITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

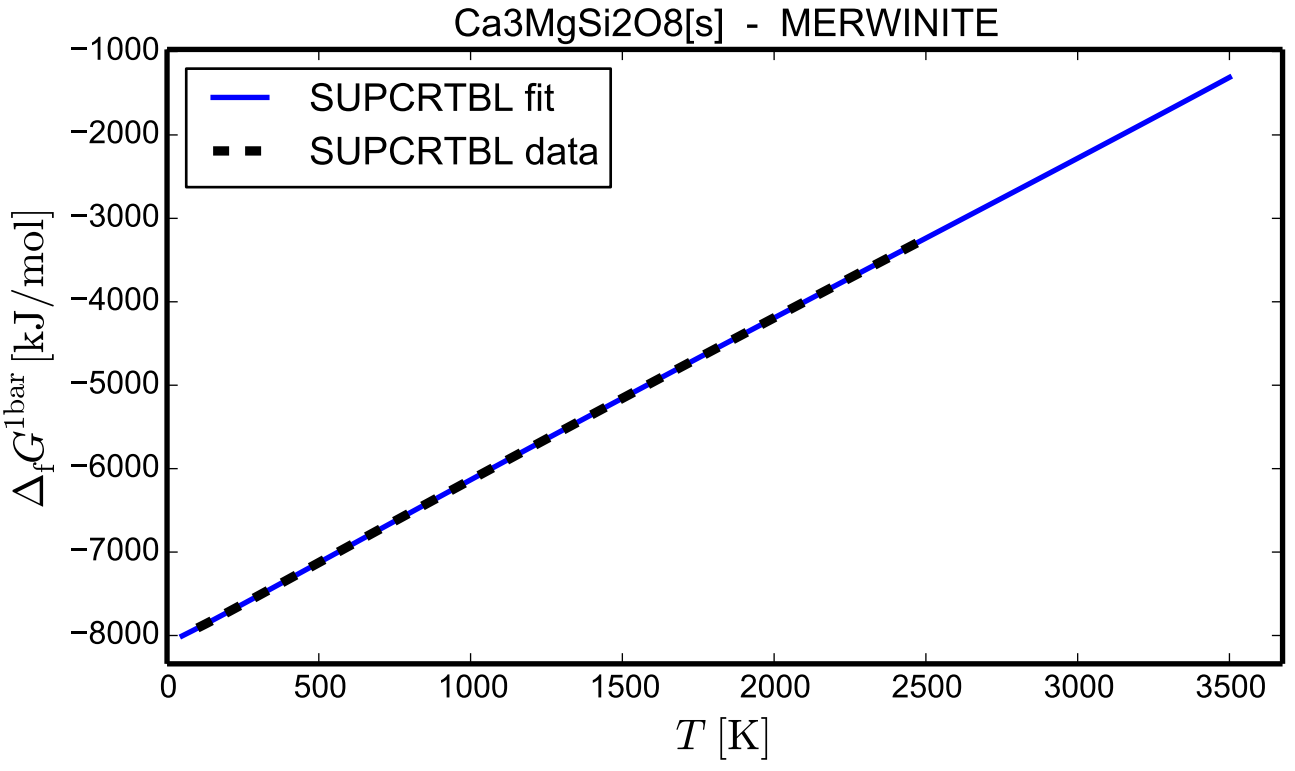

Ca2MgSi2O7[s] - AKERMANITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

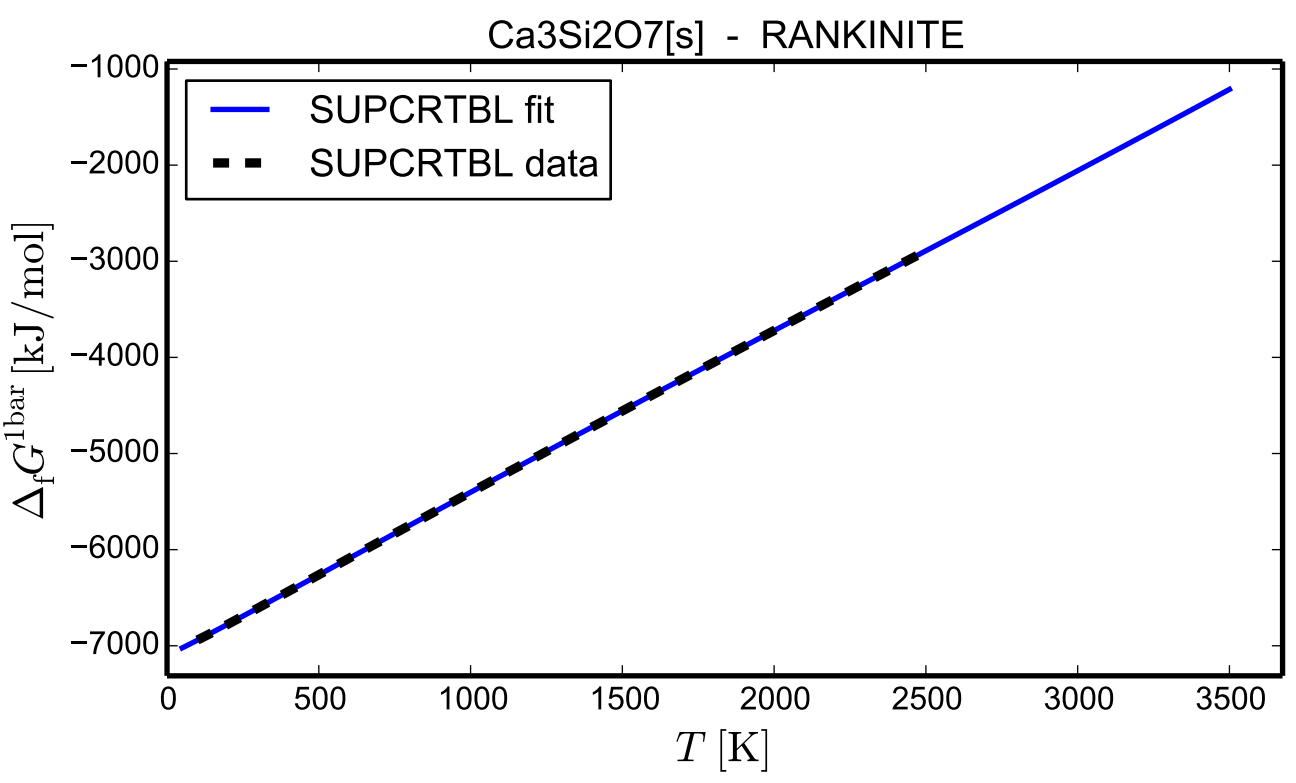

Ca2MnAl2Si3O13H[s] - PIEMONTITE(ORDERED)
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

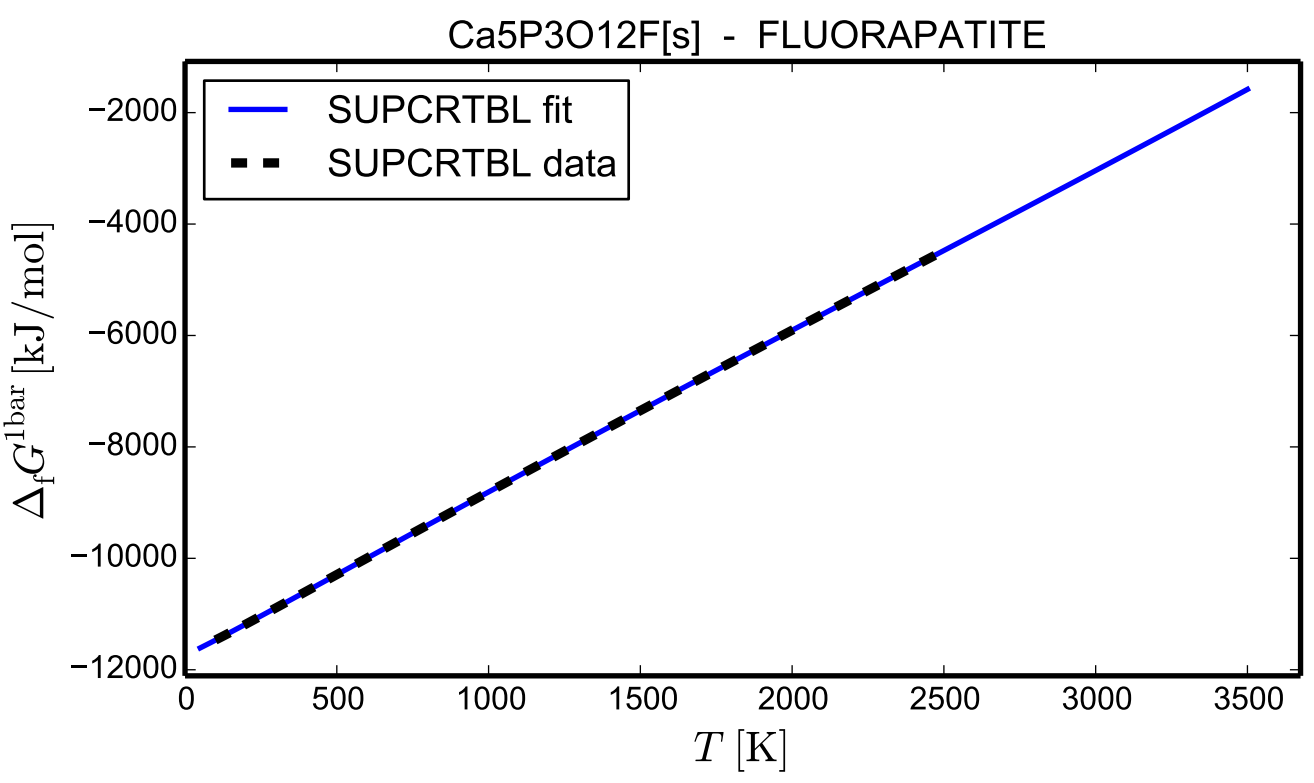

Ca2SiO4[s] - LARNITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

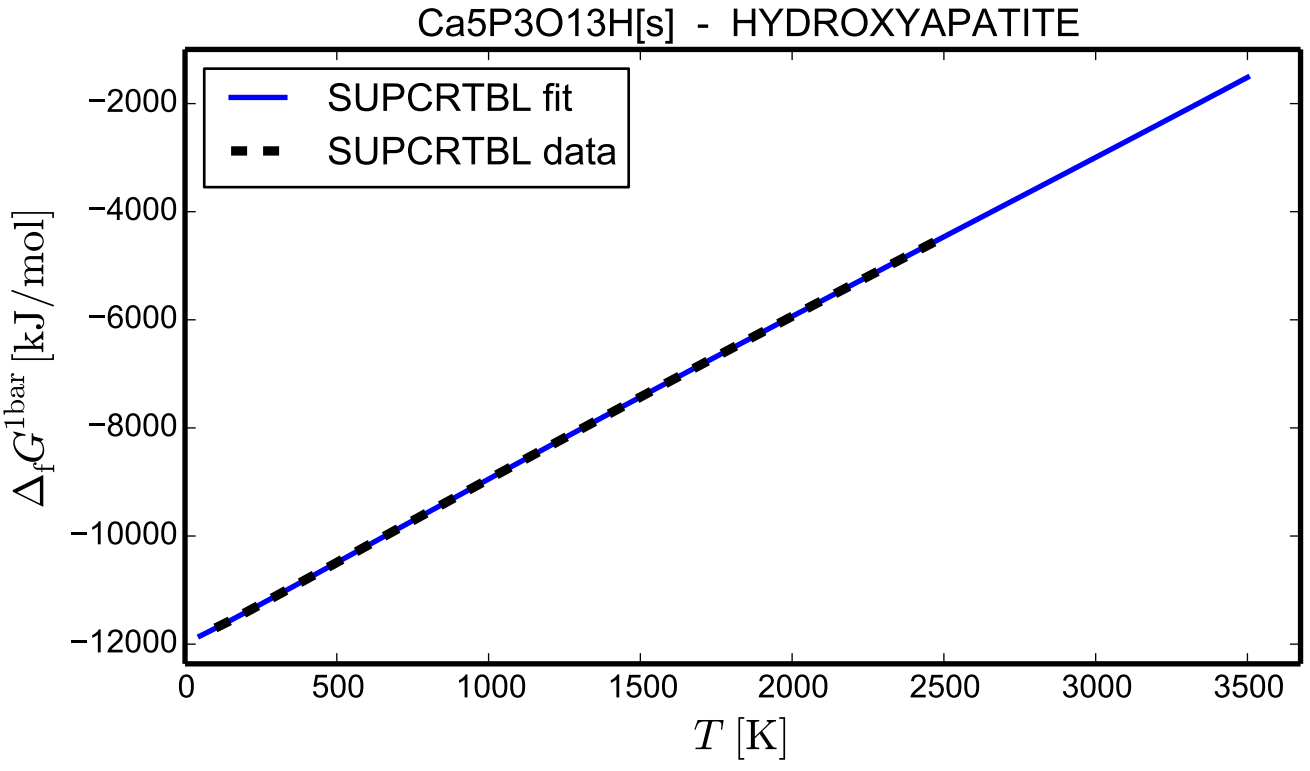

Ca3Al2Si3O12[s] - GROSSULAR
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

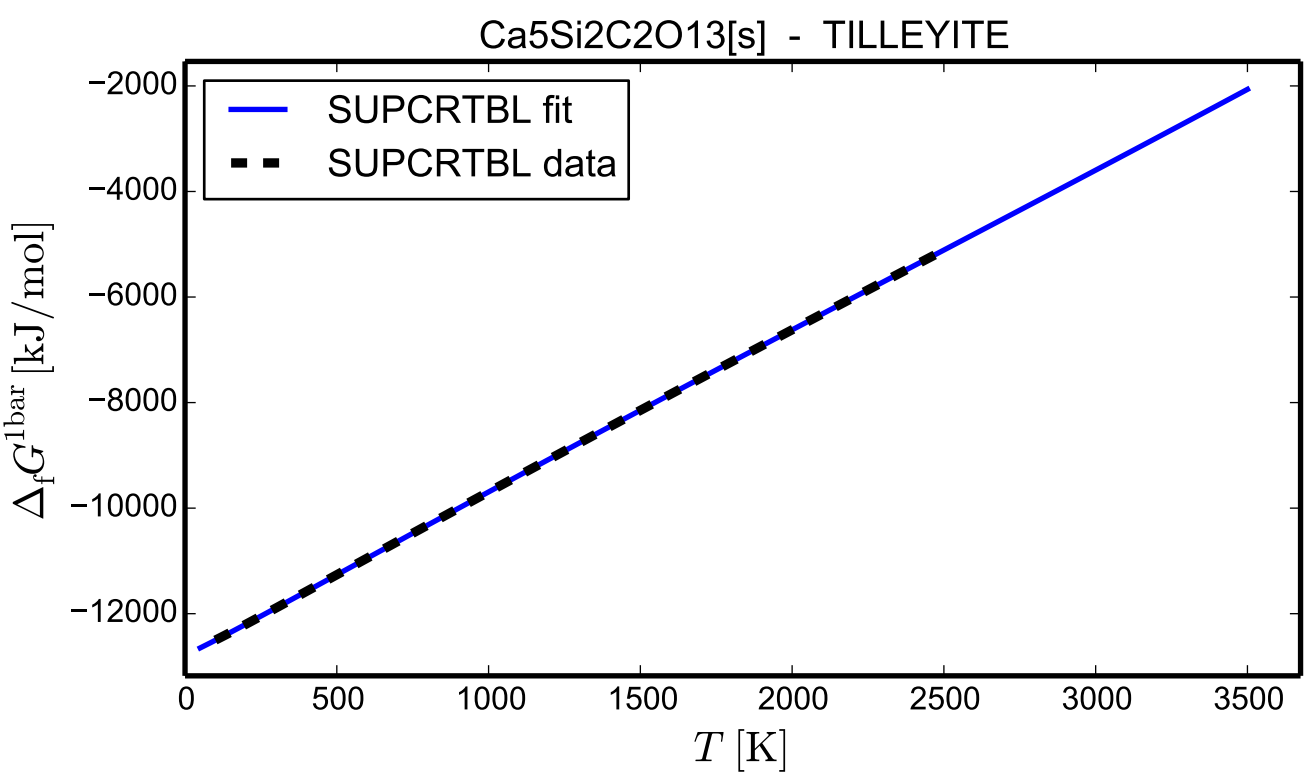

Ca3Fe2Si3O12[s] - ANDRADITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

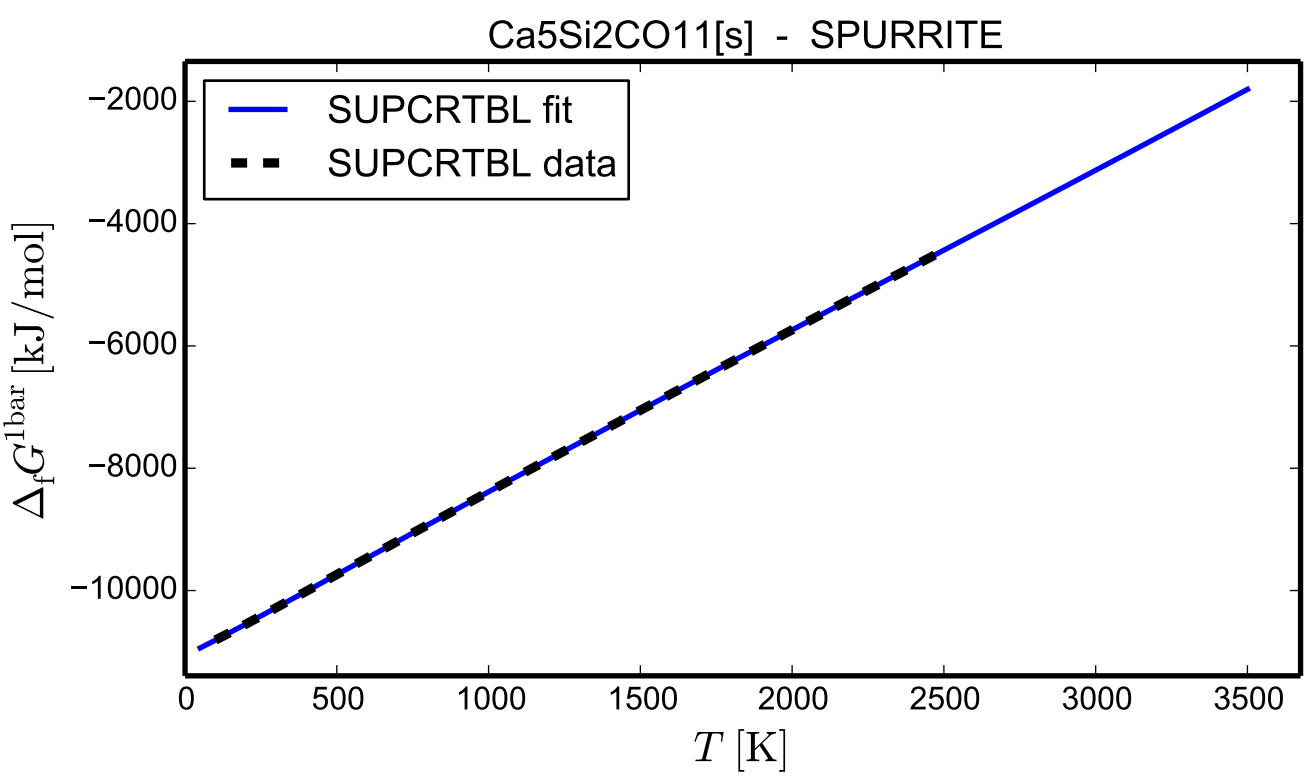

Ca3MgSi2O8[s] - MERWINITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
−8000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

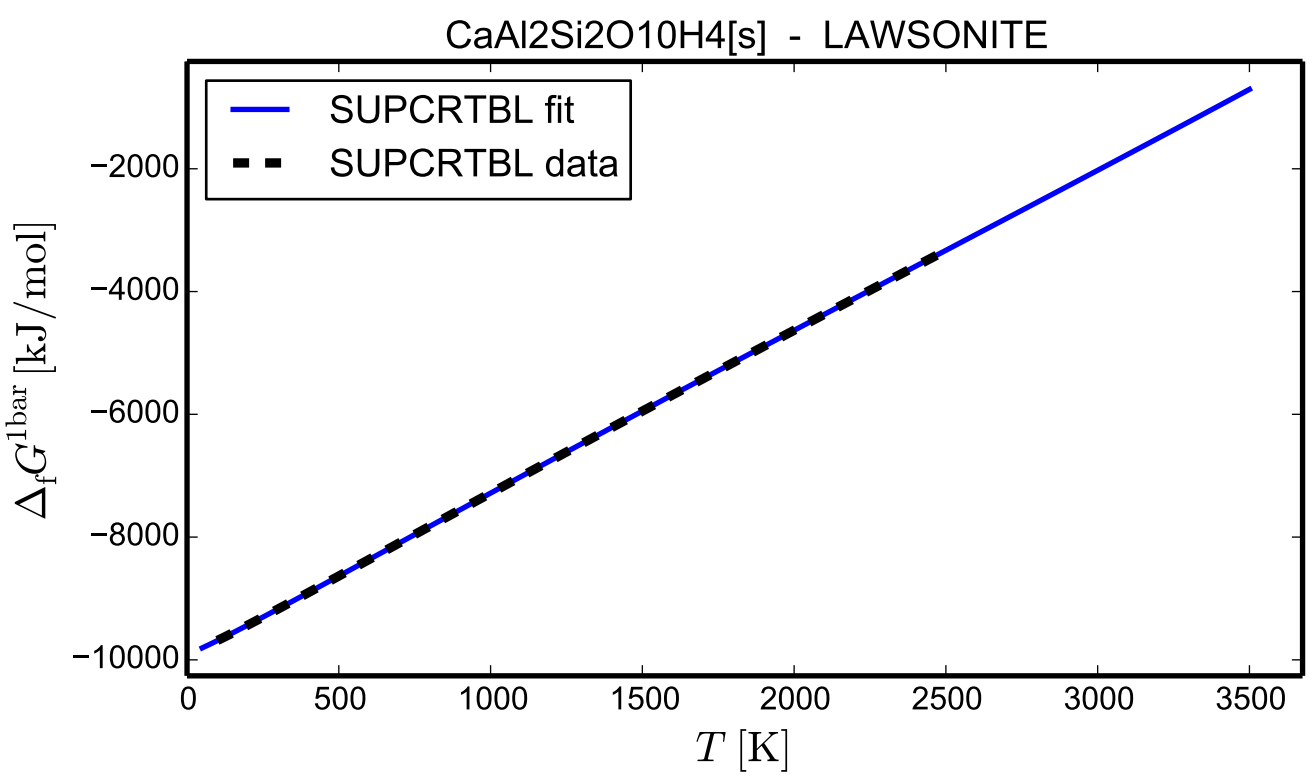

Ca3Si2O7[s] - RANKINITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

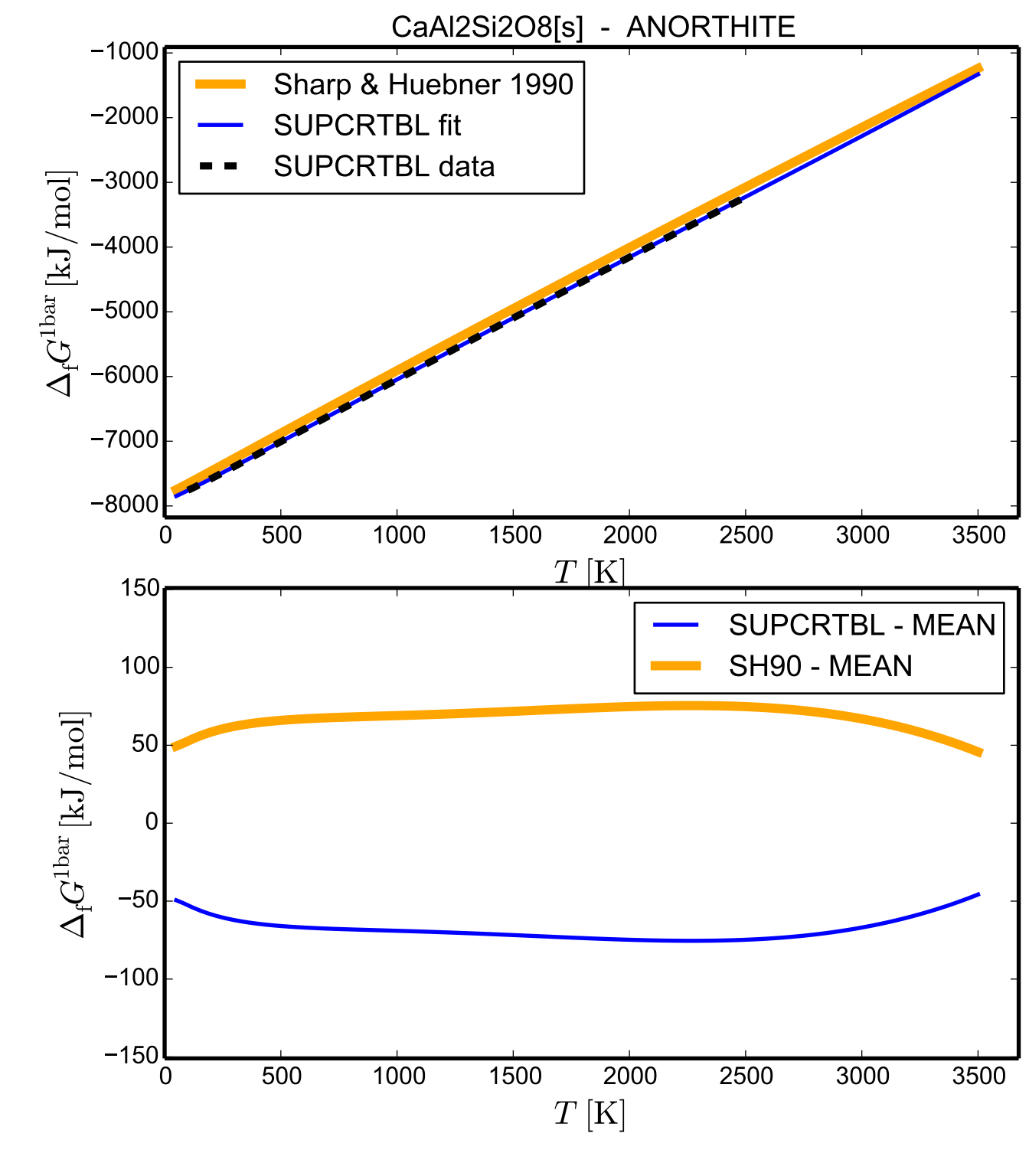

Ca5P3O12F[s] - FLUORAPATITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

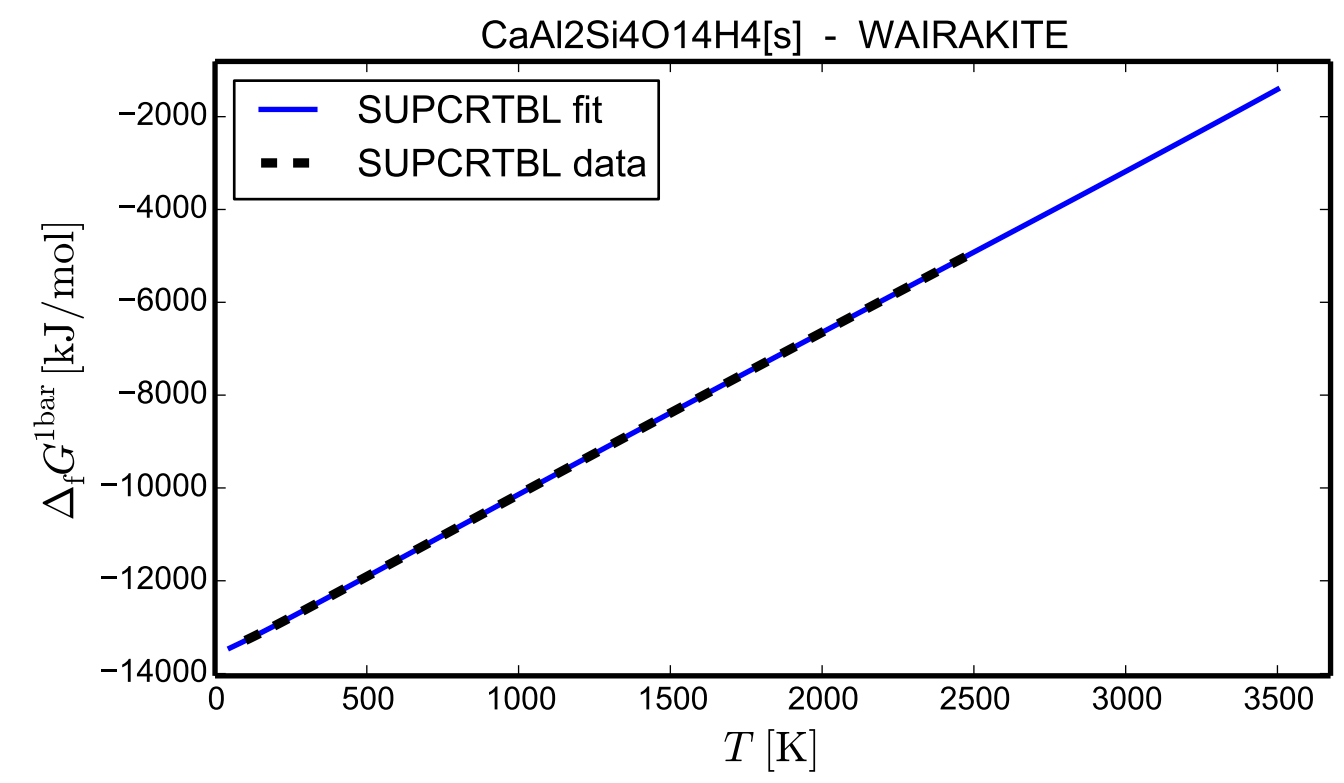

Ca5P3O13H[s] - HYDROXYAPATITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

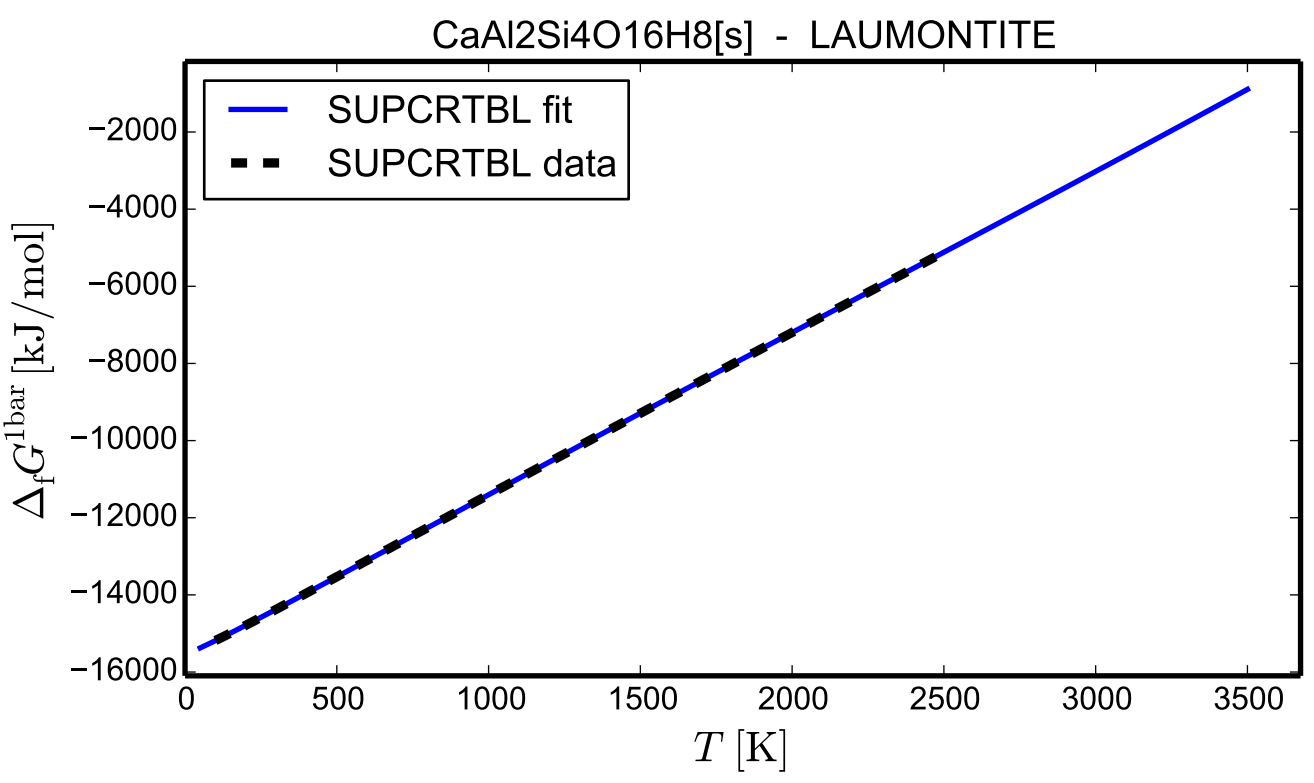

Ca5Si2C2O13[s] - TILLEYITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

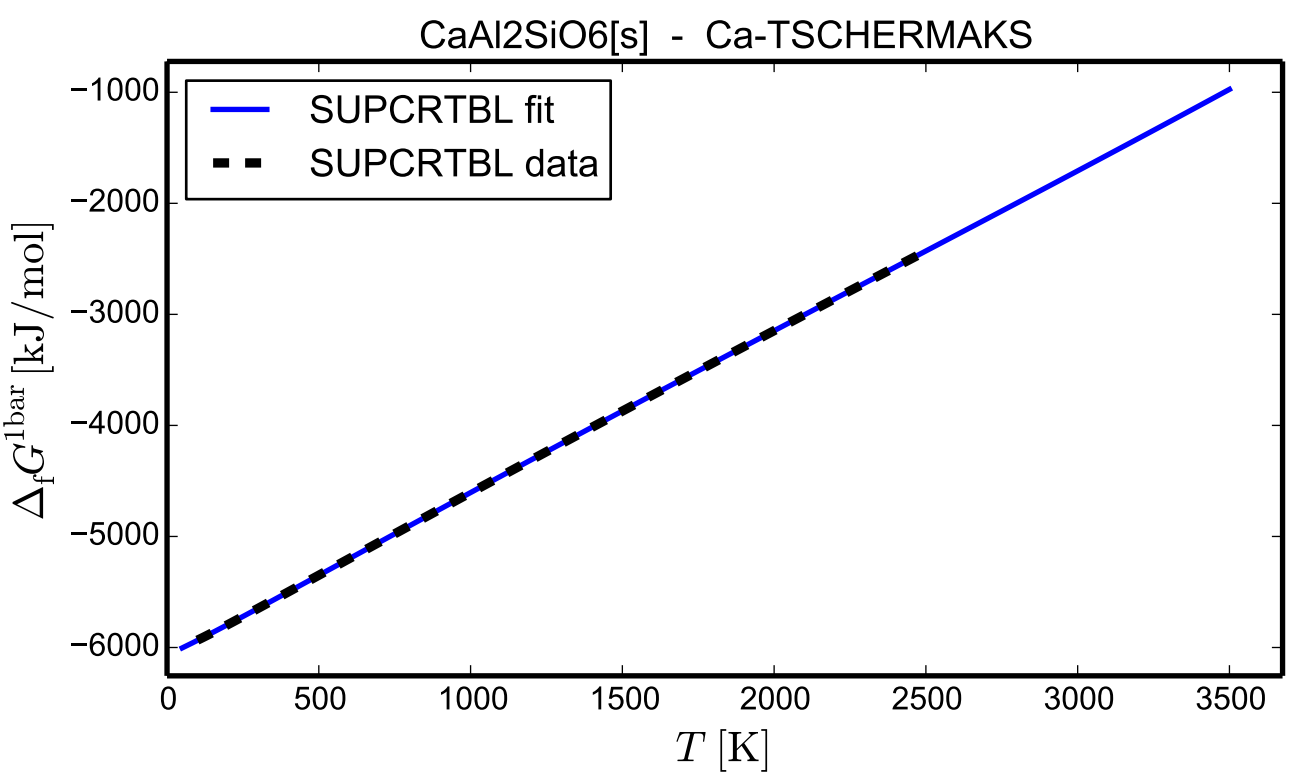

Ca5Si2CO11[s] - SPURRITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

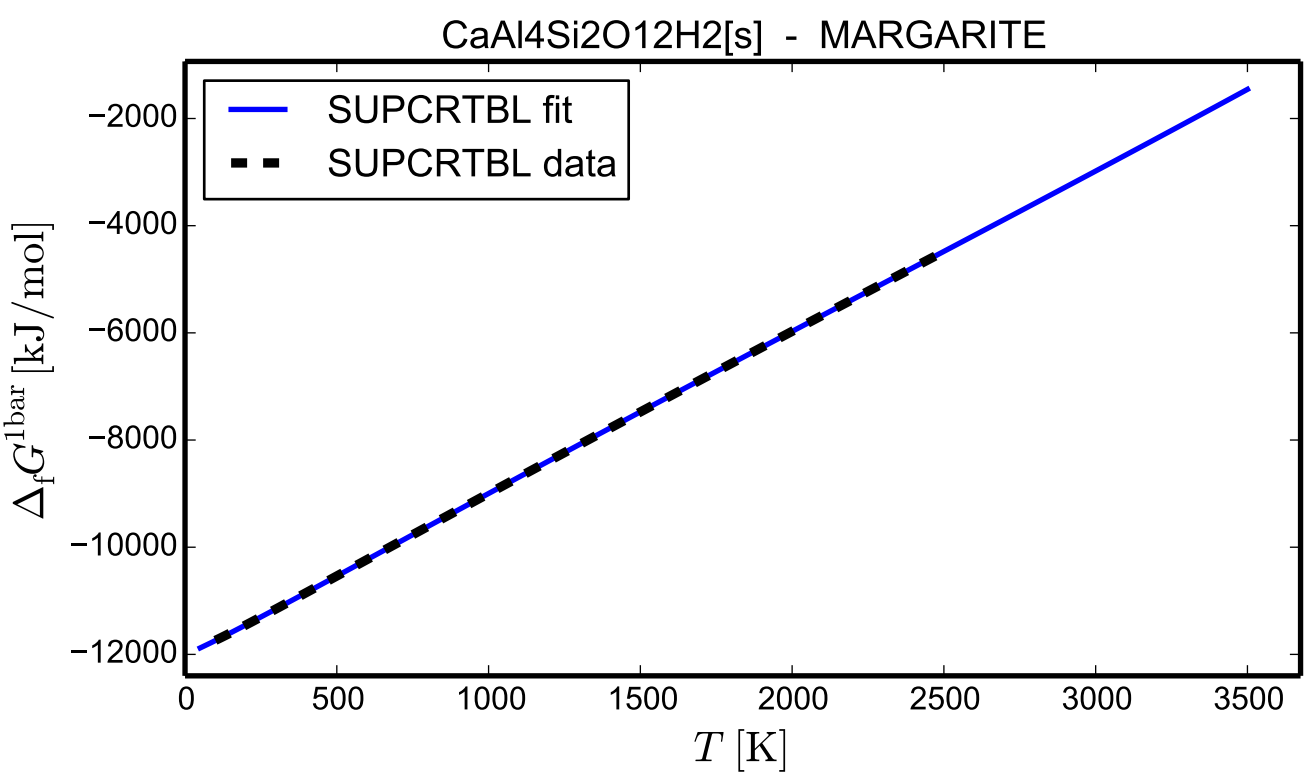

CaAl2Si2O10H4[s] - LAWSONITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

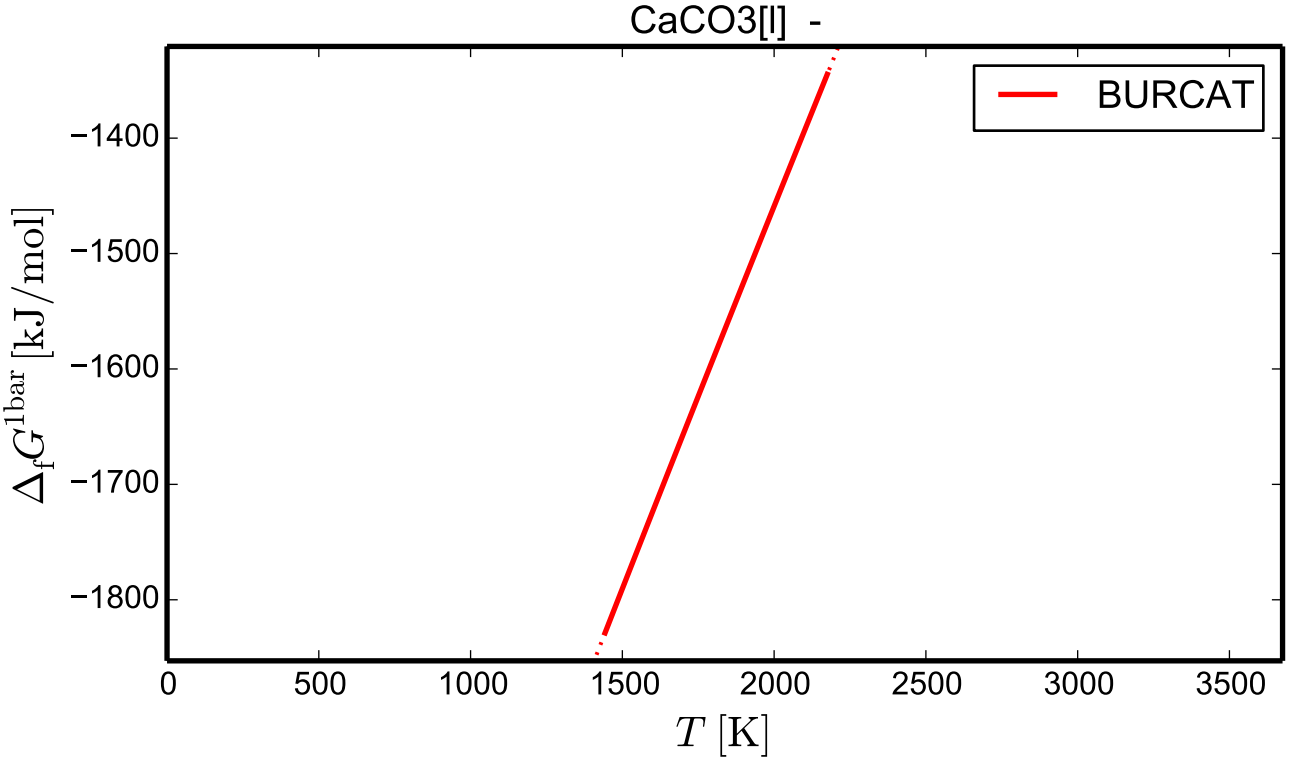

CaAl2Si2O8[s] - ANORTHITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

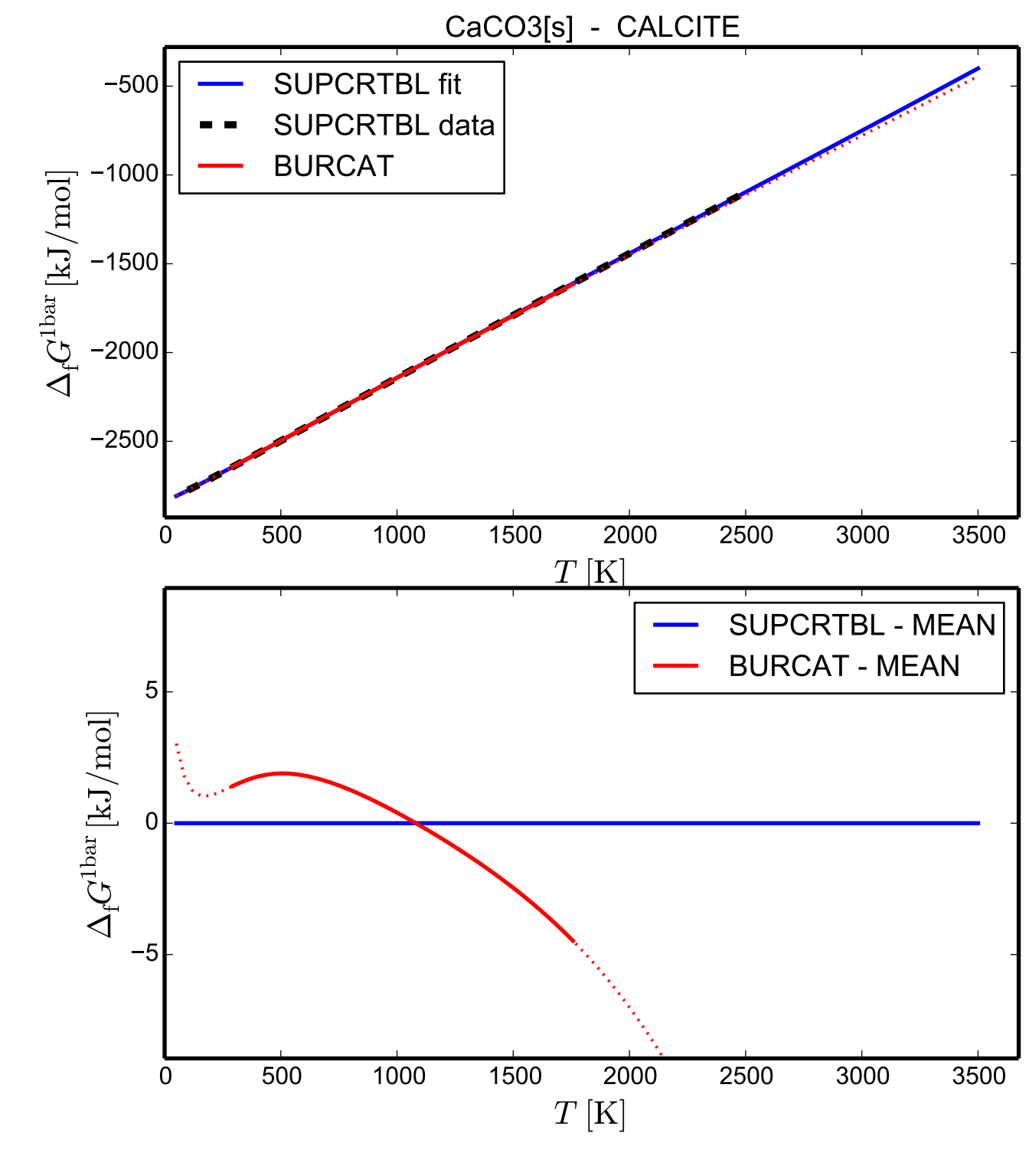

CaAl2Si4O14H4[s] - WAIRAKITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
−14000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

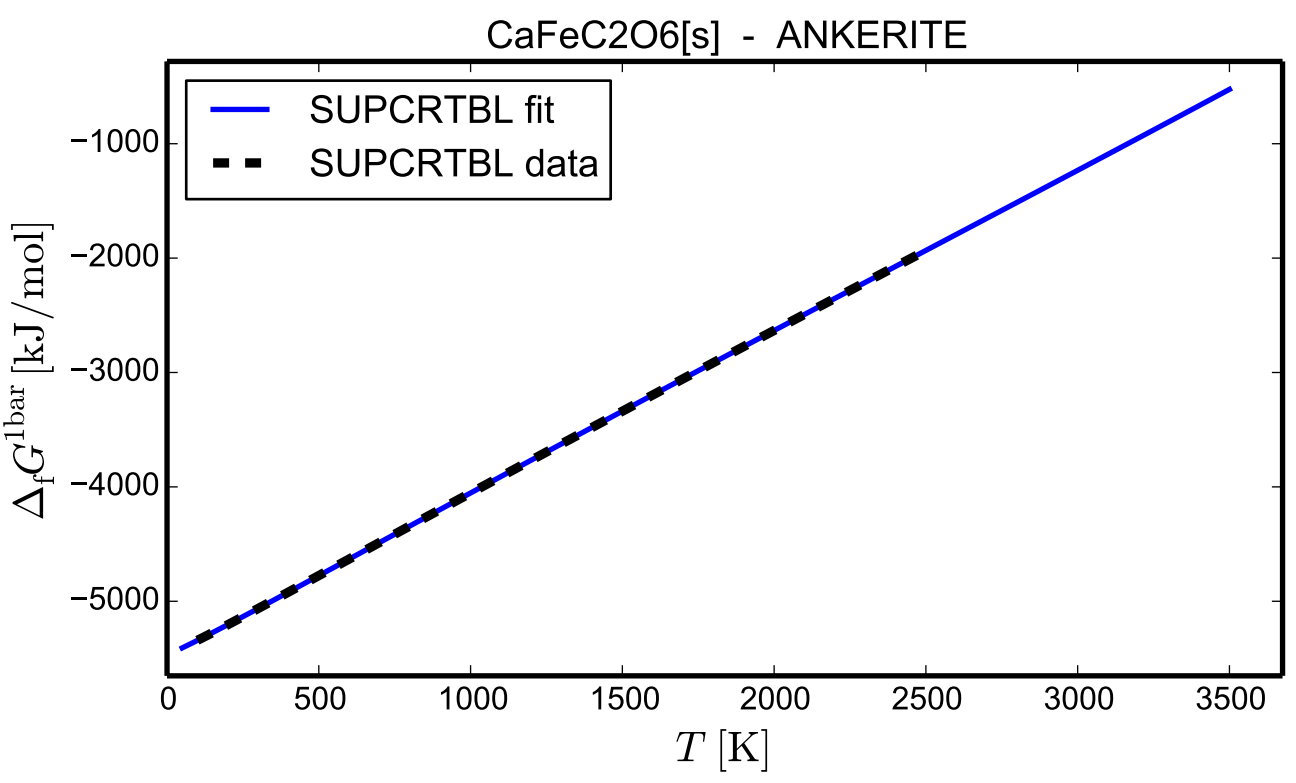

CaAl2Si4O16H8[s] - LAUMONTITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
−14000
−16000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

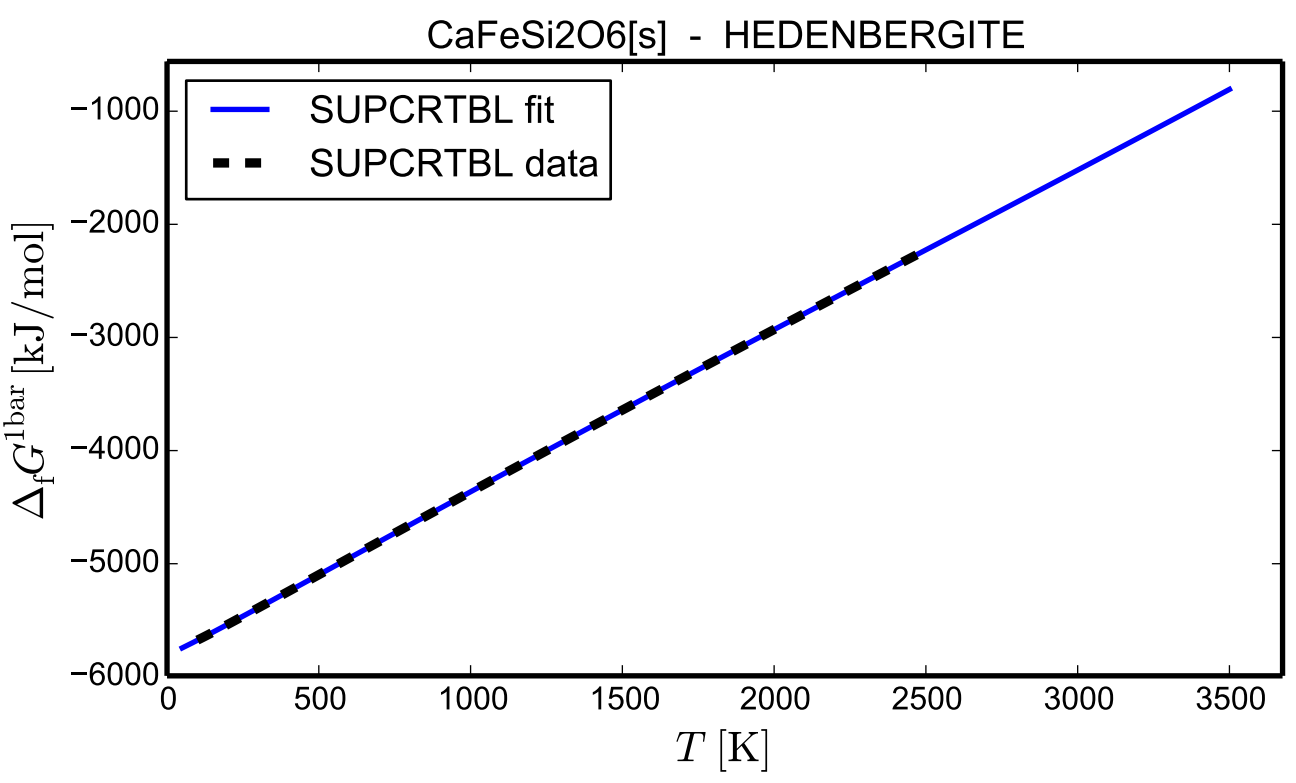

CaAl2SiO6[s] - Ca-TSCHERMAKS
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

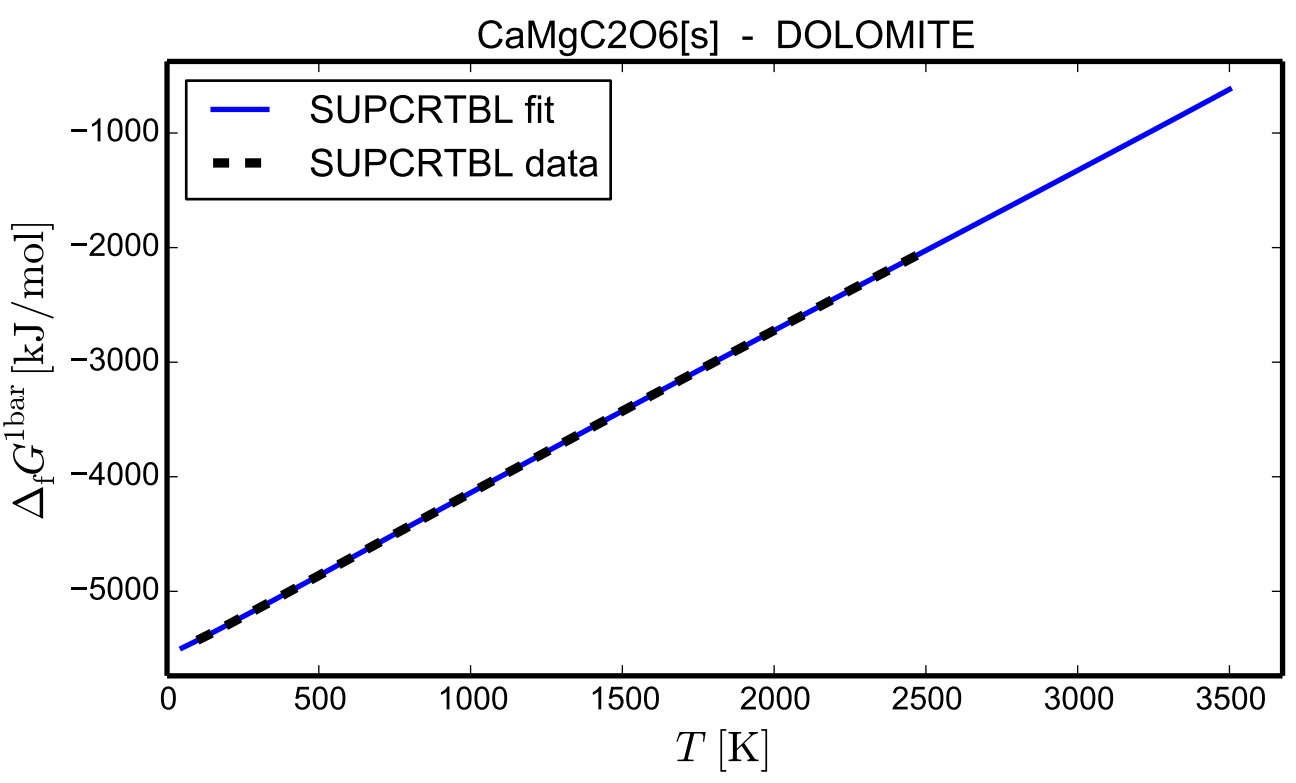

CaAl4Si2O12H2[s] - MARGARITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

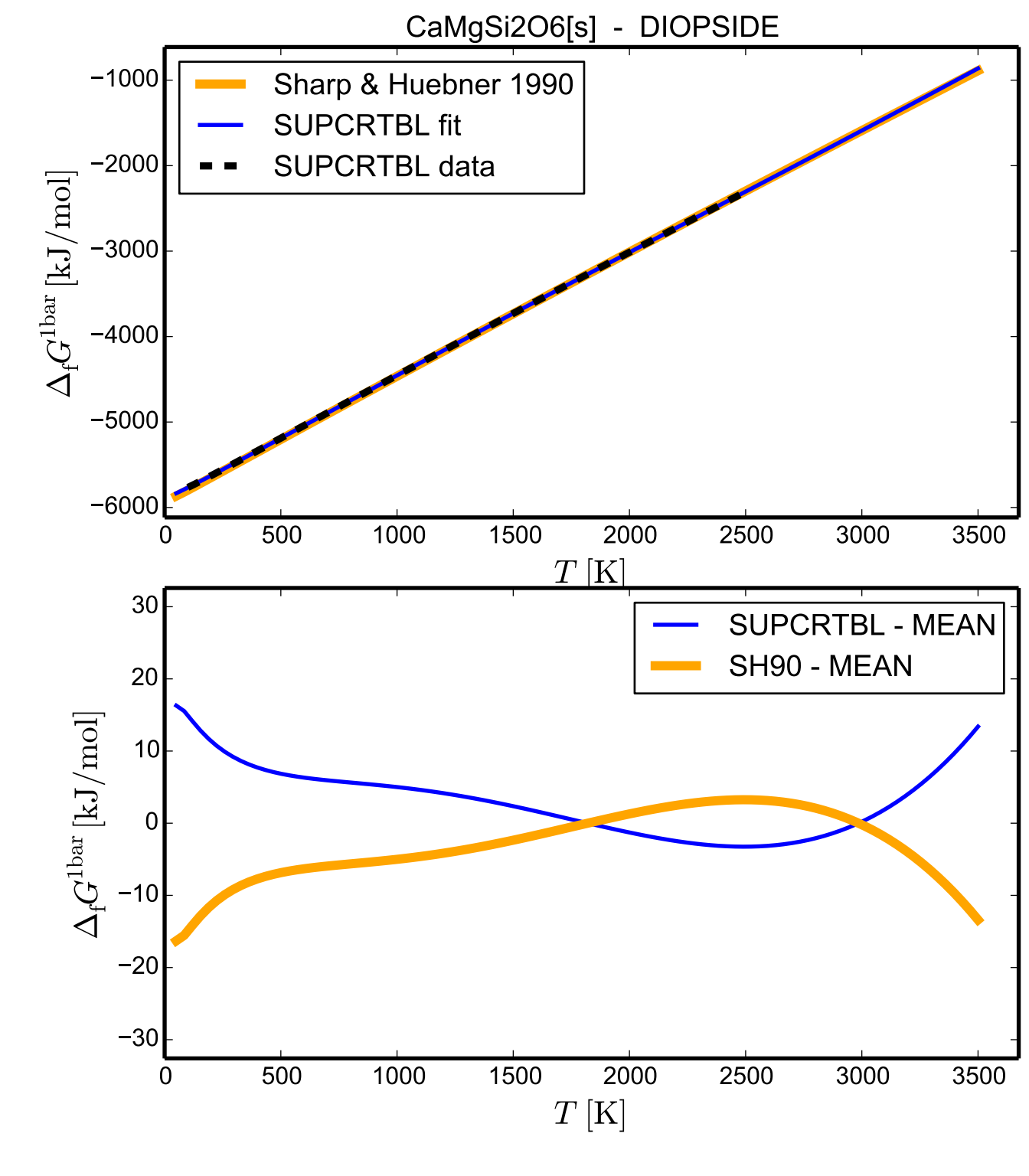

CaCO3[l] -
BURCAT
−1400
−1500
−1600
−1700
−1800
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

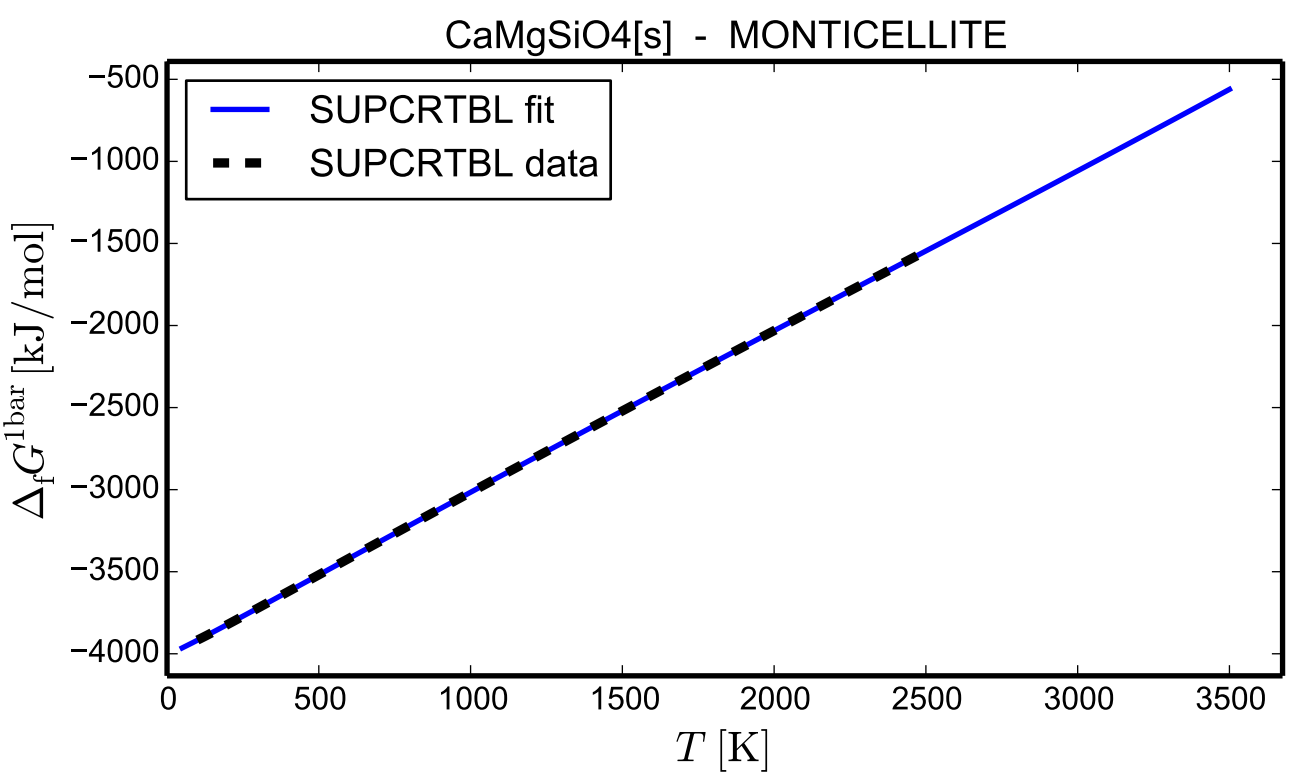

CaCO3[s] - CALCITE
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

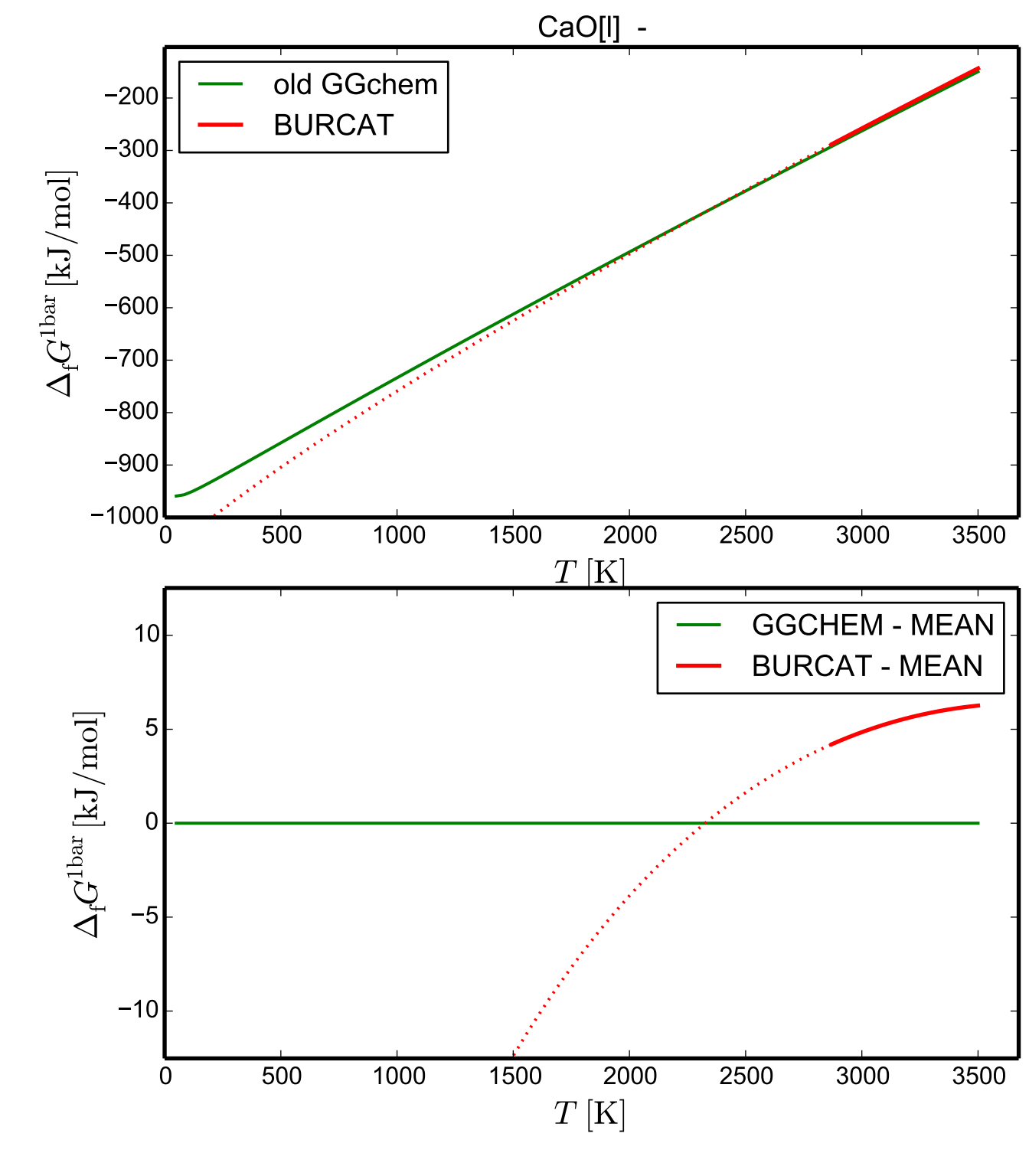

CaFeC2O6[s] - ANKERITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

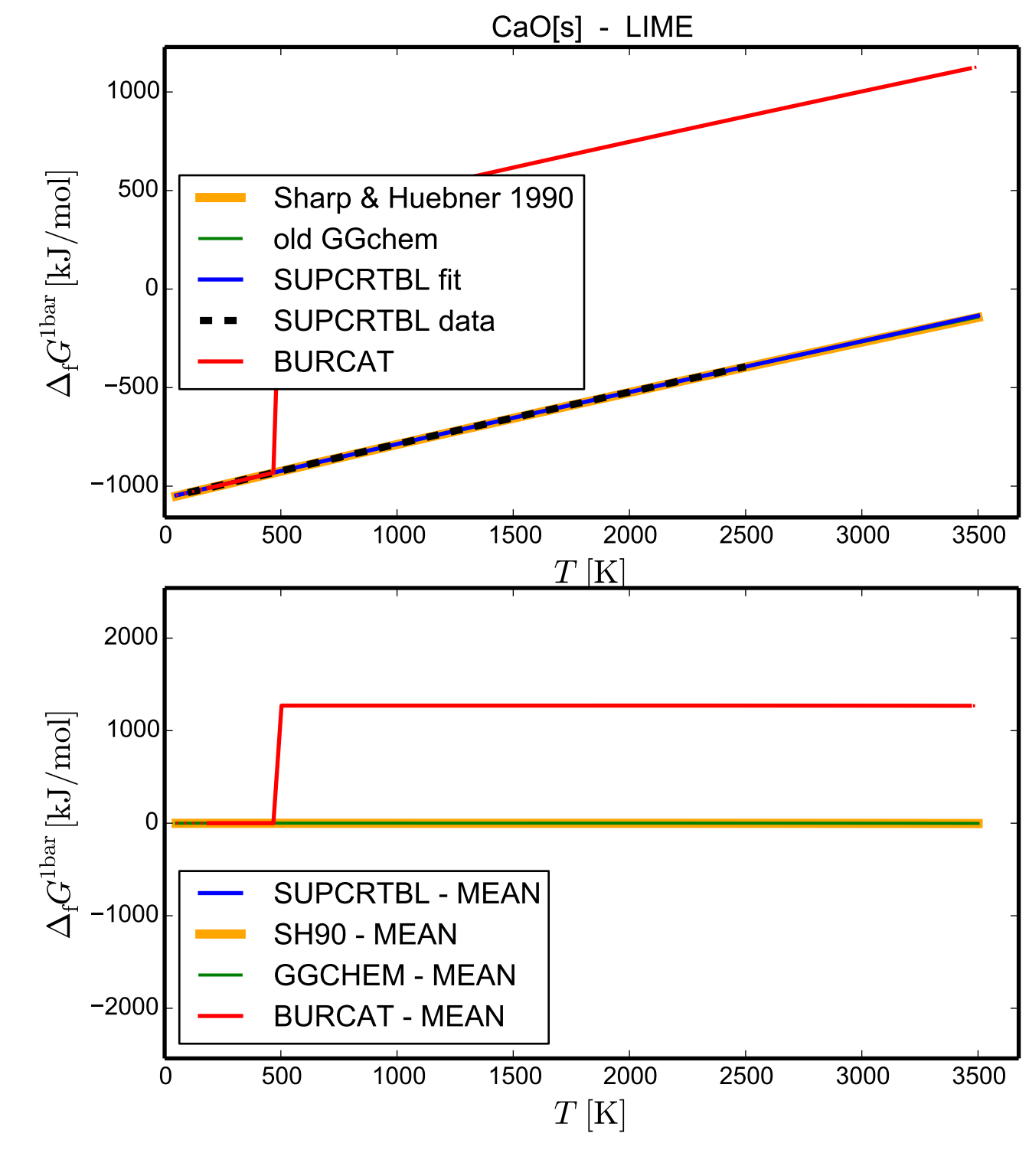

CaFeSi2O6[s] - HEDENBERGITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

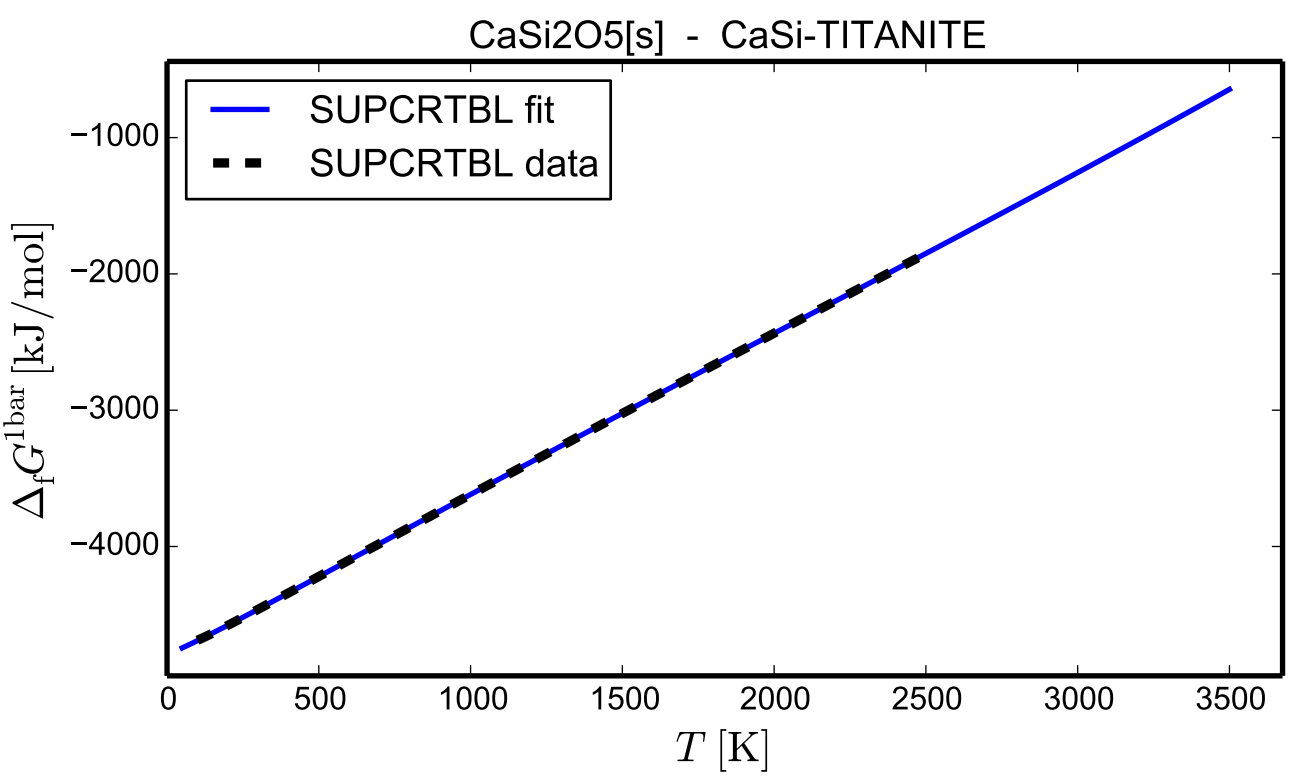

CaMgC2O6[s] - DOLOMITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

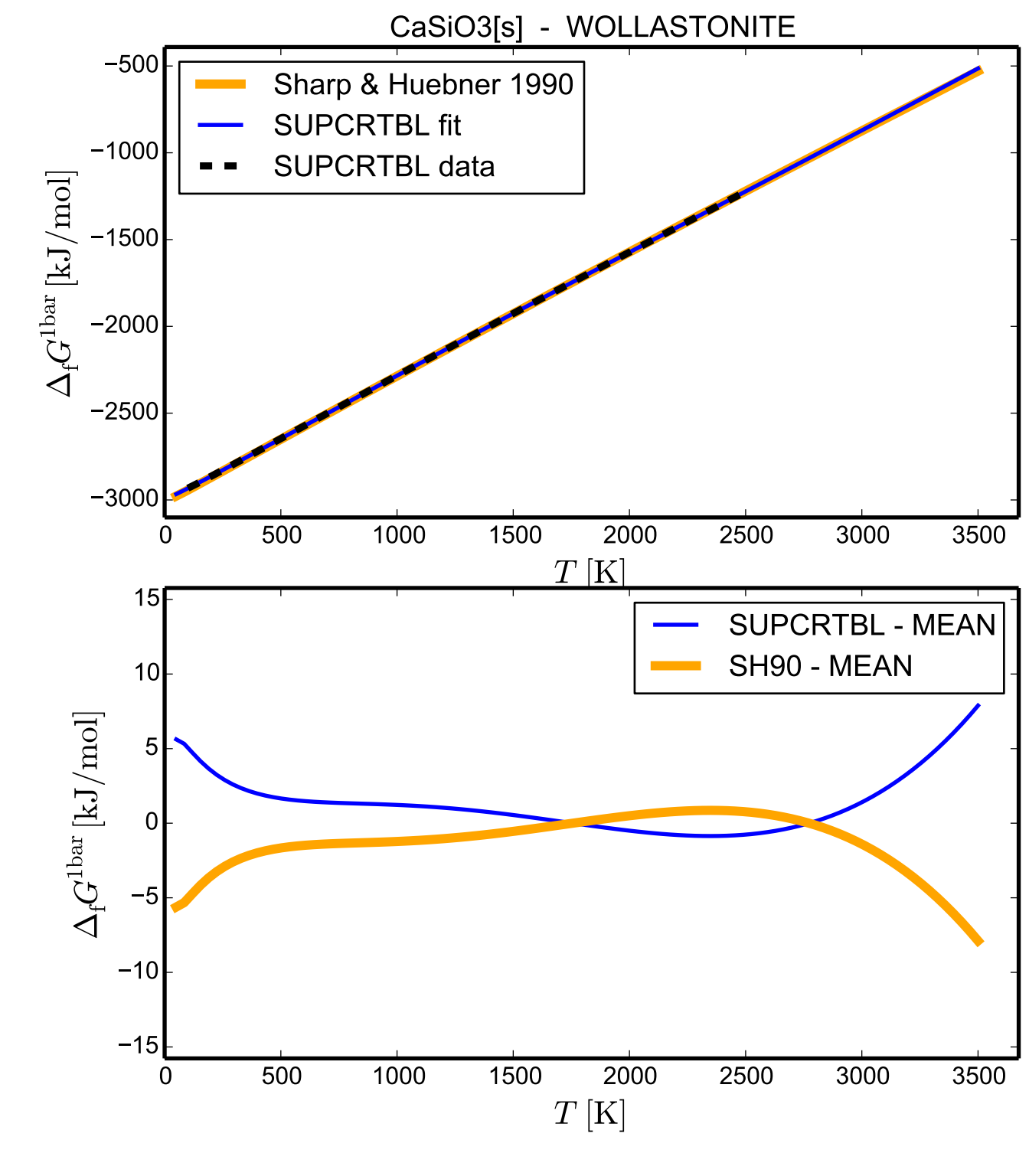

CaMgSi2O6[s] - DIOPSIDE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

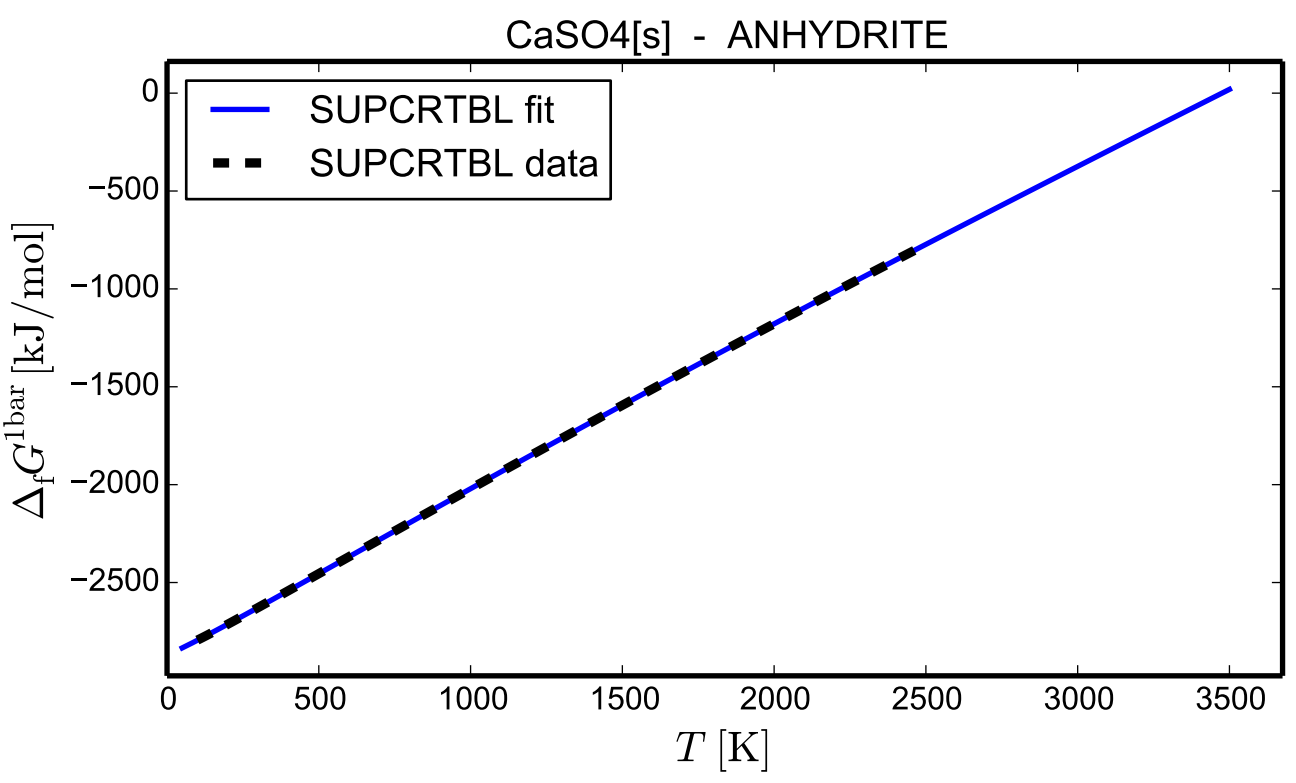

CaMgSiO4[s] - MONTICELLITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

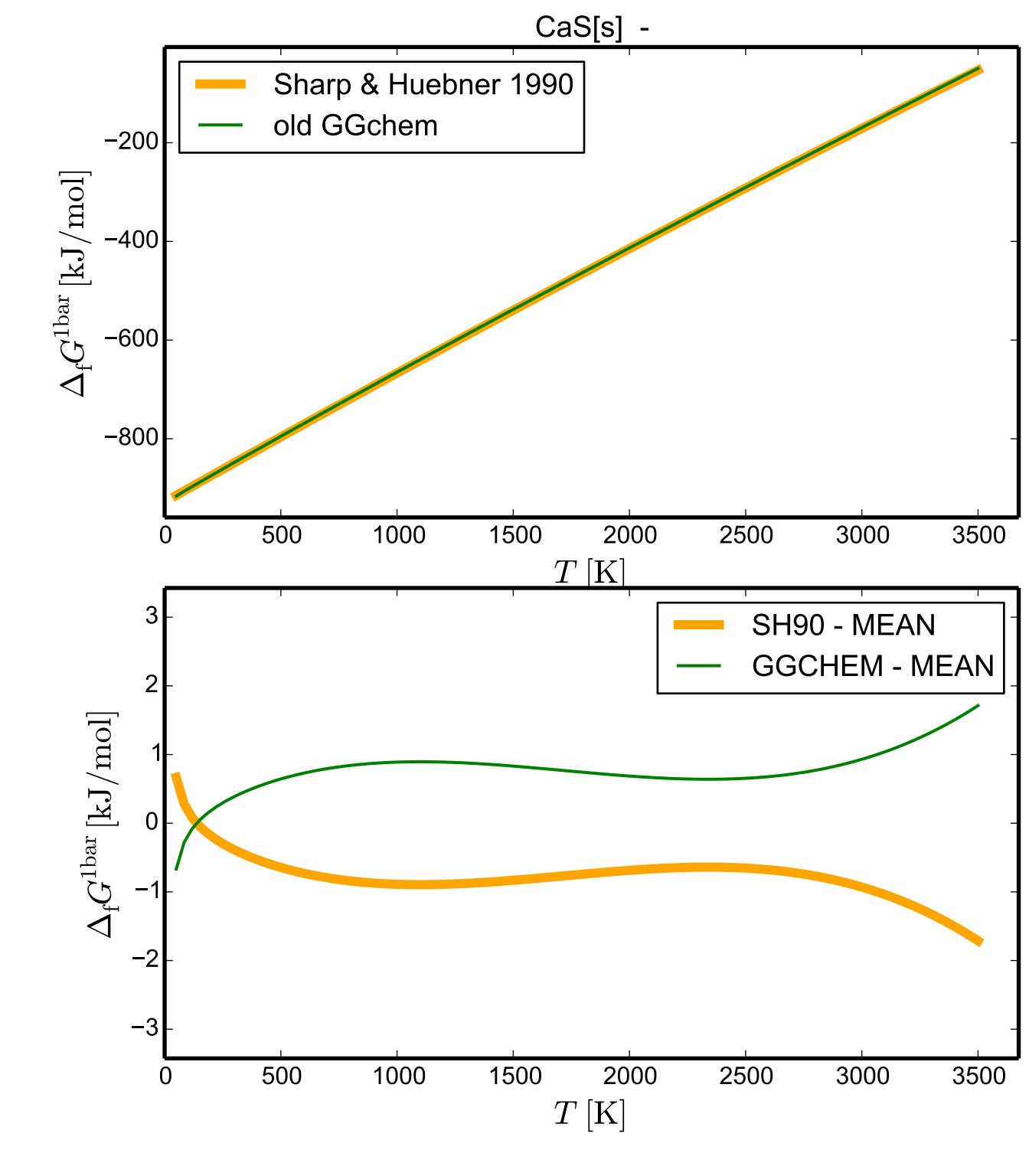

CaO[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

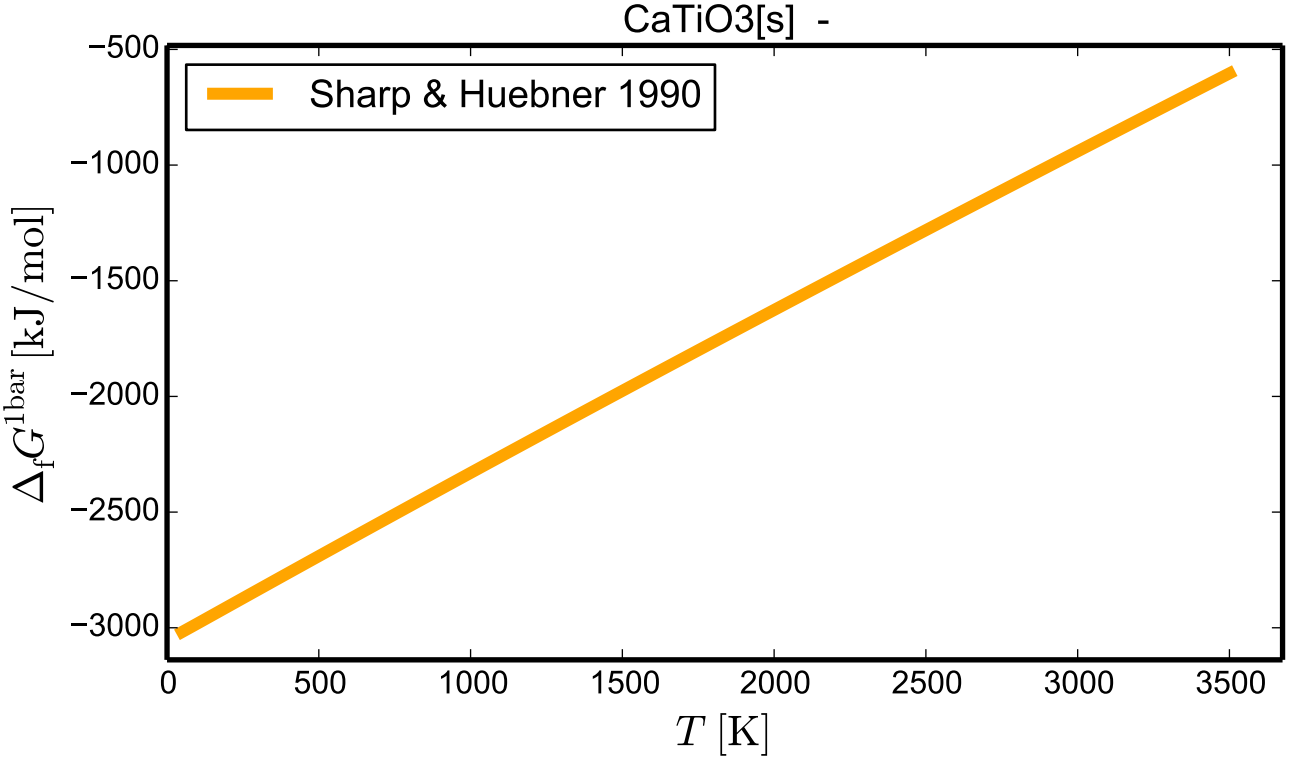

CaO[s] - LIME
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

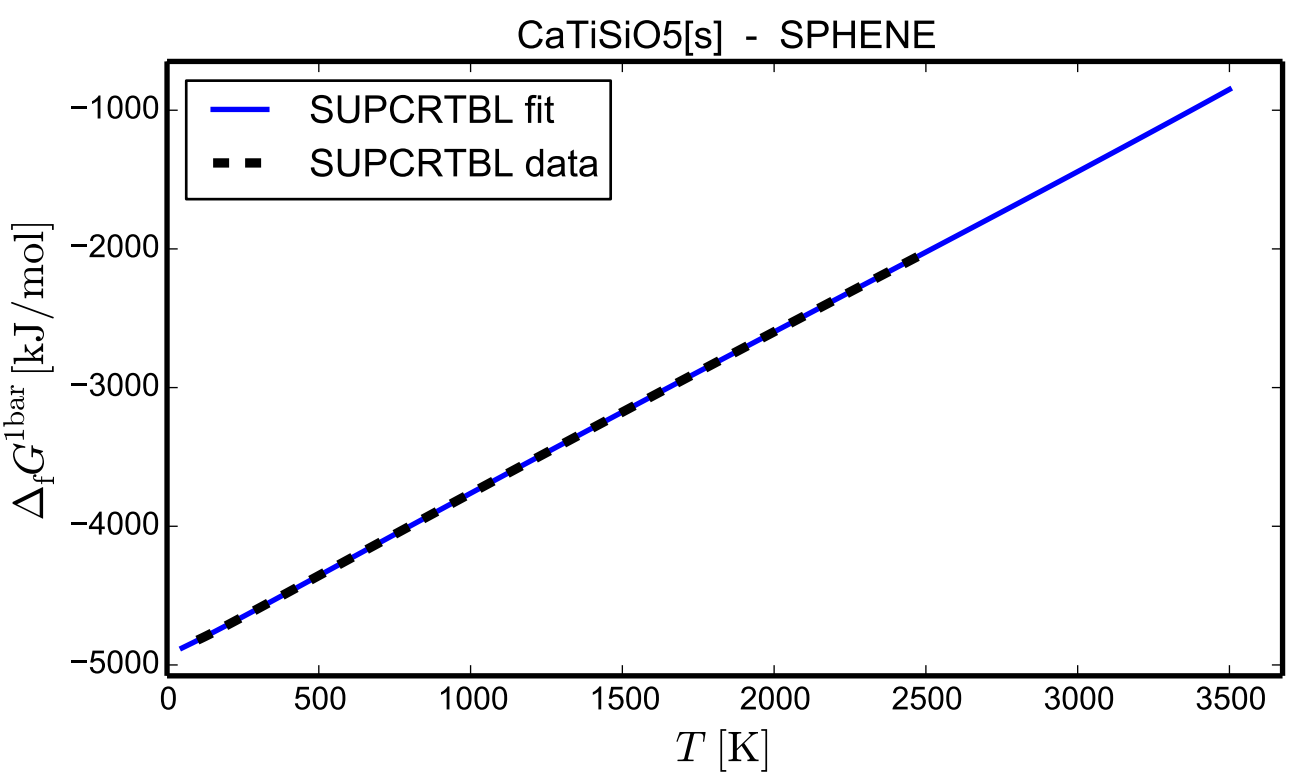

CaSi2O5[s] - CaSi-TITANITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

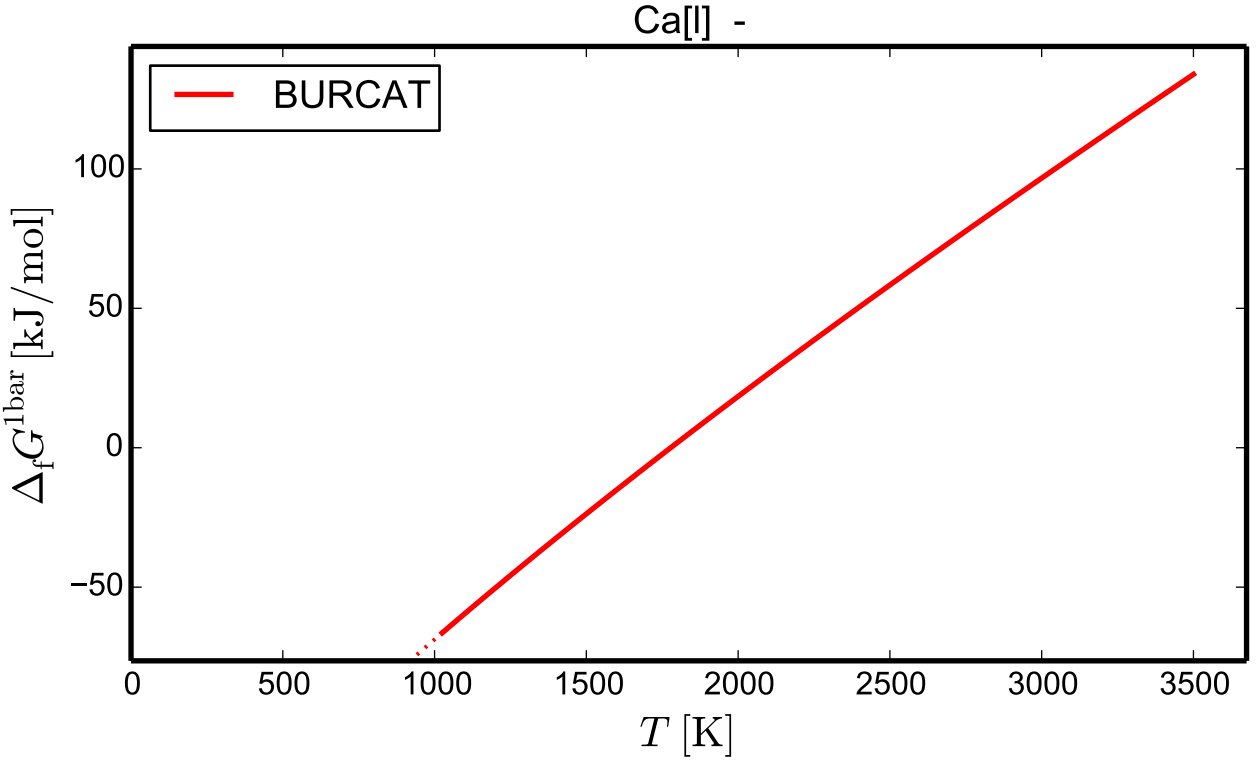

CaSiO3[s] - WOLLASTONITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

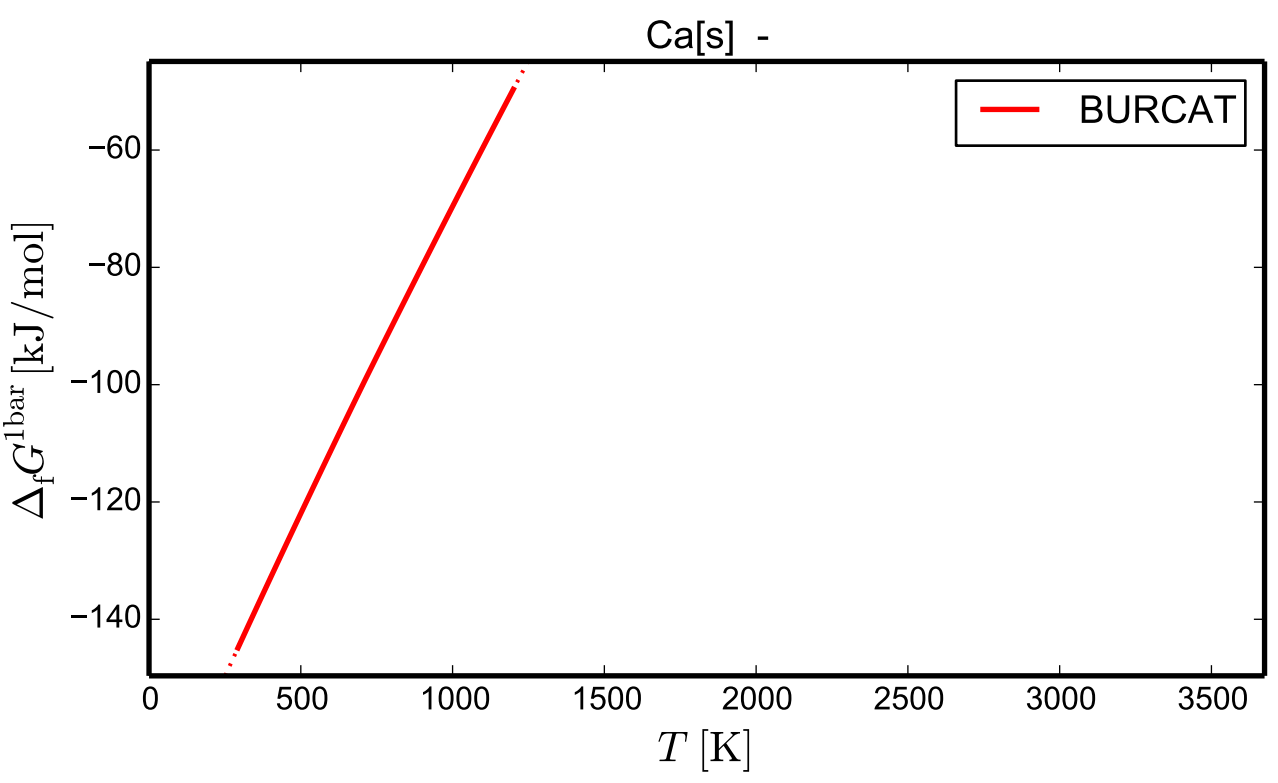

CaSO4[s] - ANHYDRITE
SUPCRTBL fit
SUPCRTBL data
0
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

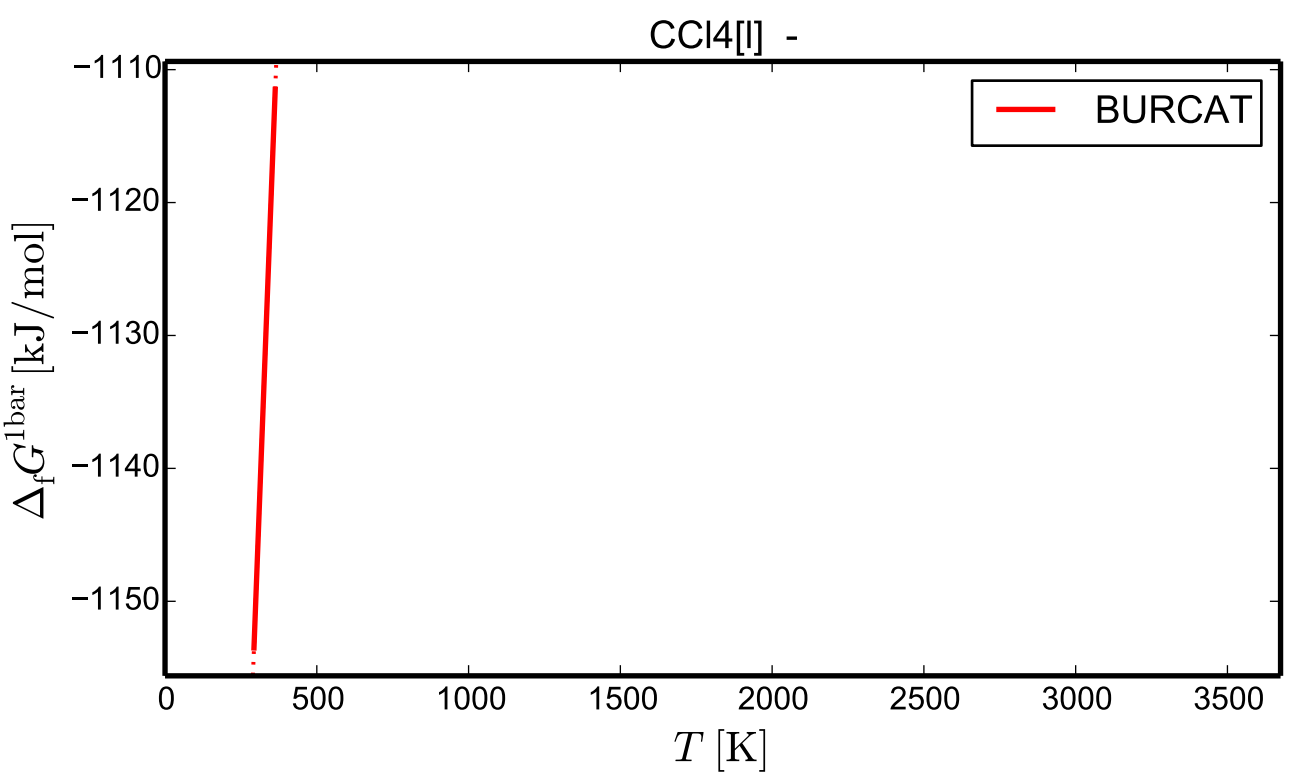

CaS[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
−200
−400
−600
−800
0
500
1000
1500
2000
2500
3000
3500
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
3
2
1
0
−1
−2
−3
0
500
1000
1500
2000
2500
3000
3500
T [K]

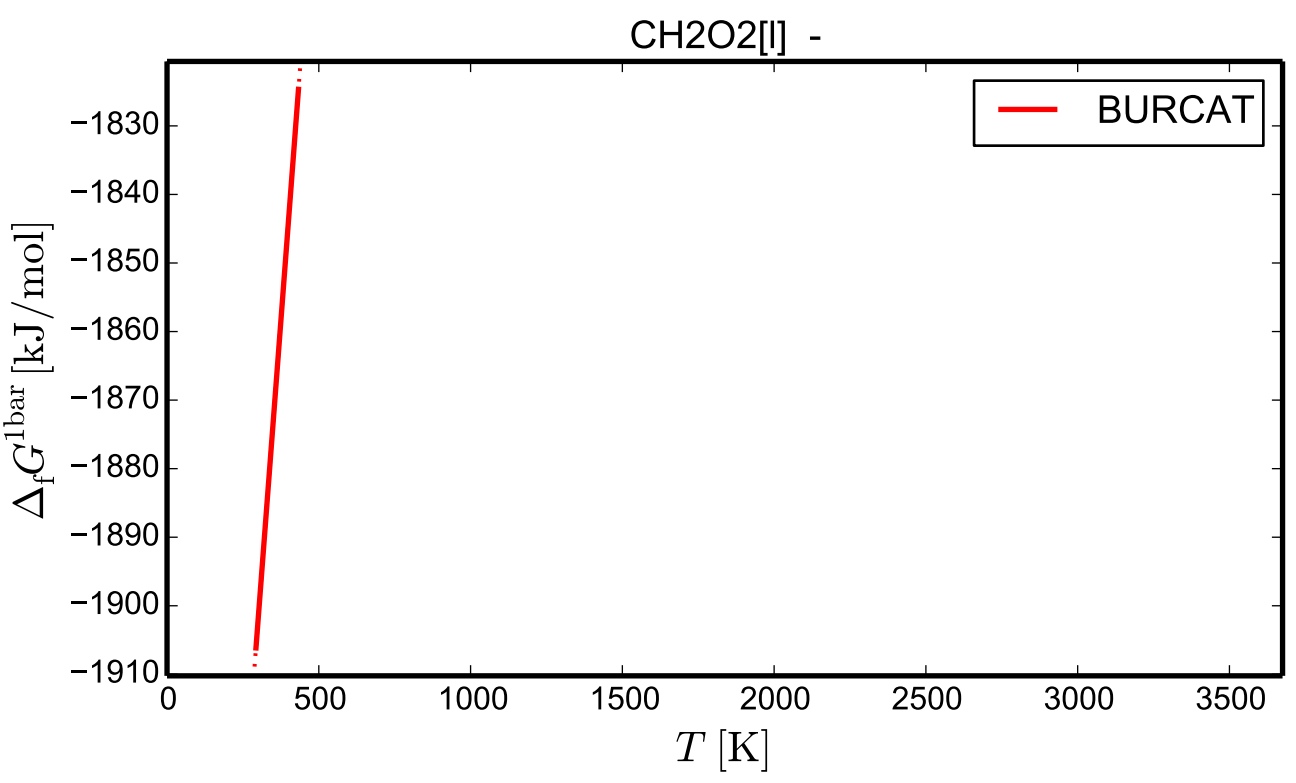

CaTiO3[s] -
Sharp & Huebner 1990
−500
−1000
−1500
−2000
−2500
−3000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

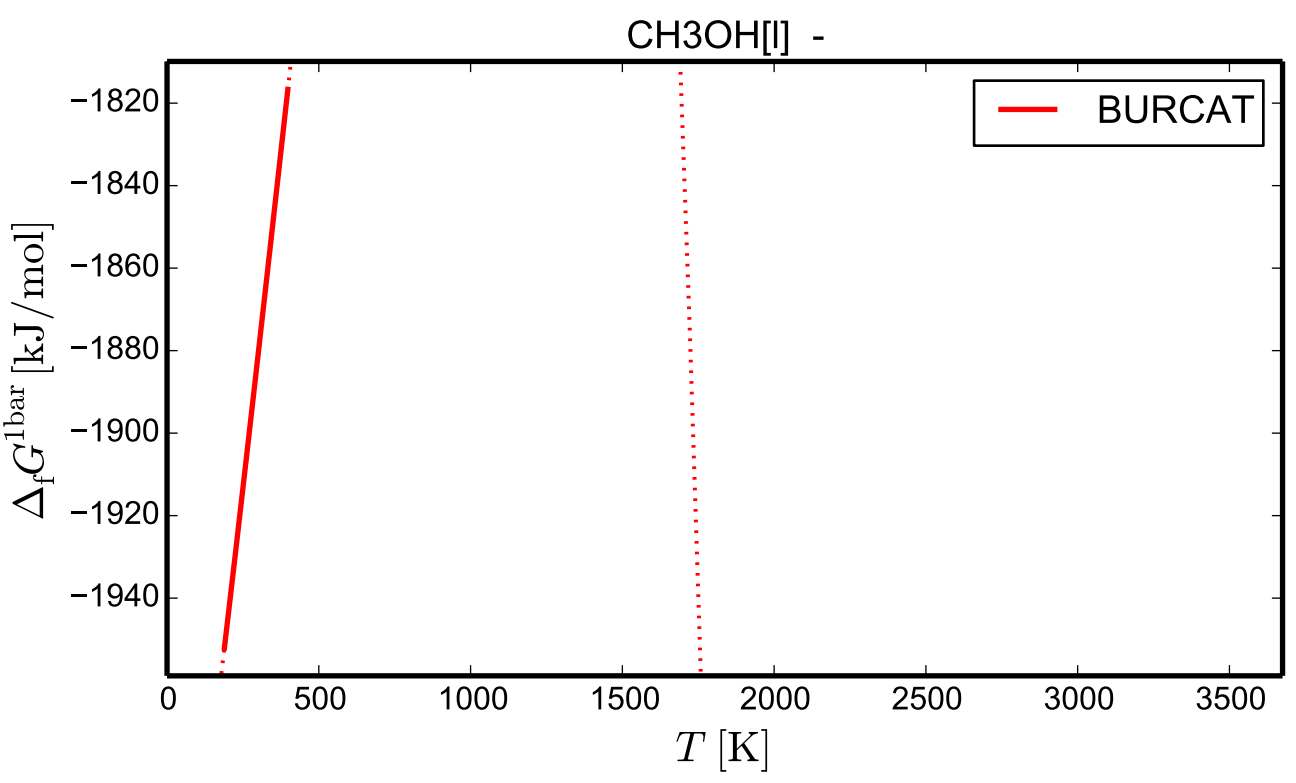

CaTiSiO5[s] - SPHENE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

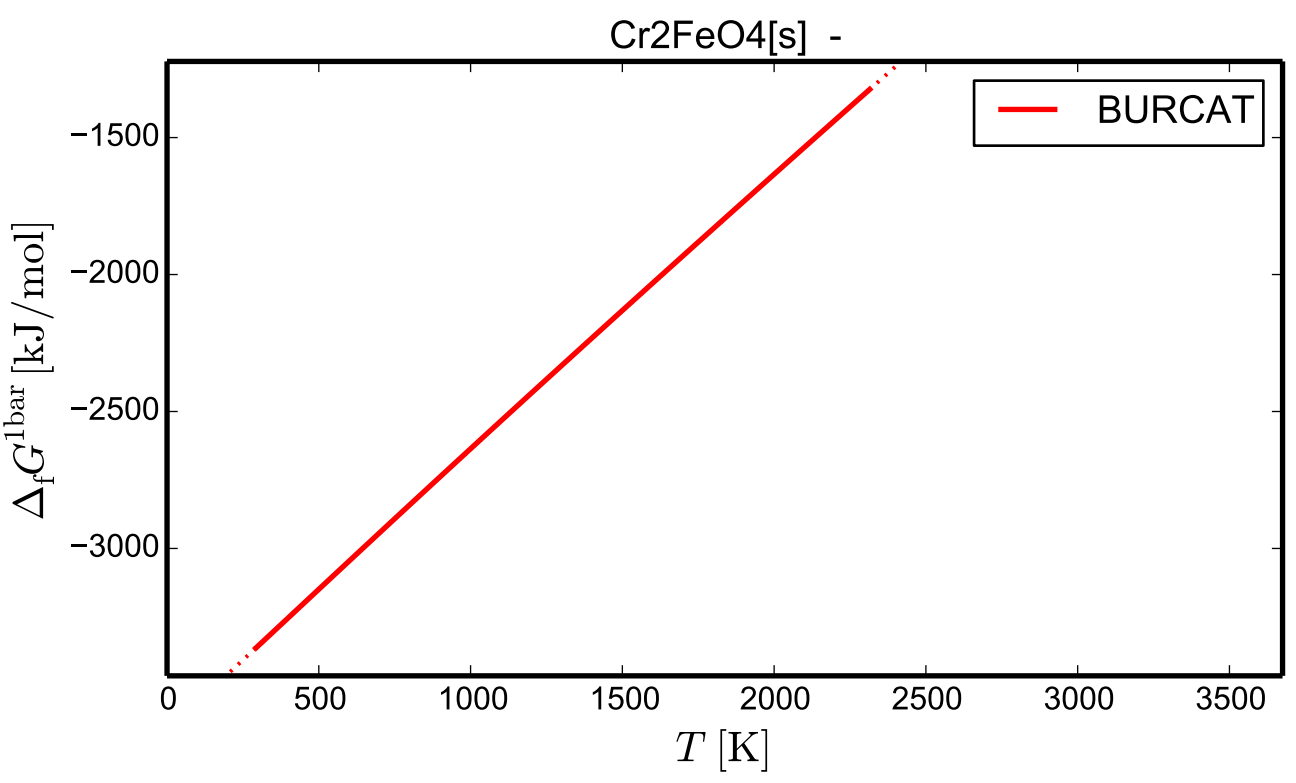

Ca[l] -
BURCAT
100
50
0
−50
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

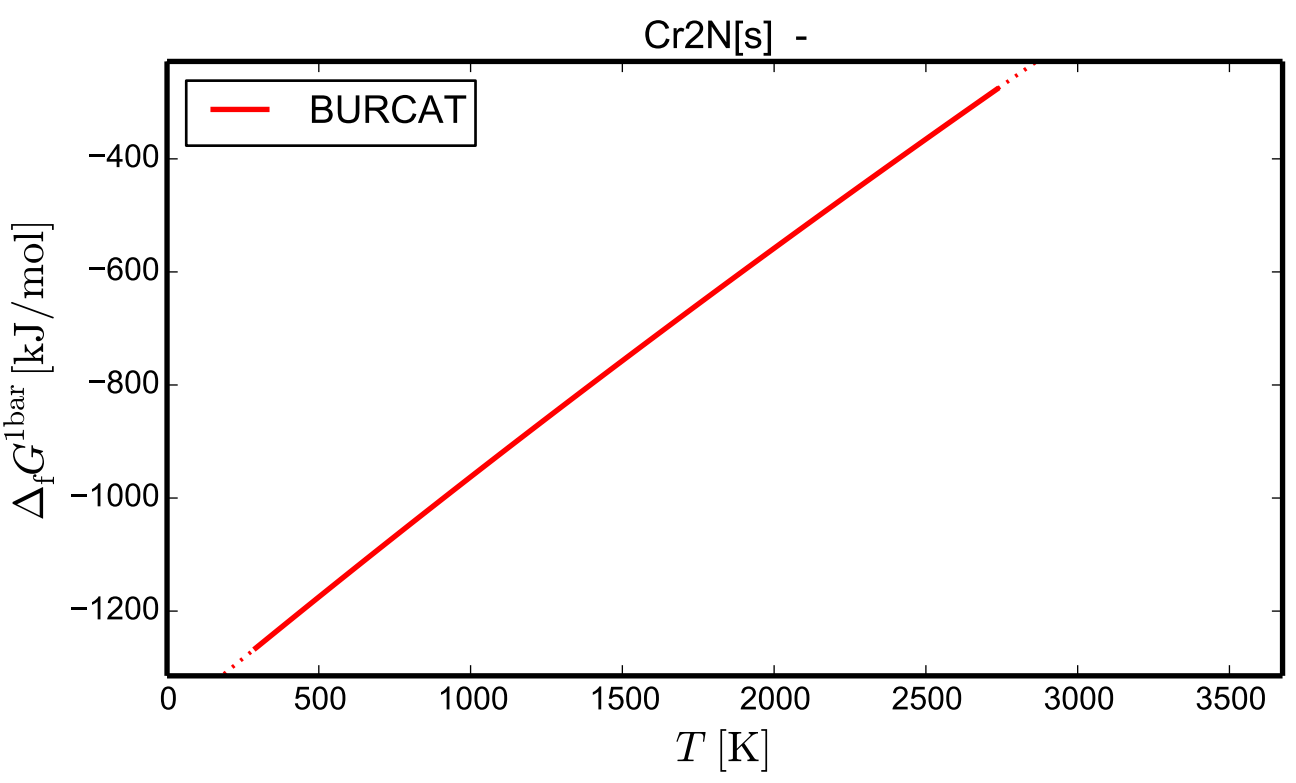

Ca[s] -
BURCAT
−60
−80
−100
−120
−140
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

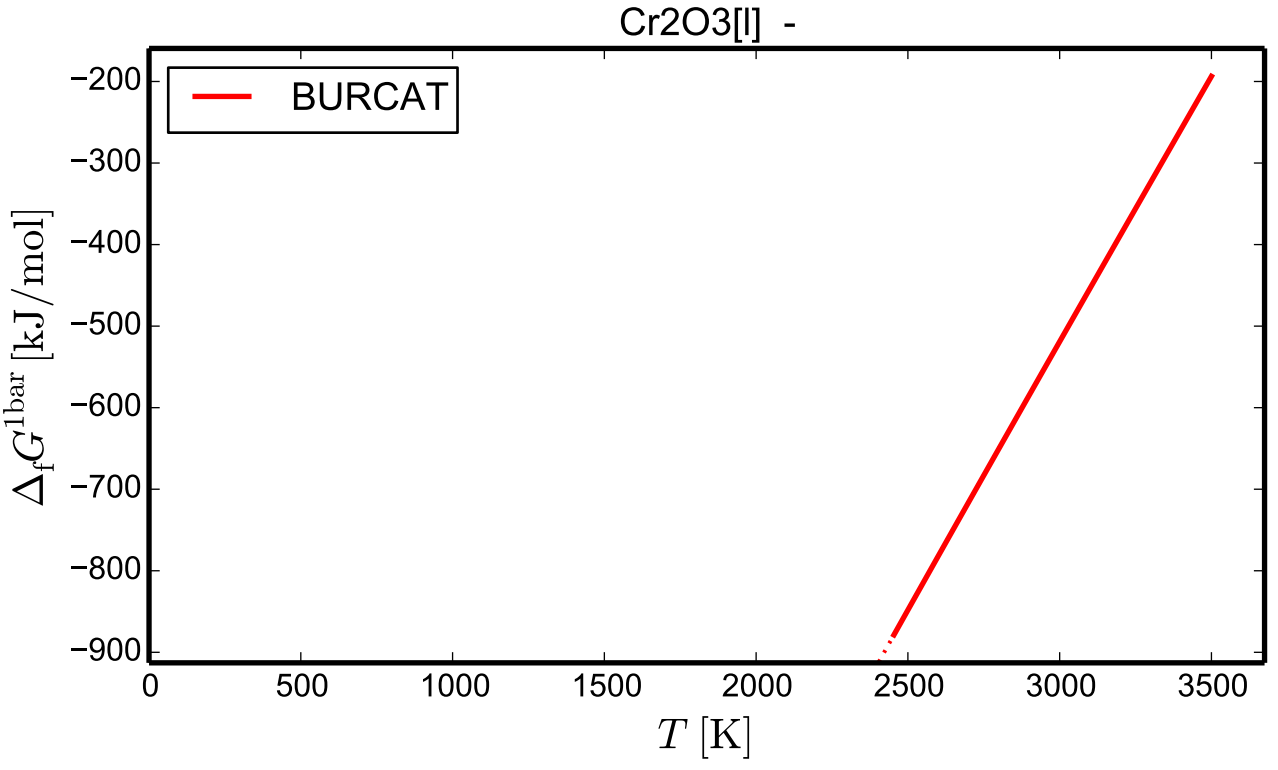

CCl4[l] -
BURCAT
−1110
−1120
−1130
−1140
−1150
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

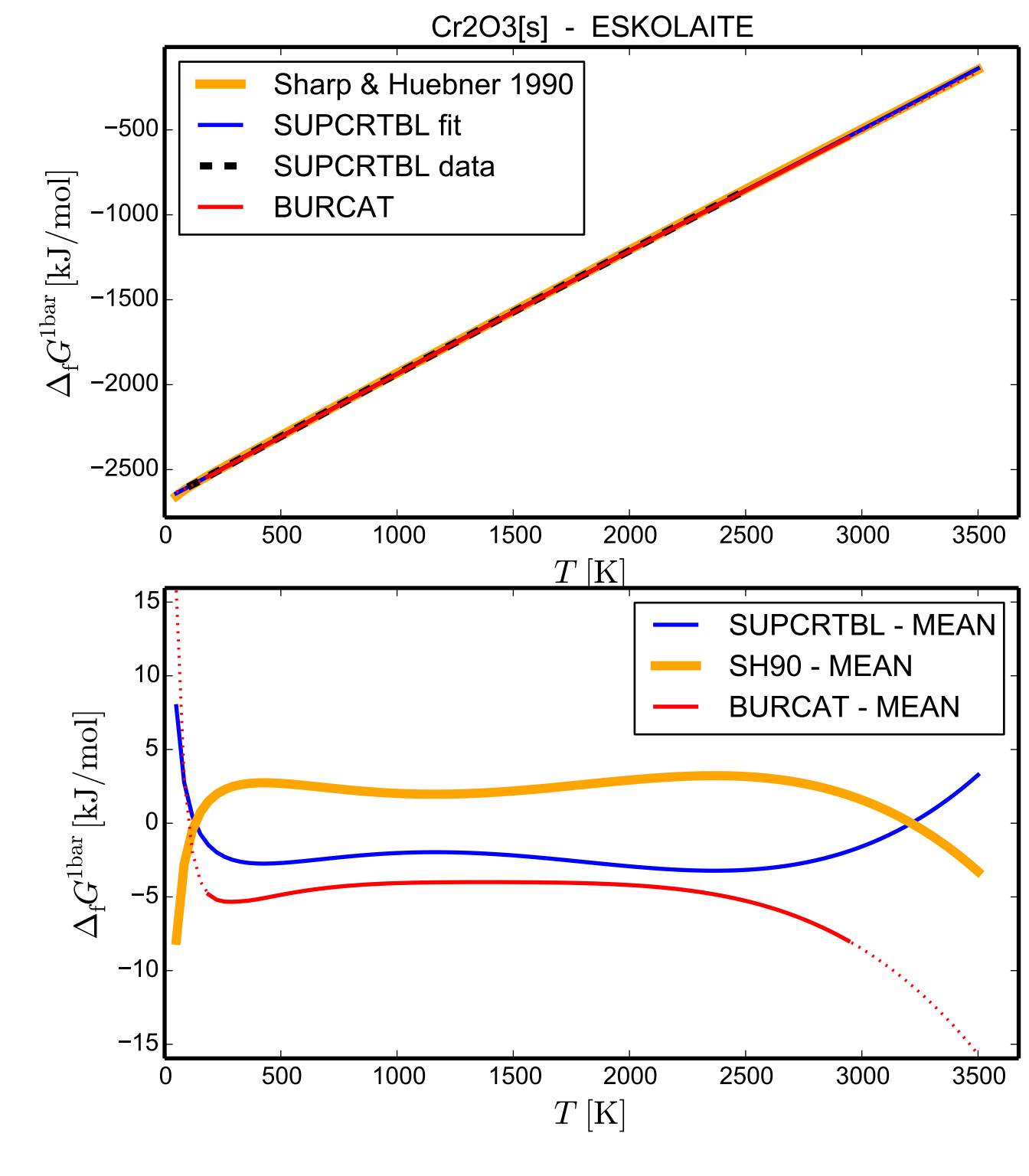

CH2O2[l] -
BURCAT
−1830
−1840
−1850
−1860
−1870
−1880
−1890
−1900
−1910
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

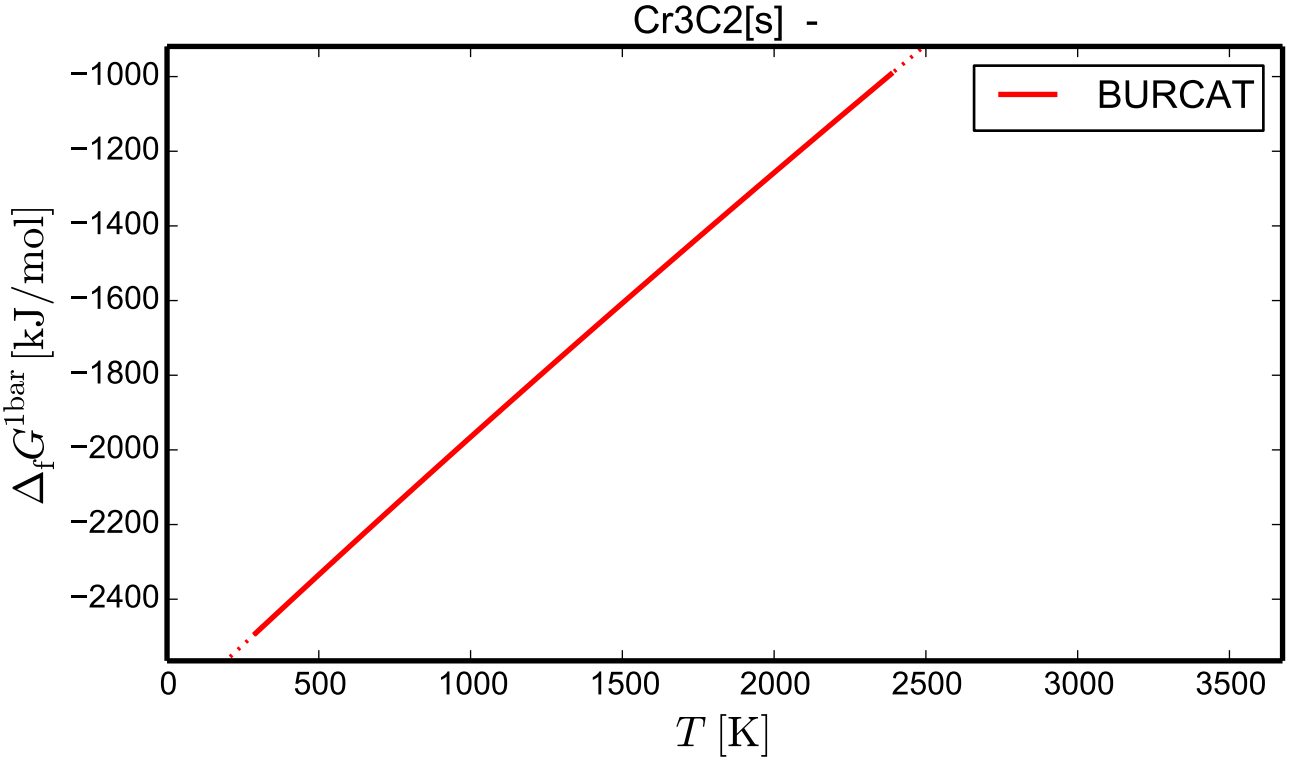

CH3OH[l] -
BURCAT
−1820
−1840
−1860
−1880
−1900
−1920
−1940
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

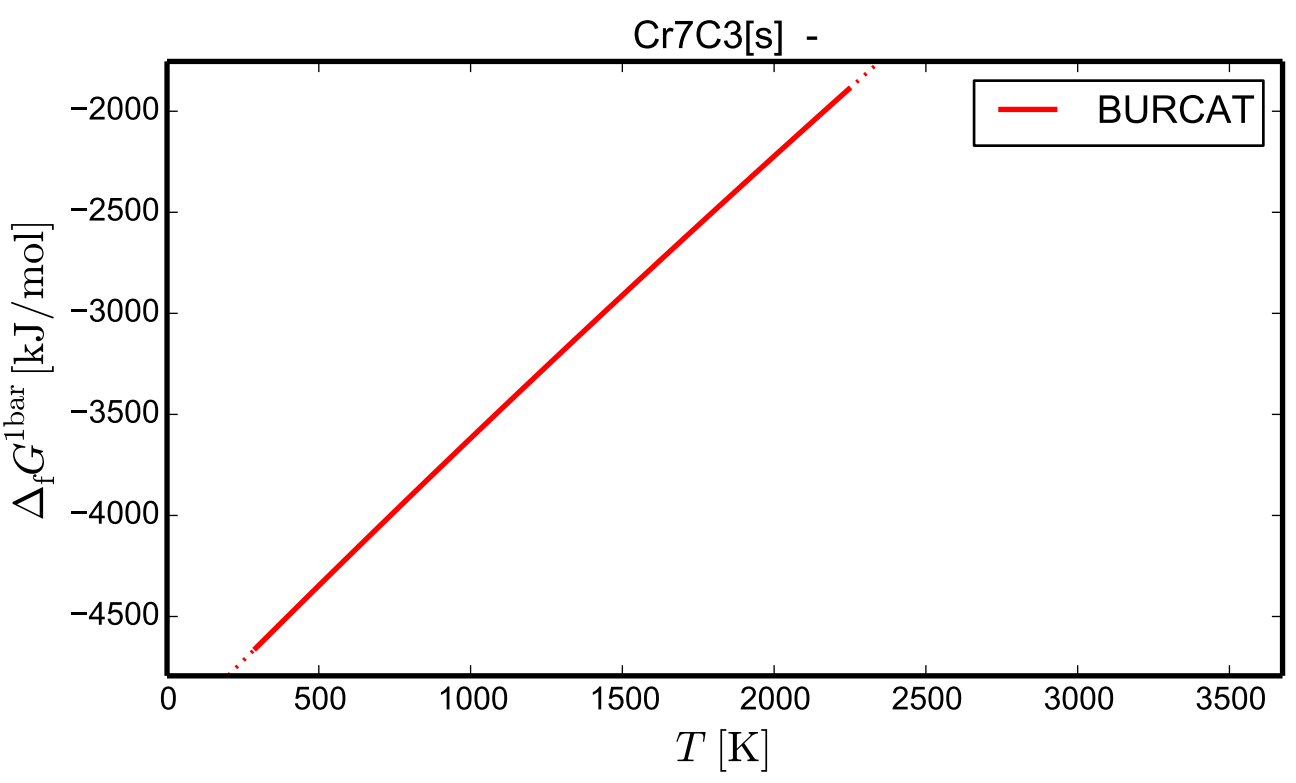

Cr2FeO4[s] -
BURCAT
−1500
−2000
−2500
−3000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

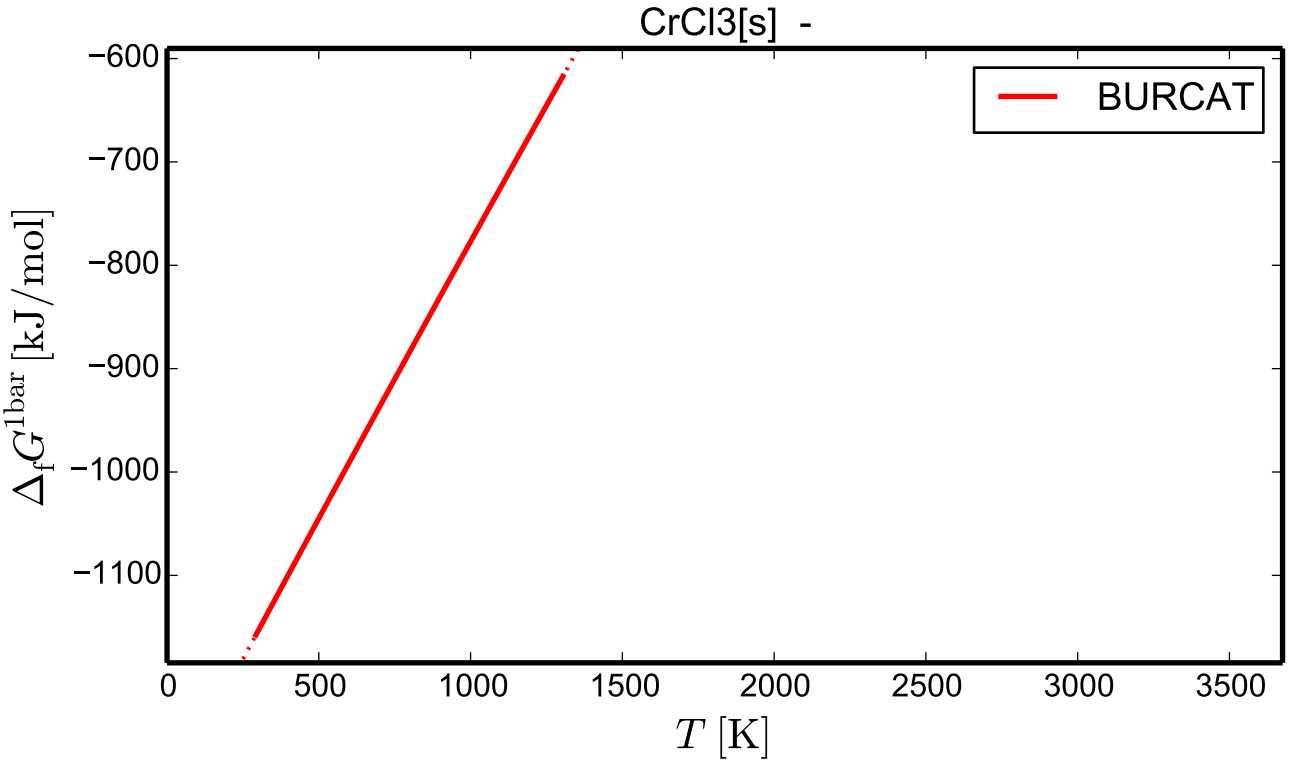

Cr2N[s] -
BURCAT
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

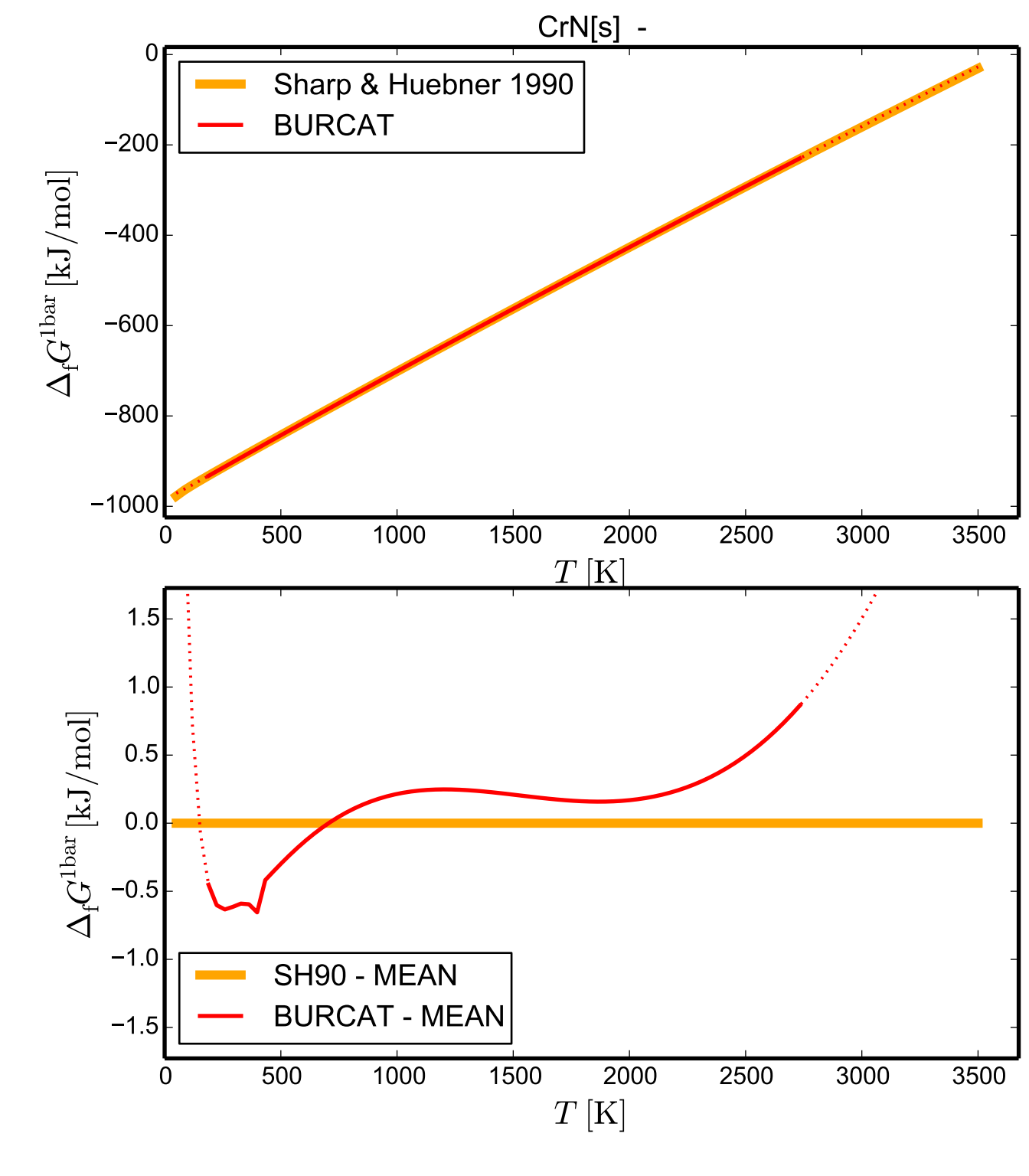

Cr2O3[l] -
BURCAT
−200
−300
−400
−500
−600
−700
−800
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

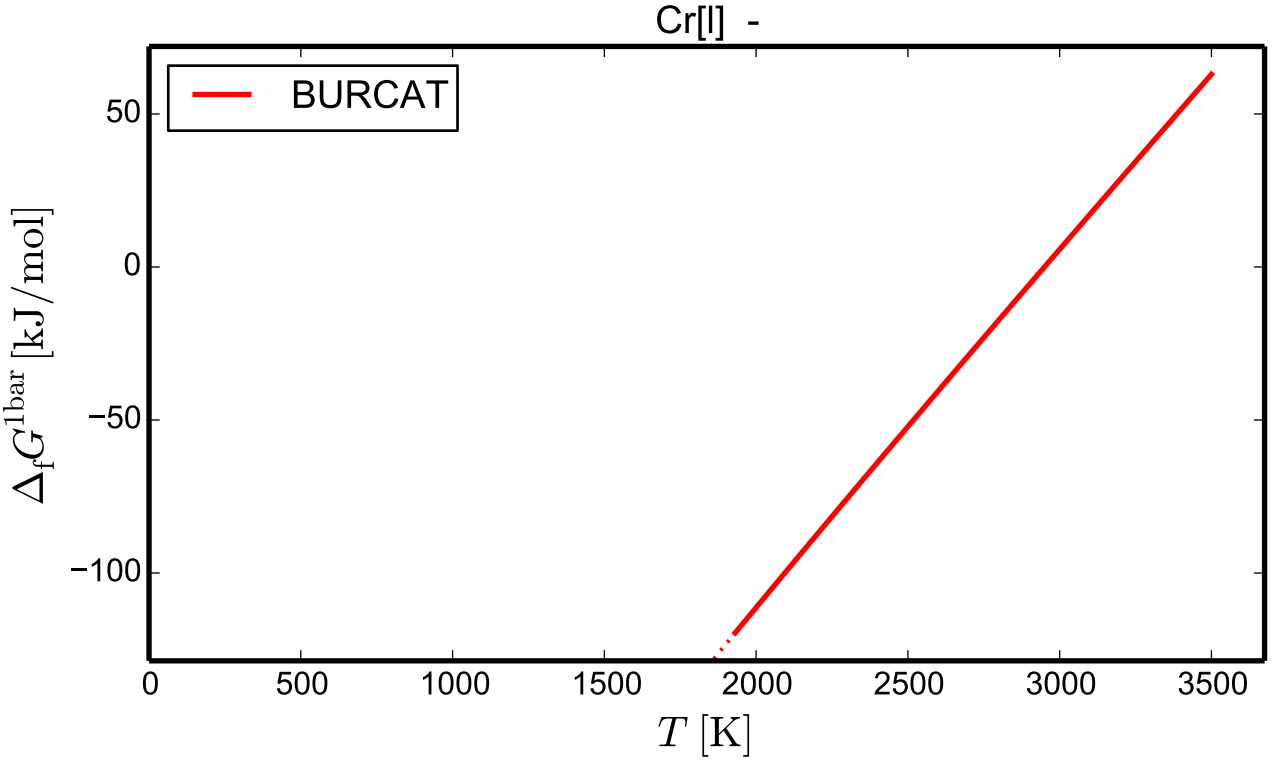

Cr2O3[s] - ESKOLAITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

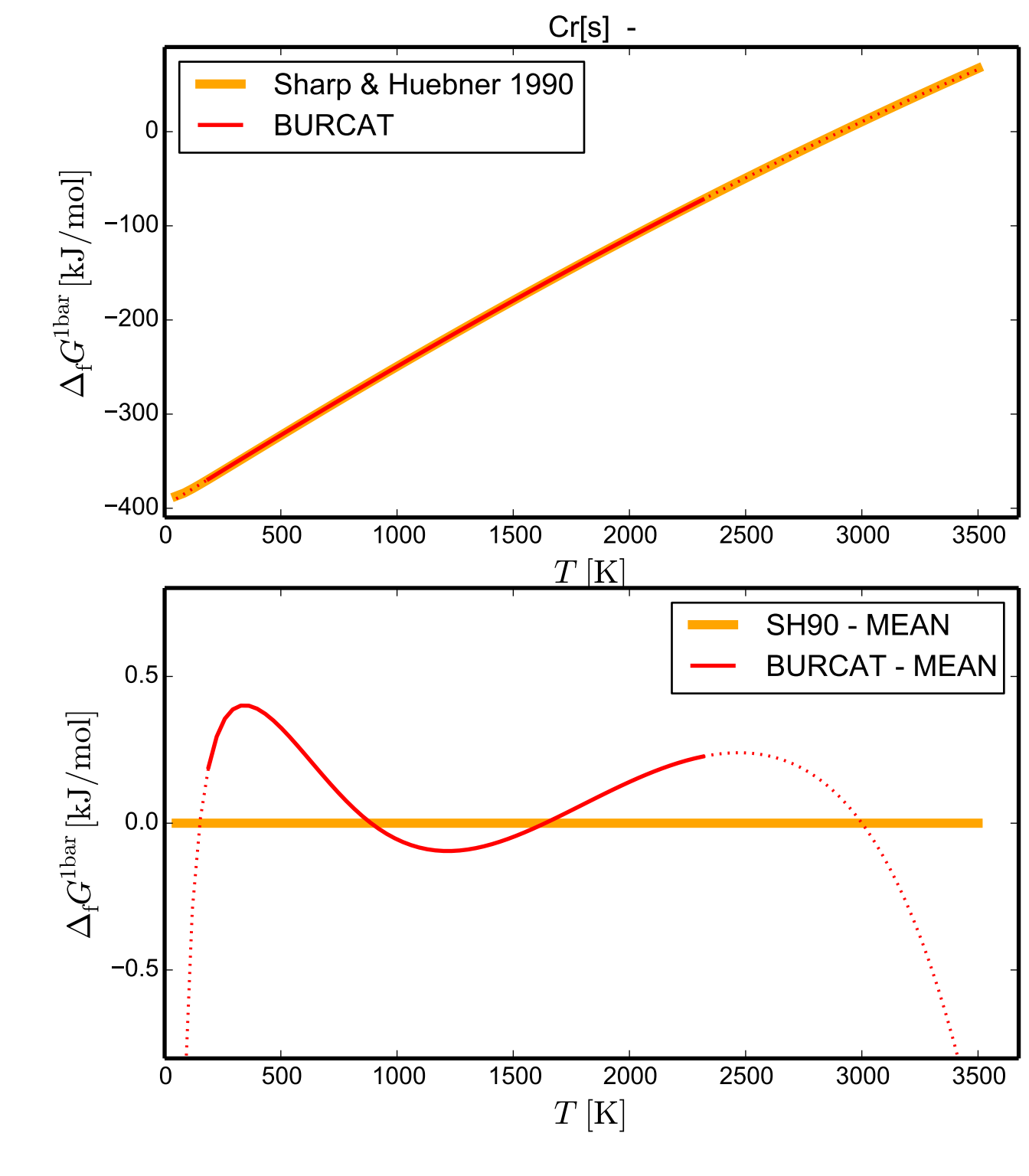

Cr3C2[s] -
BURCAT
−1000
−1200
−1400
−1600
−1800
−2000
−2200
−2400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

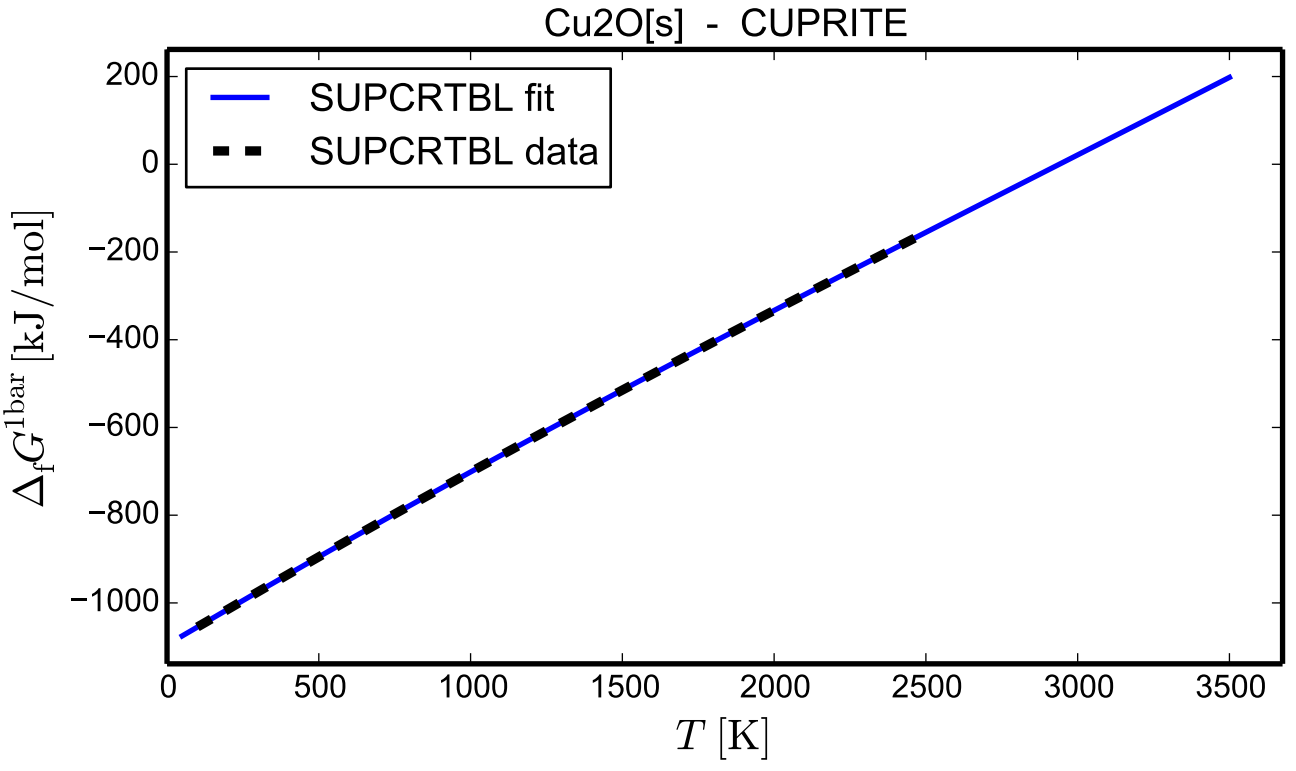

Cr7C3[s] -
BURCAT
−2000
−2500
−3000
−3500
−4000
−4500
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

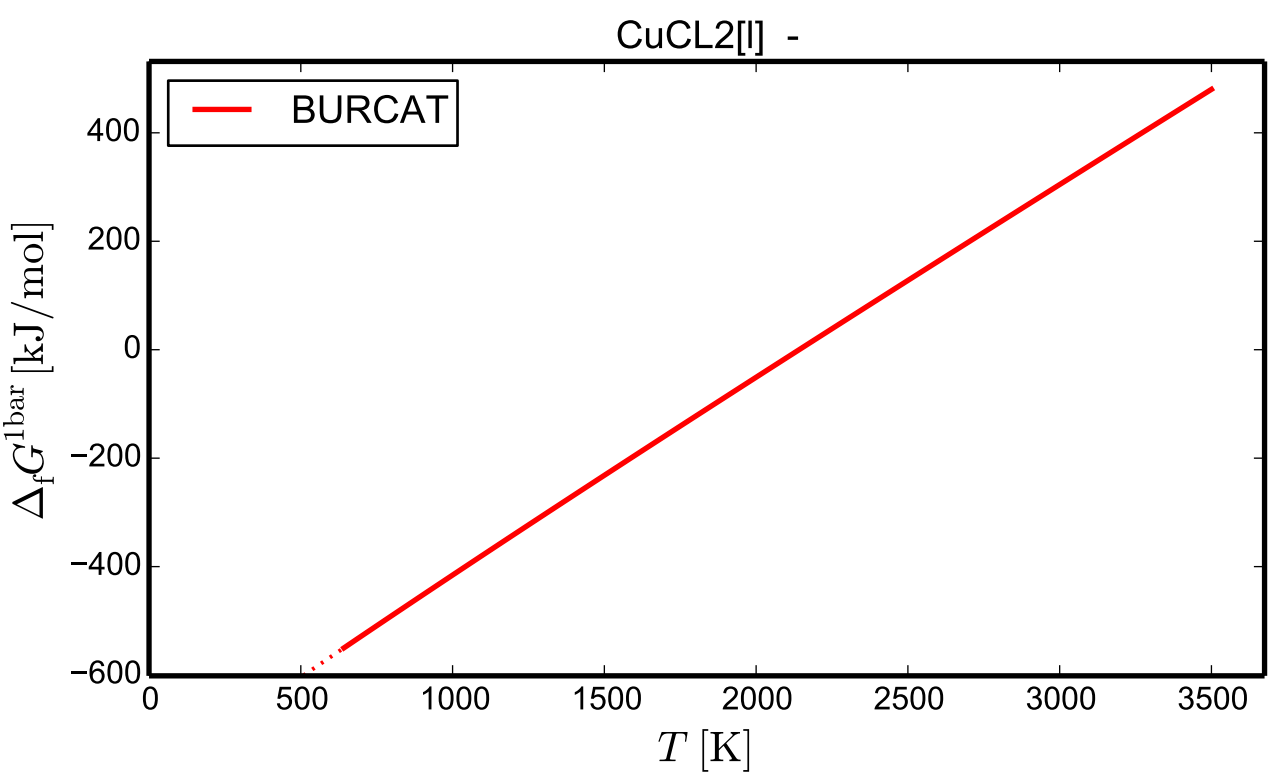

CrCl3[s] -
BURCAT
−600
−700
−800
−900
−1000
−1100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

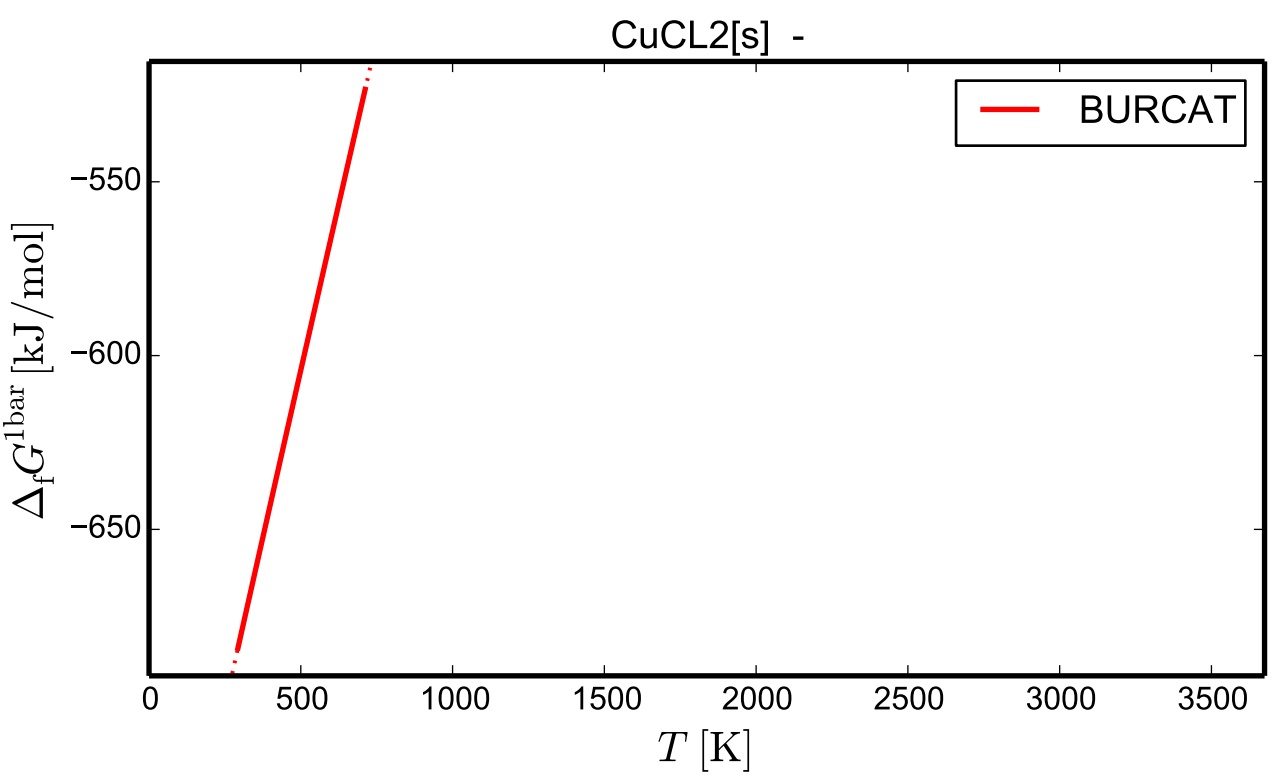

CrN[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN

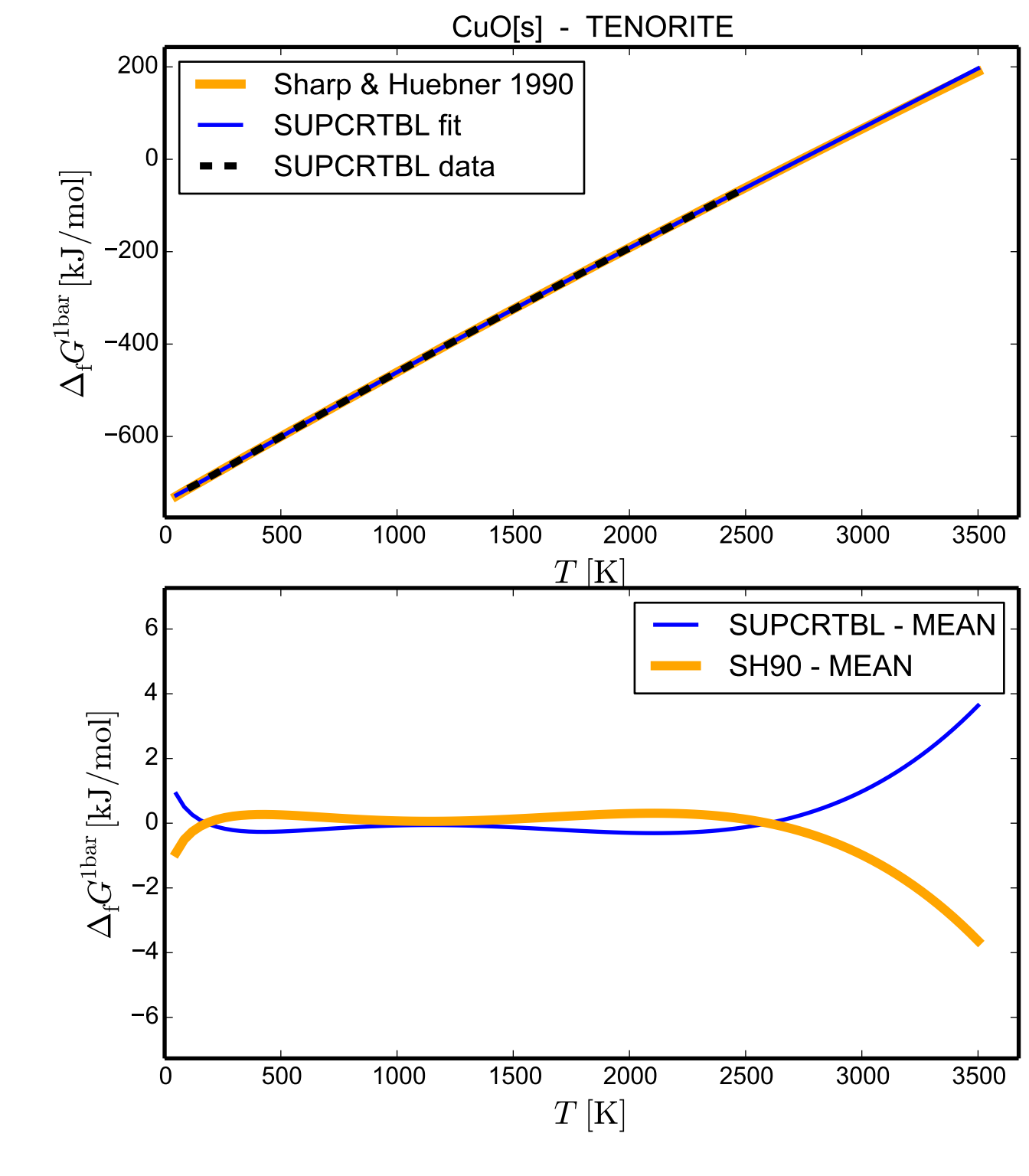

Cr[l] -
BURCAT
50
0
−50
−100
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

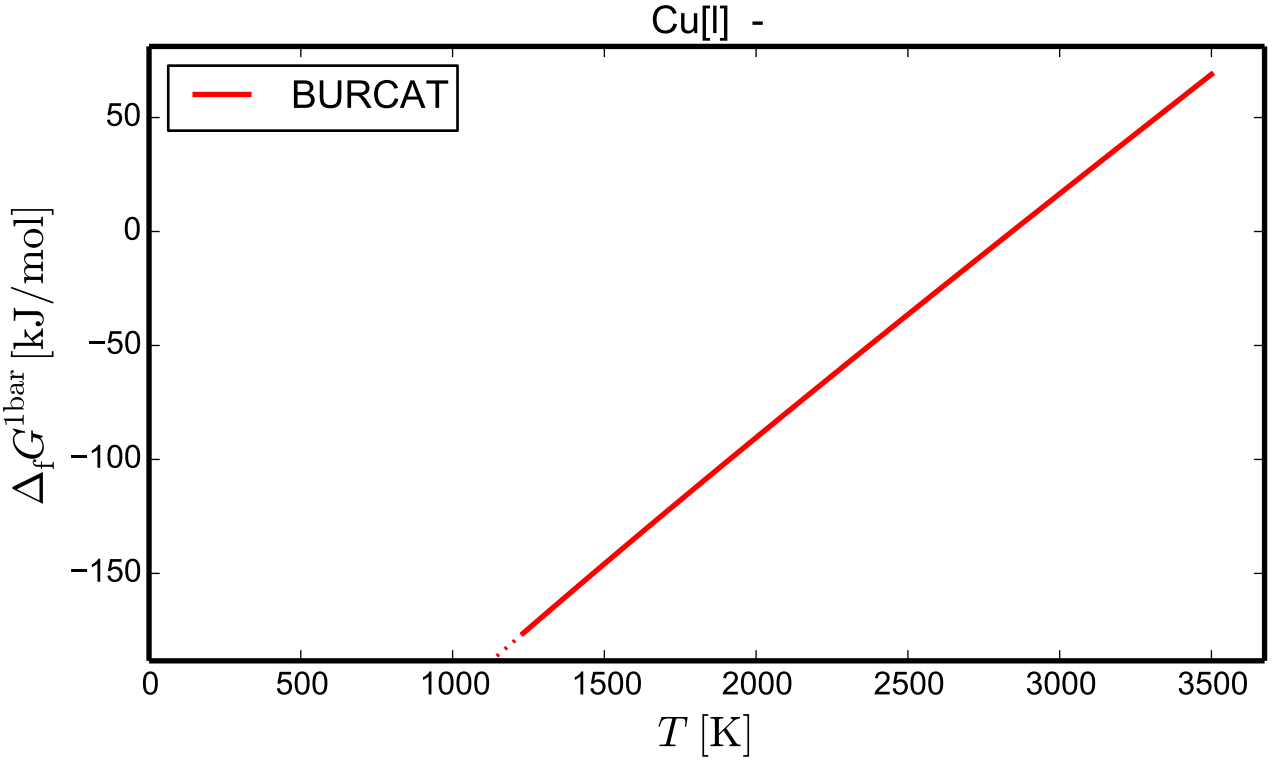

Cr[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

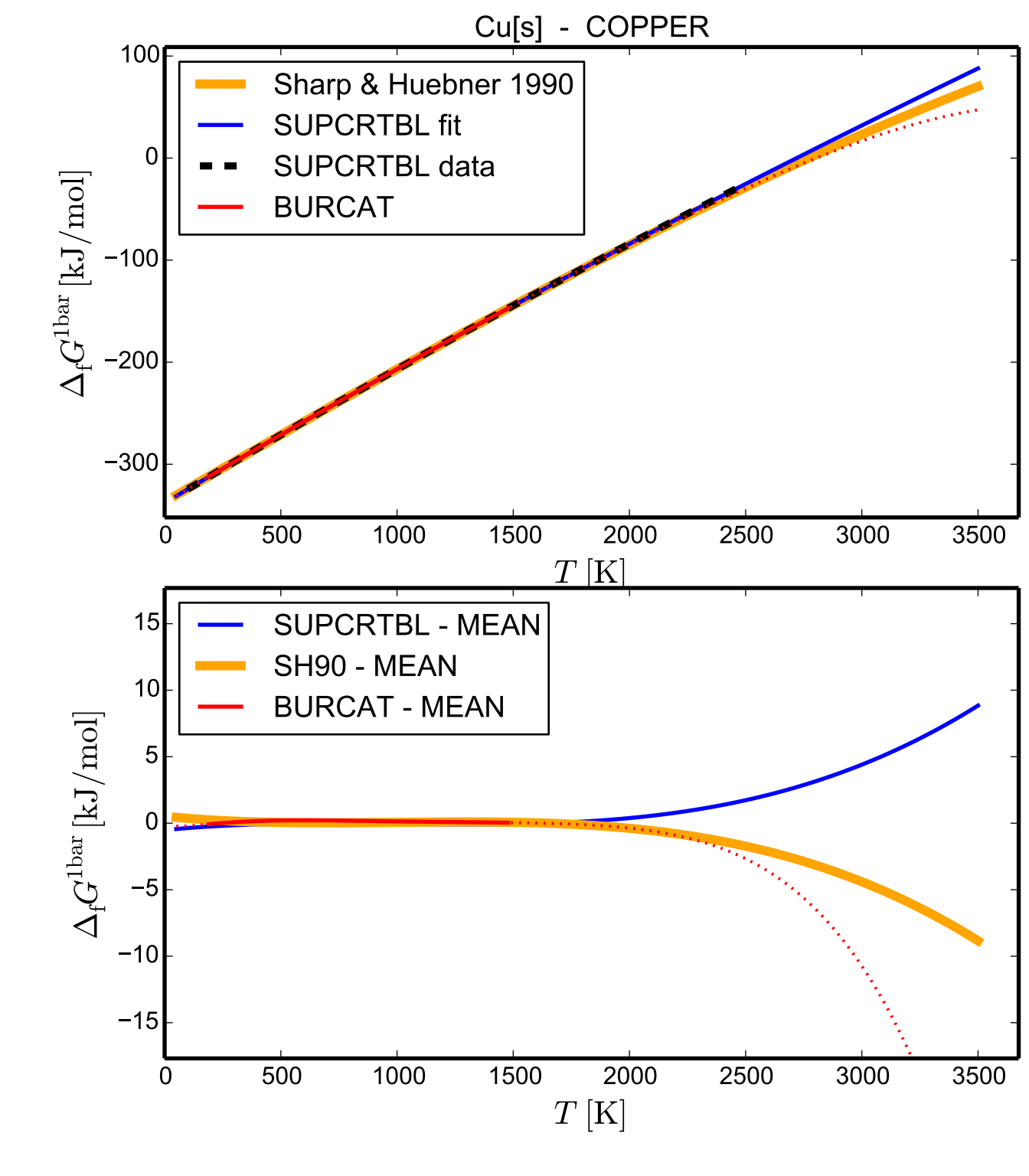

Cu2O[s] - CUPRITE
SUPCRTBL fit
SUPCRTBL data
200
0
−200
−400
−600
−800
−1000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

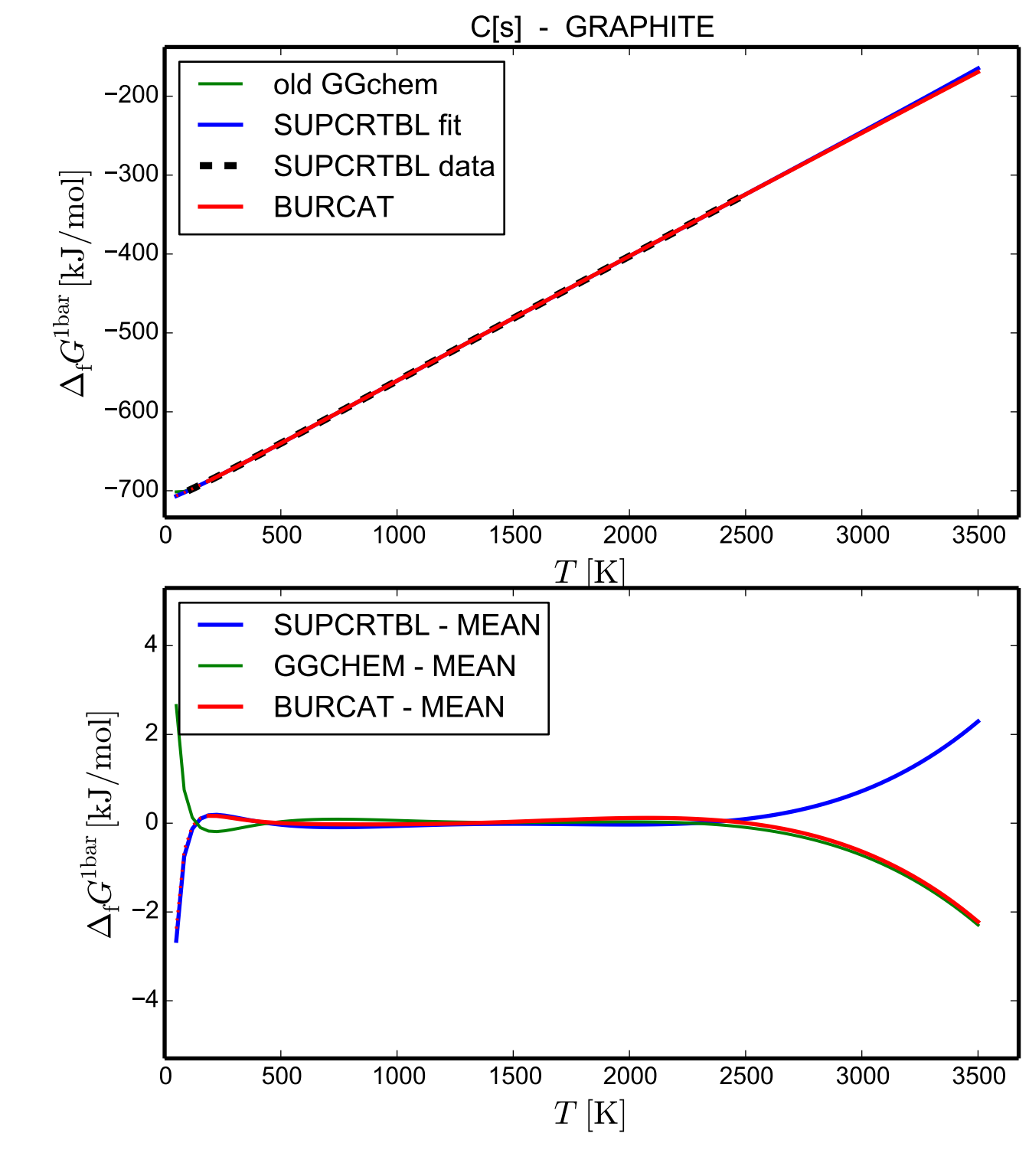

CuCL2[l] -
BURCAT
400
200
0
−200
−400
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

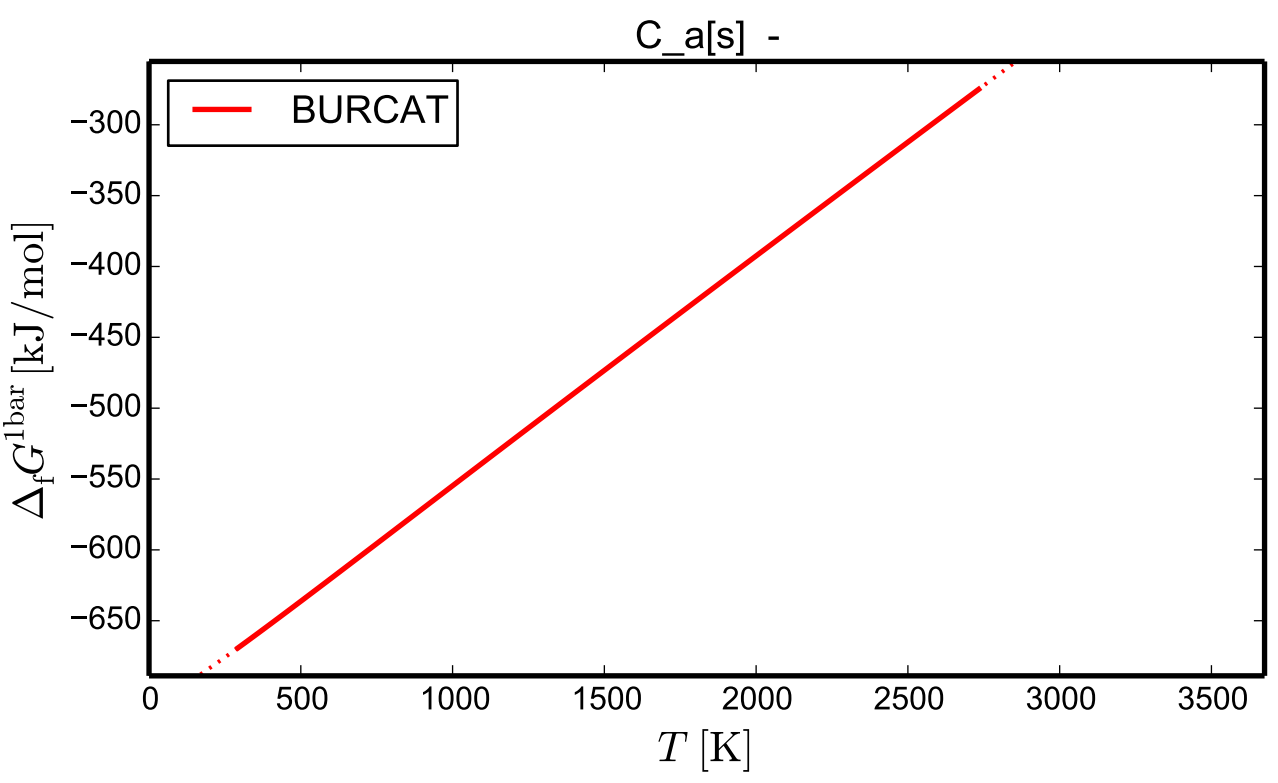

CuCL2[s] -
BURCAT
−550
−600
−650
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

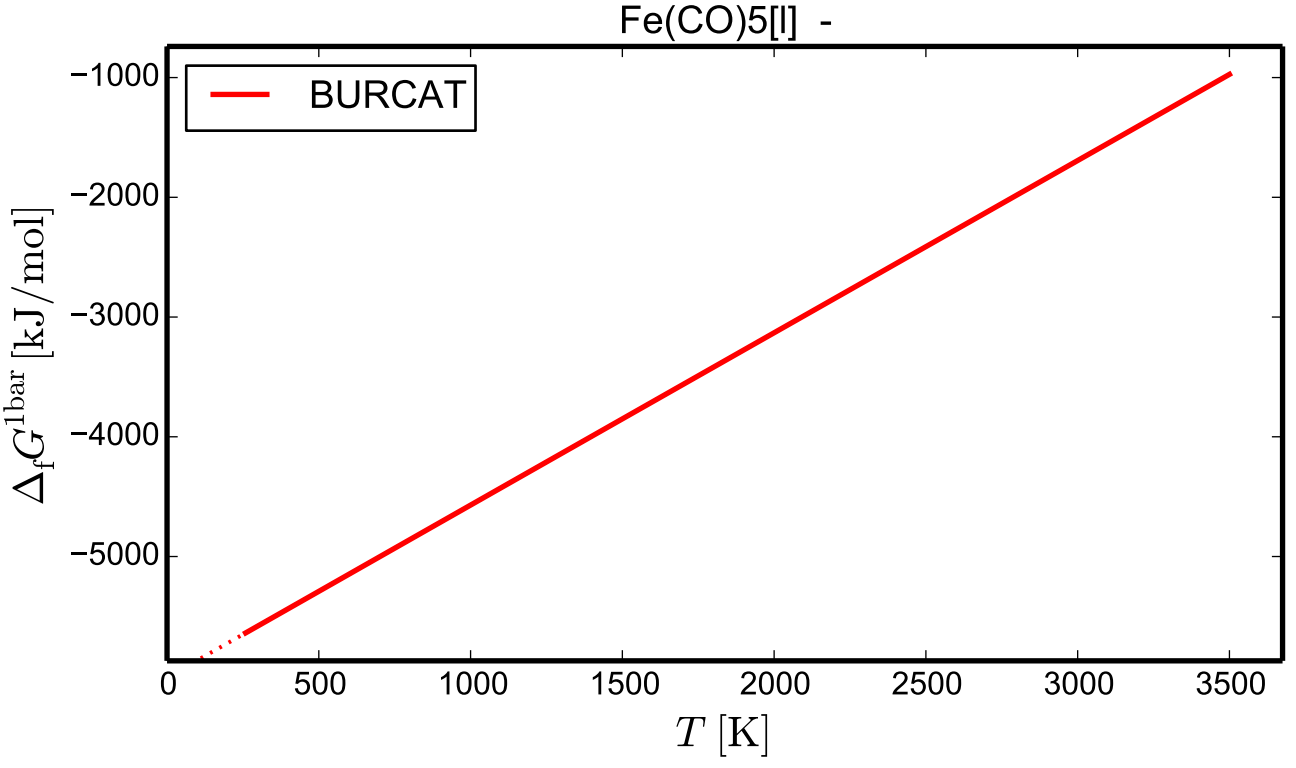

CuO[s] - TENORITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

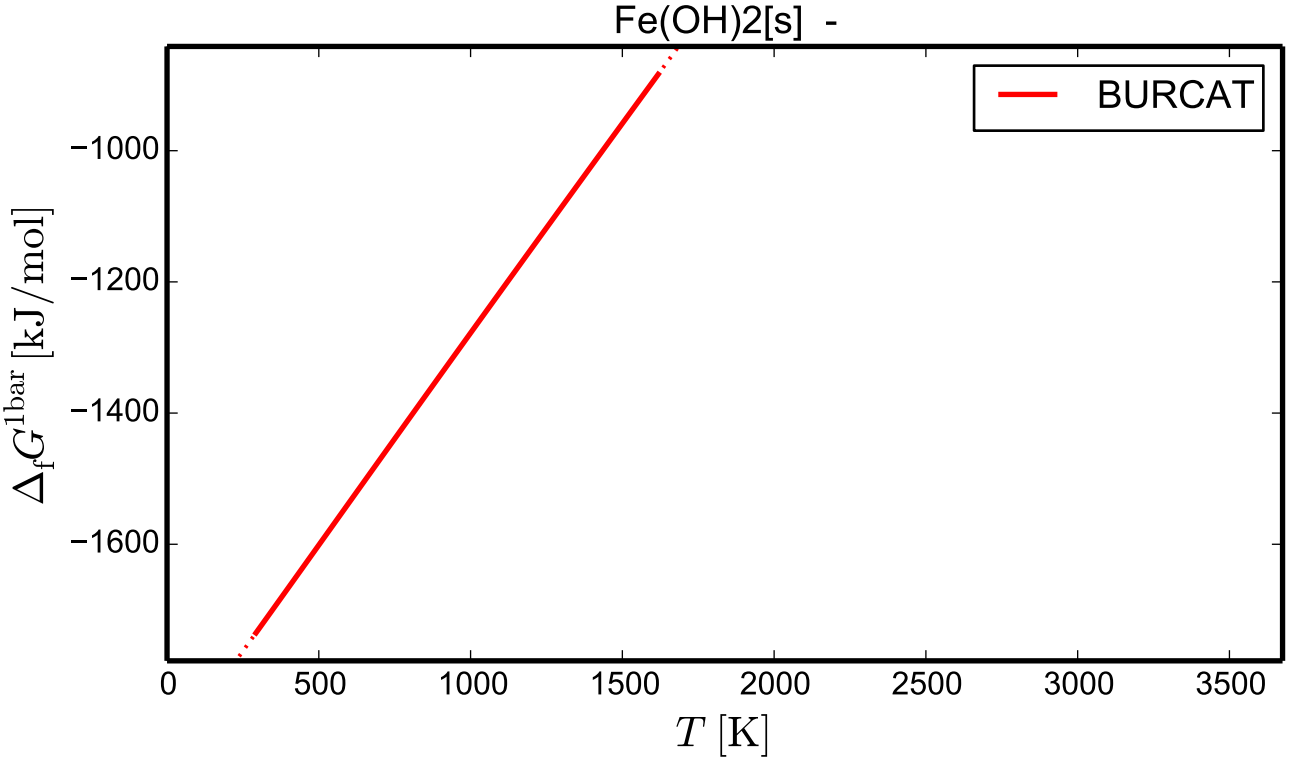

Cu[l] -
BURCAT
50
0
−50
−100
−150
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

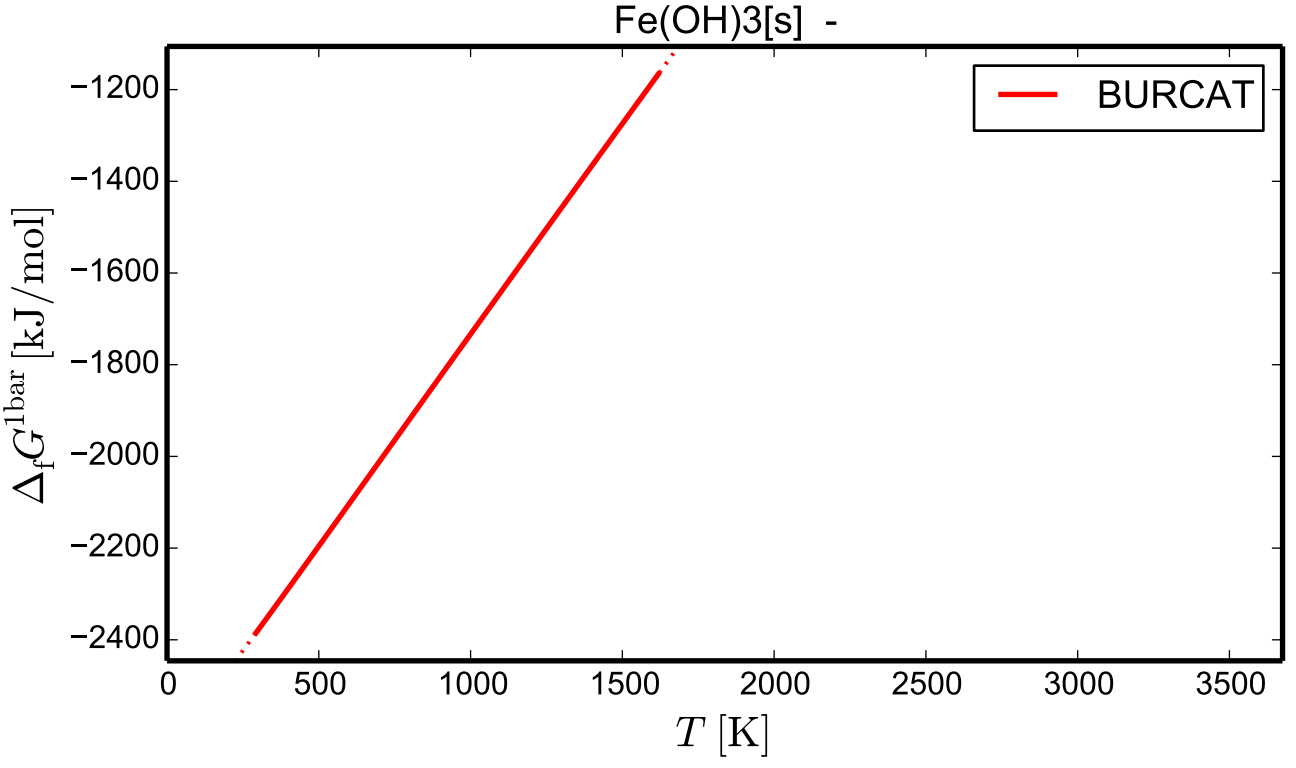

Cu[s] - COPPER
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

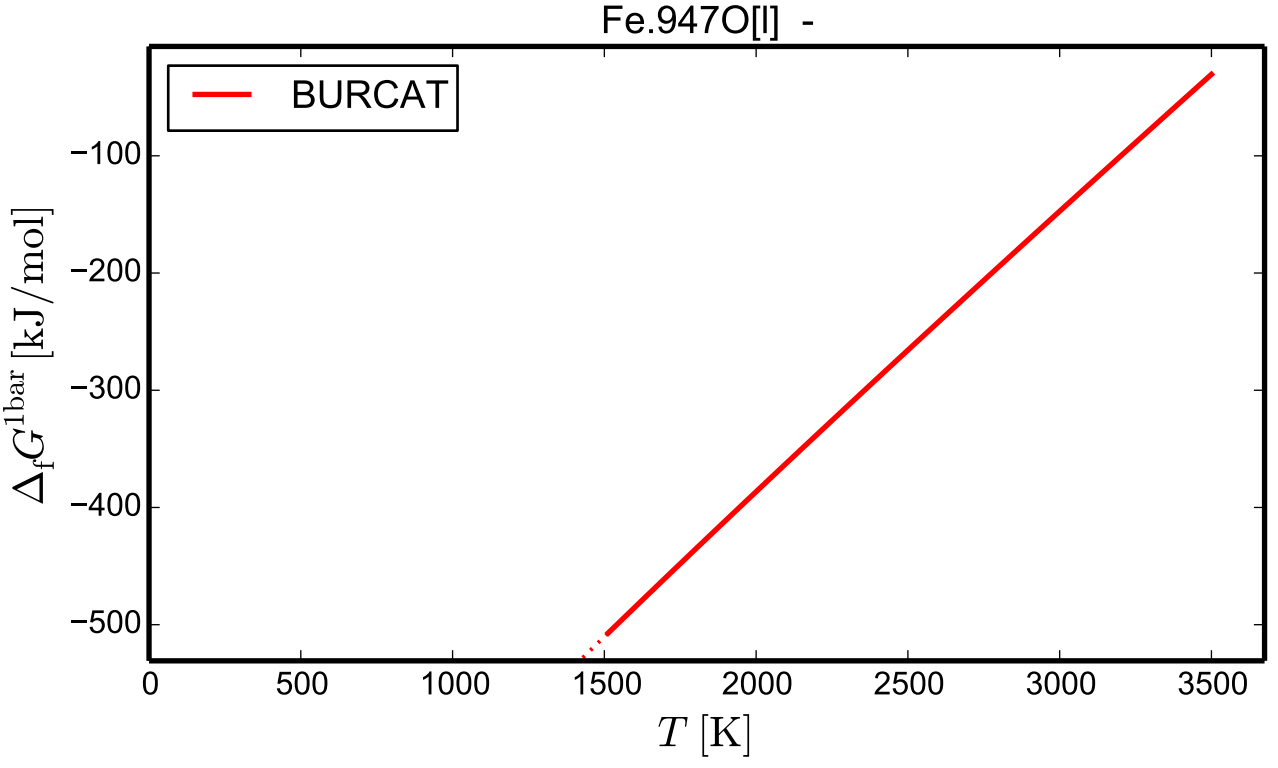

C[s] - GRAPHITE
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

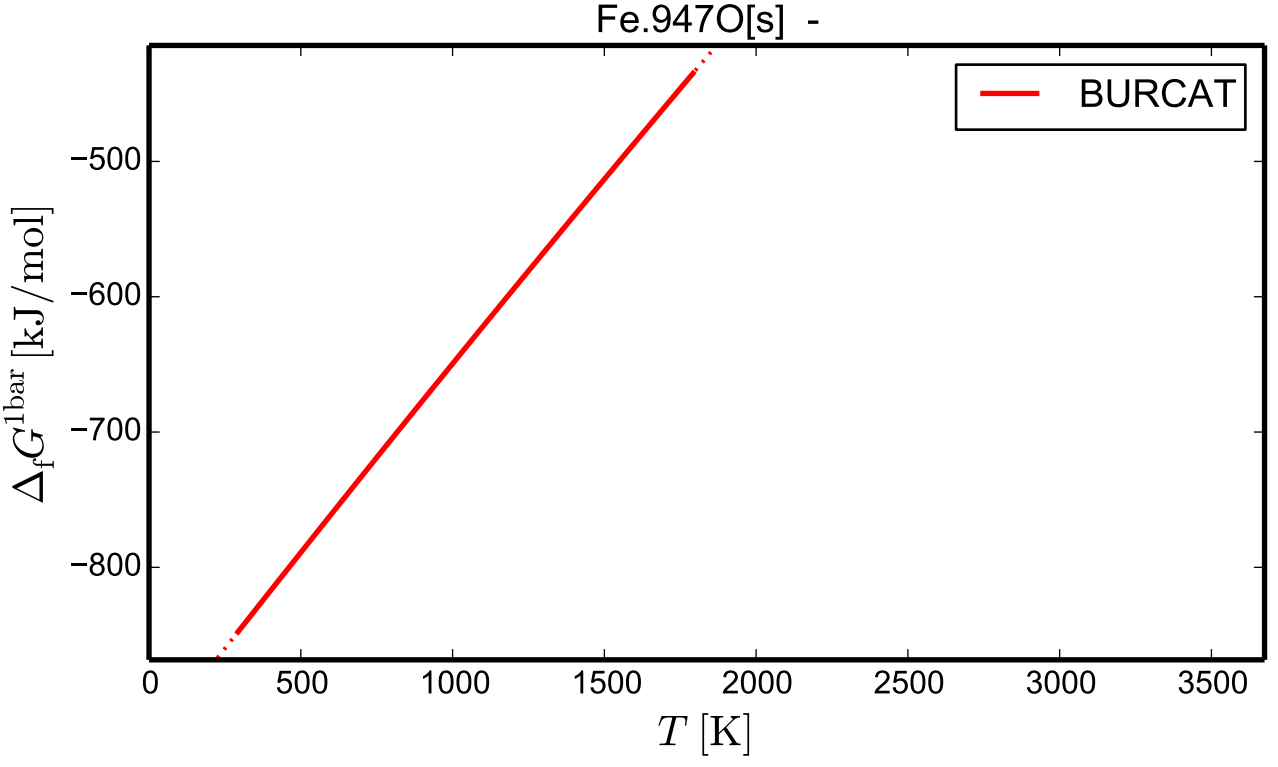

C_a[s] -
BURCAT
−300
−350
−400
−450
−500
−550
−600
−650
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

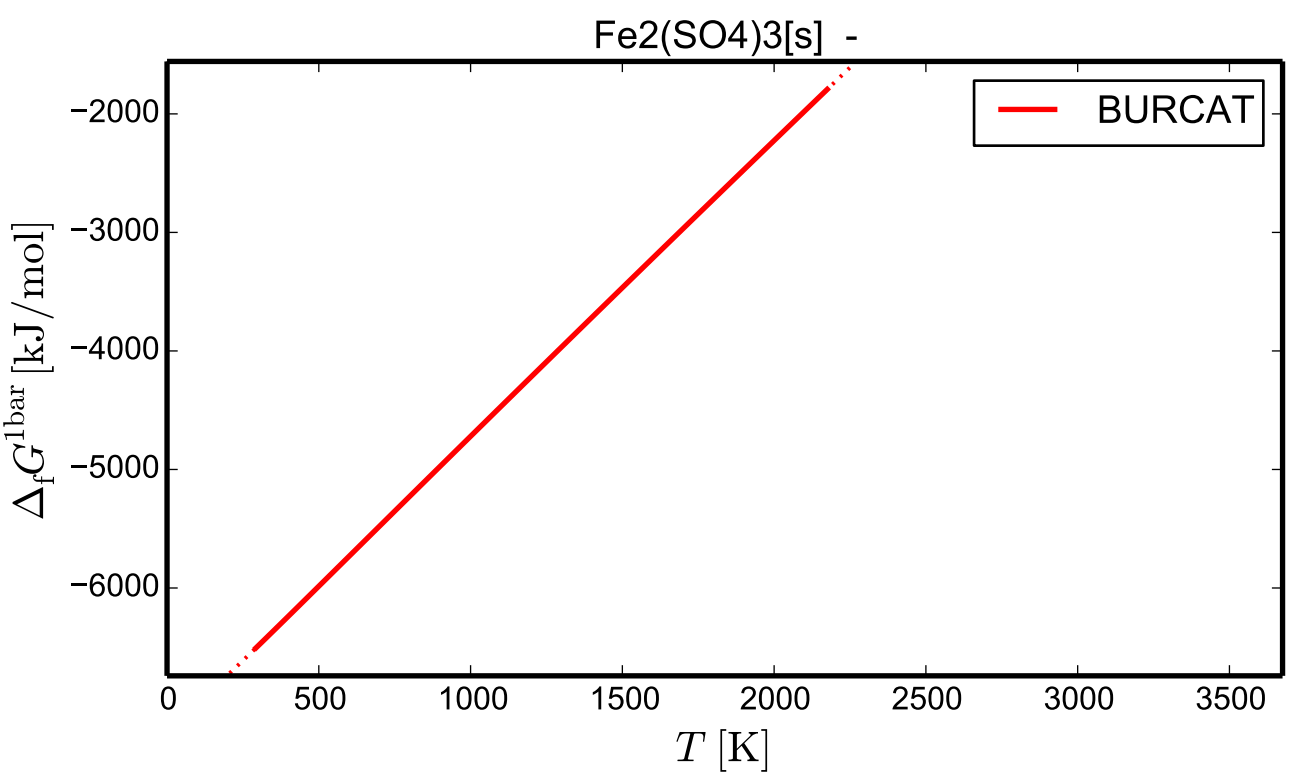

Fe(CO)5[l] -
BURCAT
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

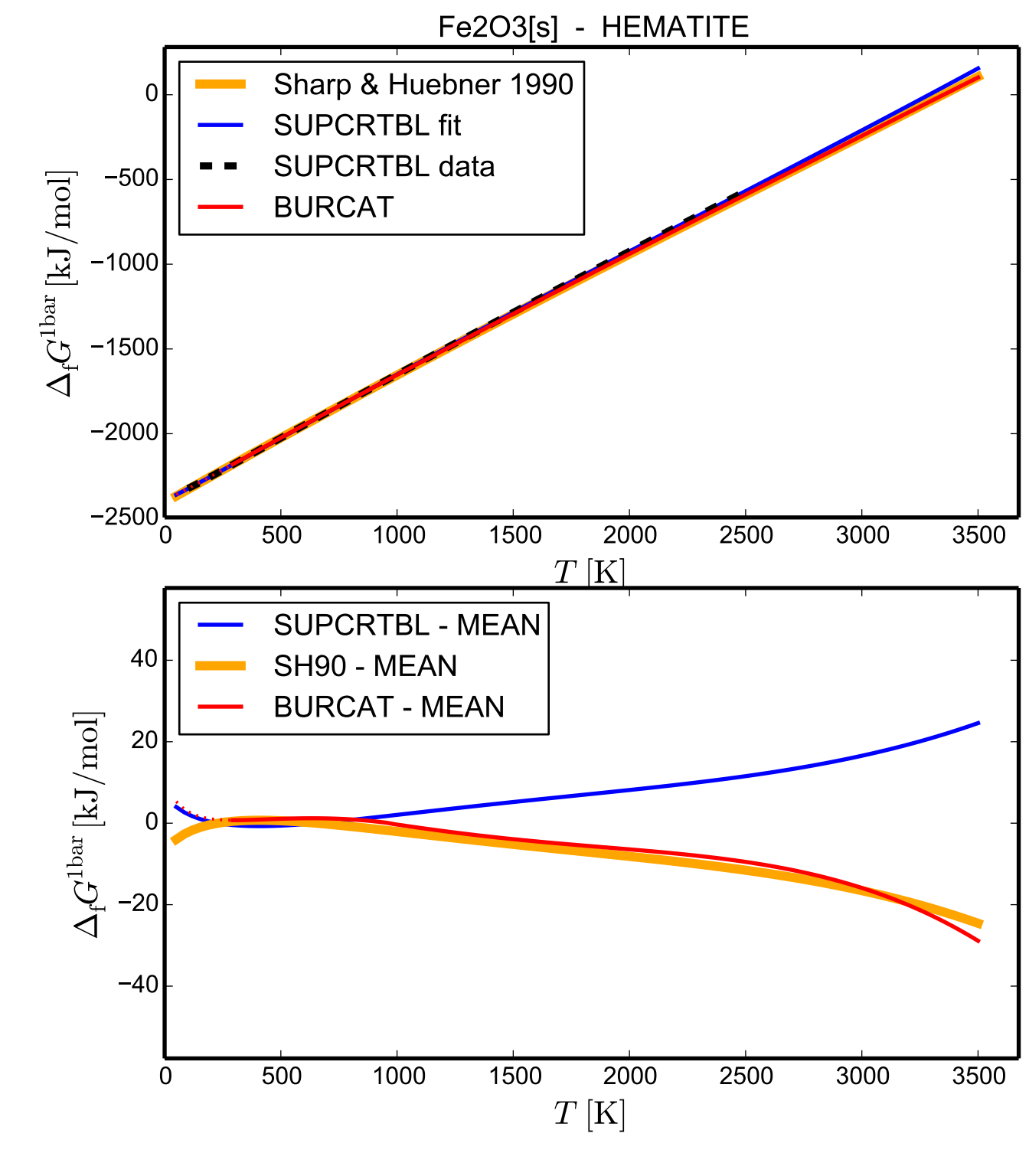

Fe(OH)2[s] -
BURCAT
−1000
−1200
−1400
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

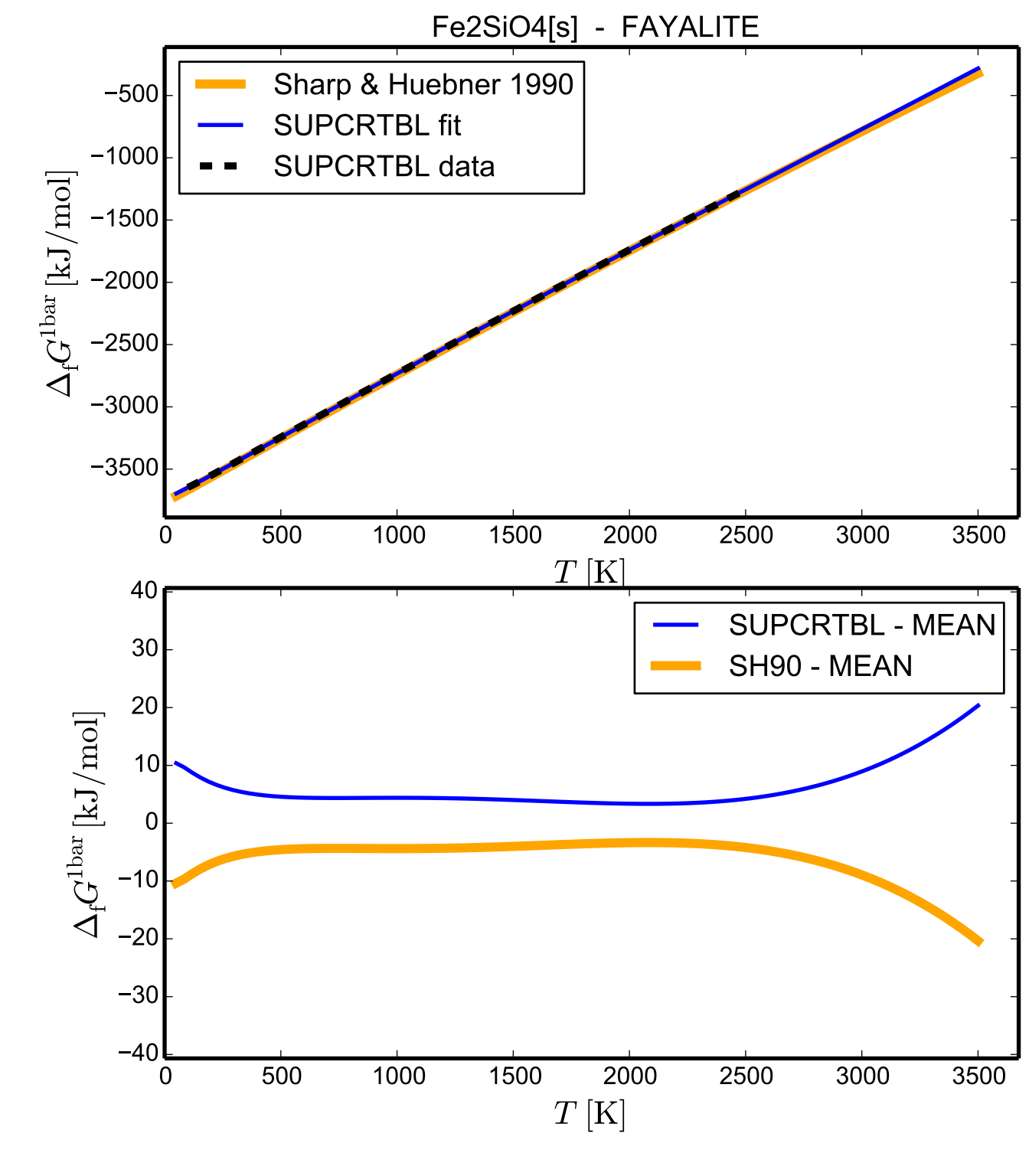

Fe(OH)3[s] -
BURCAT
−1200
−1400
−1600
−1800
−2000
−2200
−2400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

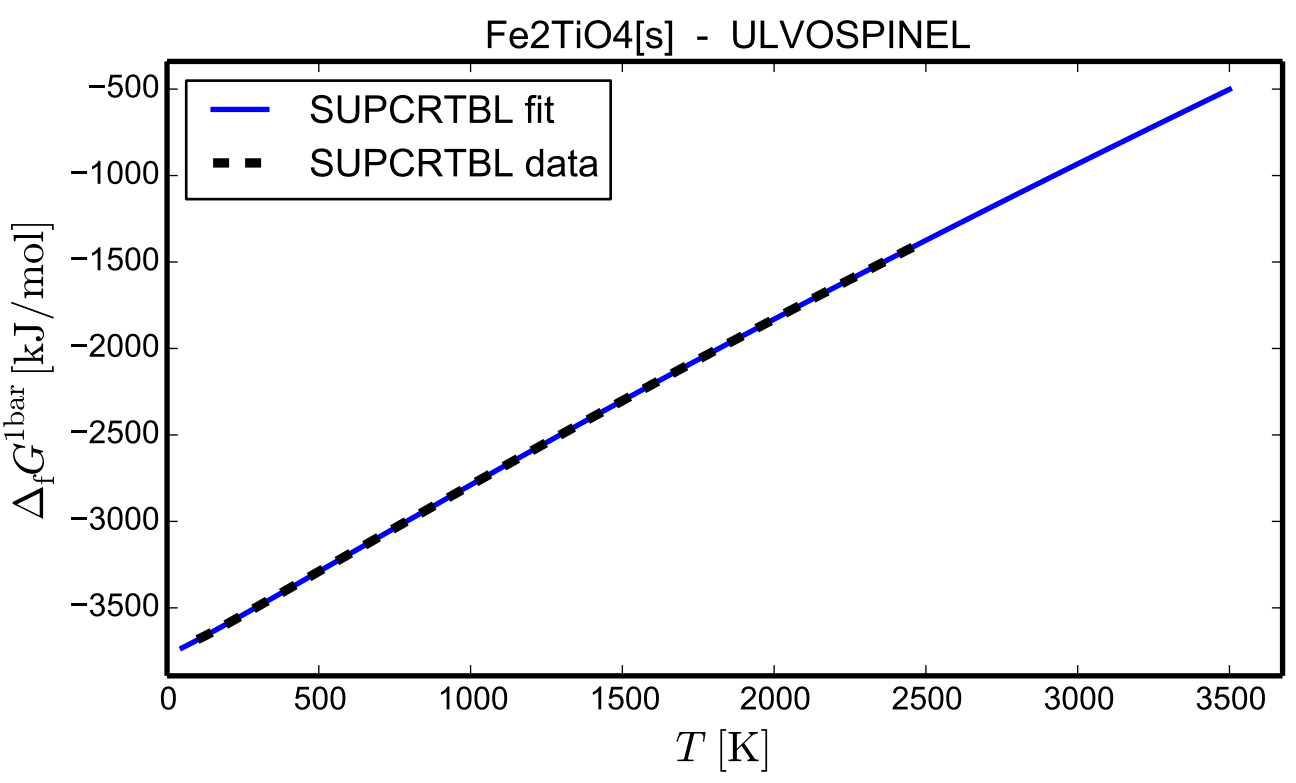

Fe.947O[l] -
BURCAT
−100
−200
−300
−400
−500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

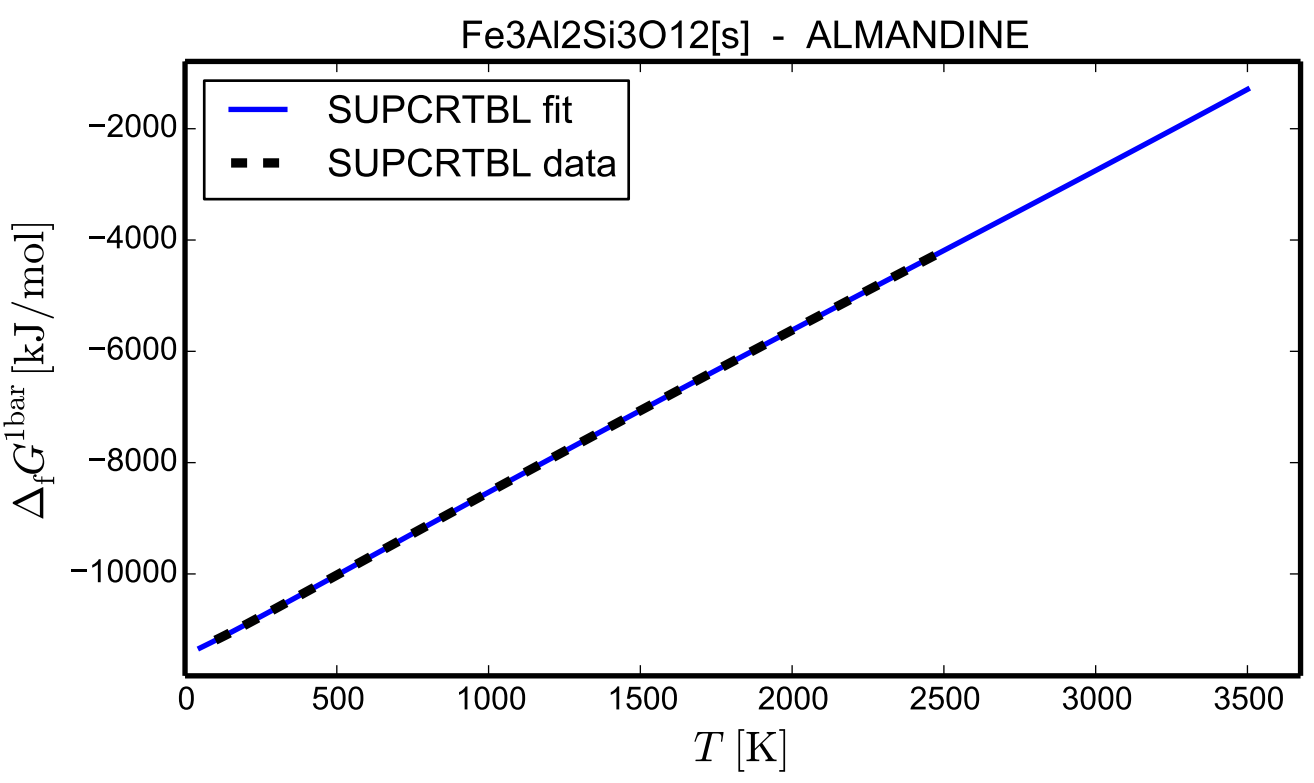

Fe.947O[s] -
BURCAT
−500
−600
−700
−800
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

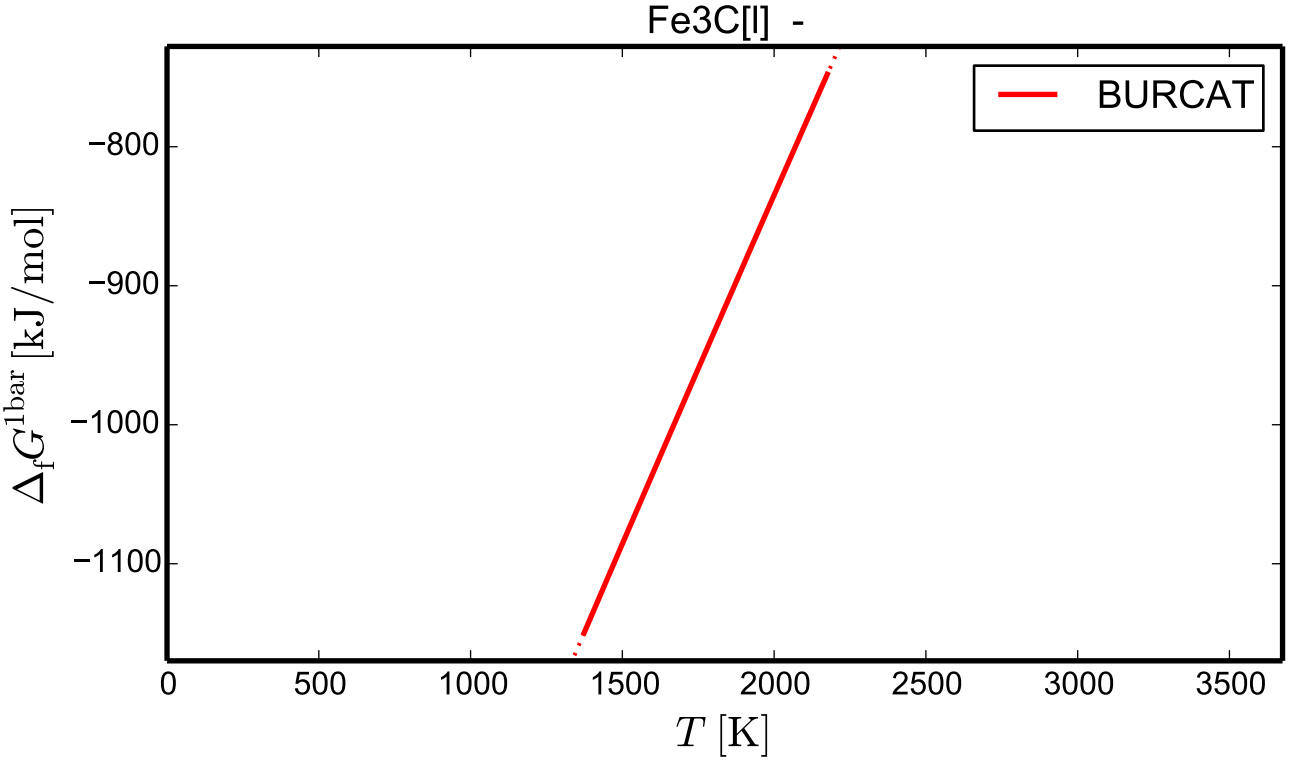

Fe2(SO4)3[s] -
BURCAT
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

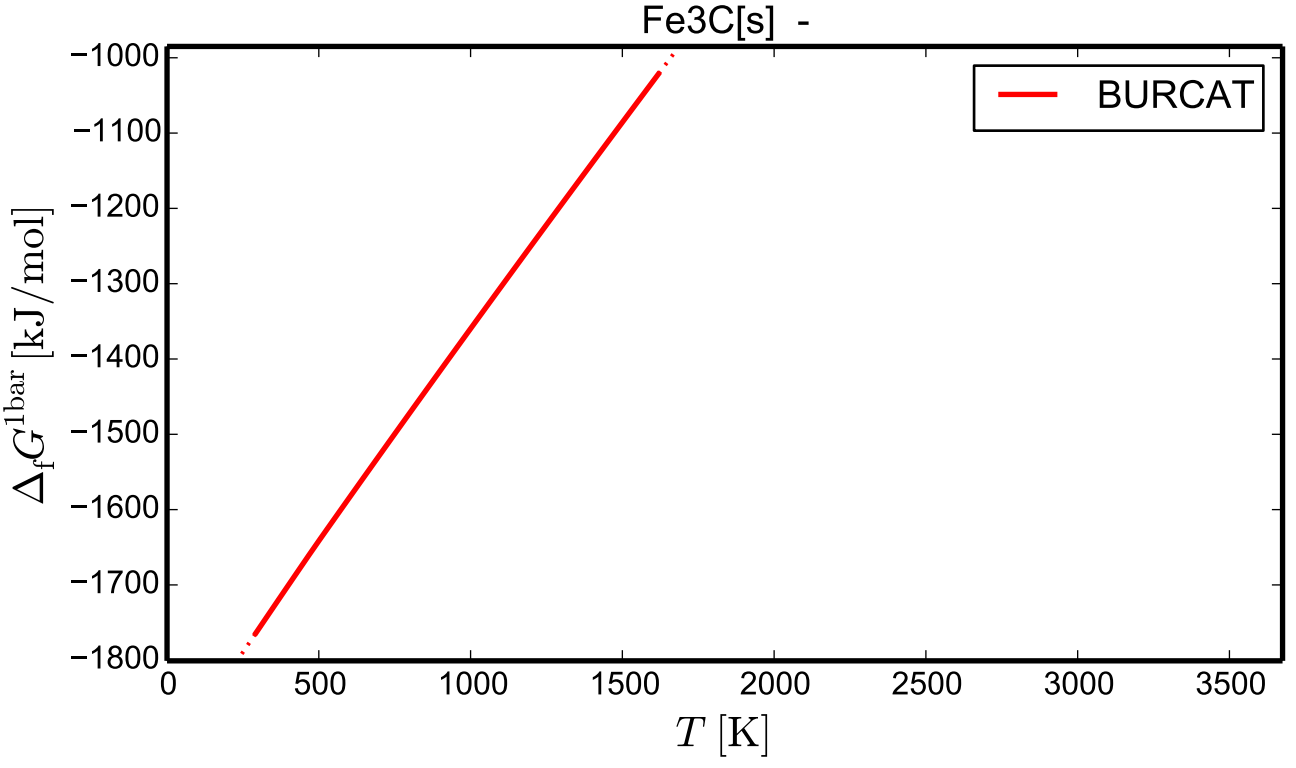

Fe2O3[s] - HEMATITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

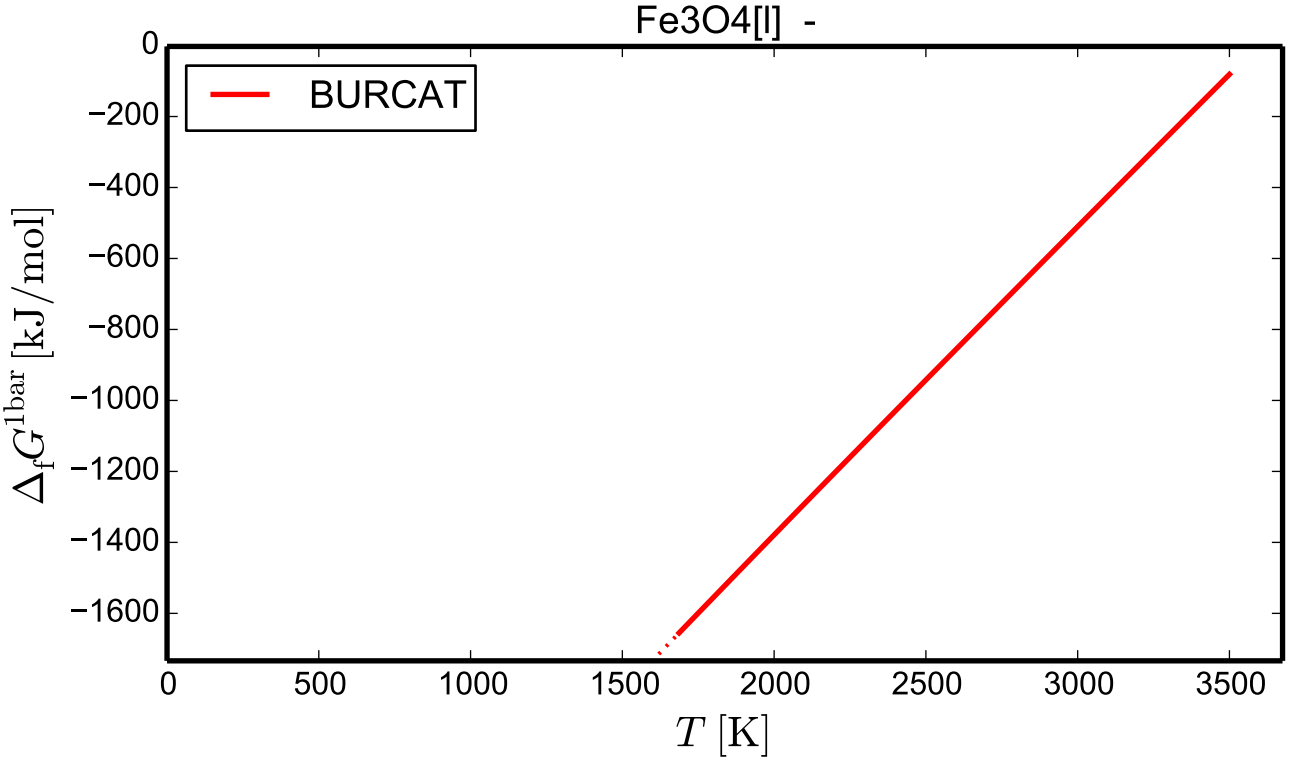

Fe2SiO4[s] - FAYALITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

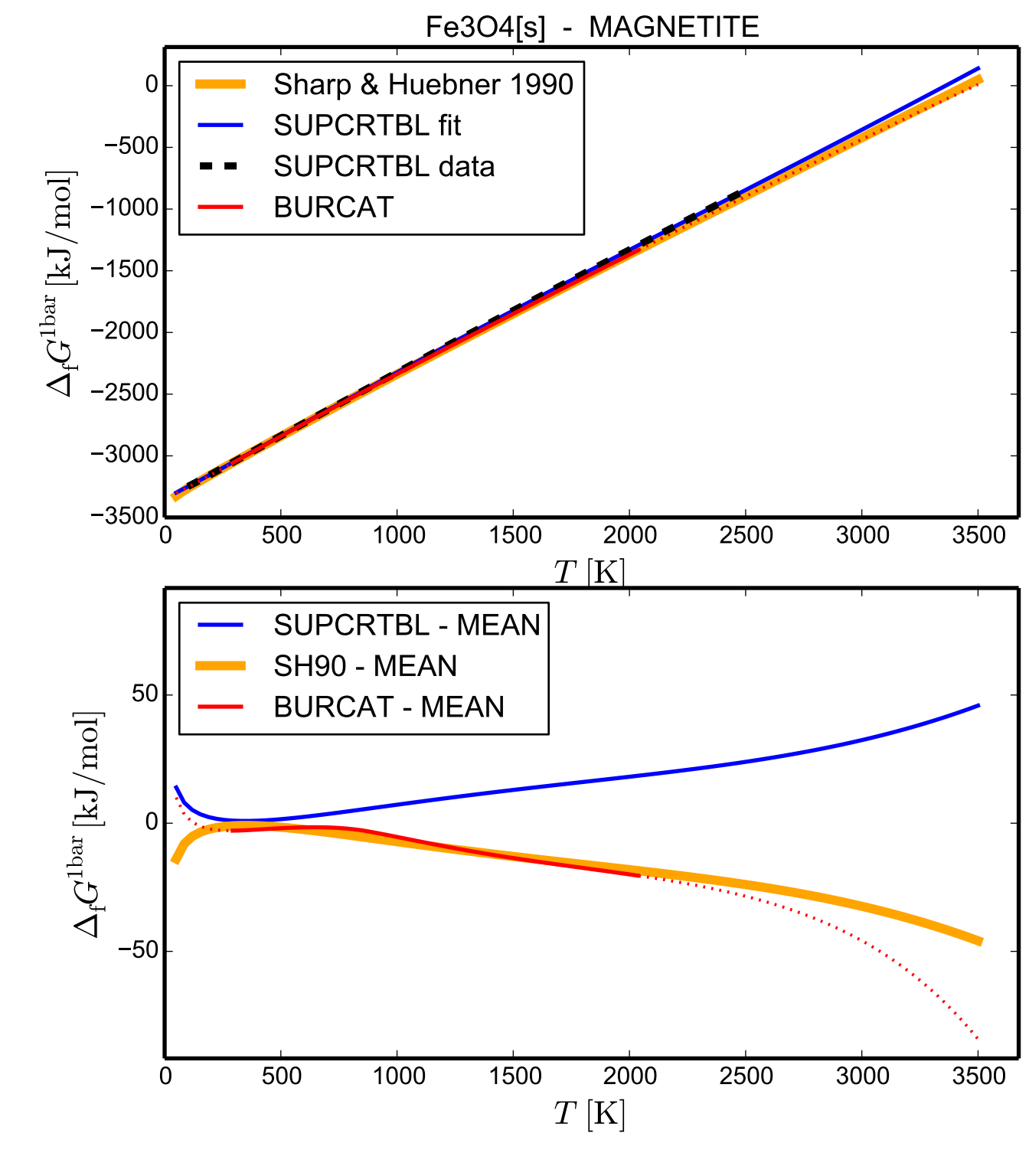

Fe2TiO4[s] - ULVOSPINEL
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
−3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

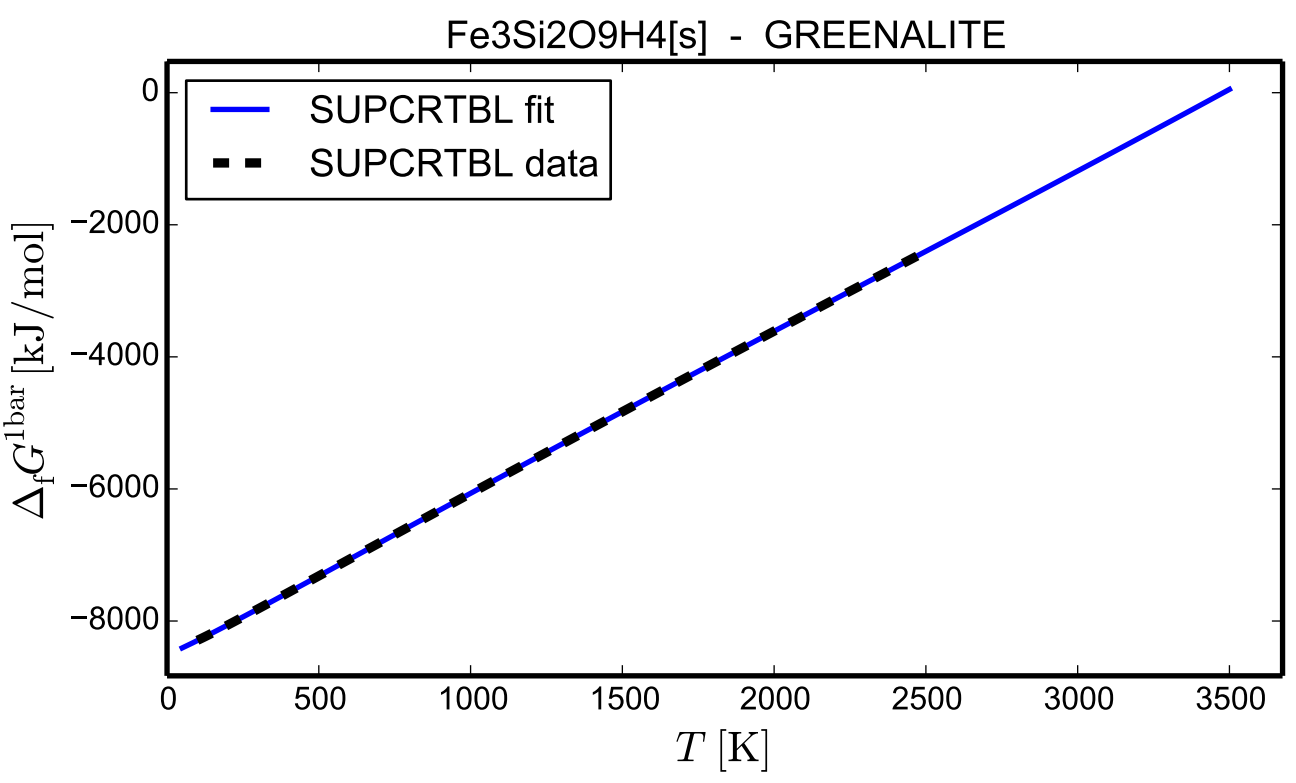

Fe3Al2Si3O12[s] - ALMANDINE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

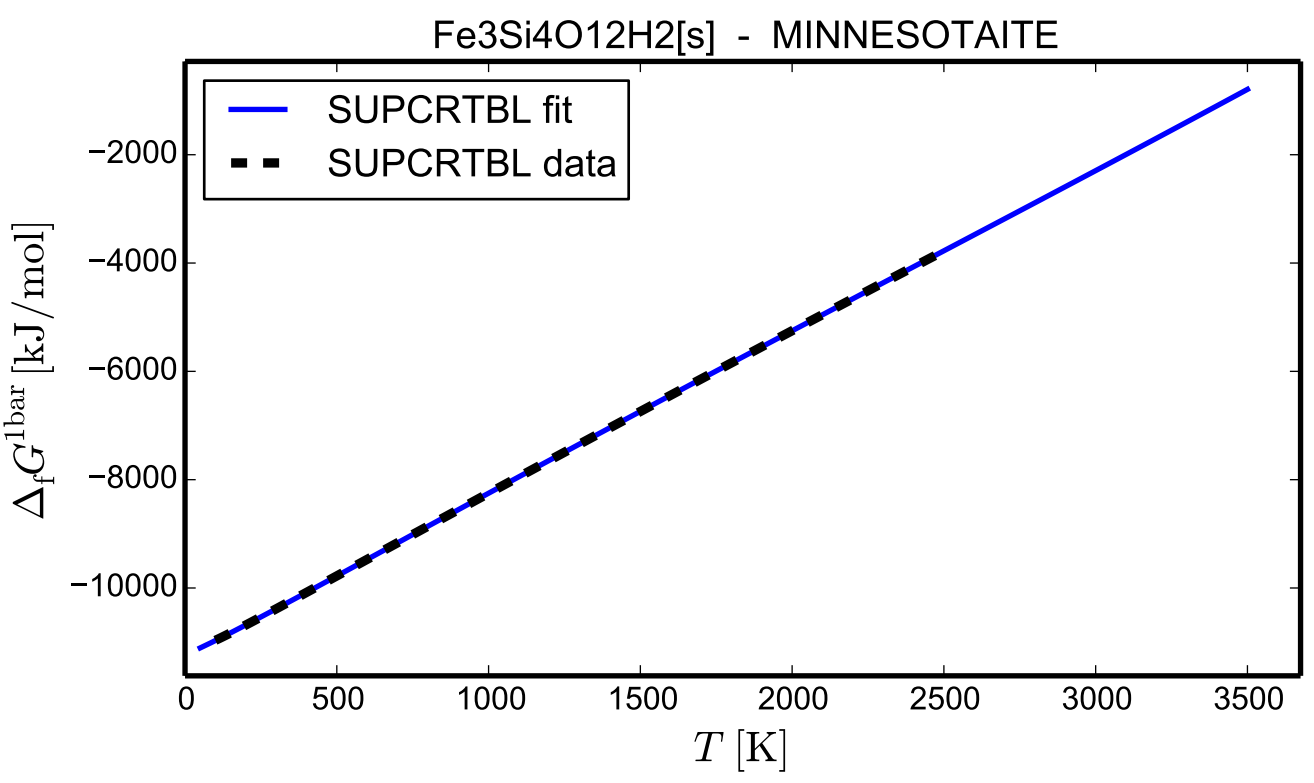

Fe3C[l] -
BURCAT
−800
−900
−1000
−1100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

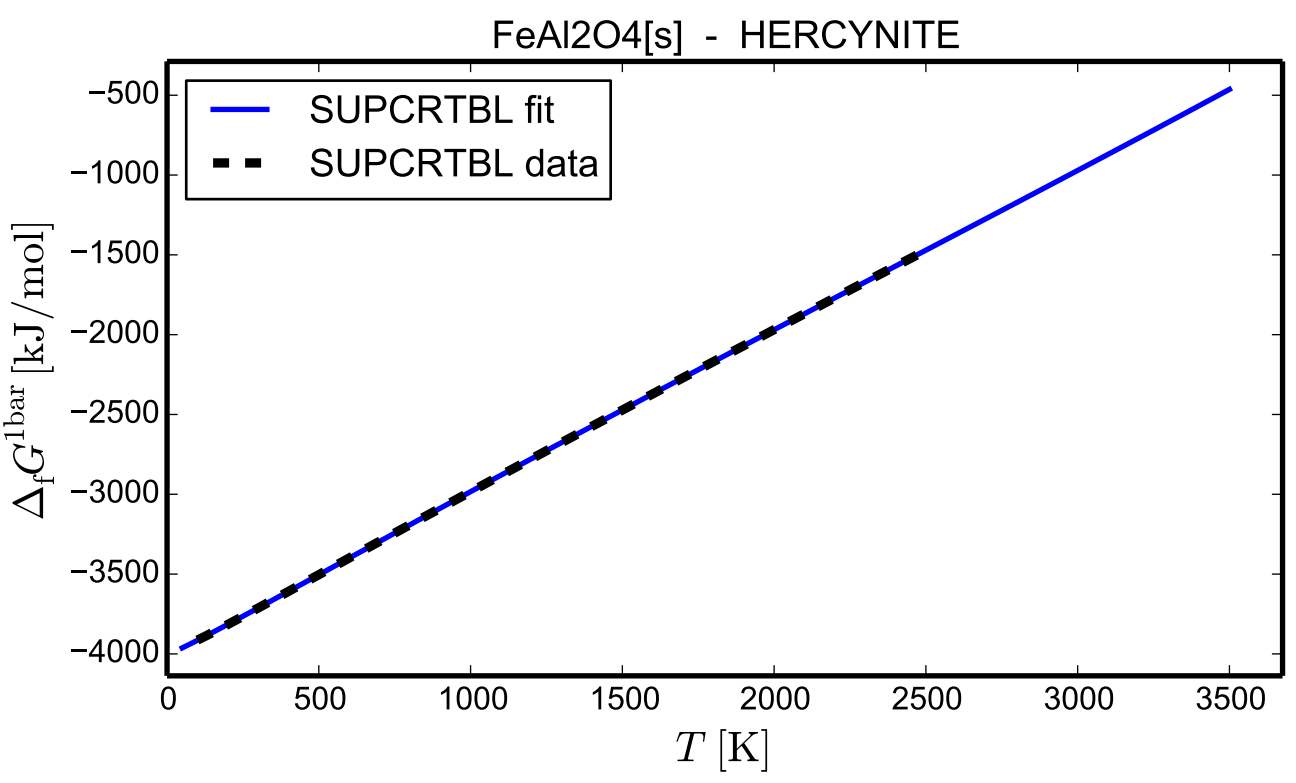

Fe3C[s] -
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
−1000
−1100
−1200
−1300
−1400
−1500
−1600
−1700
−1800
0
500
1000
1500
2000
2500
3000
3500

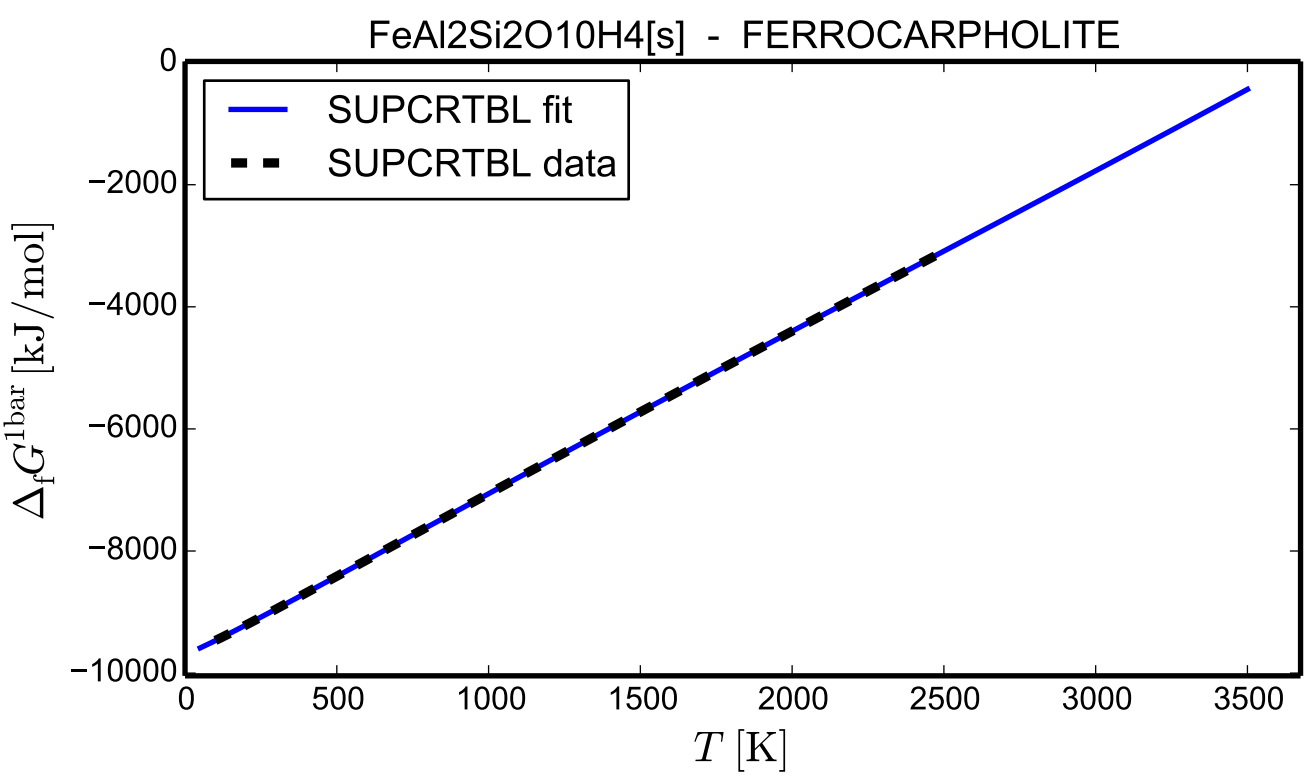

Fe3O4[l] -
BURCAT
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
0
500
1000
1500
2000
2500
3000
3500

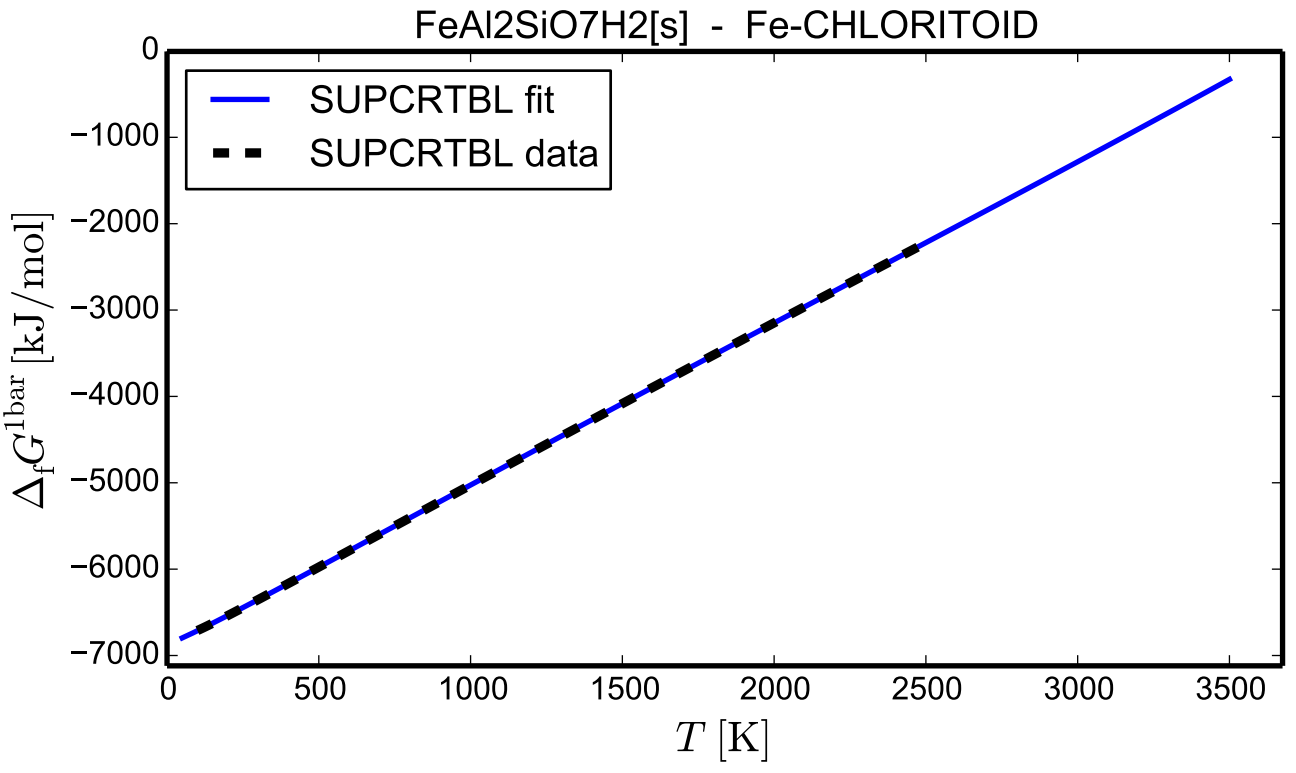

Fe3O4[s] - MAGNETITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

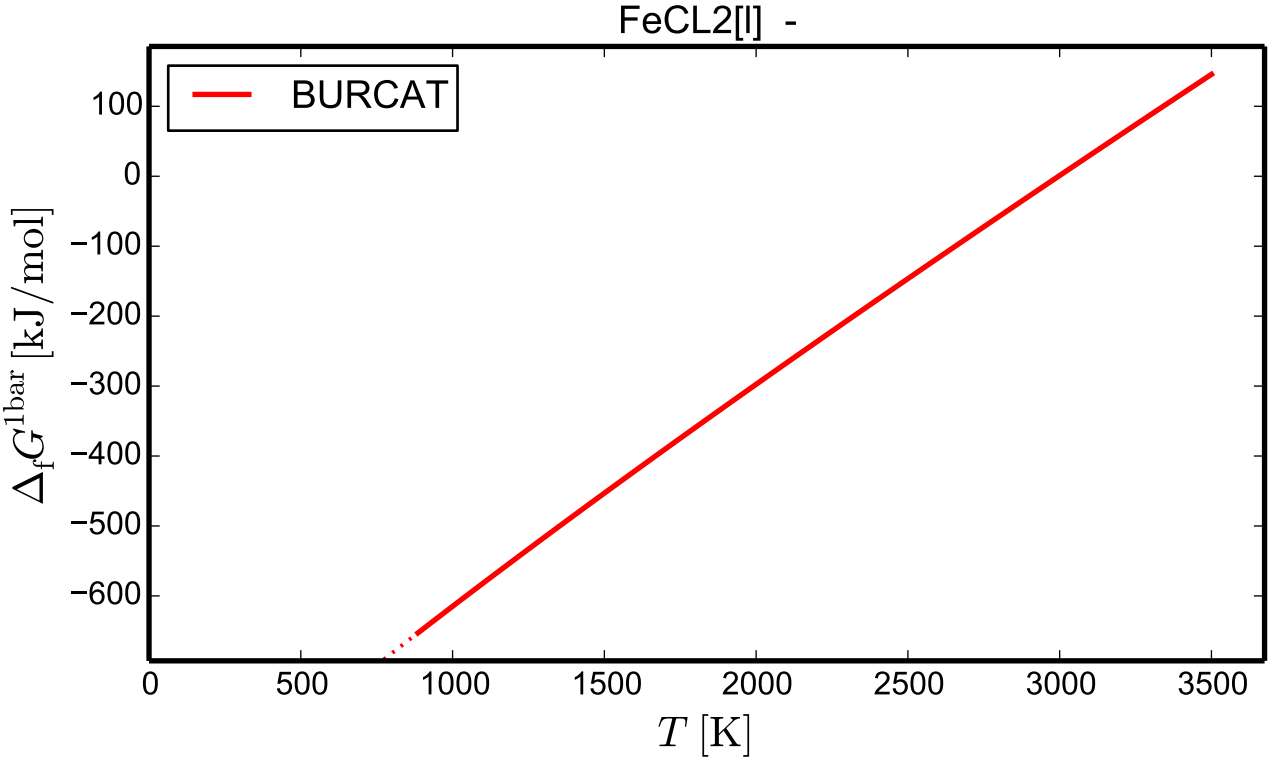

Fe3Si2O9H4[s] - GREENALITE
SUPCRTBL fit
SUPCRTBL data
0
−2000
−4000
−6000
−8000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

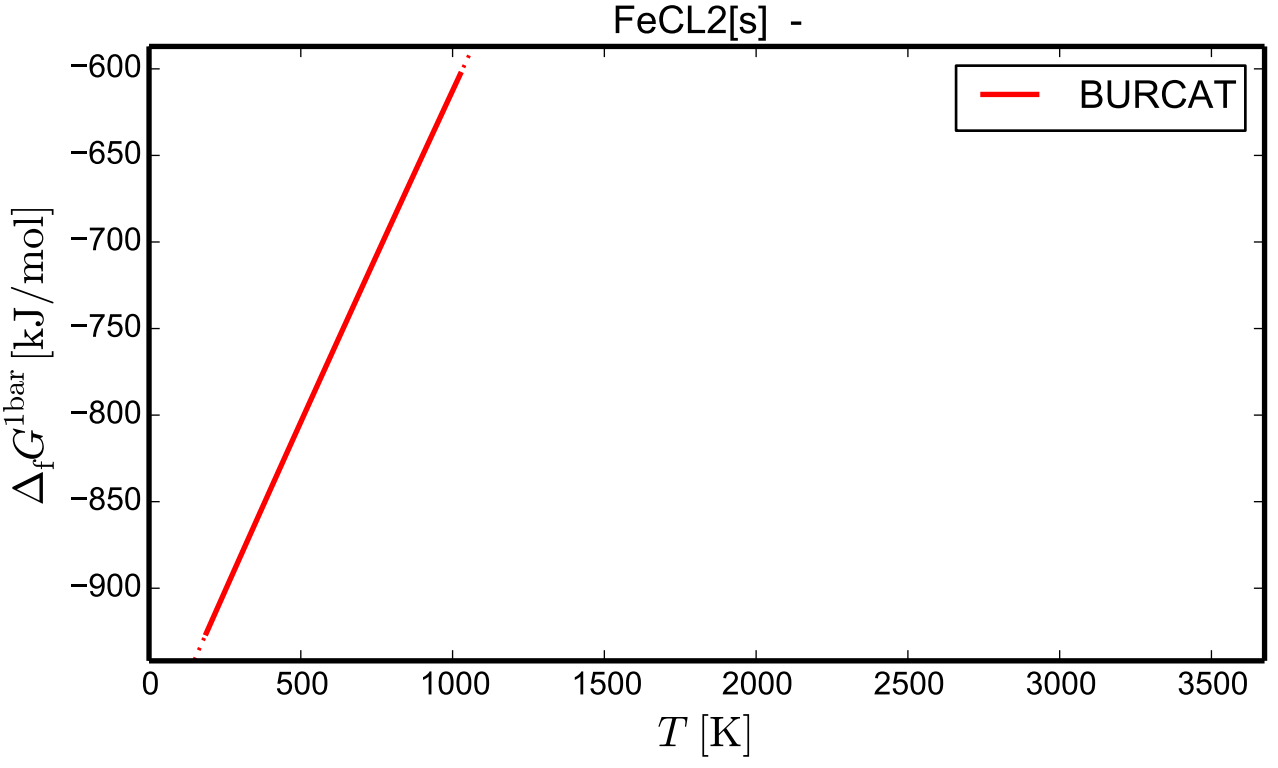

Fe3Si4O12H2[s] - MINNESOTAITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

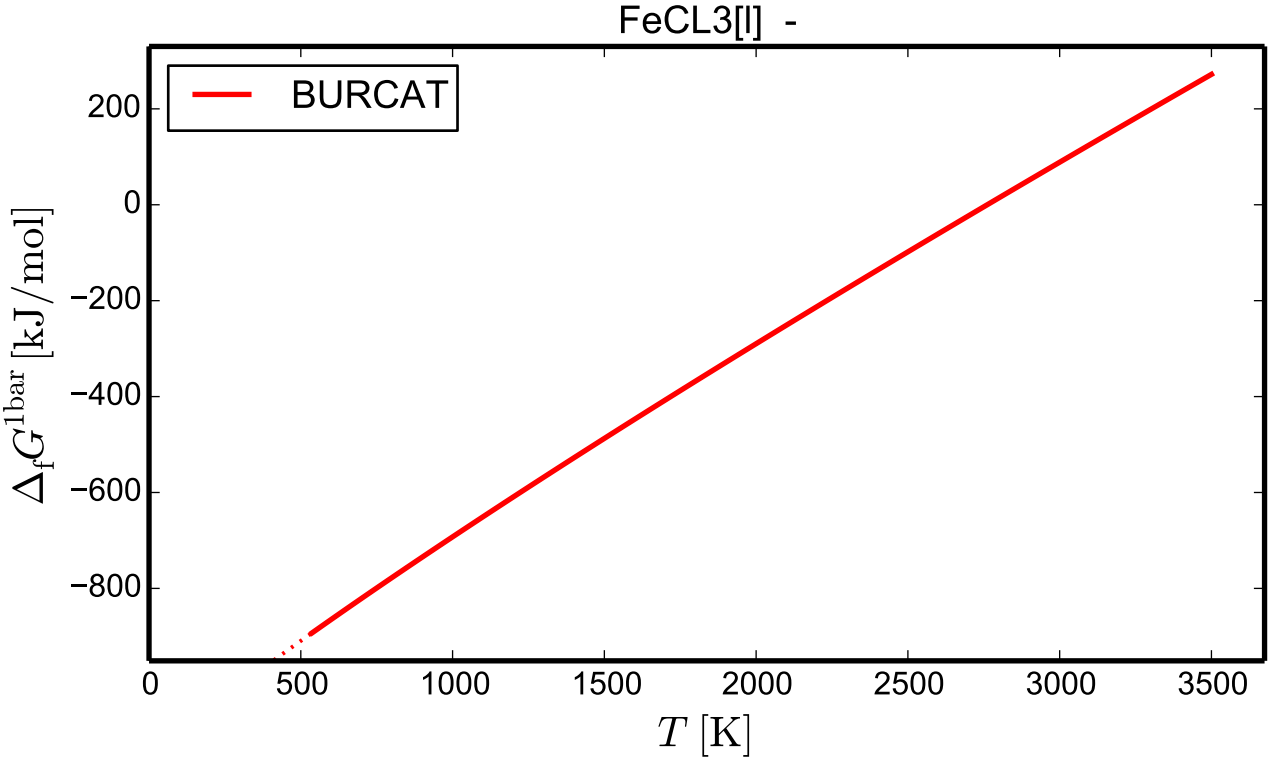

FeAl2O4[s] - HERCYNITE
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
0
500
1000
1500
2000
2500
3000
3500

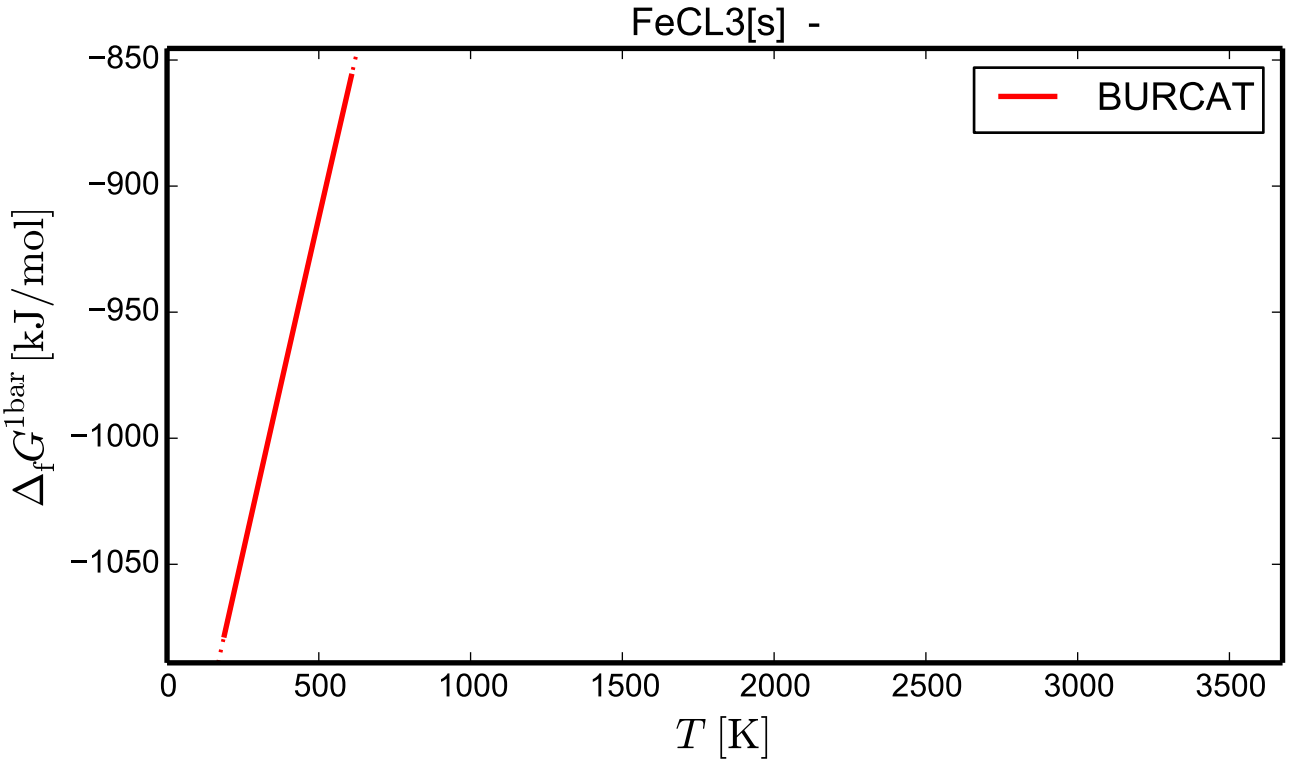

FeAl2Si2O10H4[s] - FERROCARPHOLITE
SUPCRTBL fit
SUPCRTBL data
0
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

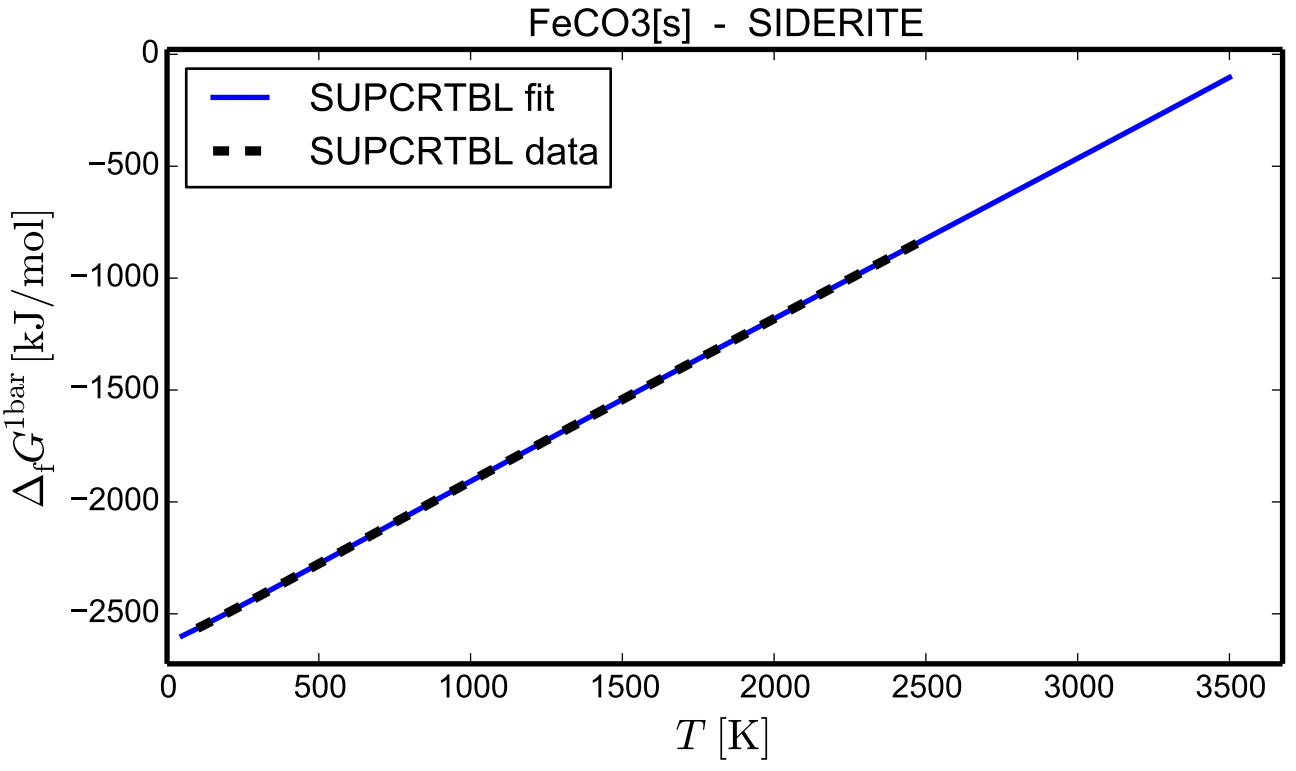

FeAl2SiO7H2[s] - Fe-CHLORITOID
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
0
−1000
−2000
−3000
−4000
−5000
−6000
−7000
0
500
1000
1500
2000
2500
3000
3500

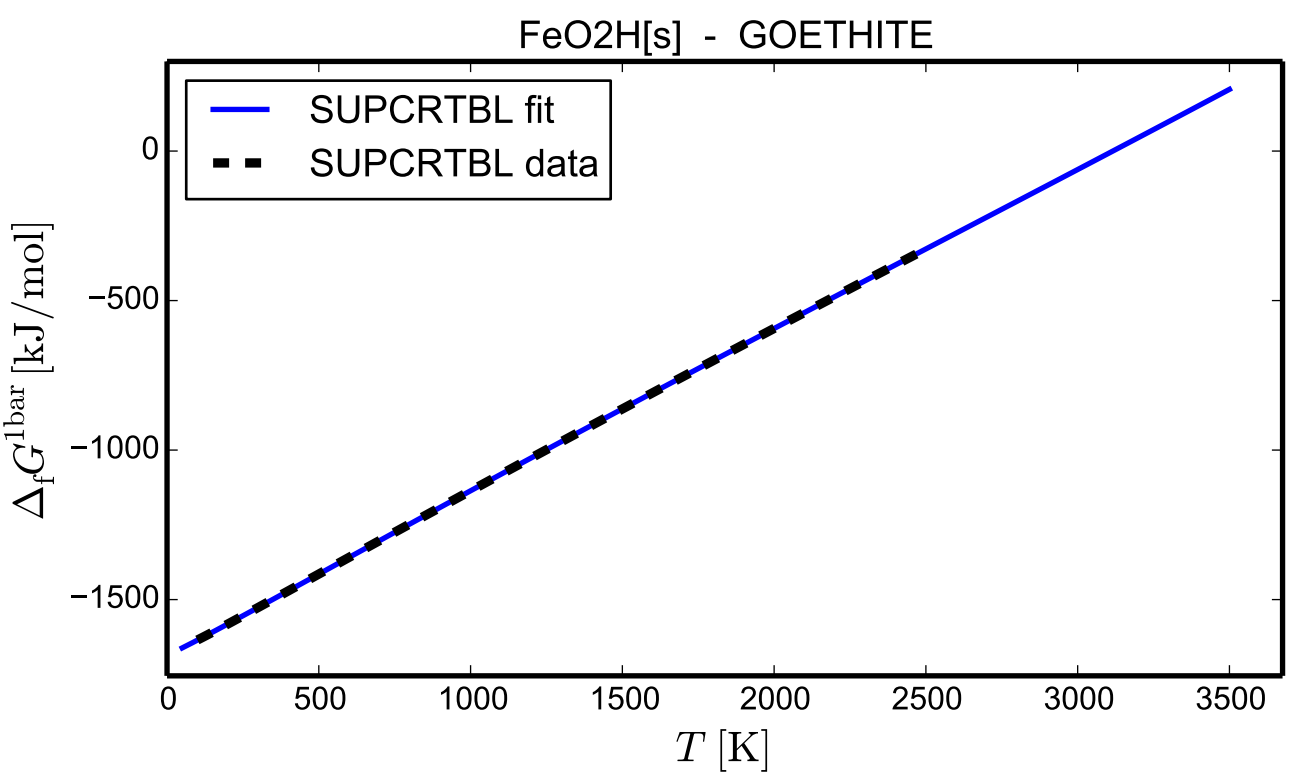

FeCL2[l] -
BURCAT
100
0
−100
−200
−300
−400
−500
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

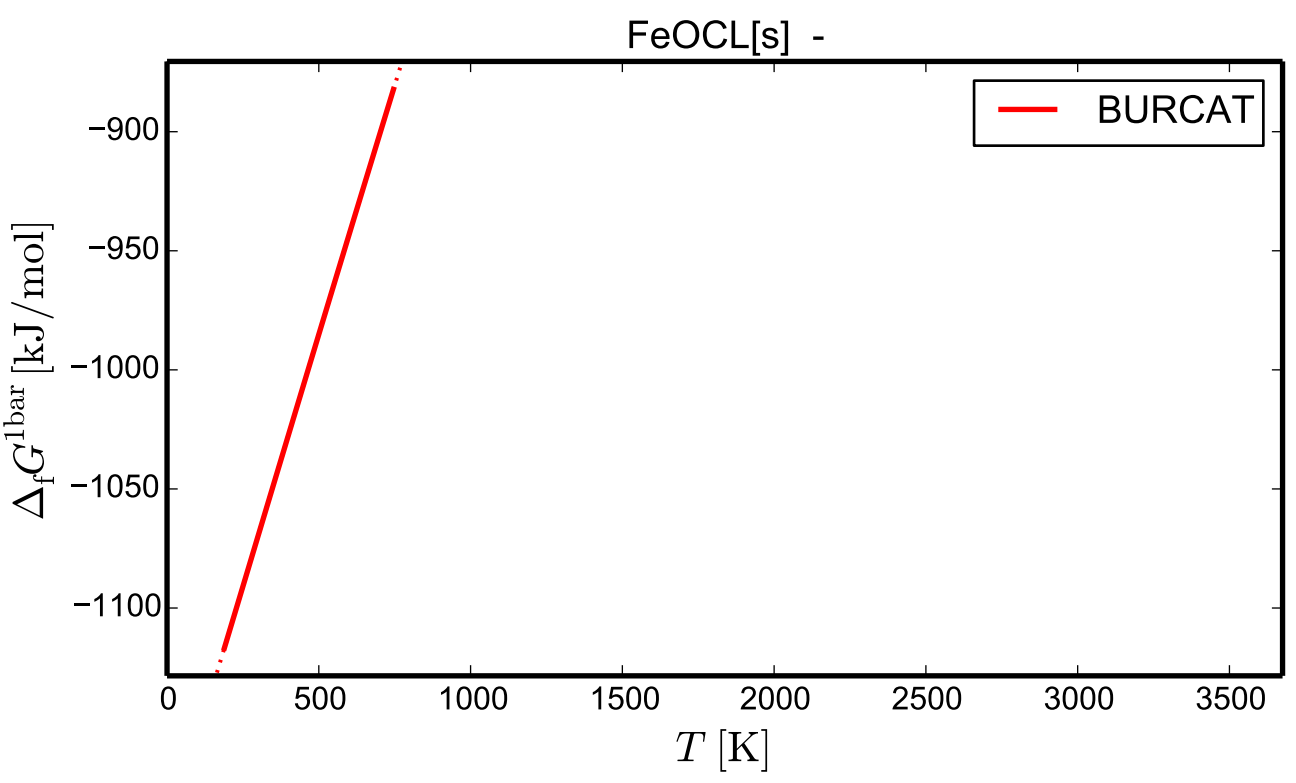

FeCL2[s] -
BURCAT
−600
−650
−700
−750
−800
−850
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

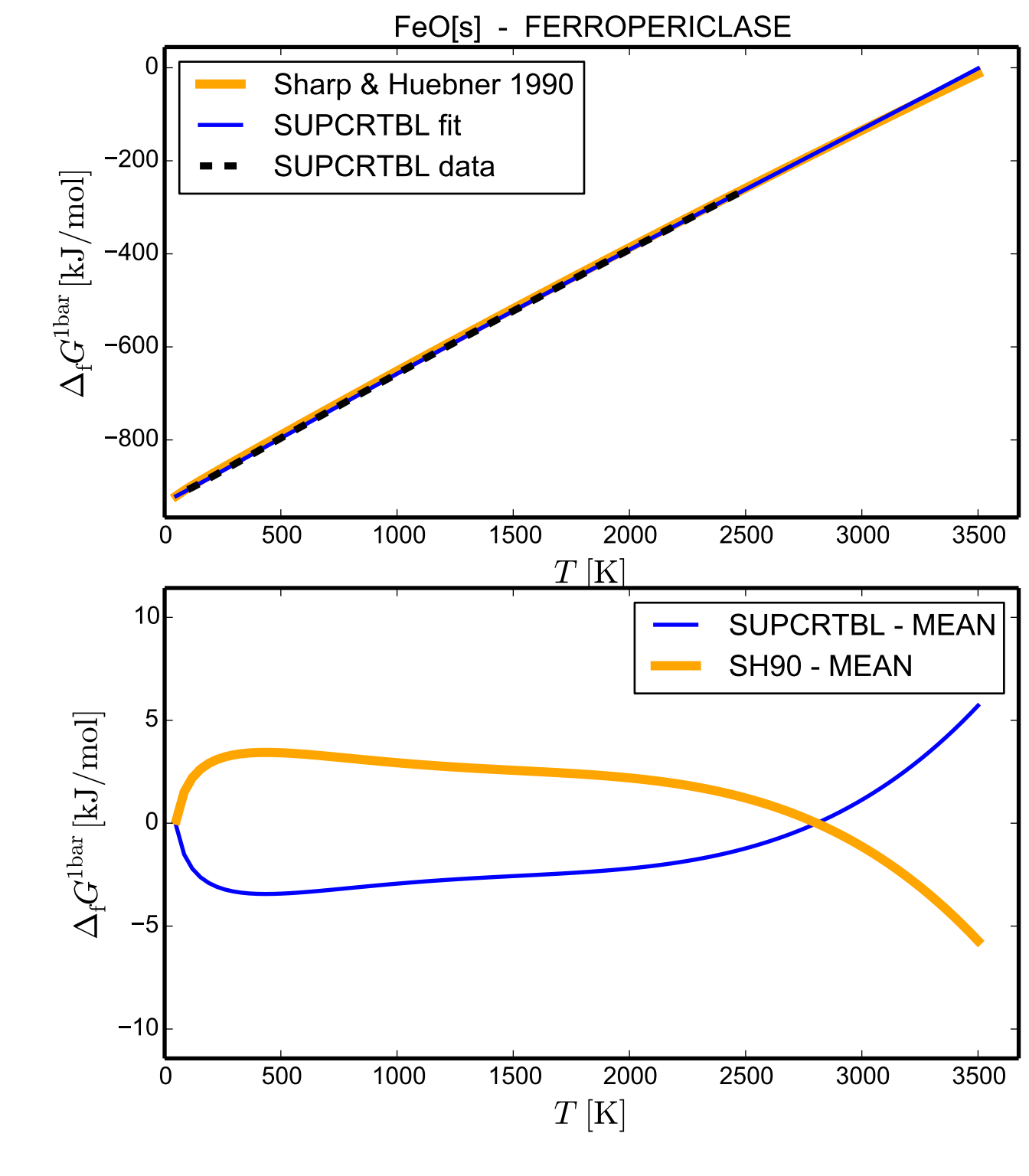

FeCL3[l] -
BURCAT
200
0
−200
−400
−600
−800
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

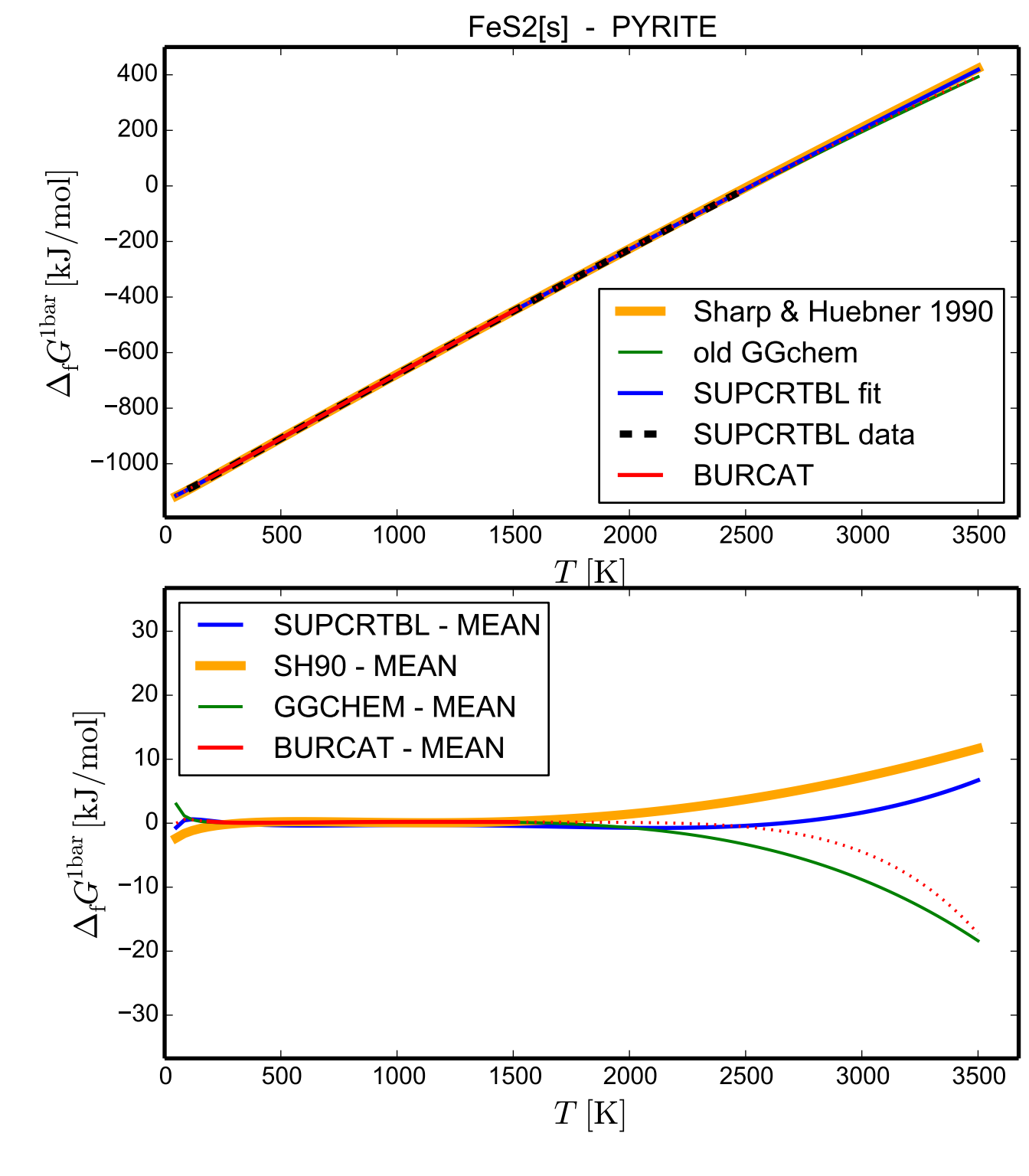

FeCL3[s] -
BURCAT
−850
−900
−950
−1000
−1050
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

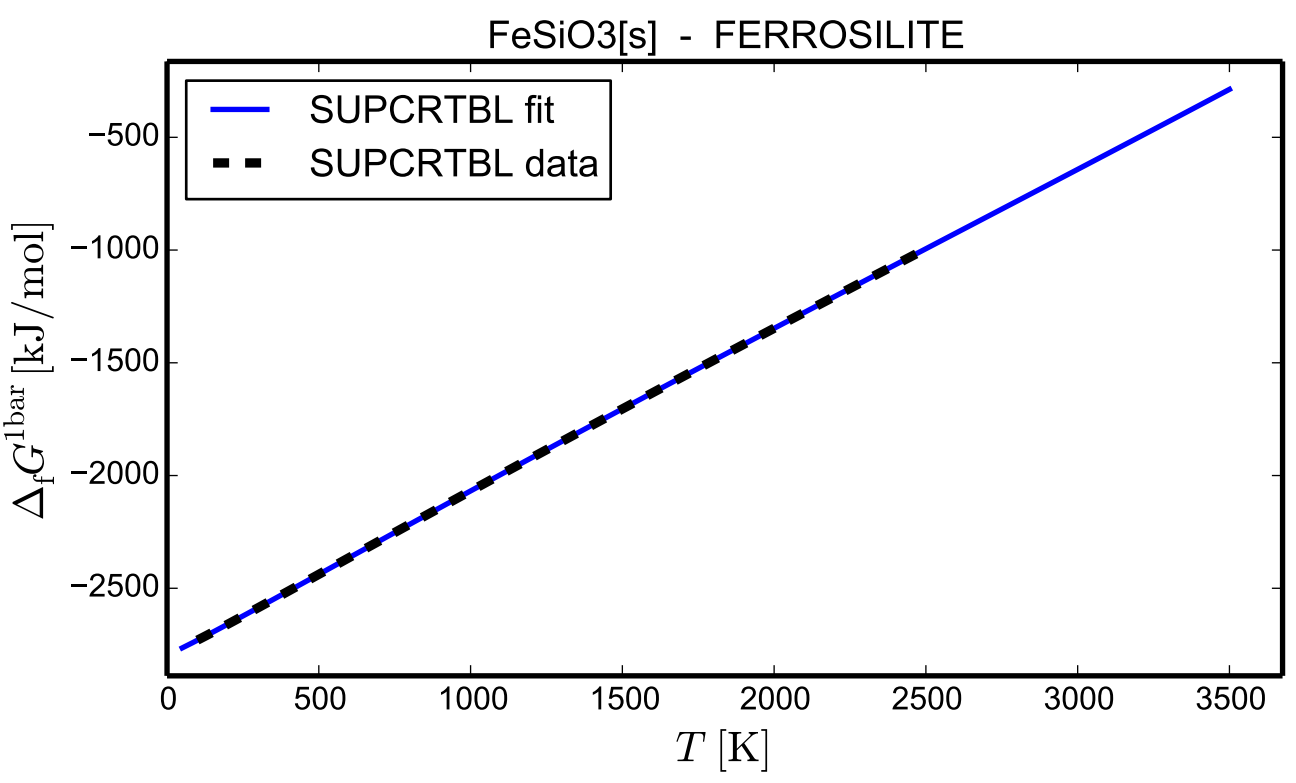

FeCO3[s] - SIDERITE
SUPCRTBL fit
SUPCRTBL data
0
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

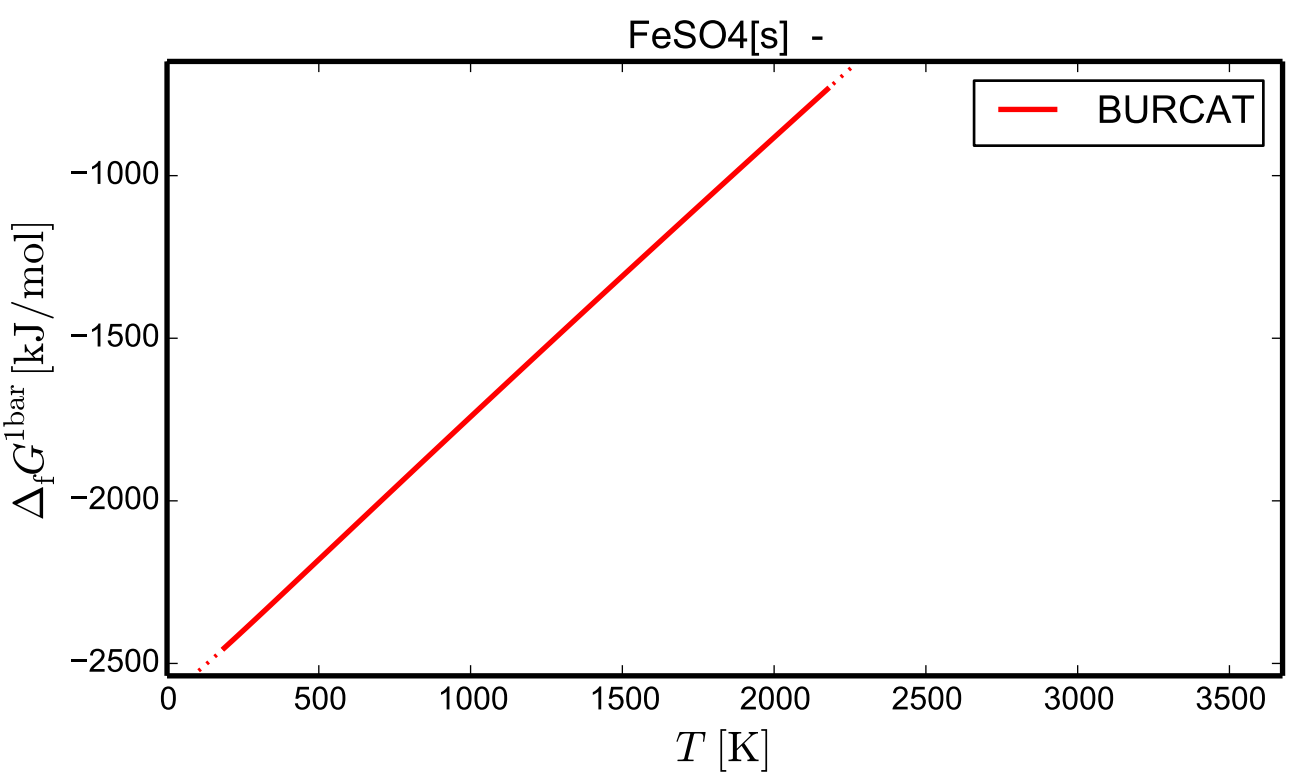

FeO2H[s] - GOETHITE
SUPCRTBL fit
SUPCRTBL data
0
−500
−1000
−1500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

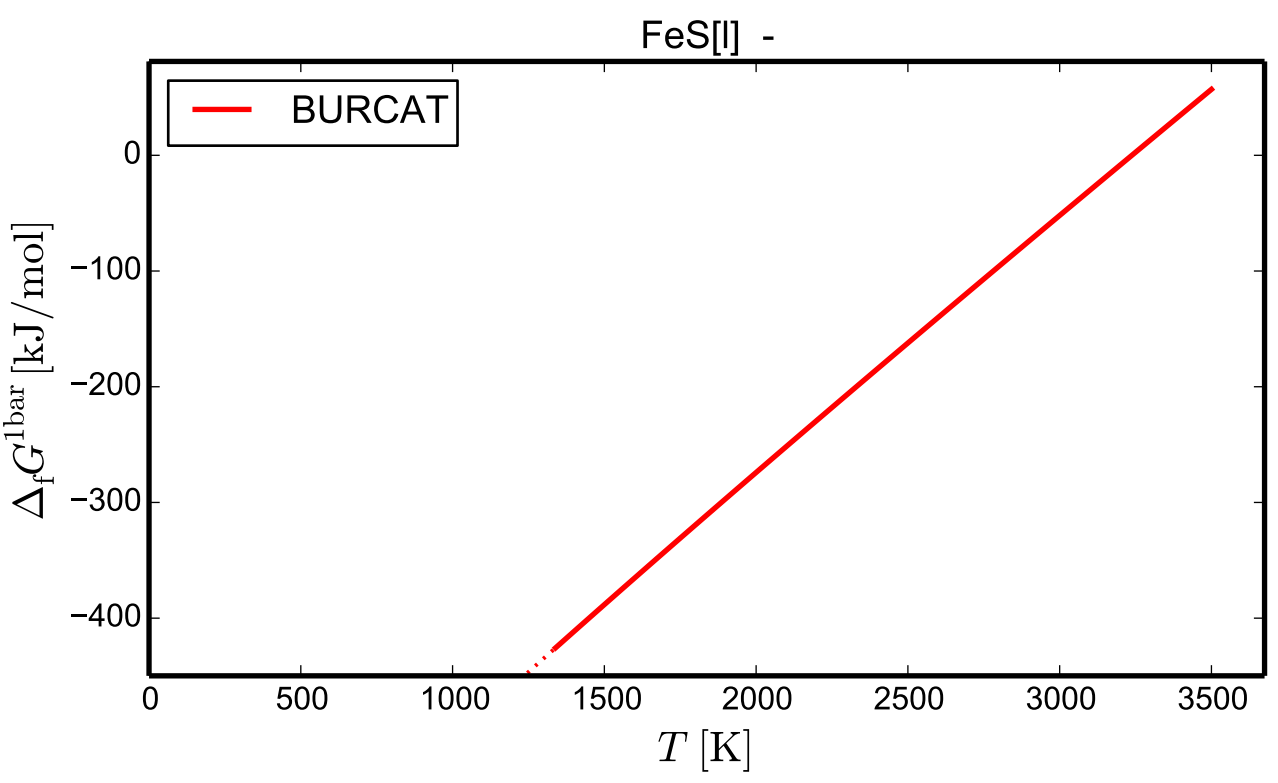

FeOCL[s] -
BURCAT
−900
−950
−1000
−1050
−1100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

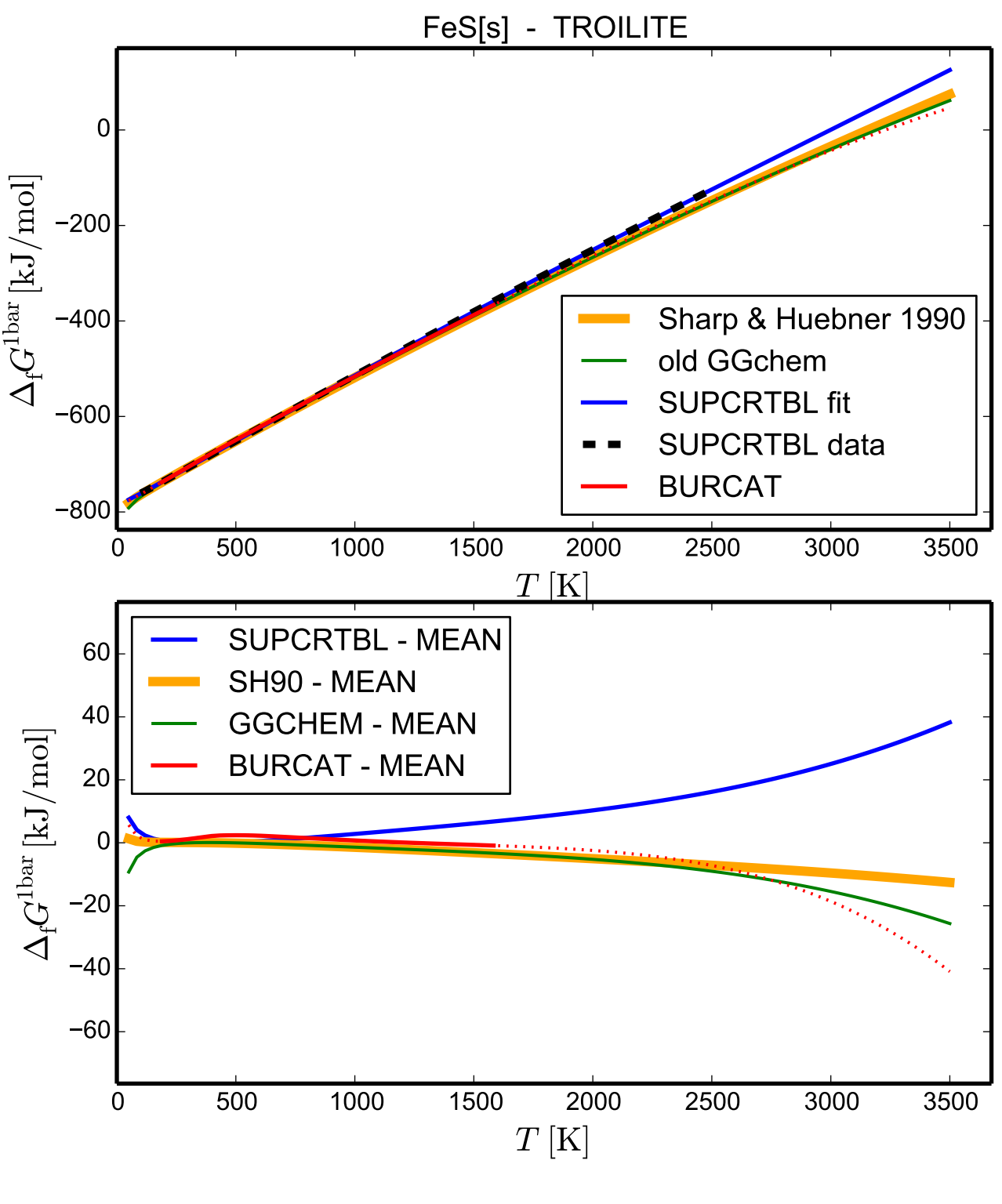

FeO[s] - FERROPERICLASE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

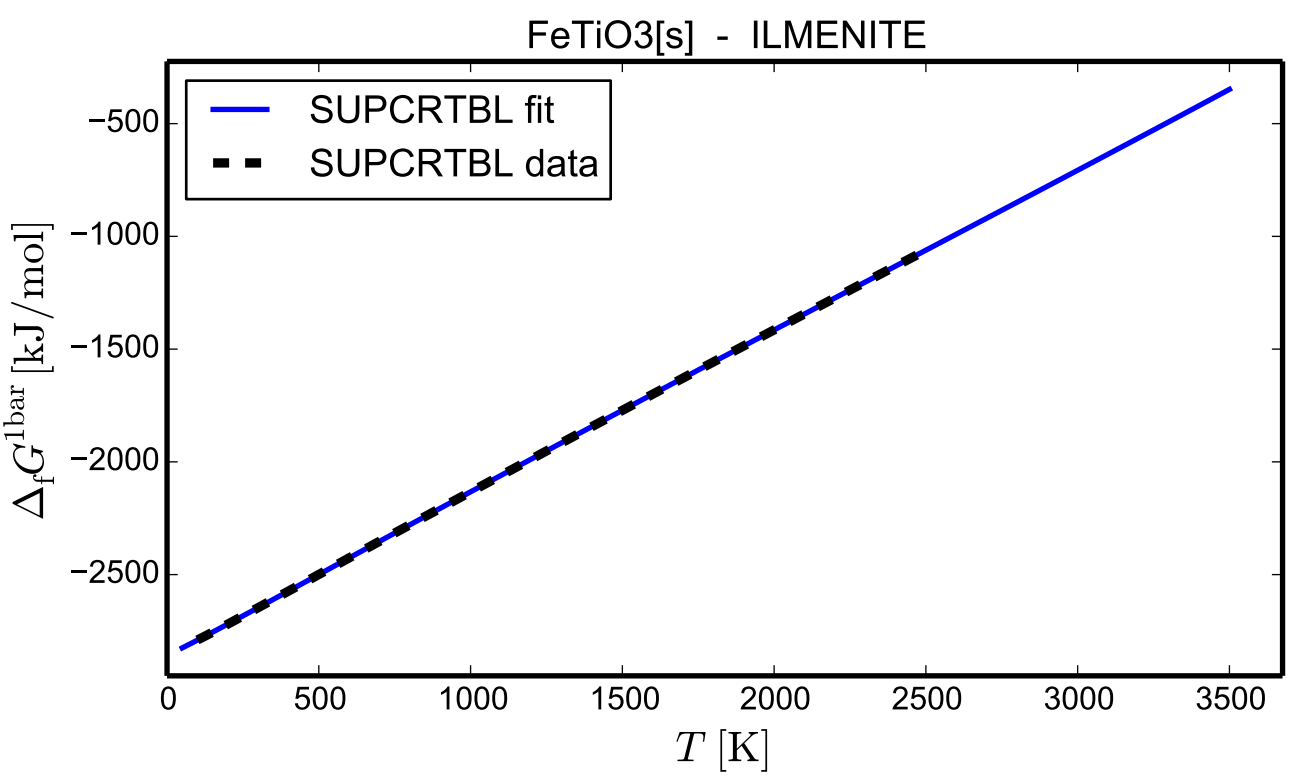

FeS2[s] - PYRITE
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN

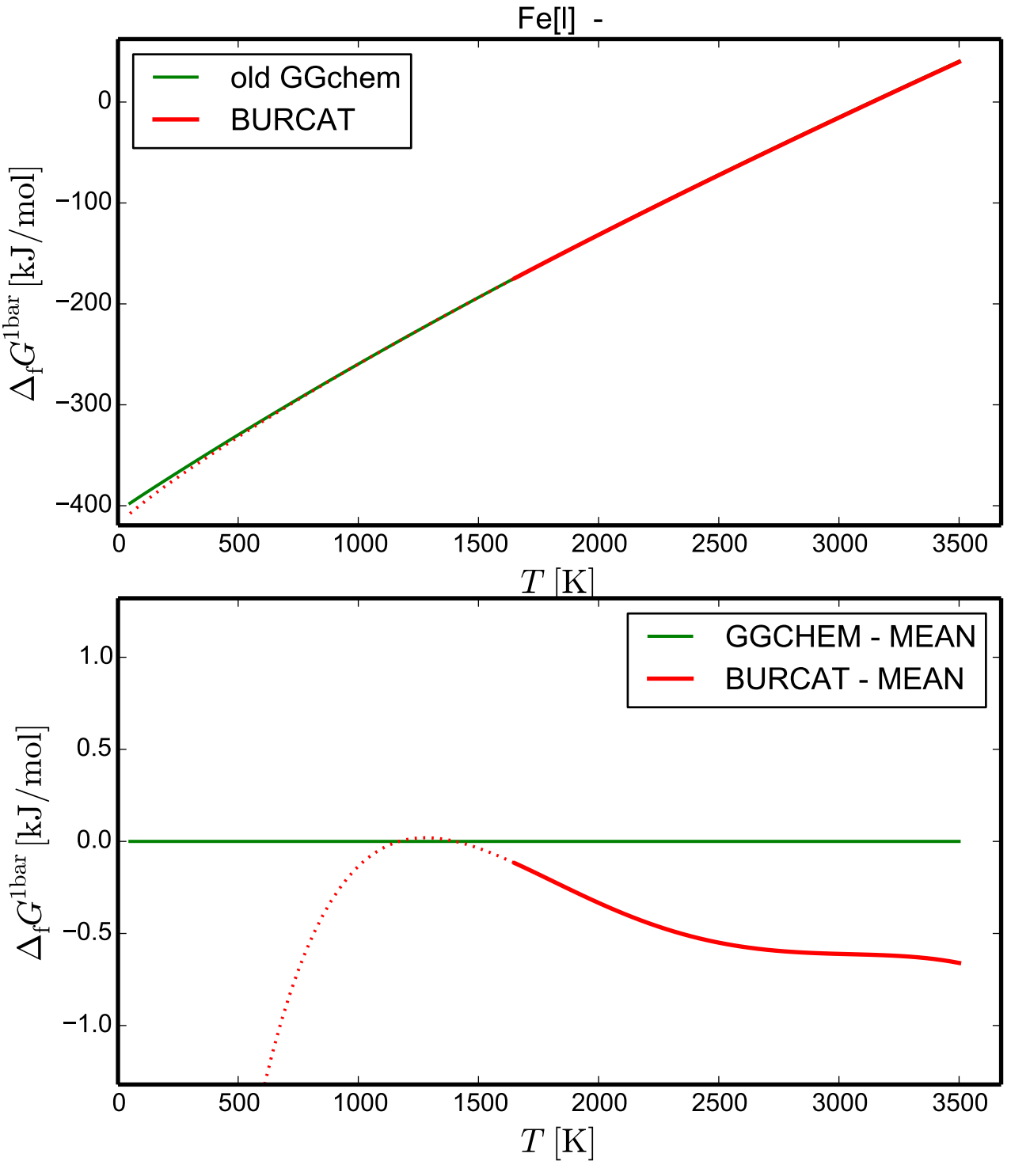

FeSiO3[s] - FERROSILITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

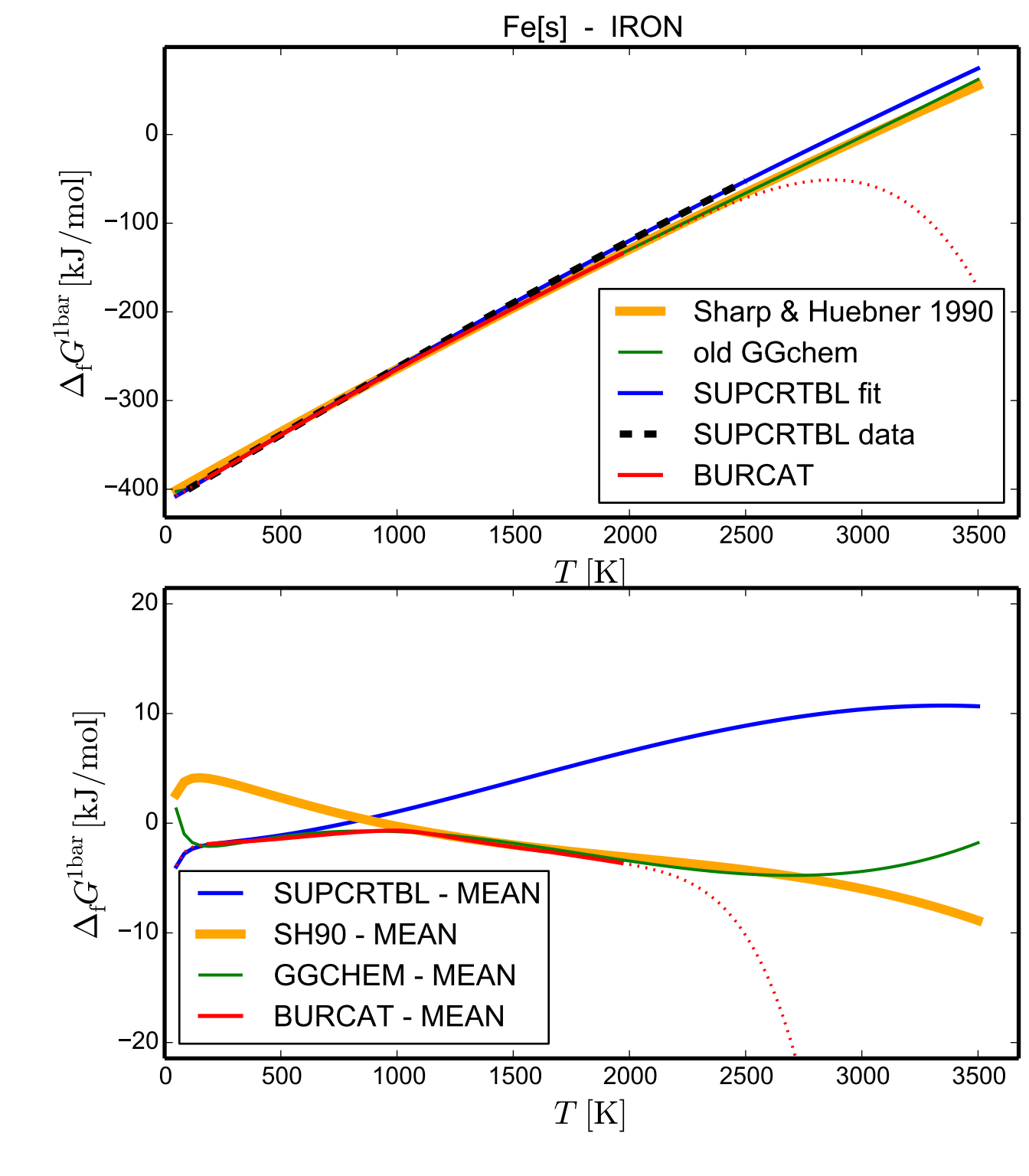

FeSO4[s] -
BURCAT
−1000
−1500
−2000
−2500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

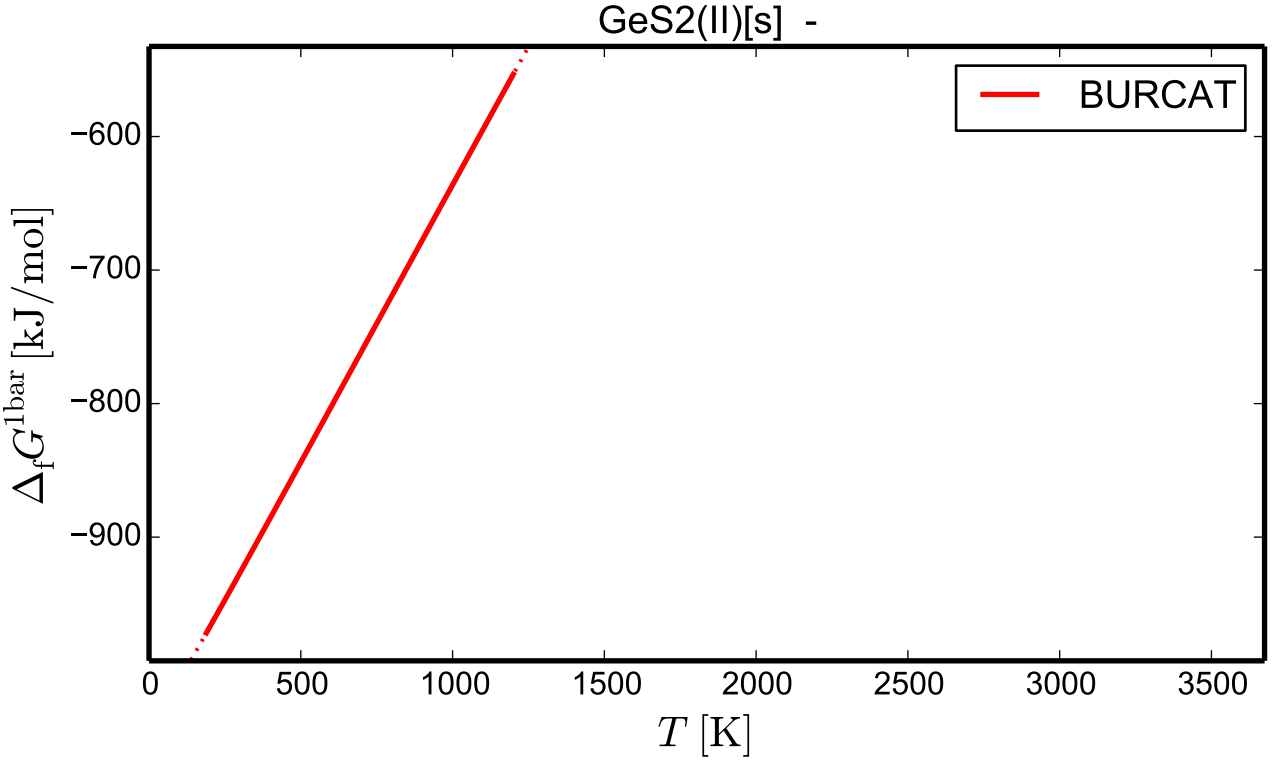

FeS[l] -
BURCAT
0
−100
−200
−300
−400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

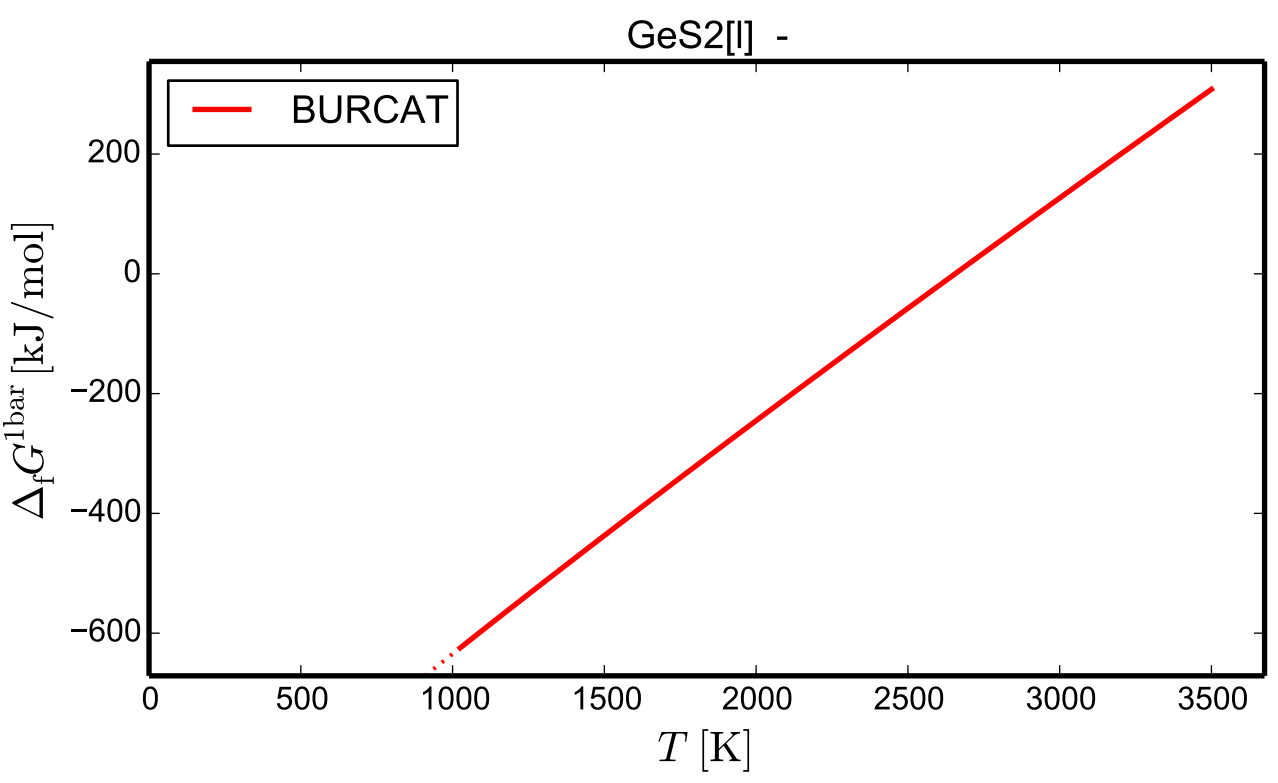

FeS[s] - TROILITE
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
−200
−400
−600
−800
0
500
1000
1500
2000
2500
3000
3500
T [K]
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
60
40
20
0
−20
−40
−60

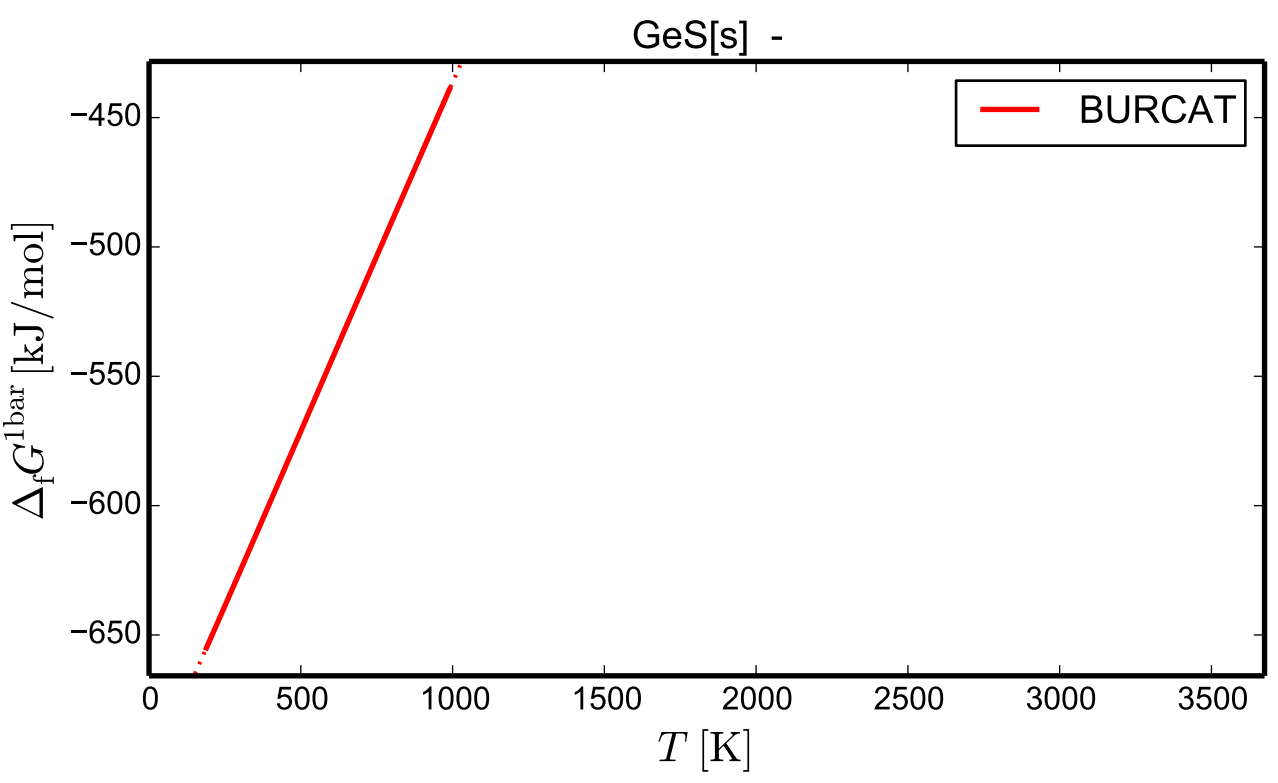

FeTiO3[s] - ILMENITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

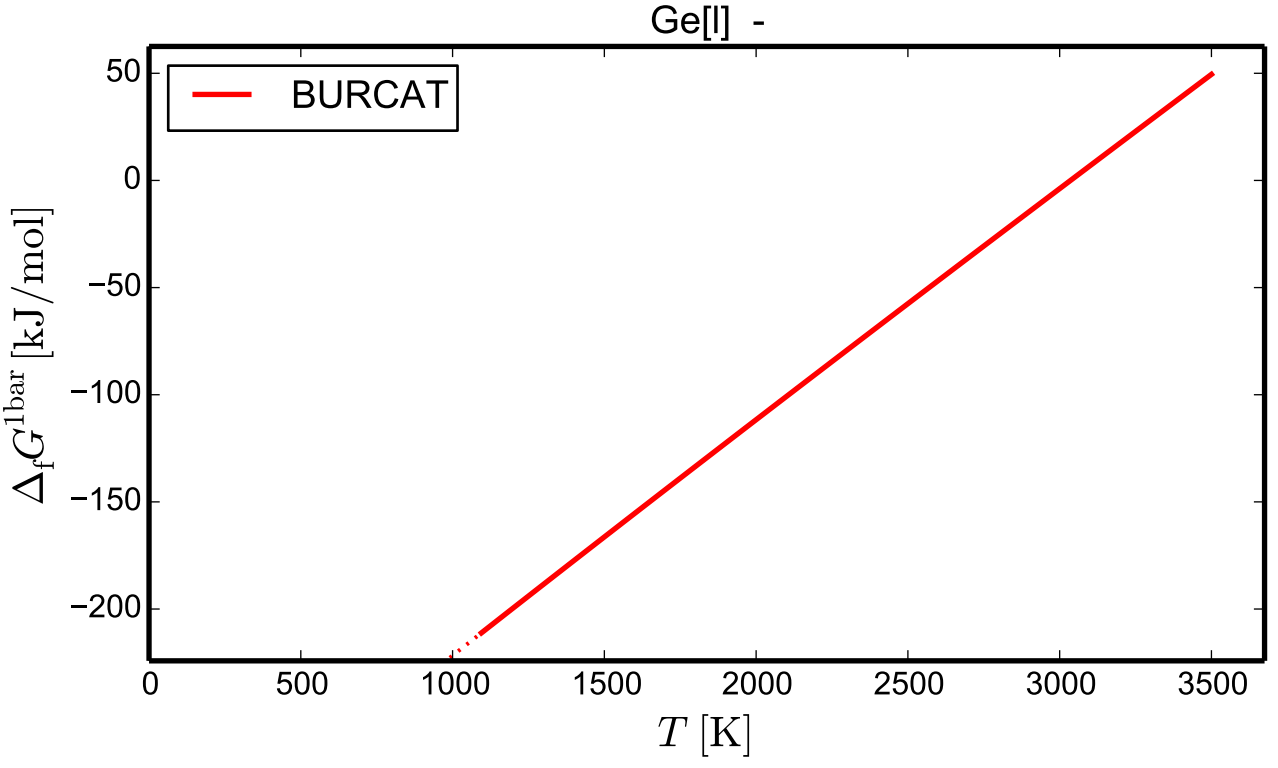

Fe[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
1.0
0.5
0.0
−0.5
−1.0
0
500
1000
1500
2000
2500
3000
3500
T [K]

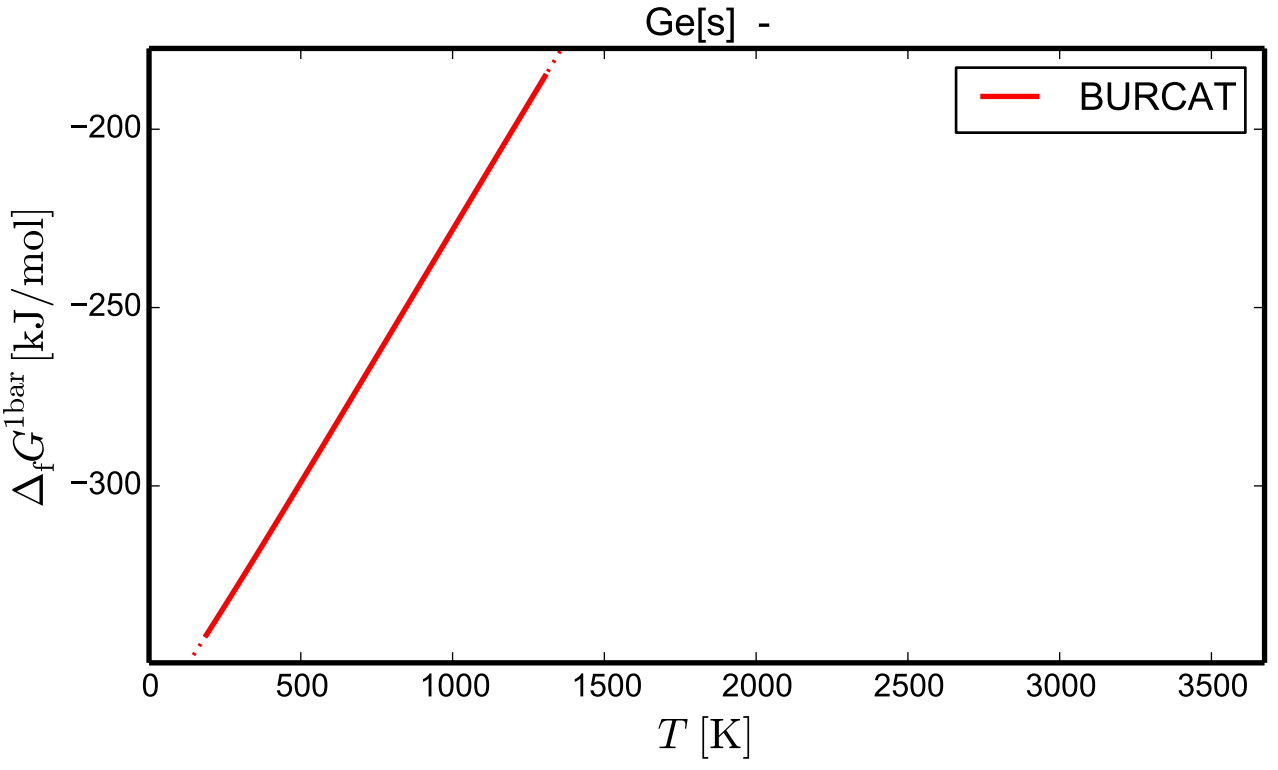

Fe[s] - IRON
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN

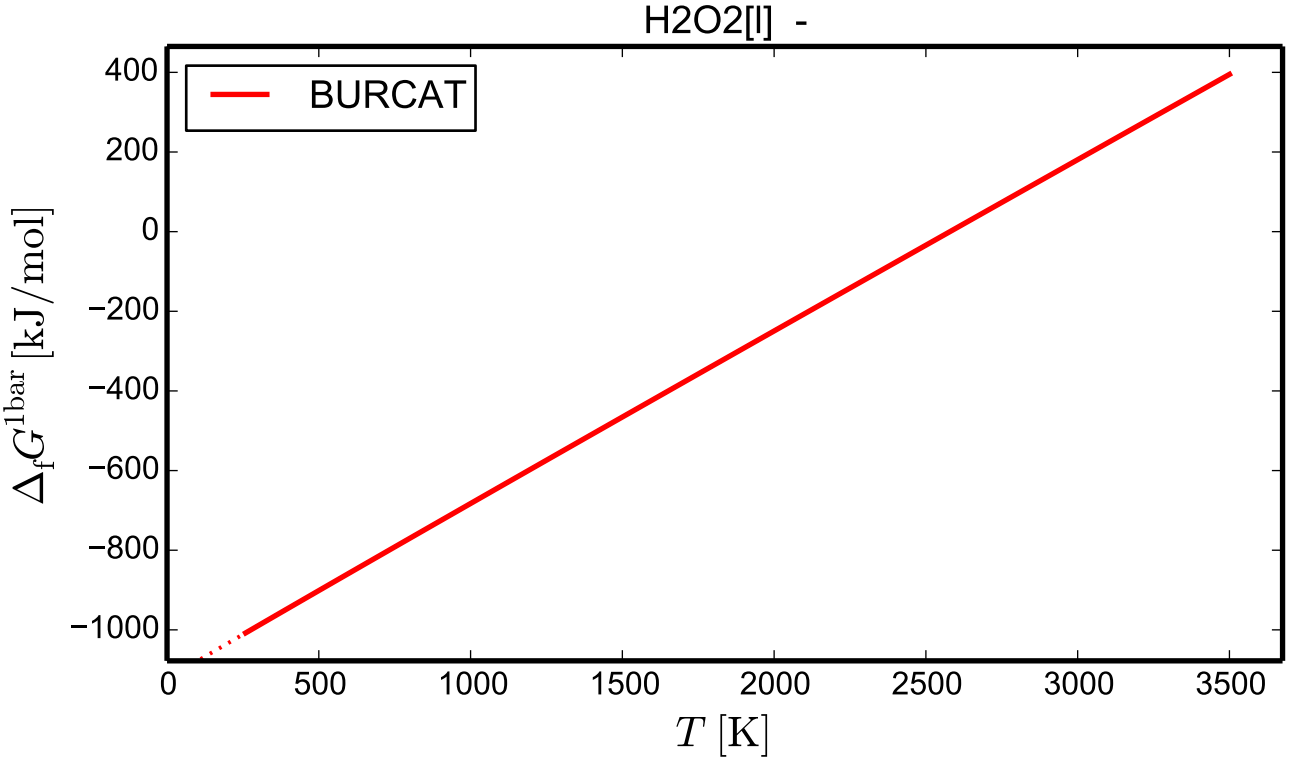

GeS2(II)[s] -
BURCAT
−600
−700
−800
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

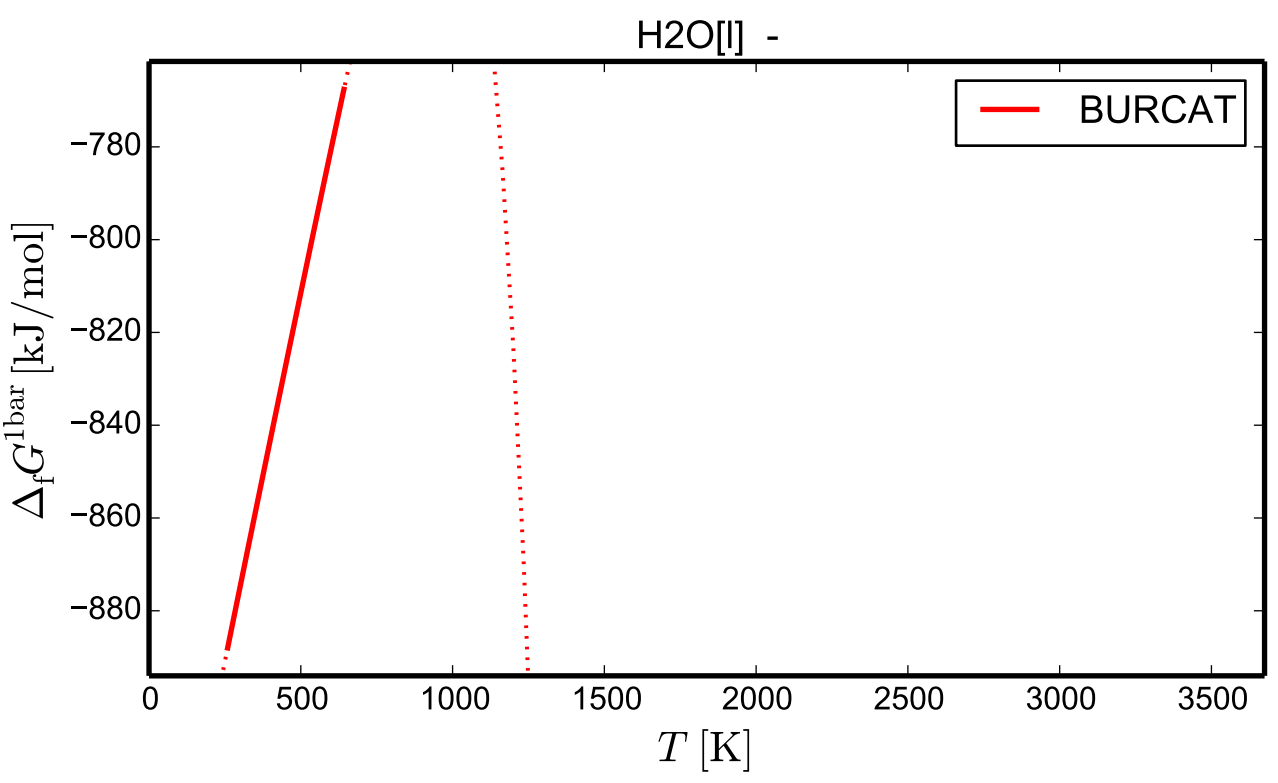

GeS2[l] -
BURCAT
200
0
−200
−400
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

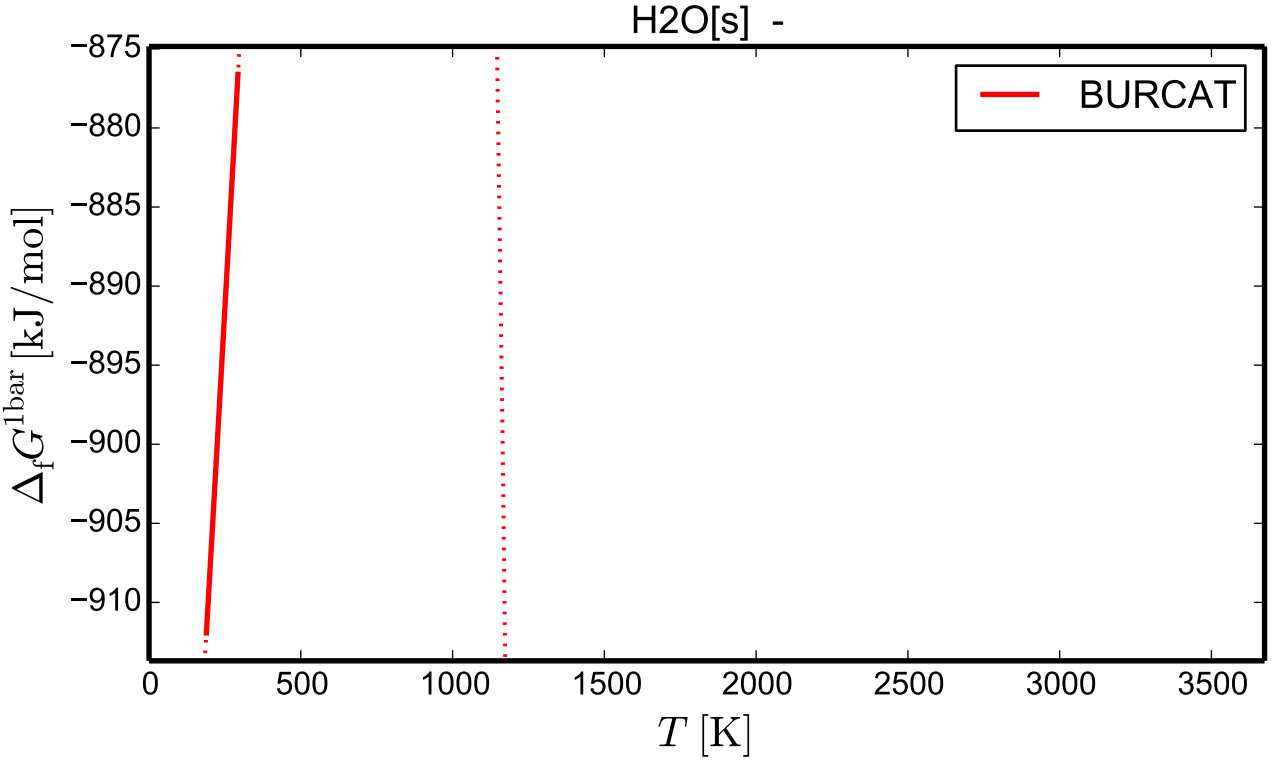

GeS[s] -
BURCAT
−450
−500
−550
−600
−650
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

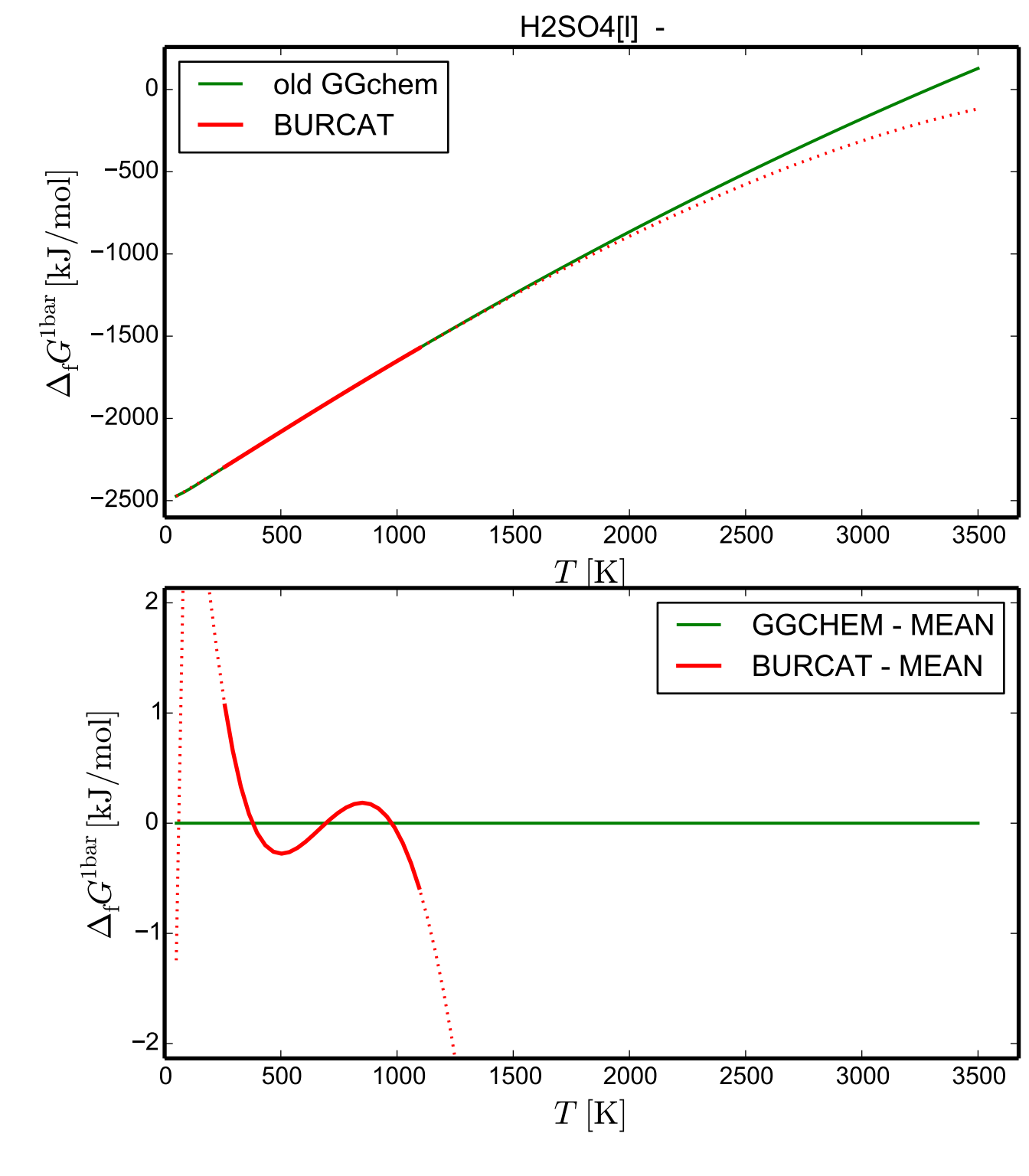

Ge[l] -
BURCAT
50
0
−50
−100
−150
−200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

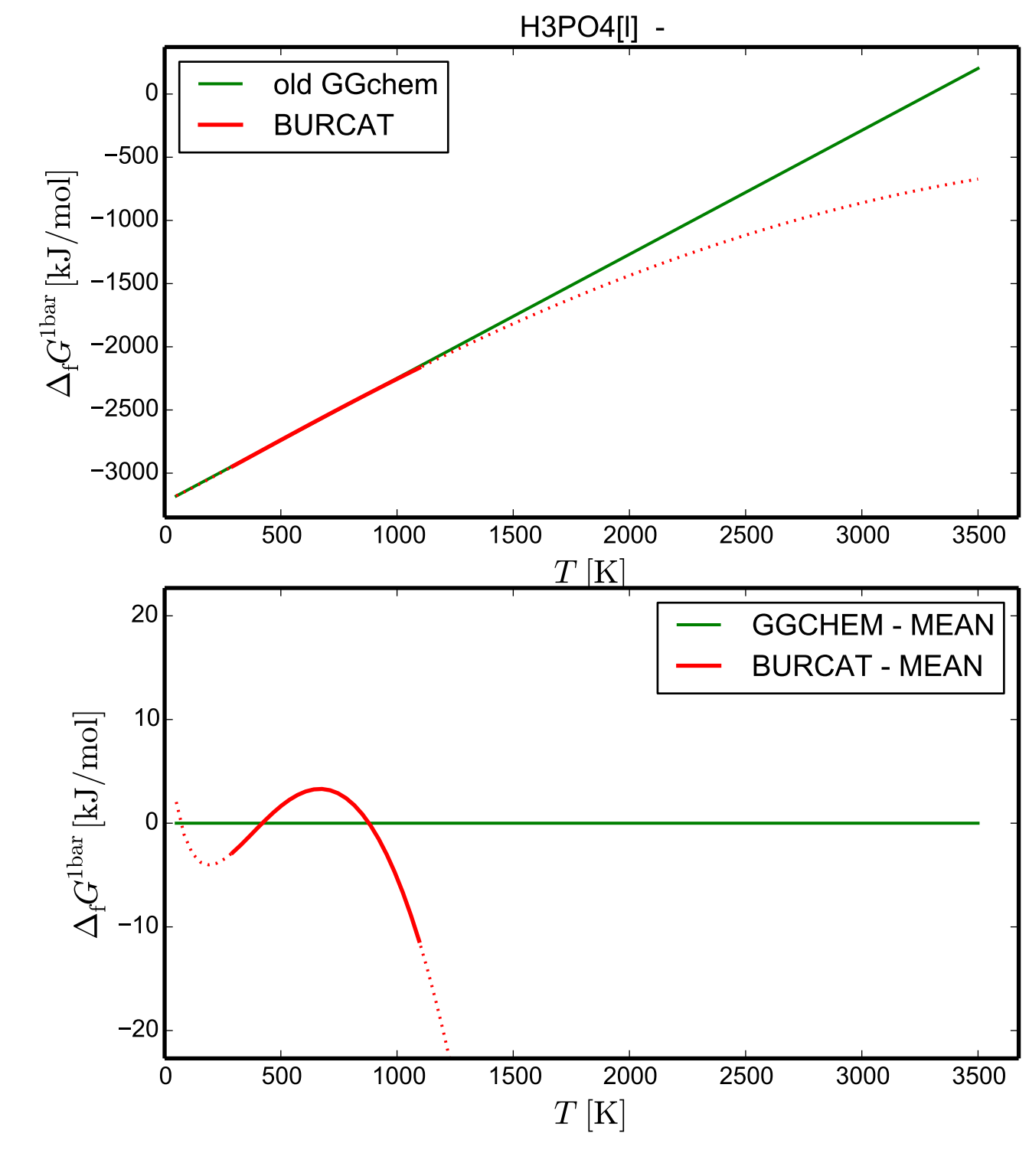

Ge[s] -
BURCAT
−200
−250
−300
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

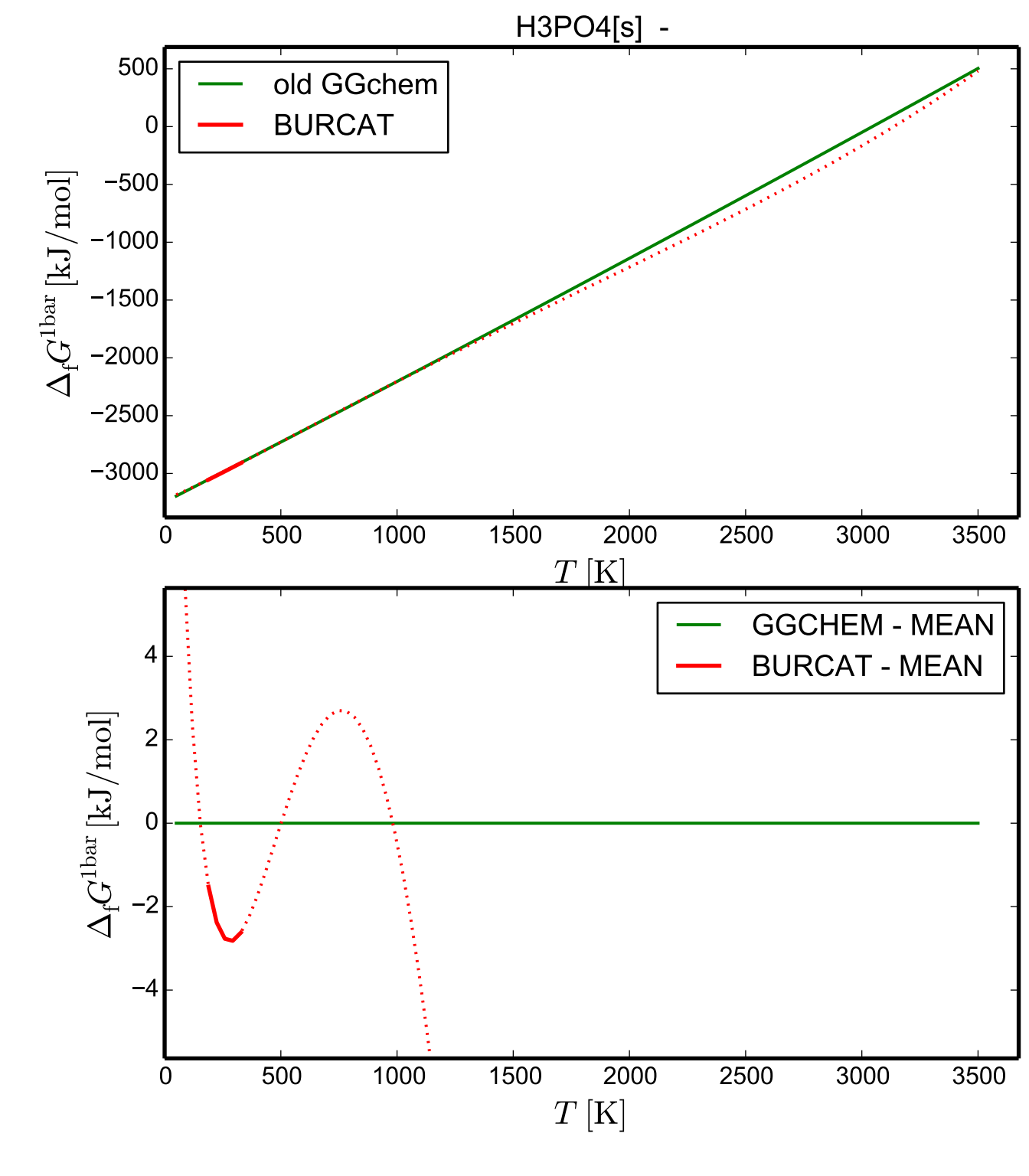

H2O2[l] -
BURCAT
400
200
0
−200
−400
−600
−800
−1000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

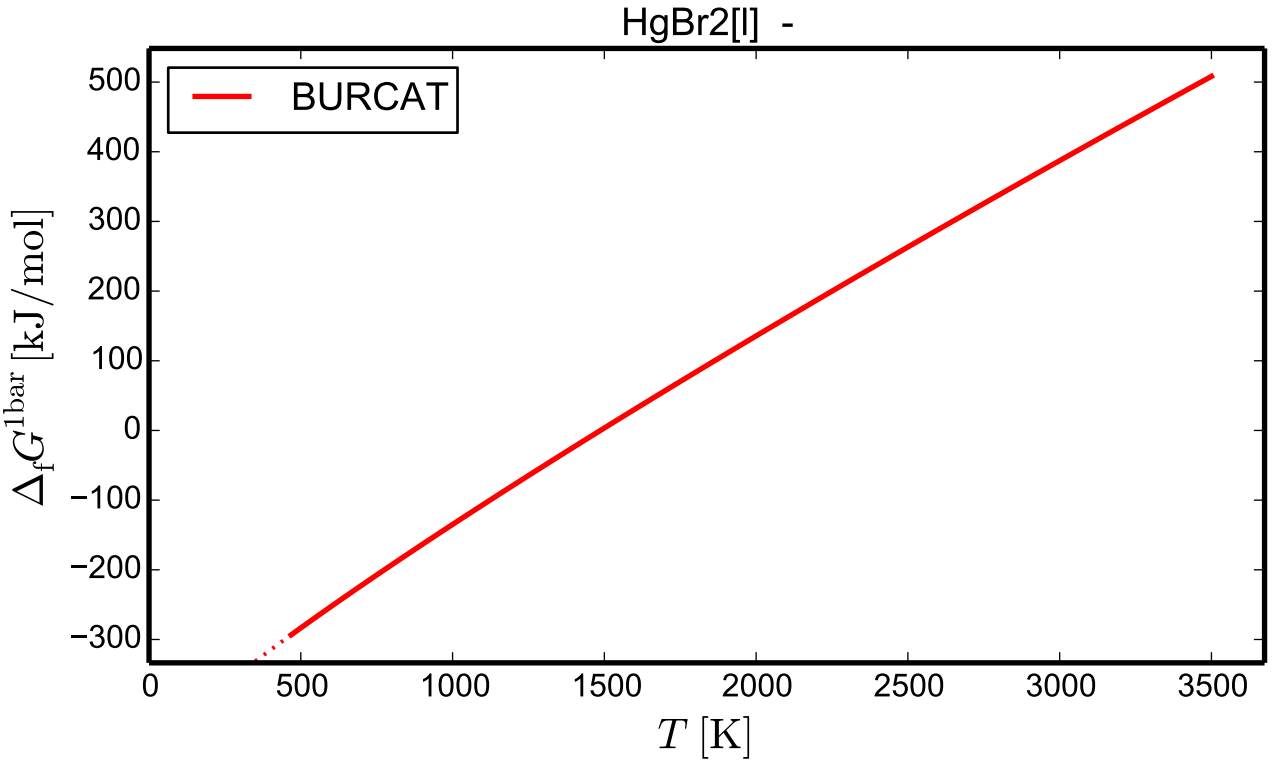

H2O[l] -
BURCAT
−780
−800
−820
−840
−860
−880
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

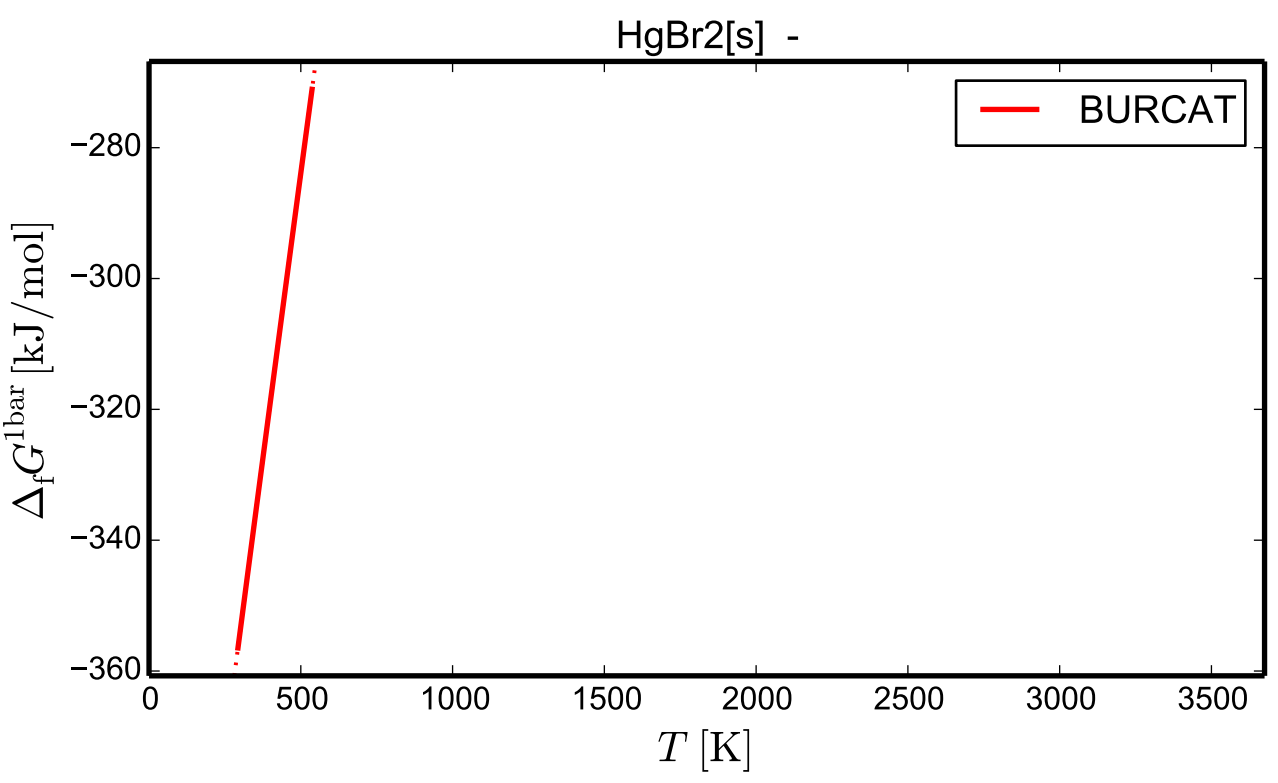

H2O[s] -
BURCAT
−875
−880
−885
−890
−895
−900
−905
−910
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

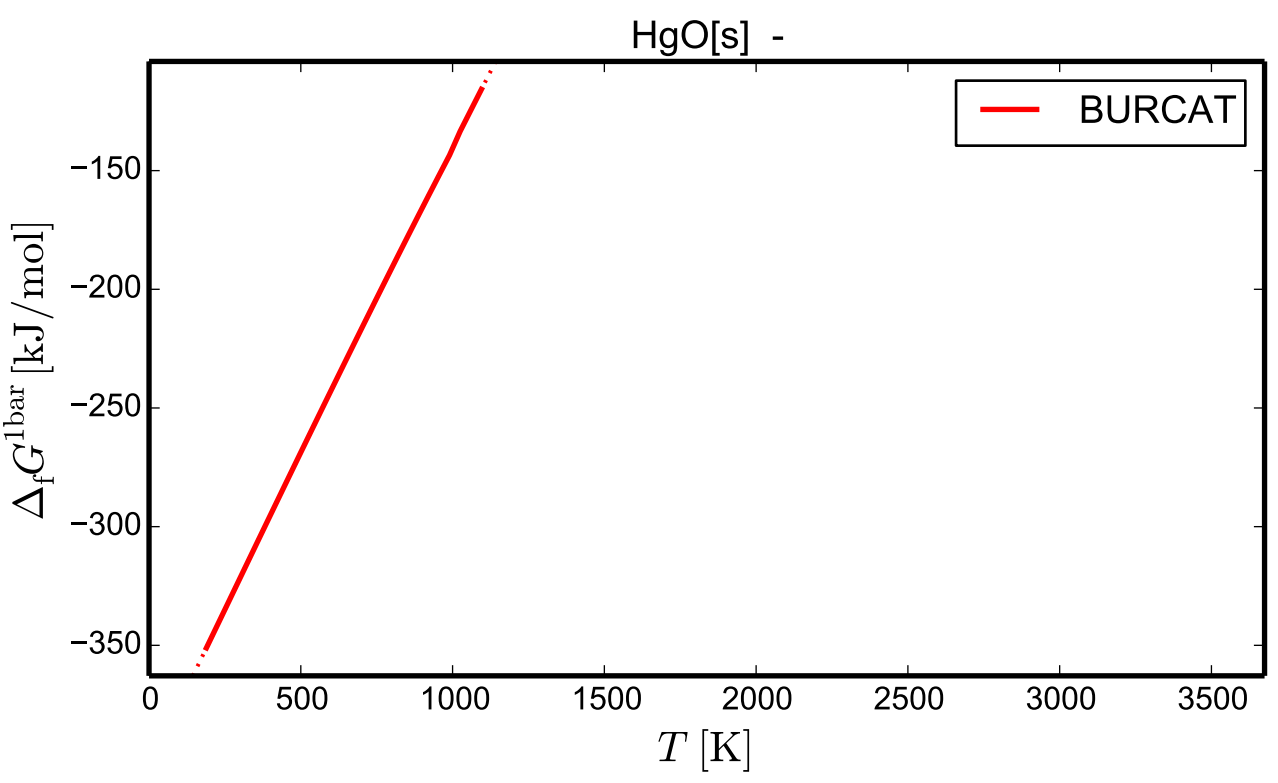

H2SO4[l] -
old GGchem
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

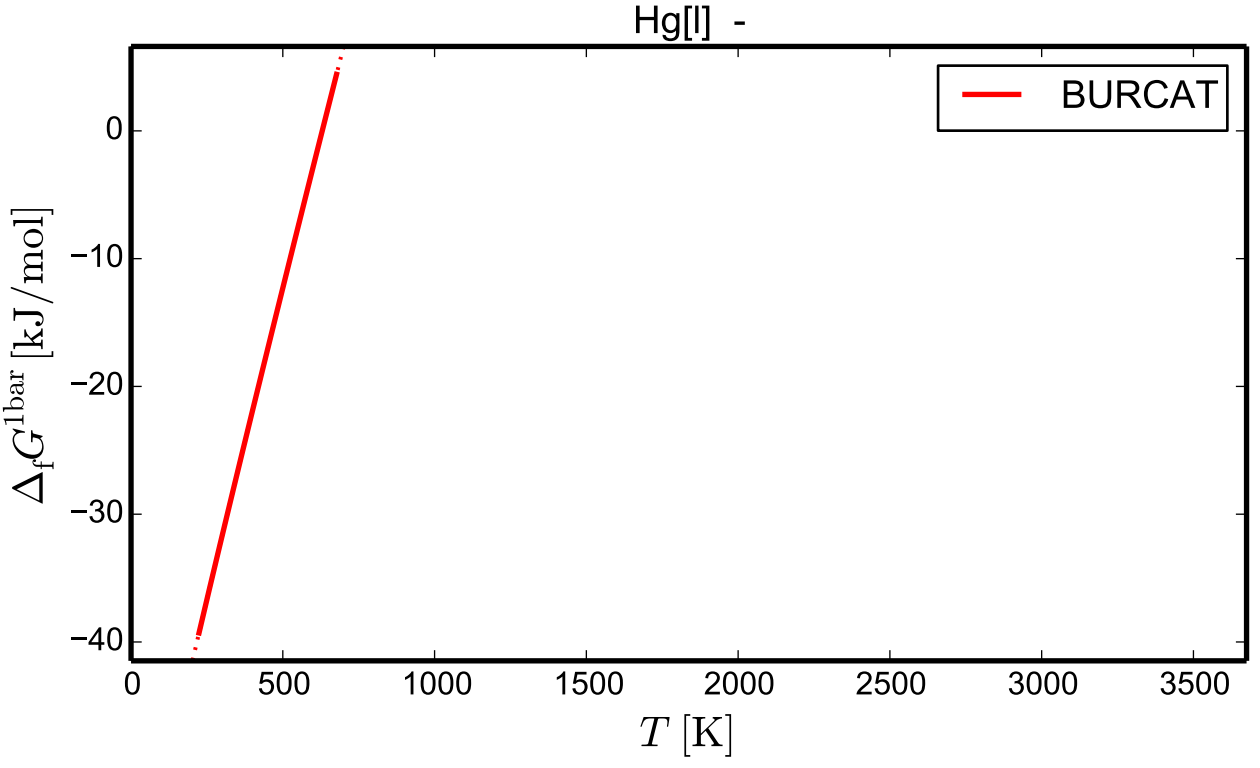

H3PO4[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

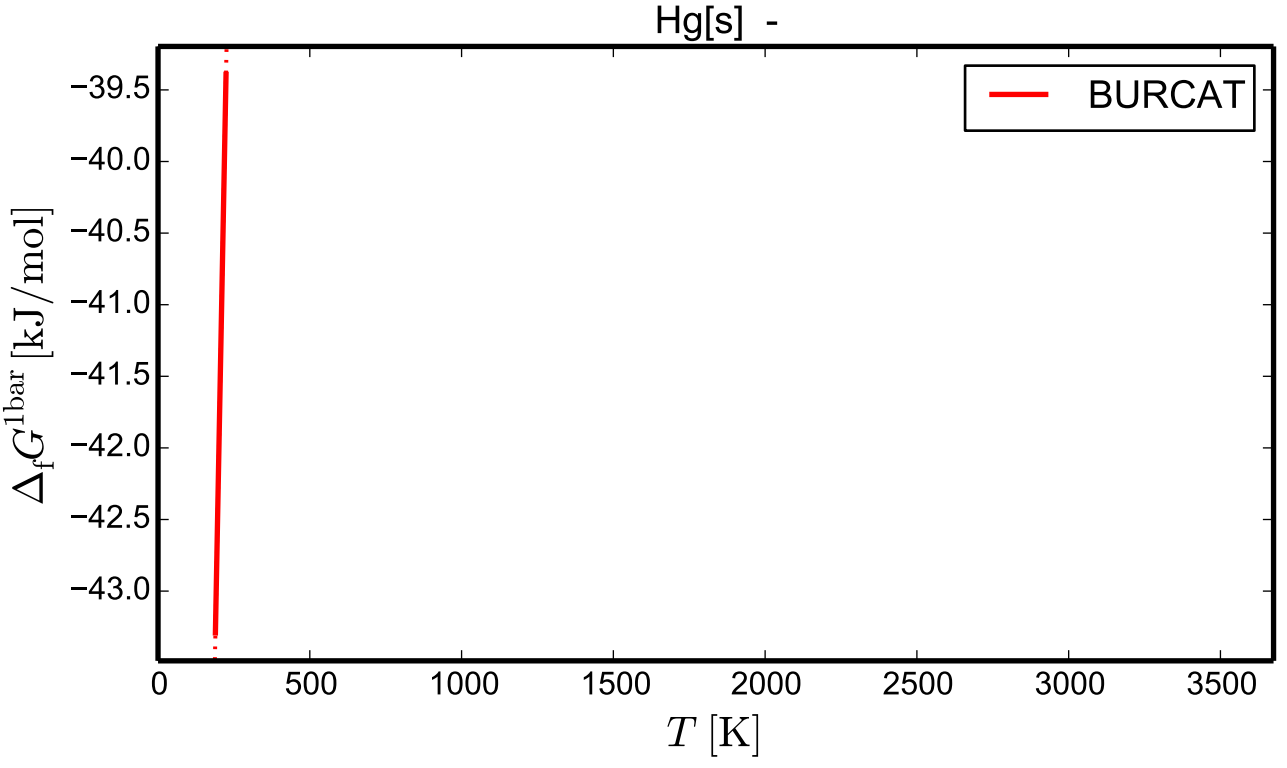

H3PO4[s] -
old GGchem
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

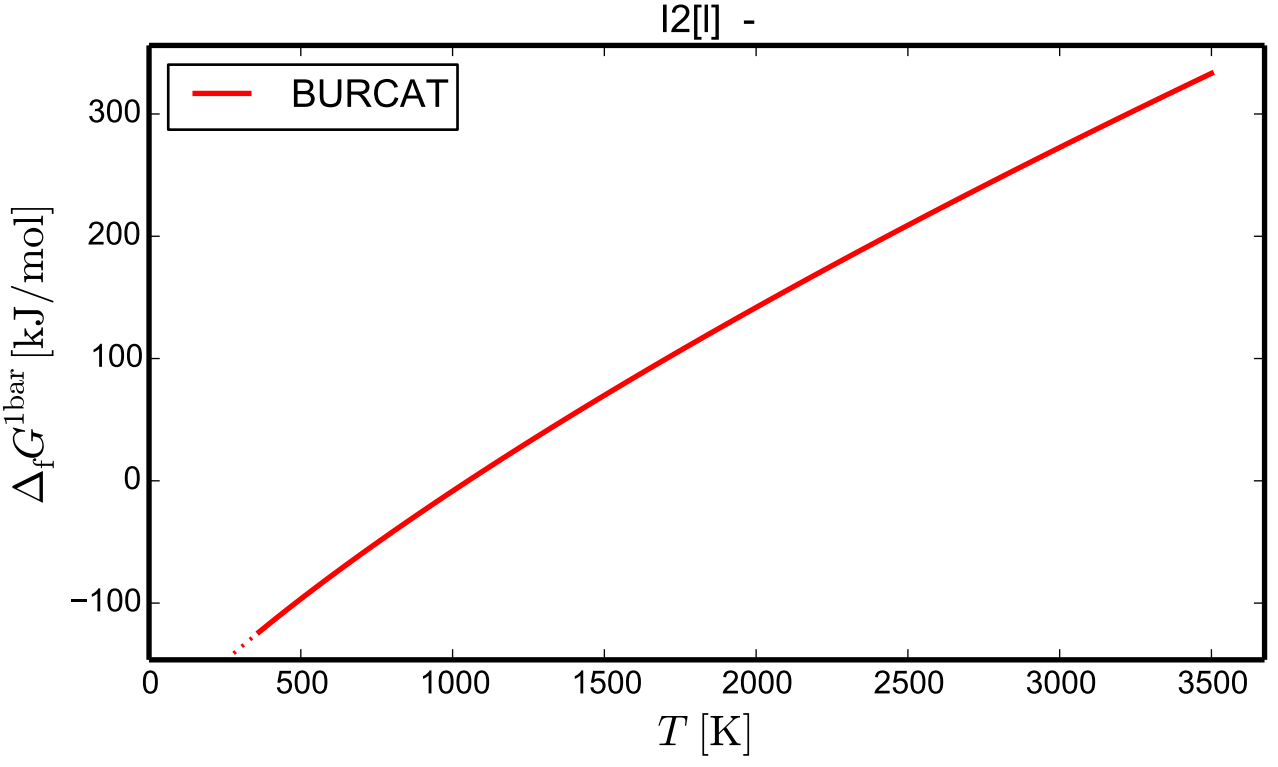

HgBr2[l] -
BURCAT
500
400
300
200
100
0
−100
−200
−300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

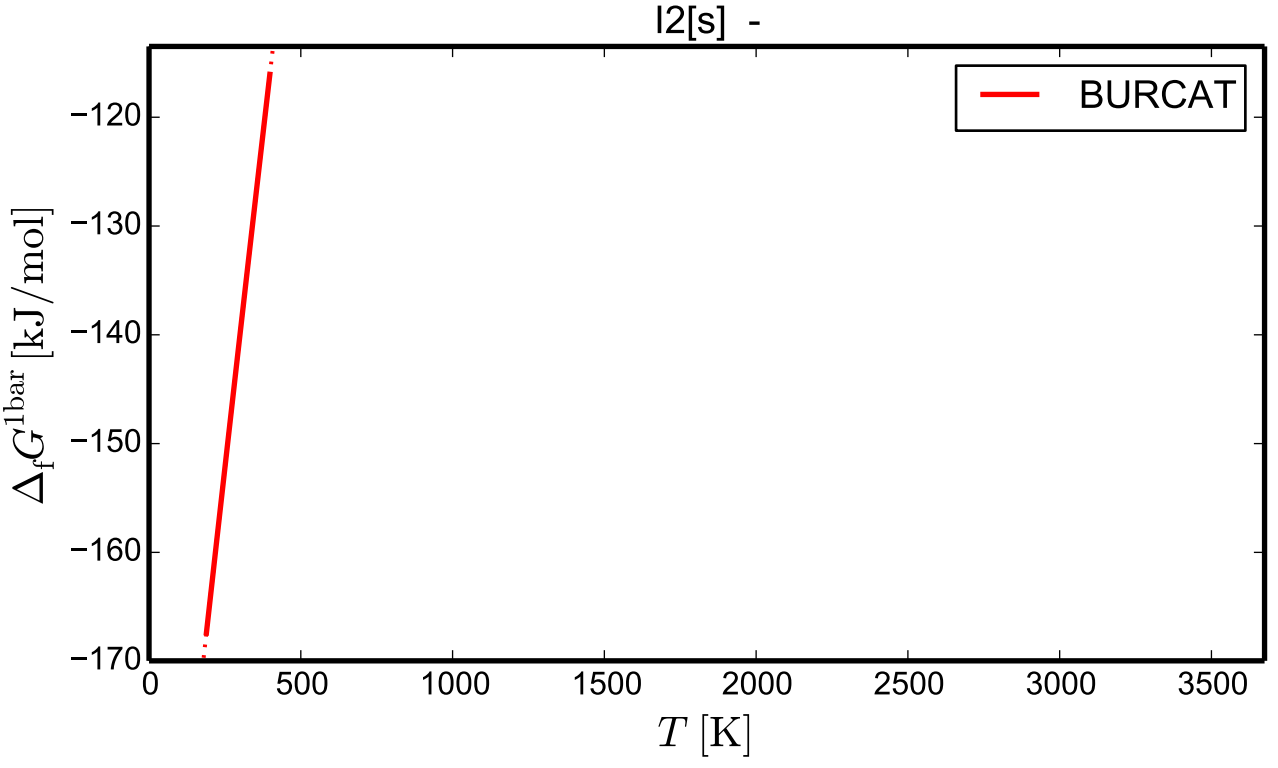

HgBr2[s] -
BURCAT
−280
−300
−320
−340
−360
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

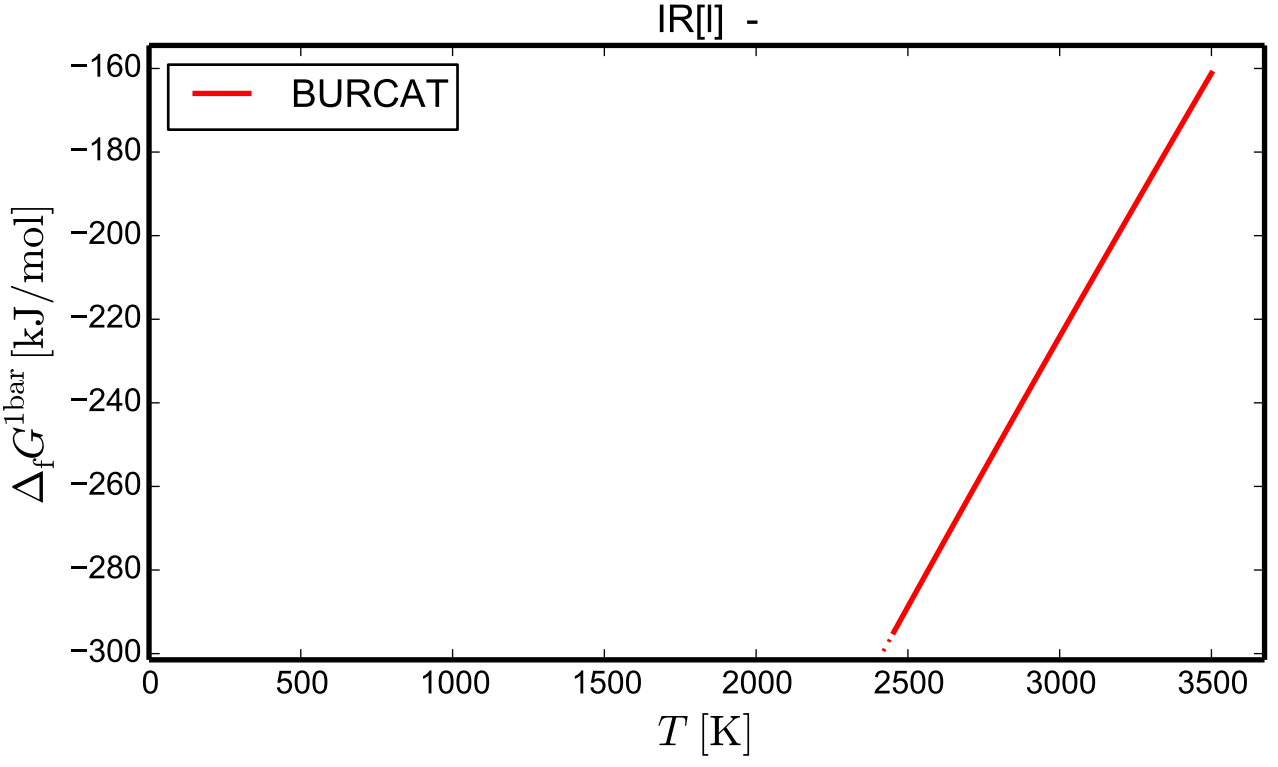

HgO[s] -
BURCAT
−150
−200
−250
−300
−350
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

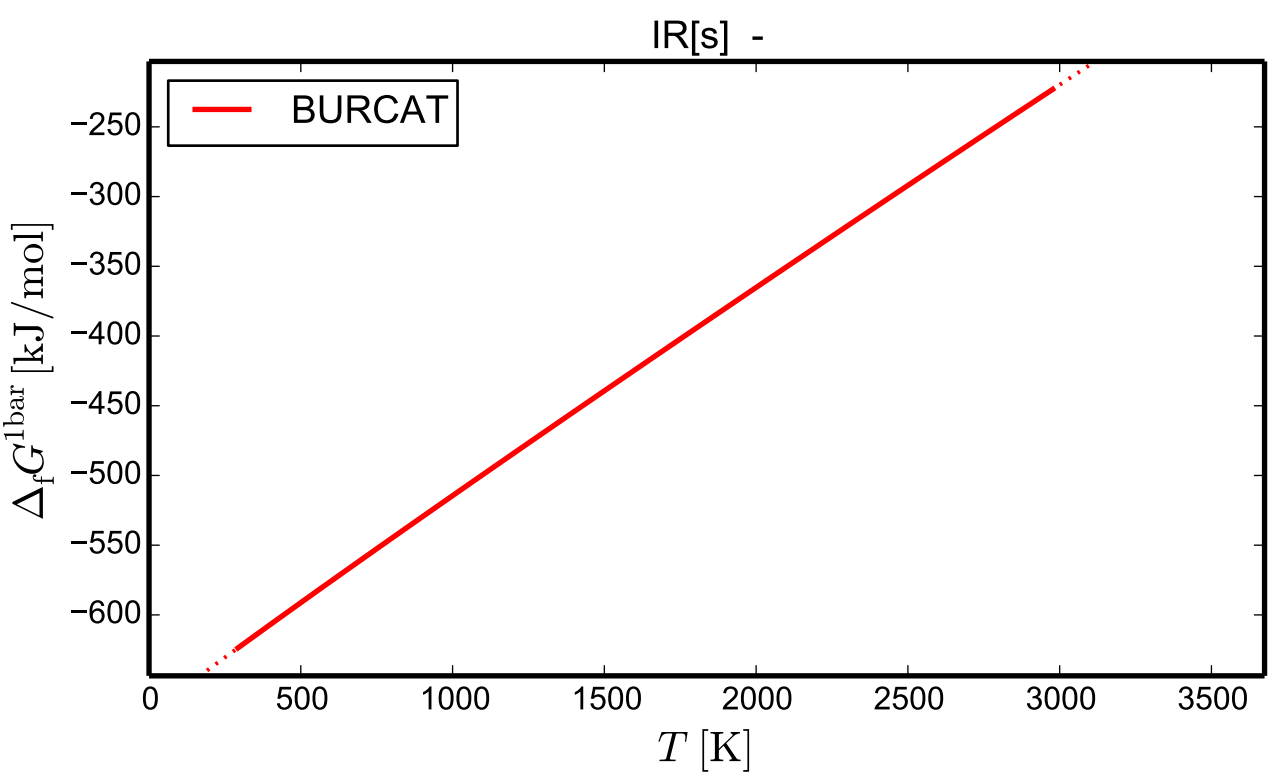

Hg[l] -
BURCAT
0
−10
−20
−30
−40
$\Delta_f G^{1bar}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

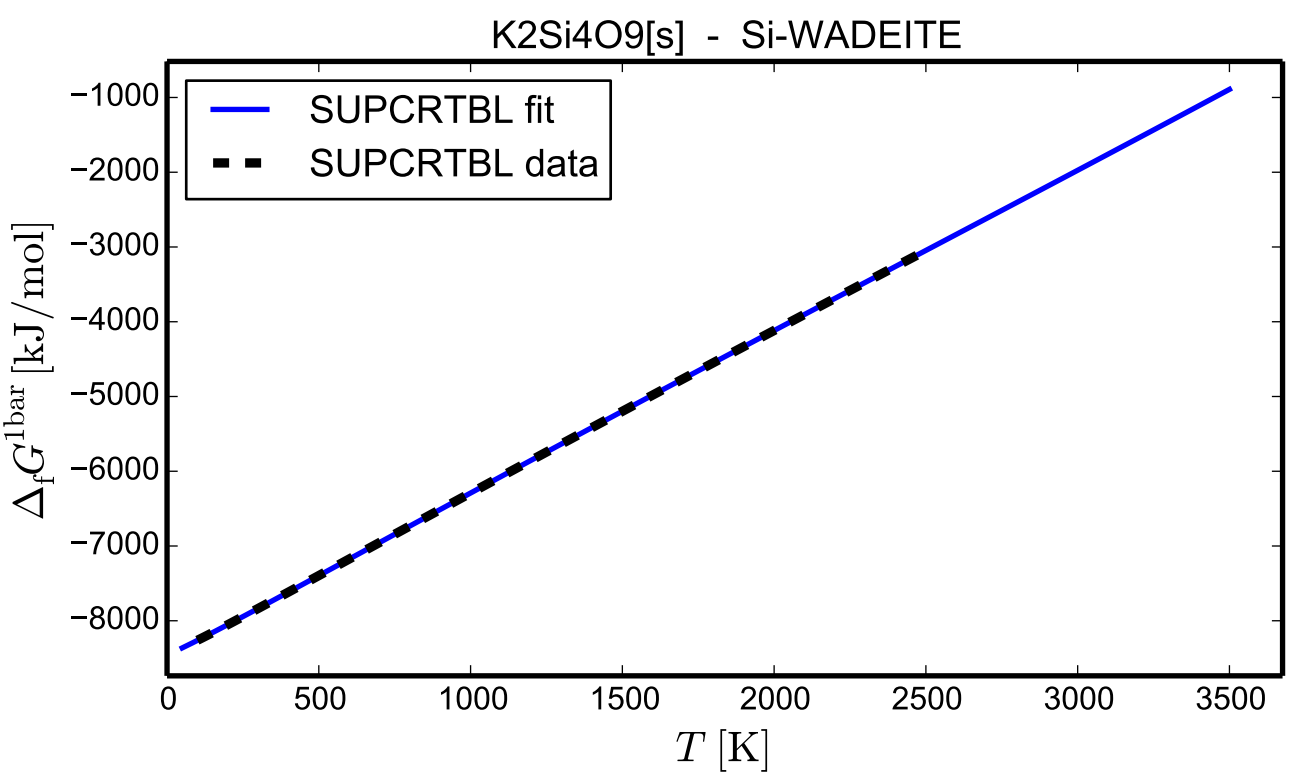

Hg[s] -
BURCAT
−39.5
−40.0
−40.5
−41.0
−41.5
−42.0
−42.5
−43.0
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

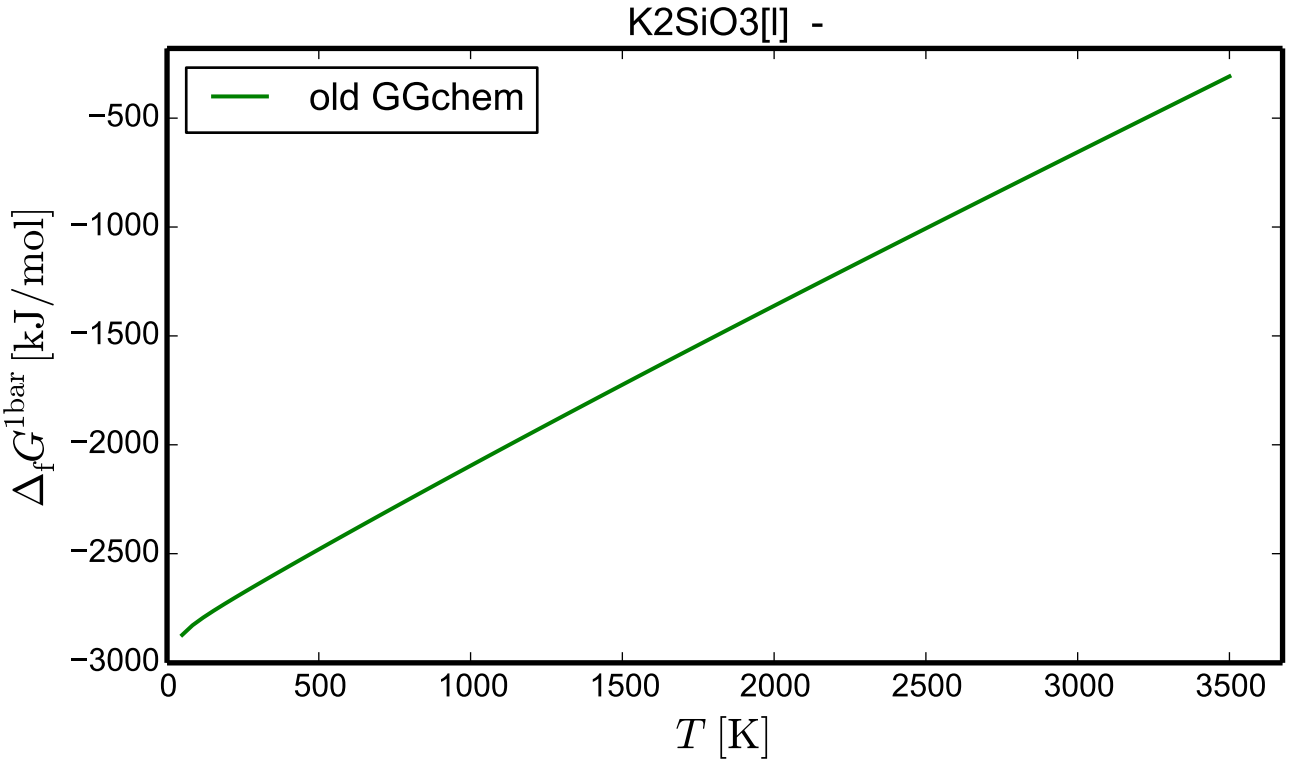

I2[l] -
BURCAT
300
200
100
0
−100
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

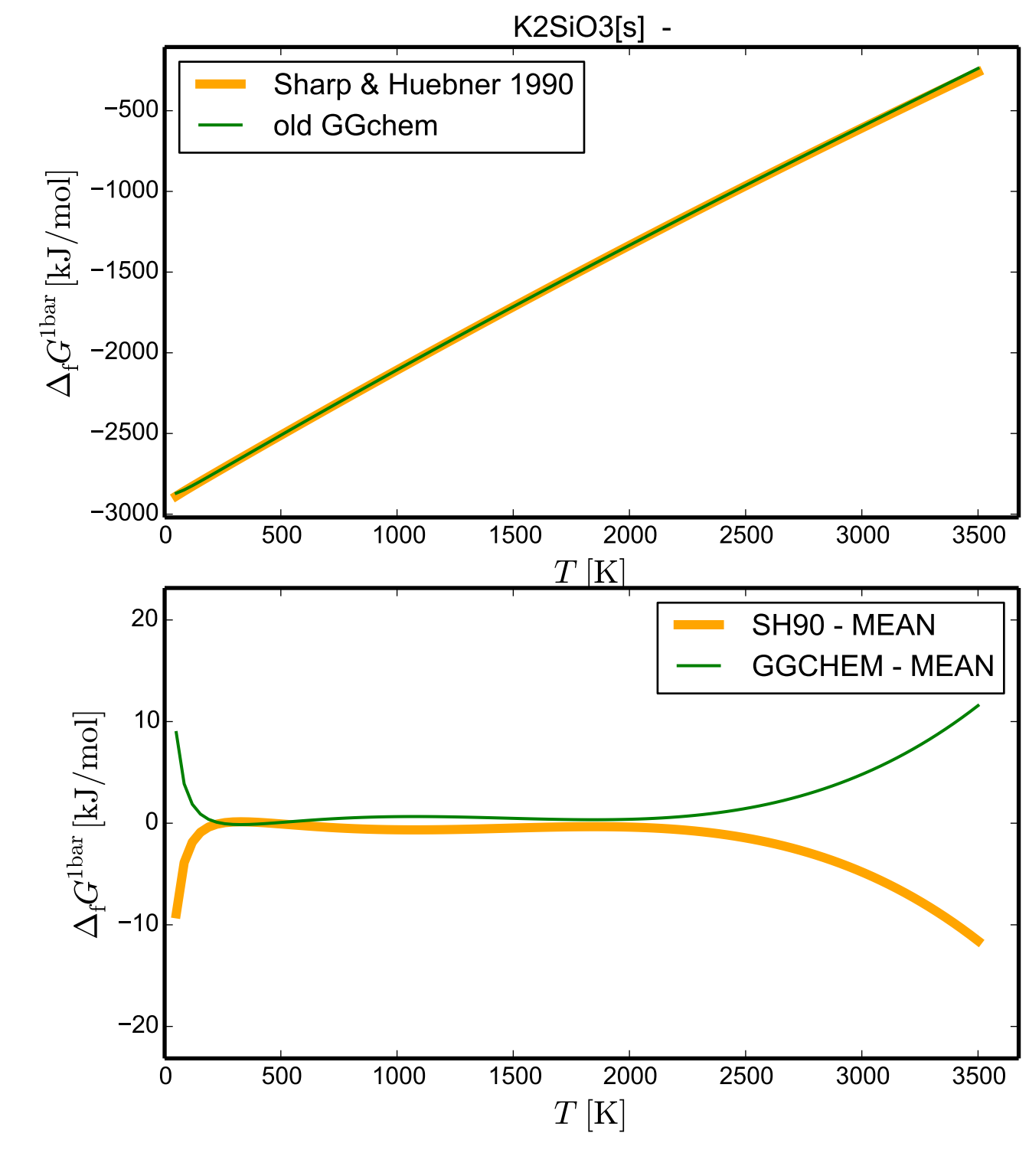

I2[s] -
BURCAT
−120
−130
−140
−150
−160
−170
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

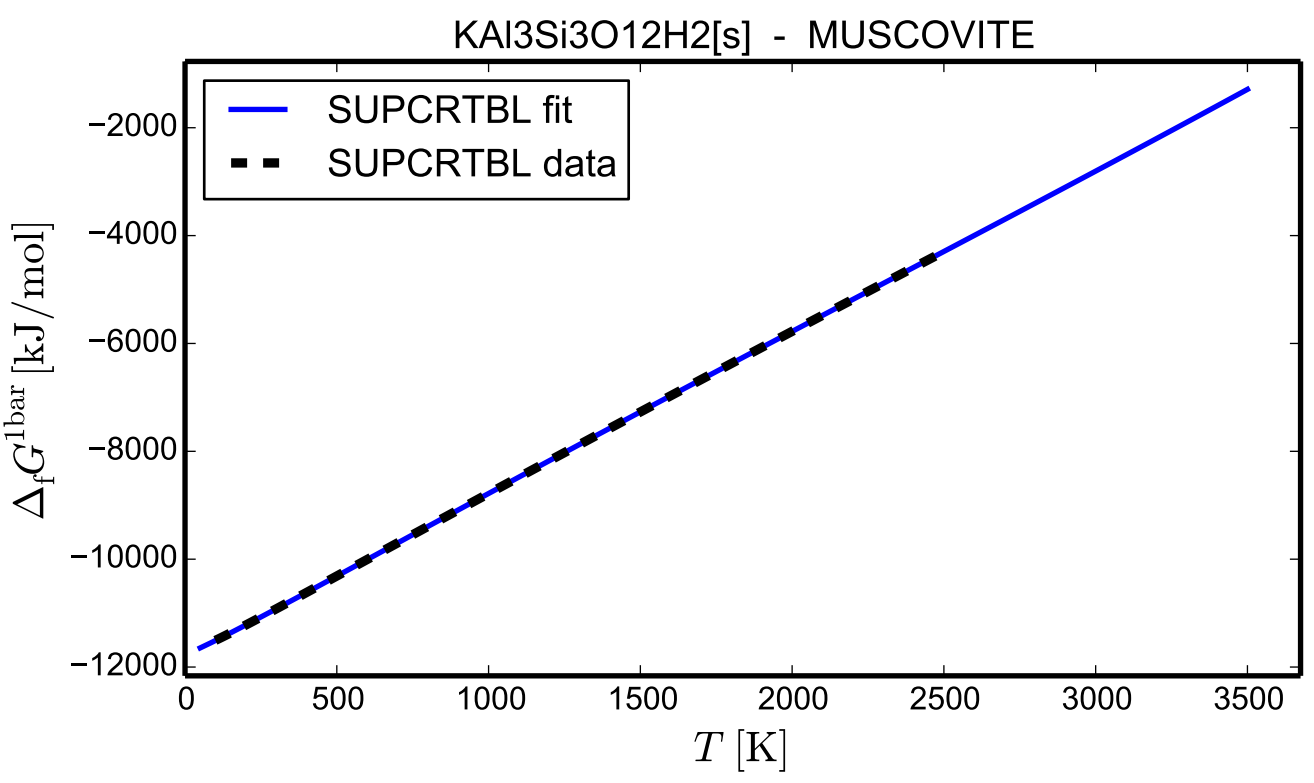

IR[l] -
BURCAT
−160
−180
−200
−220
−240
−260
−280
−300
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
0
500
1000
1500
2000
2500
3000
3500
$T\,[\mathrm{K}]$

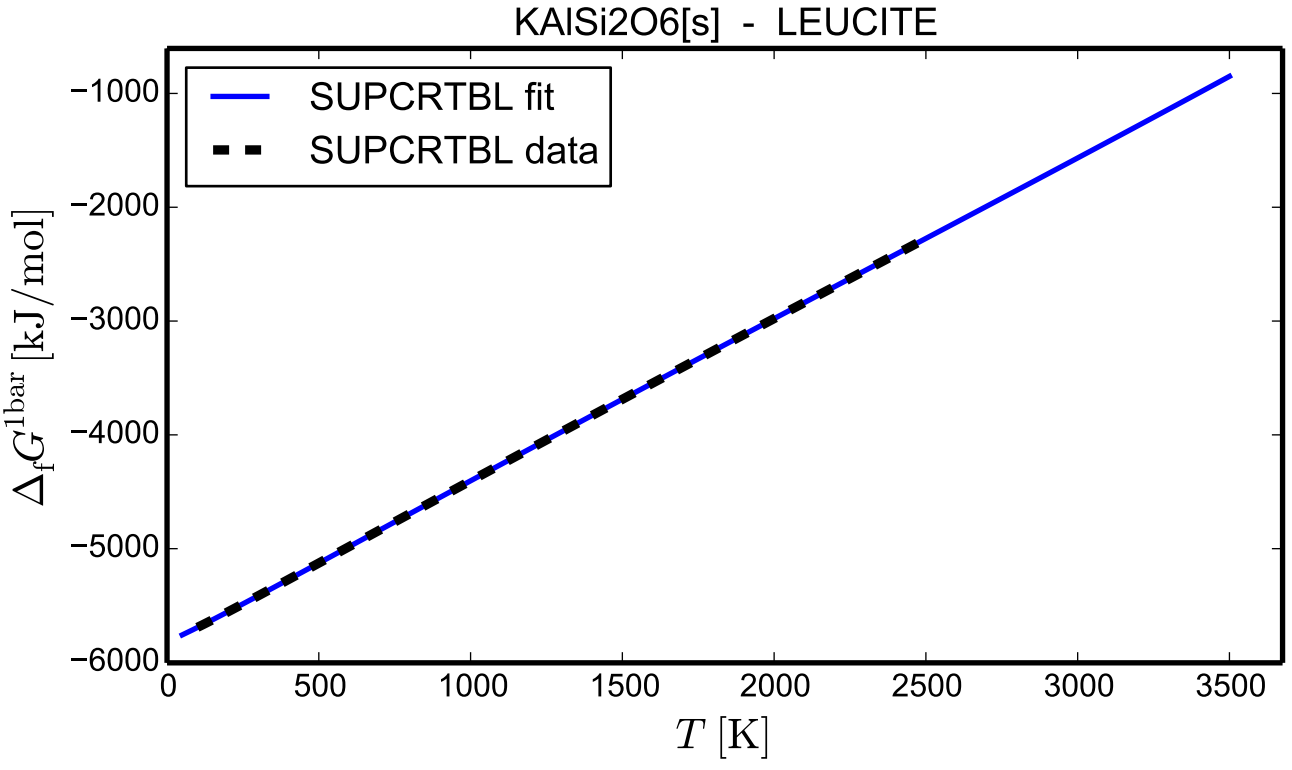

IR[s] -
BURCAT
−250
−300
−350
−400
−450
−500
−550
−600
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

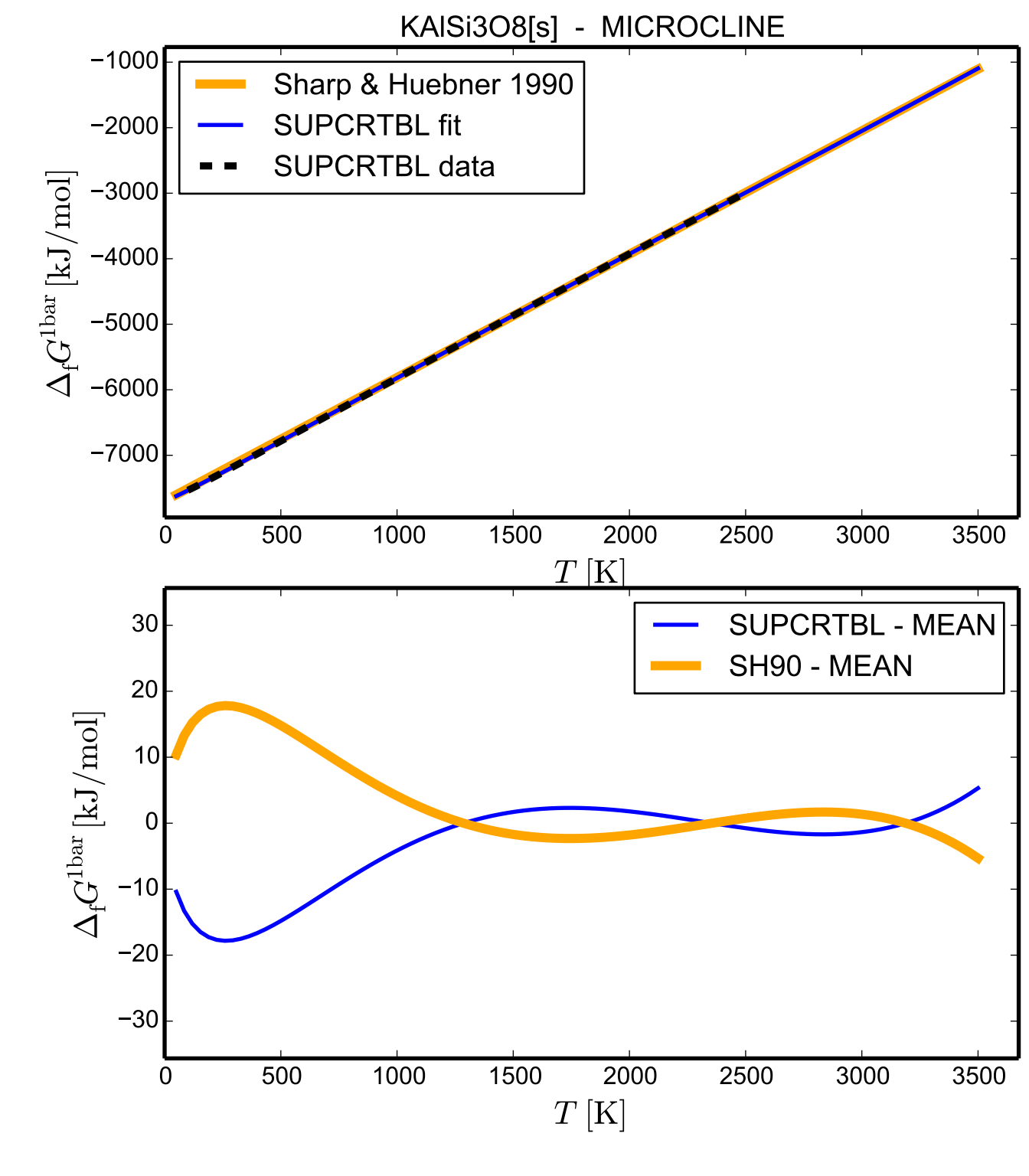

K2Si4O9[s] - Si-WADEITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
−8000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

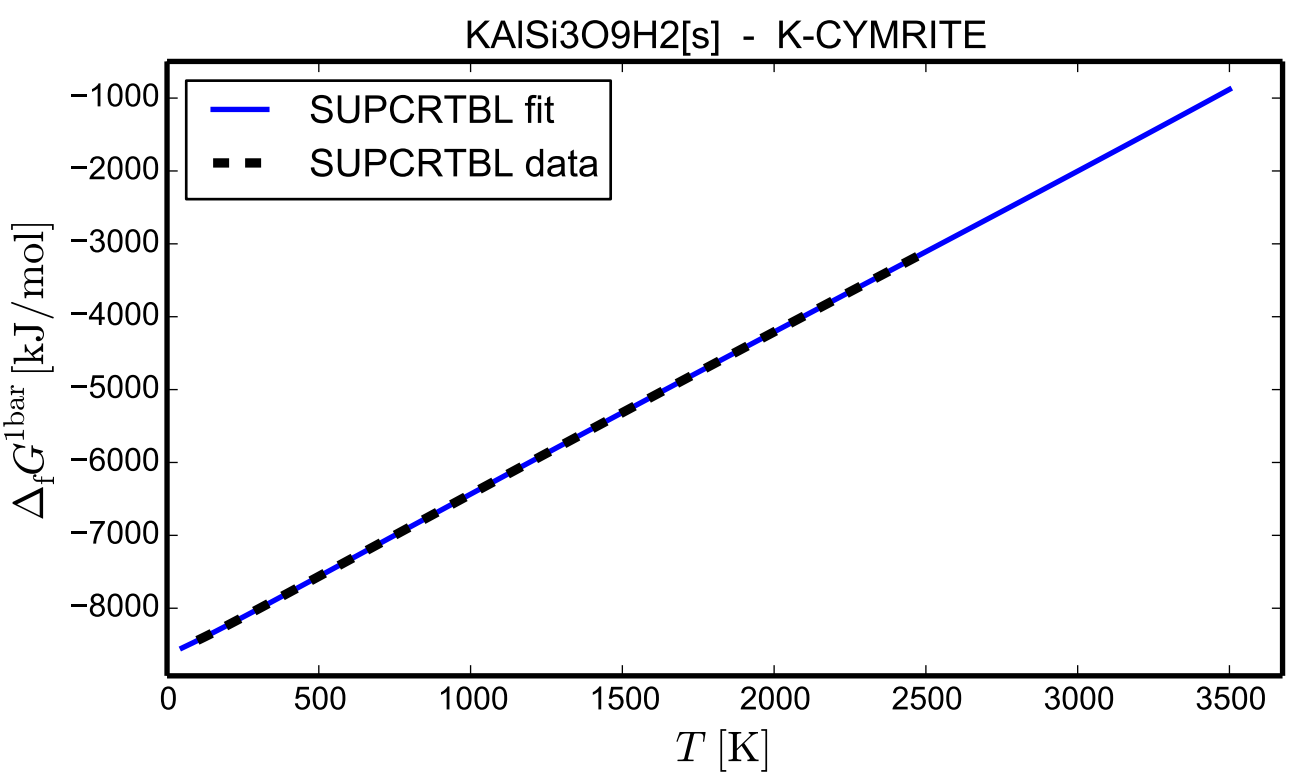

K2SiO3[l] -
old GGchem
−500
−1000
−1500
−2000
−2500
−3000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

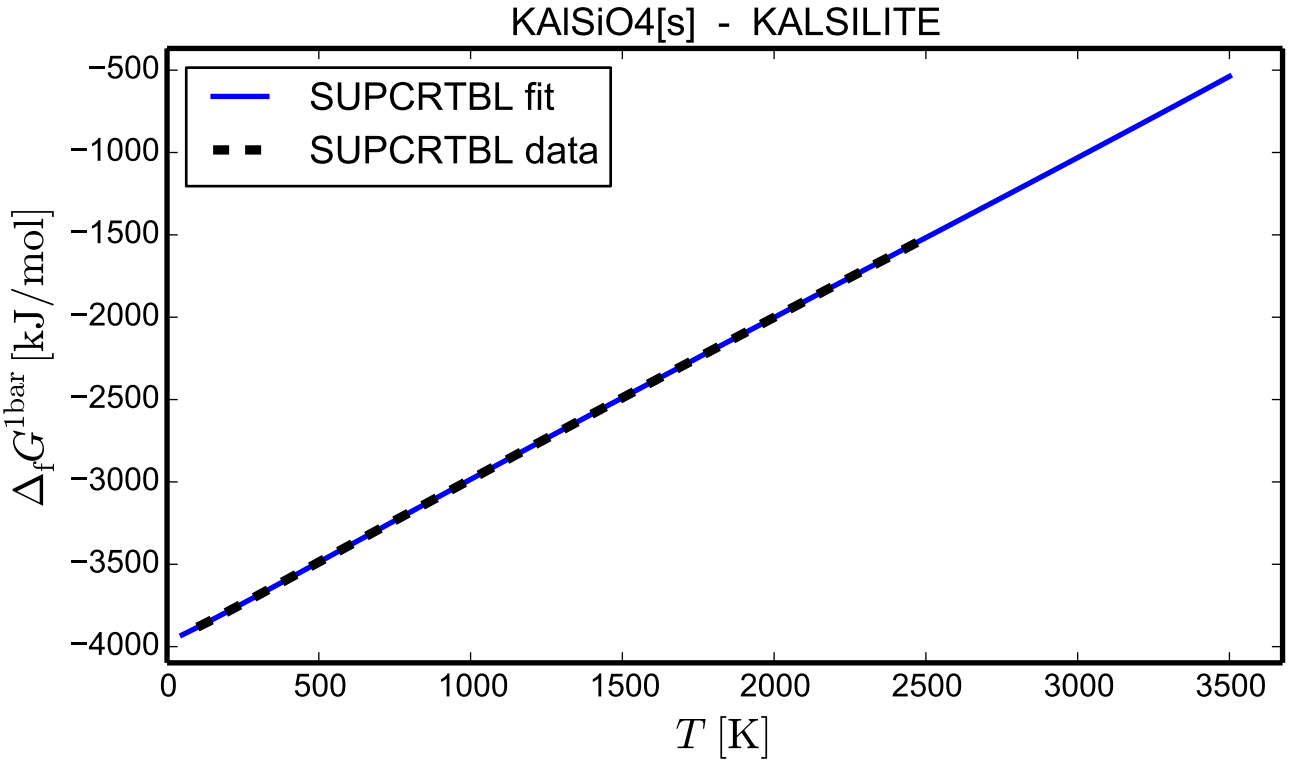

K2SiO3[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

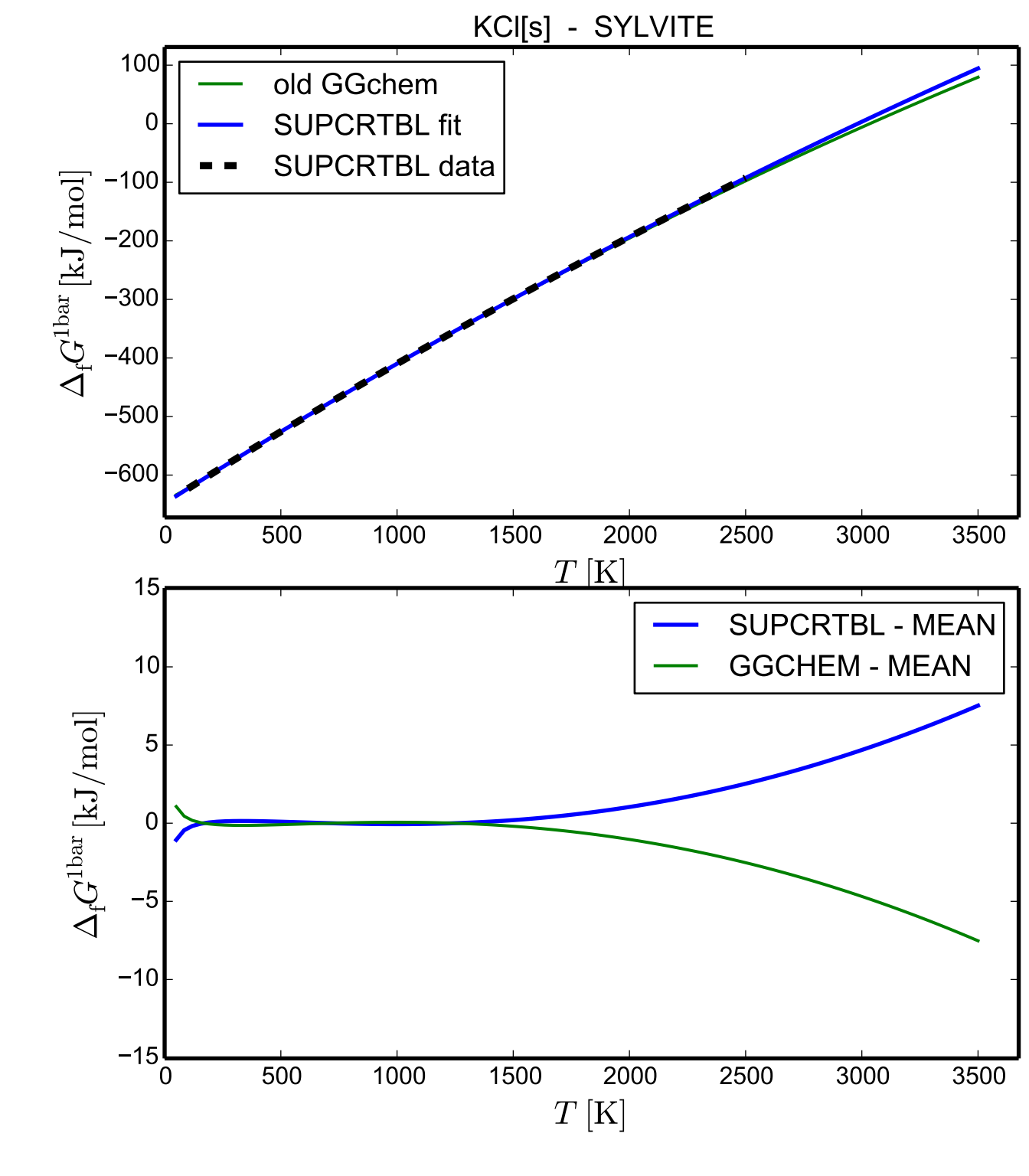

KAl3Si3O12H2[s] - MUSCOVITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

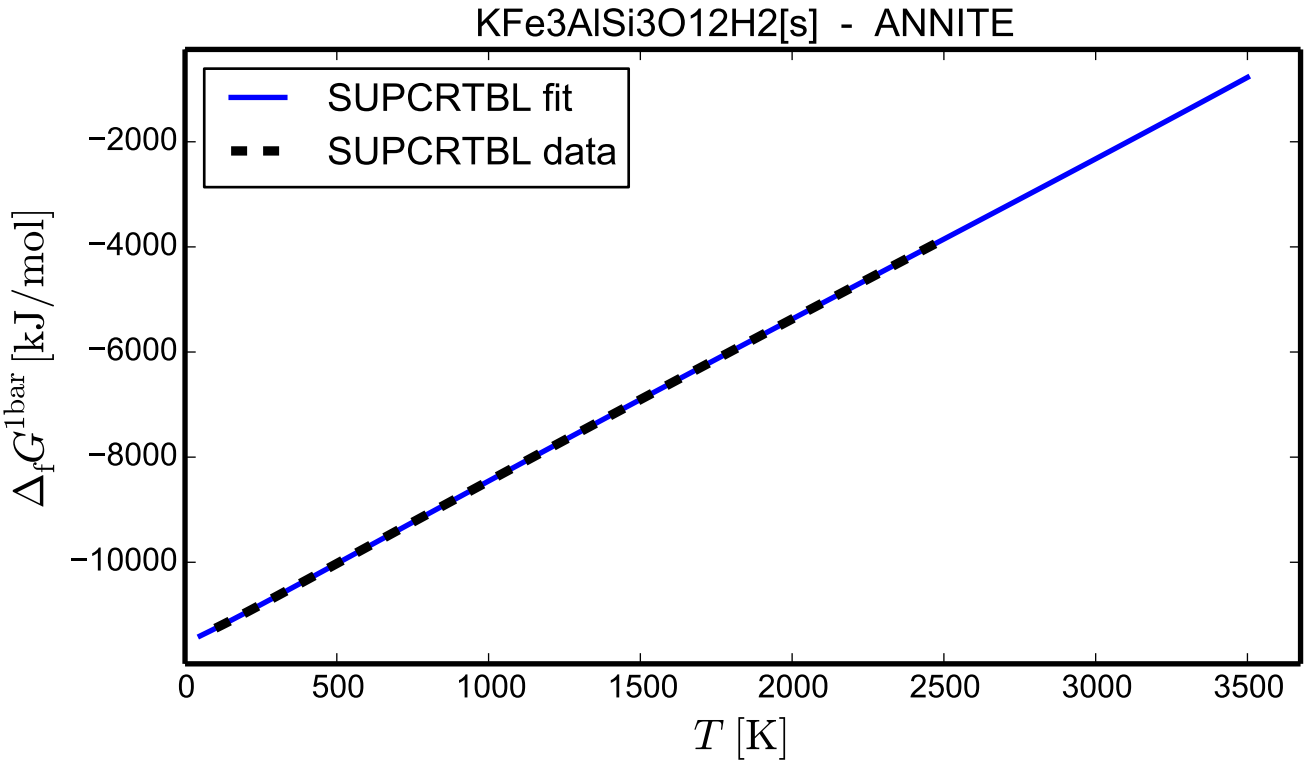

KAlSi2O6[s] - LEUCITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

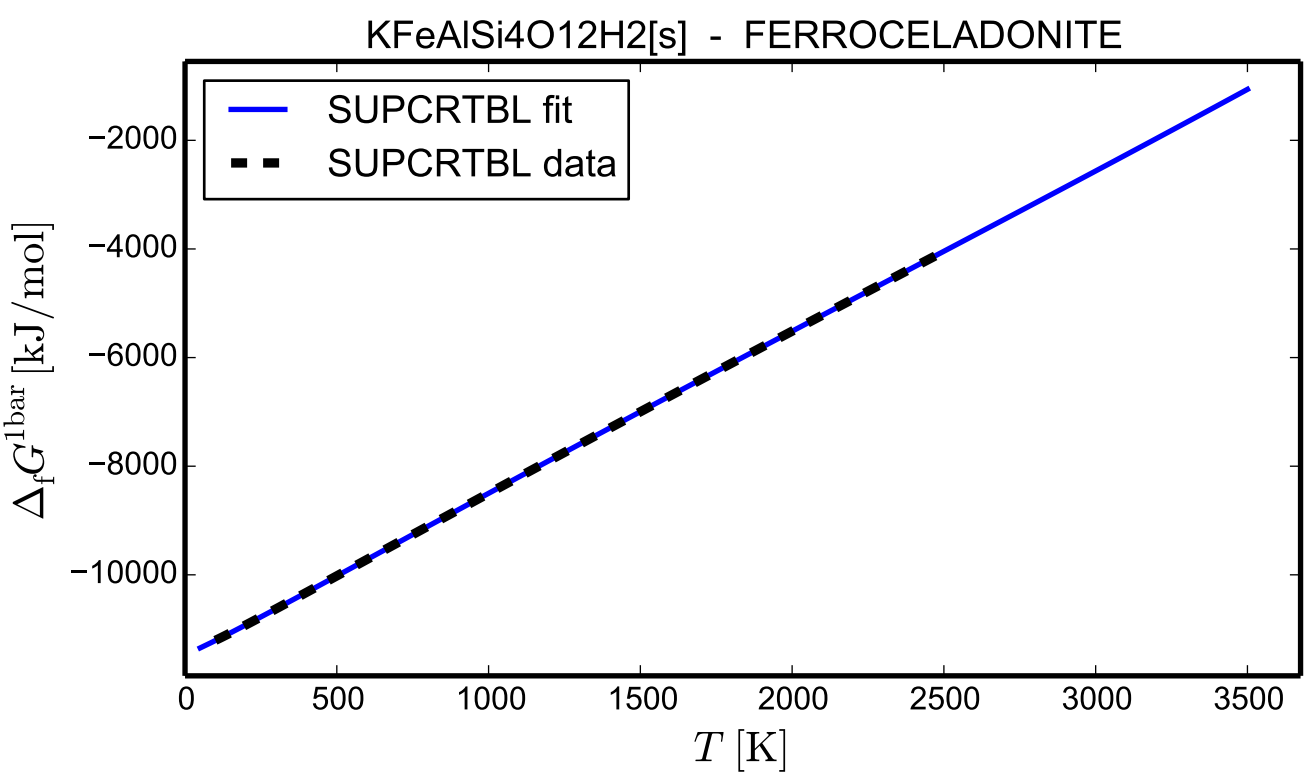

KAlSi3O8[s] - MICROCLINE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

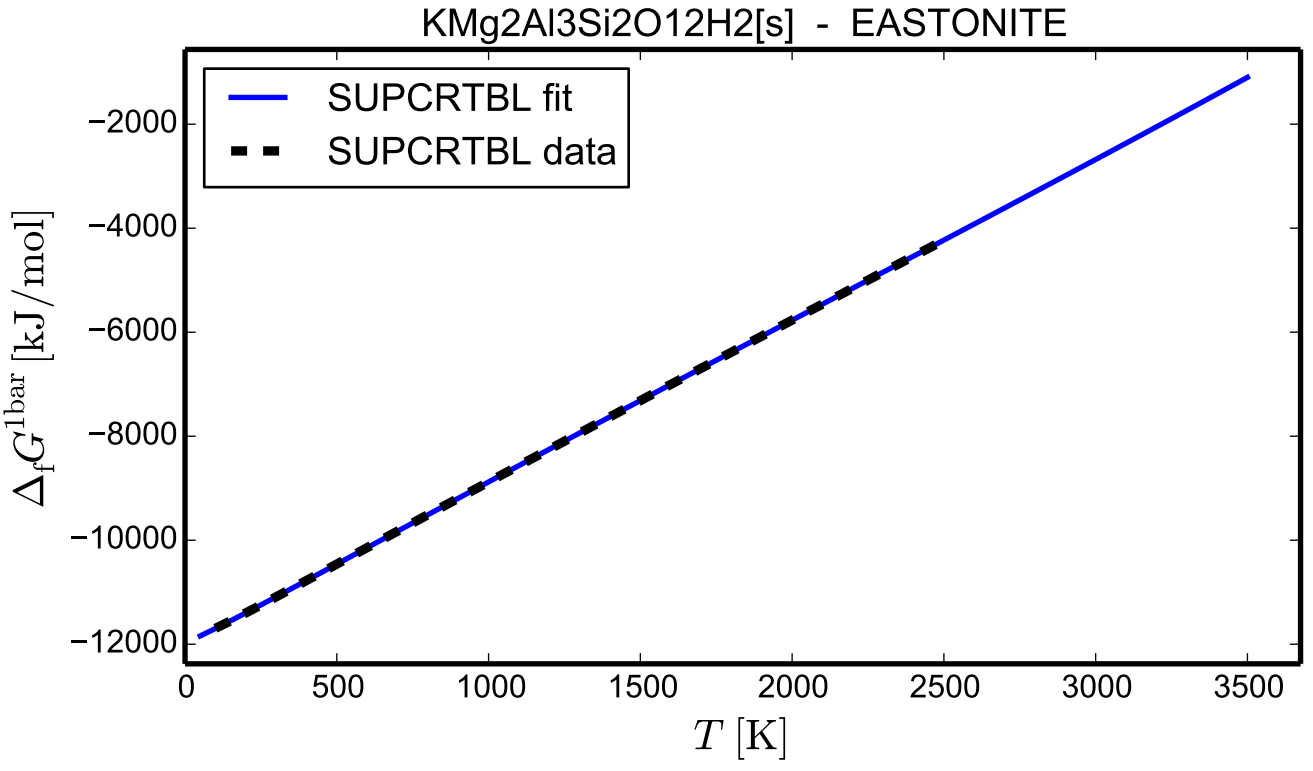

KAlSi3O9H2[s] - K-CYMRITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
−8000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

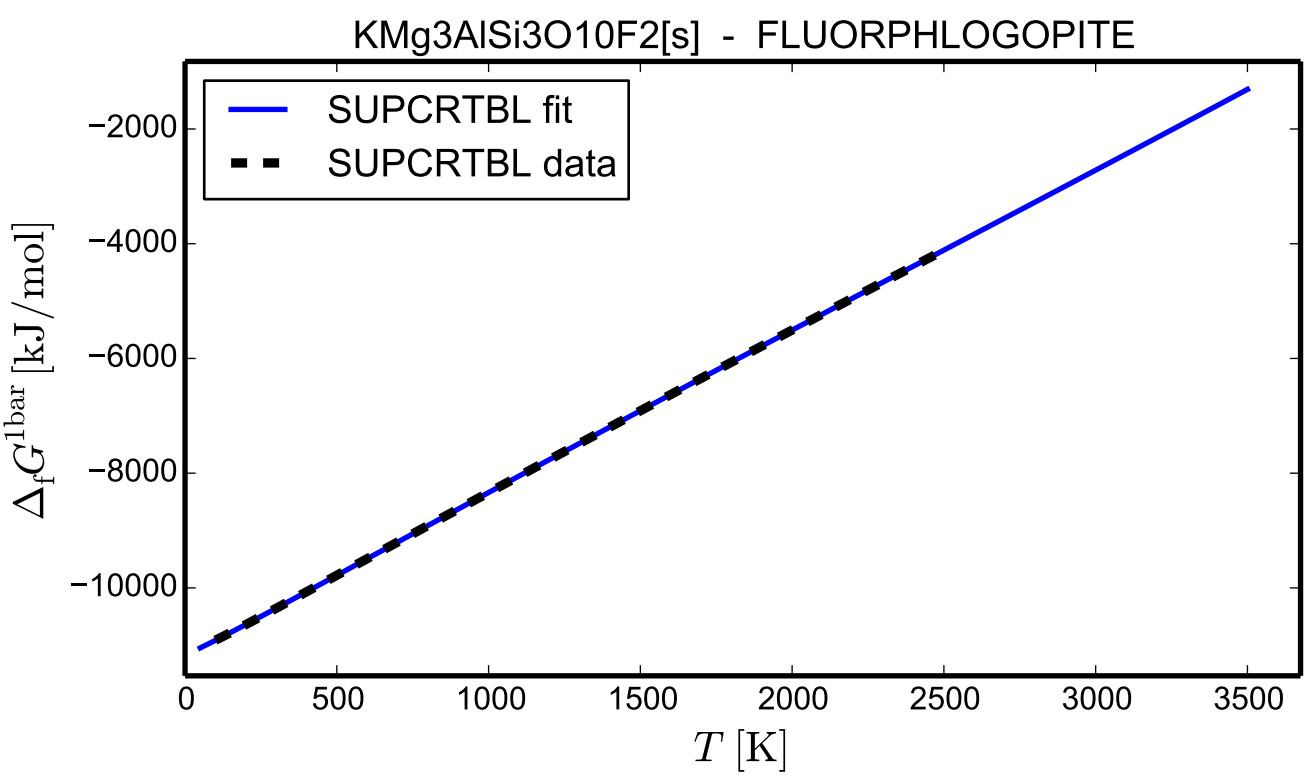

KAlSiO4[s] - KALSILITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

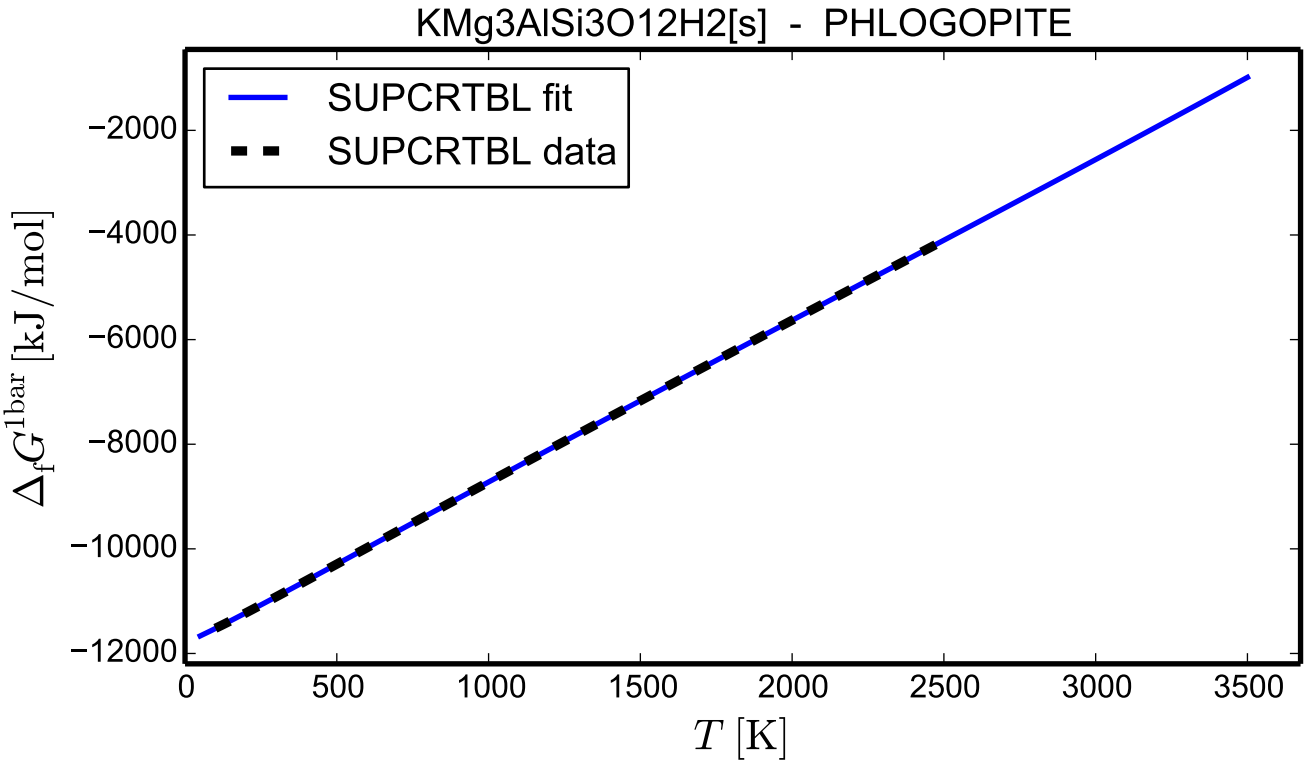

KCl[s] - SYLVITE
old GGchem
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
GGCHEM - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

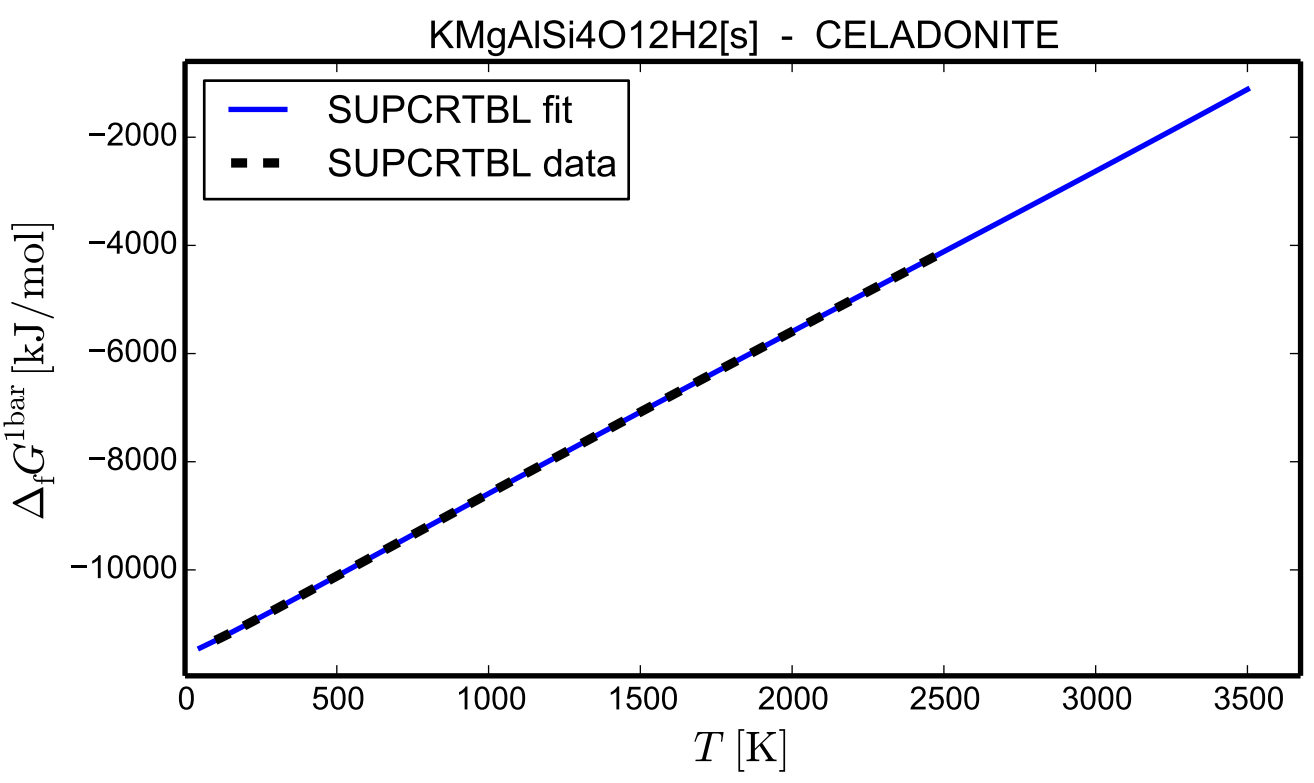

KFe3AlSi3O12H2[s] - ANNITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

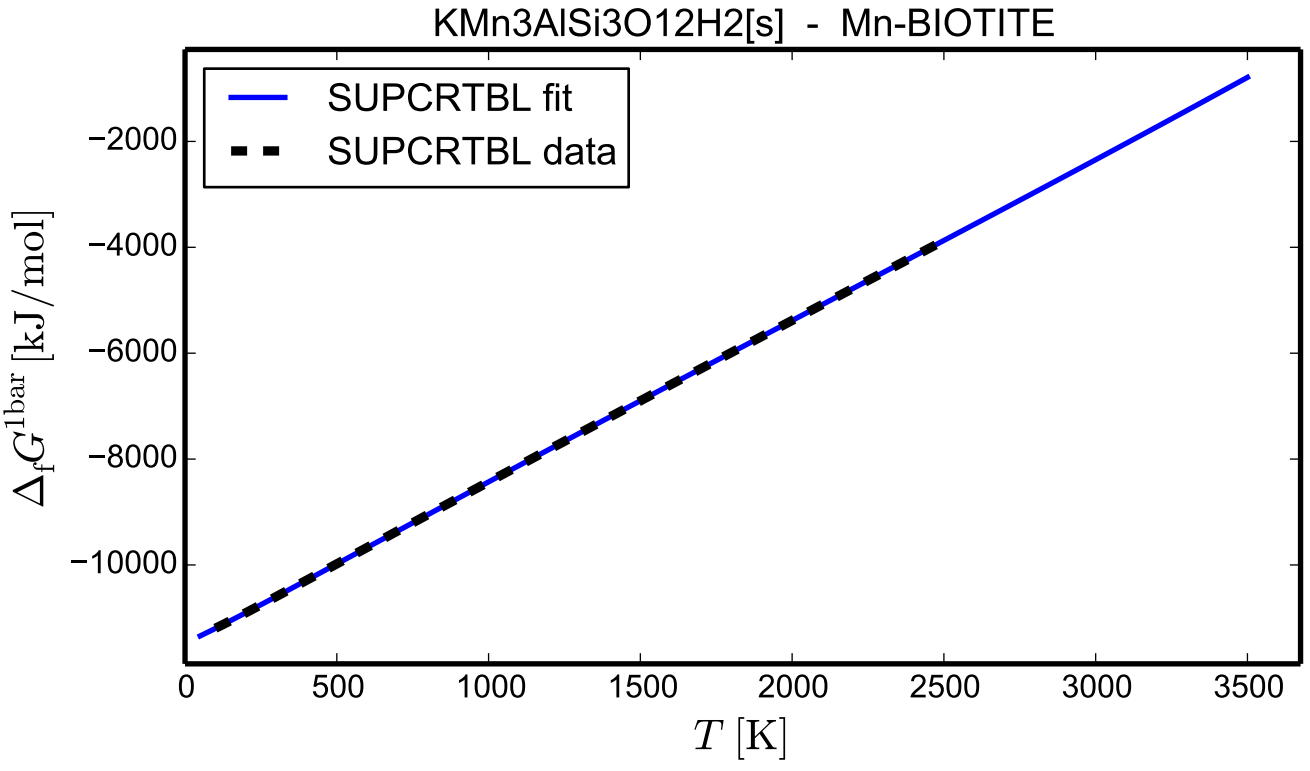

KFeAlSi4O12H2[s] - FERROCELADONITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

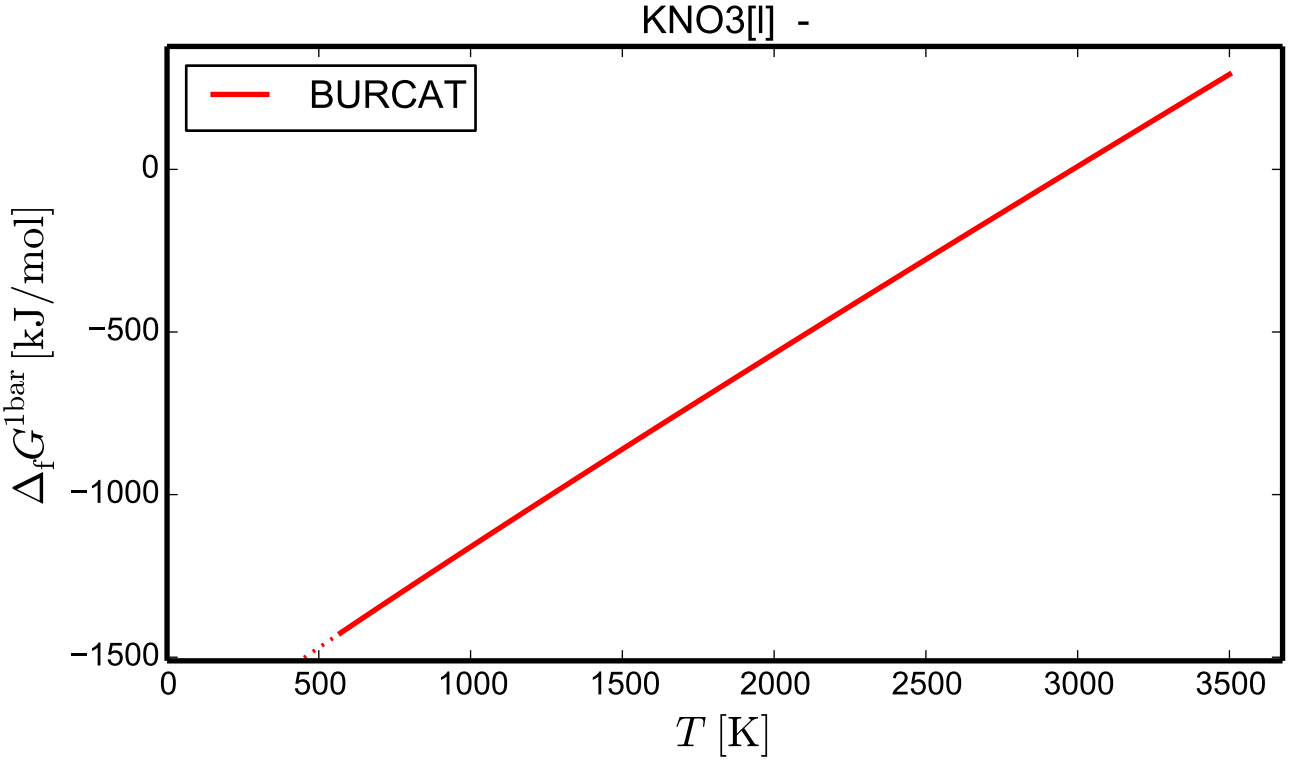

KMg2Al3Si2O12H2[s] - EASTONITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

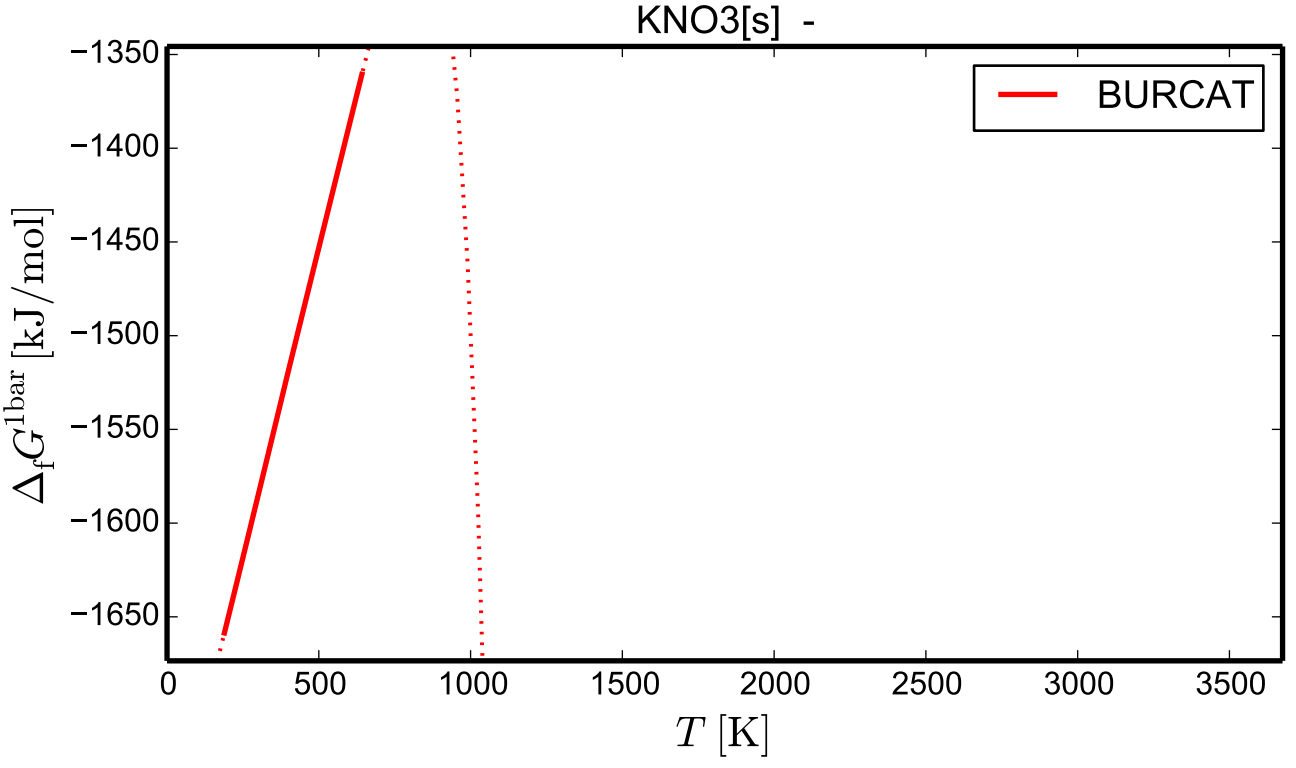

KMg3AlSi3O10F2[s] - FLUORPHLOGOPITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

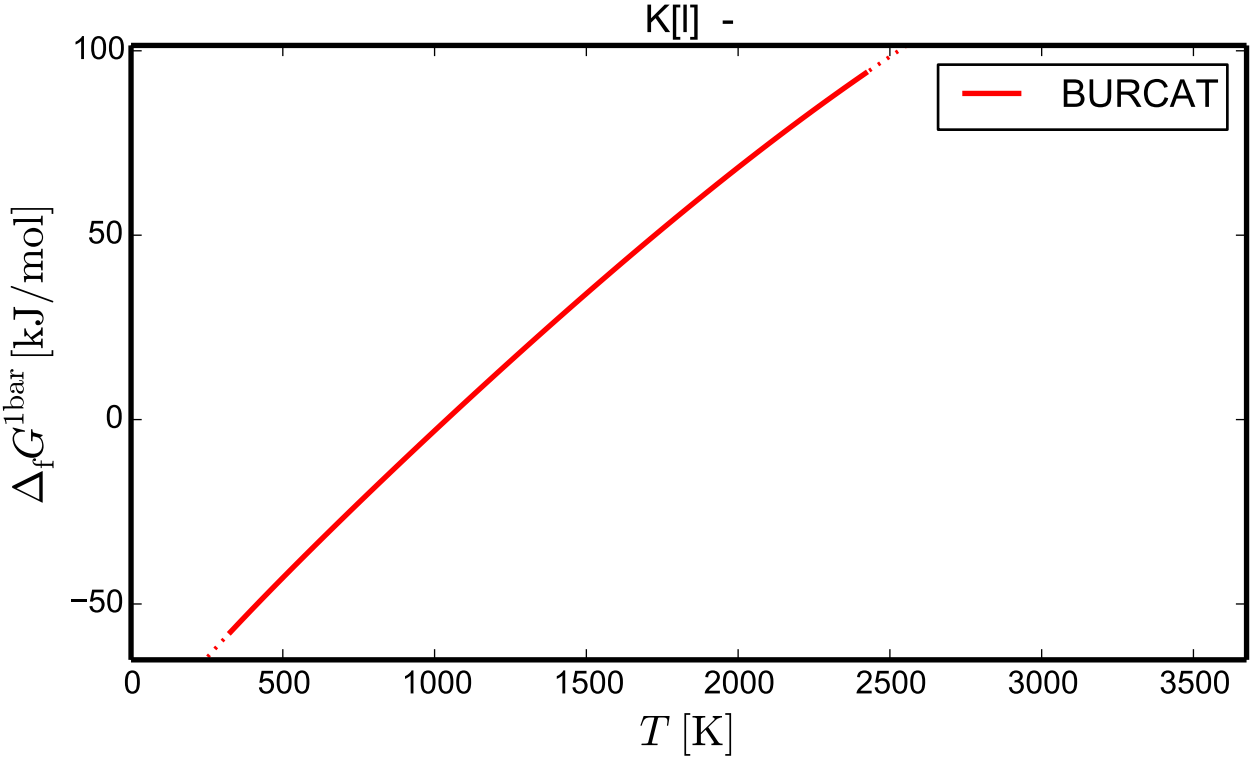

KMg3AlSi3O12H2[s] - PHLOGOPITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

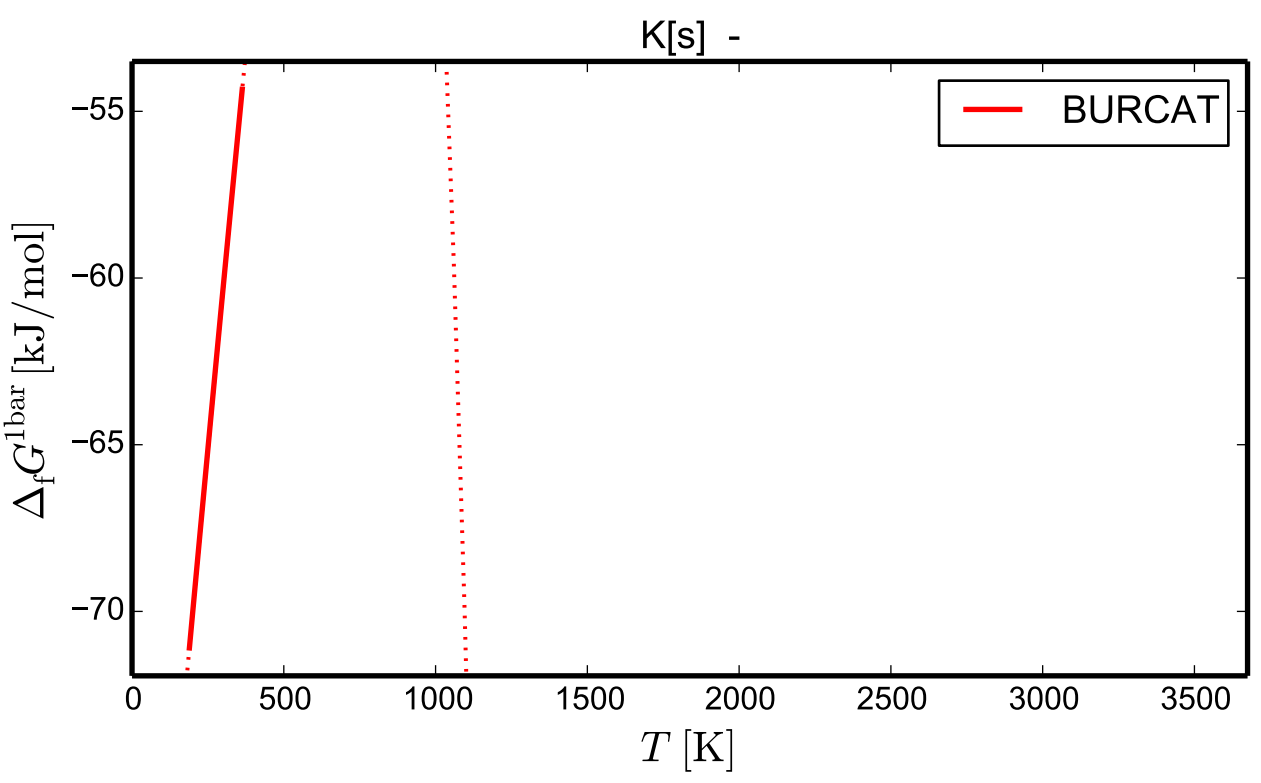

KMgAlSi4O12H2[s] - CELADONITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

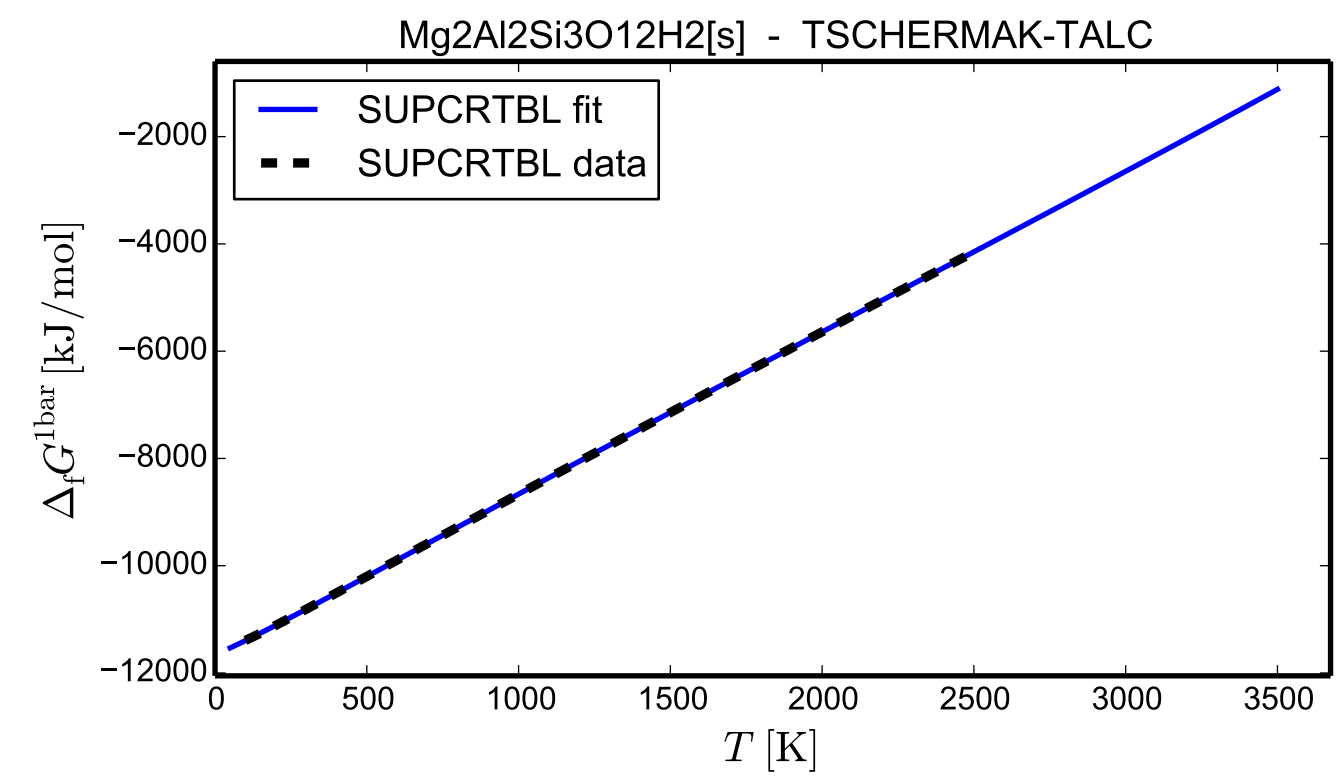

KMn3AlSi3O12H2[s] - Mn-BIOTITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

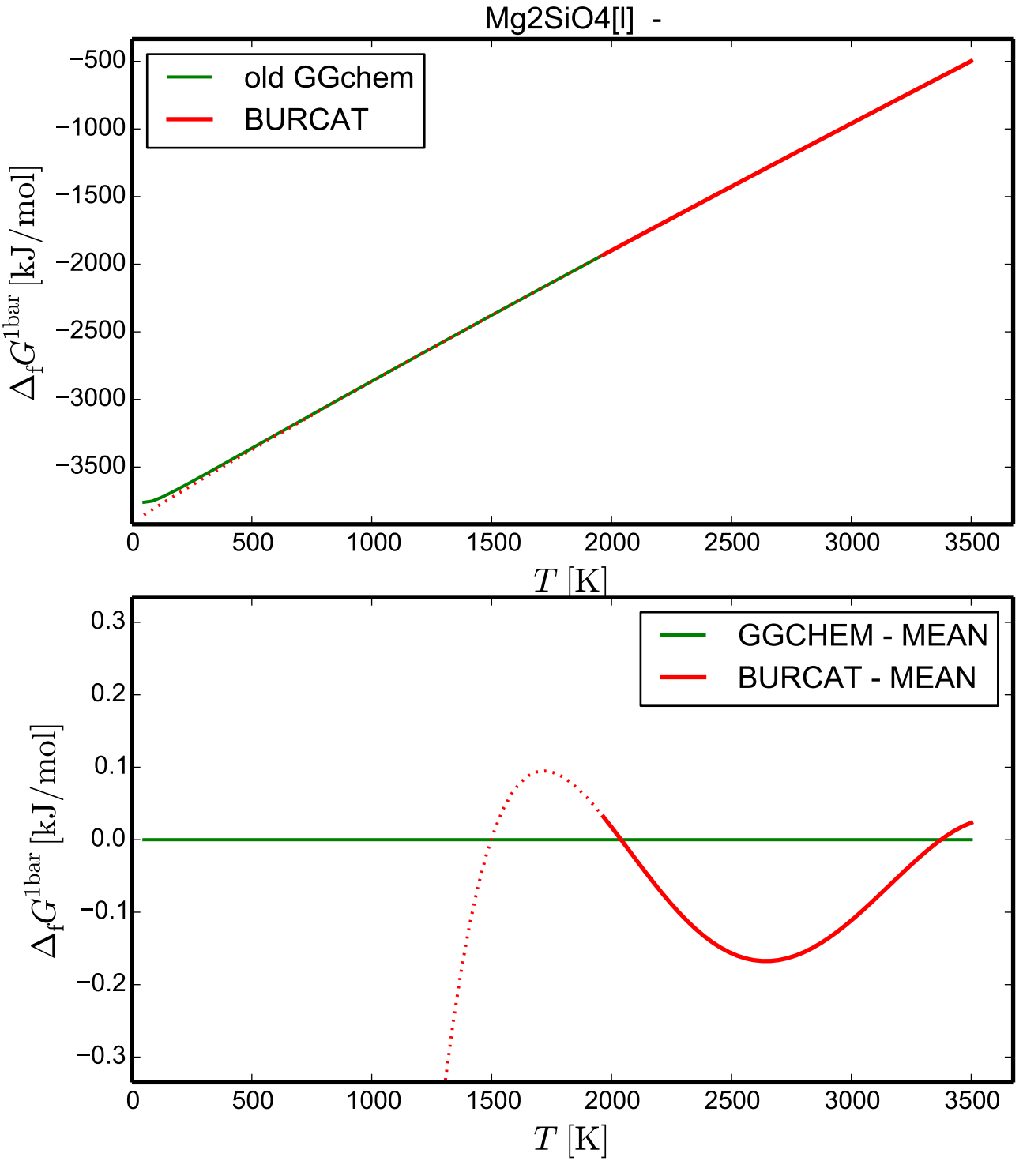

KNO3[l] -
BURCAT
0
−500
−1000
−1500
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

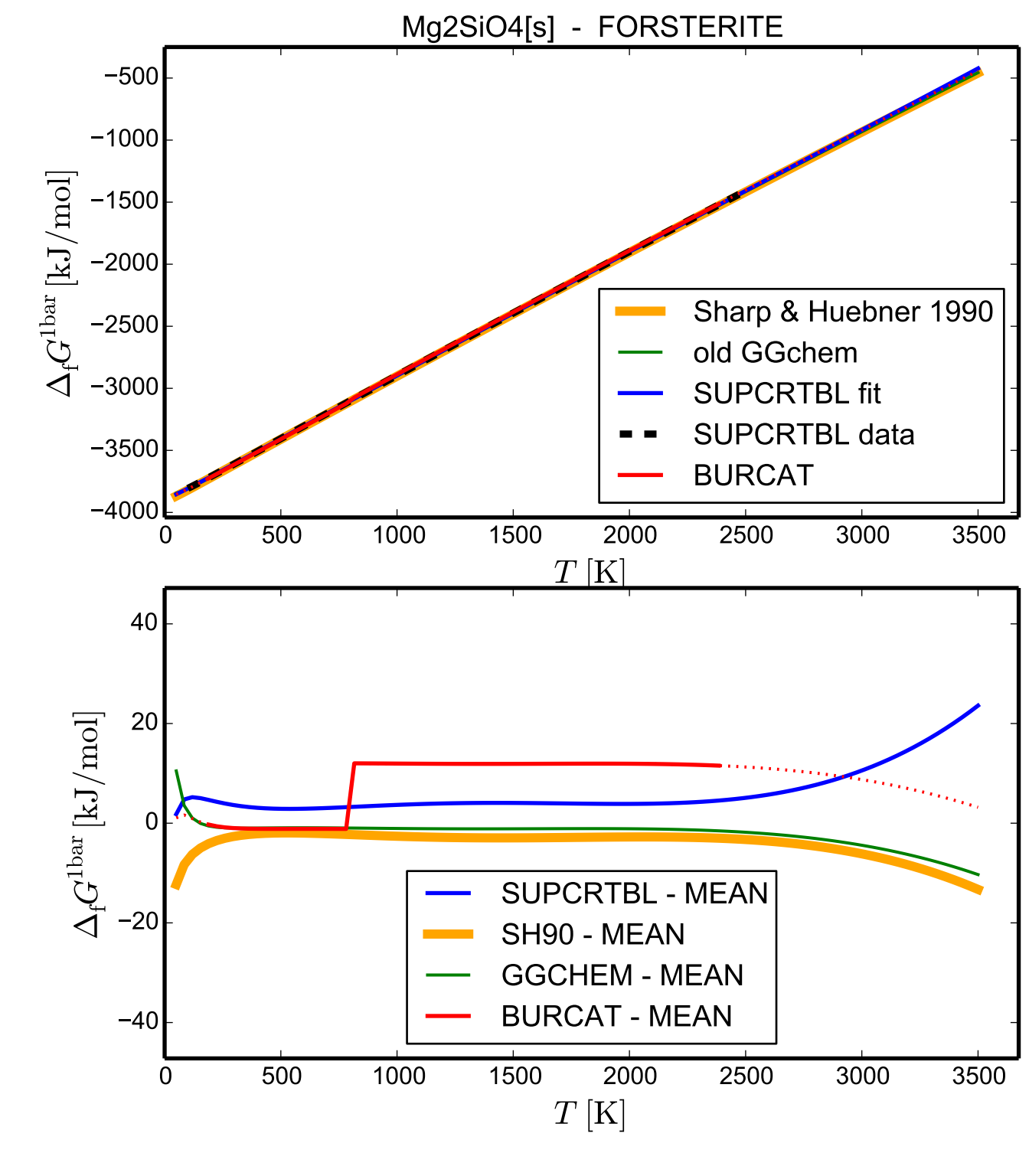

KNO3[s] -
BURCAT
−1350
−1400
−1450
−1500
−1550
−1600
−1650
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

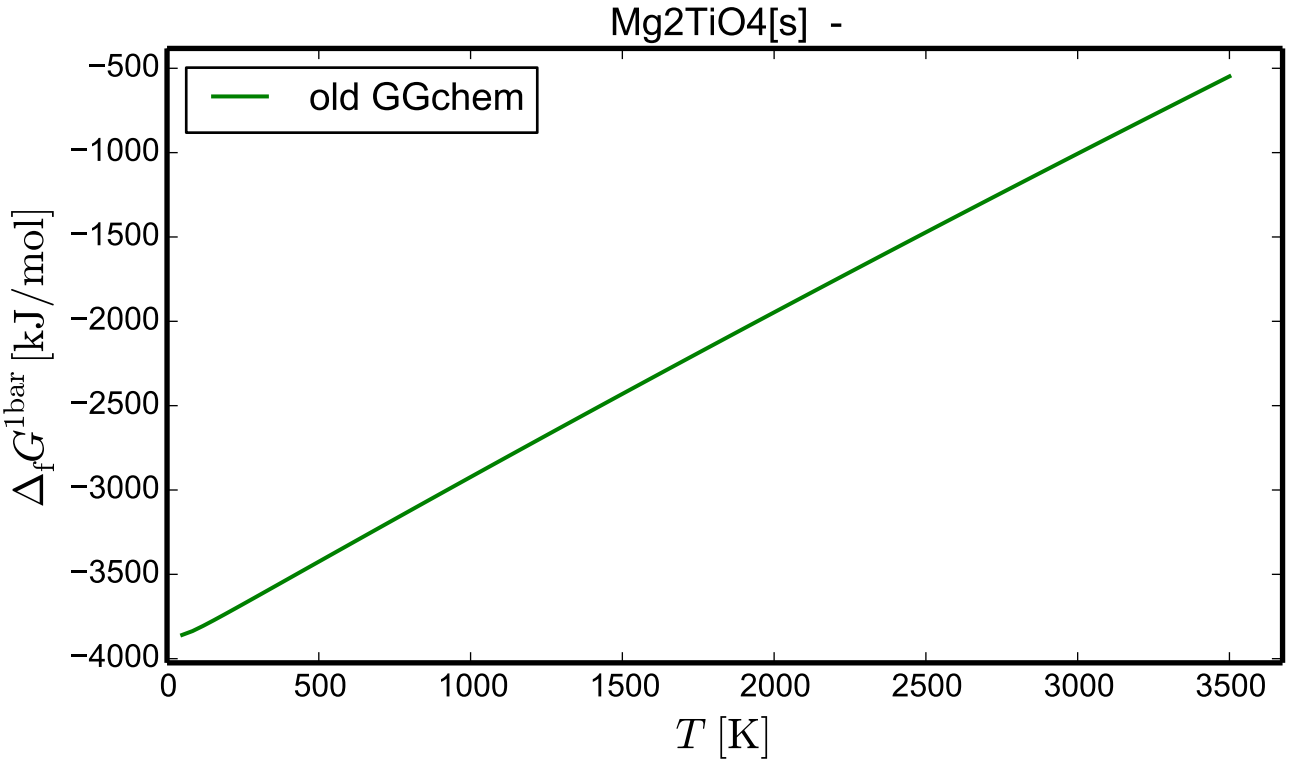

K[l] -
BURCAT
100
50
0
−50
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

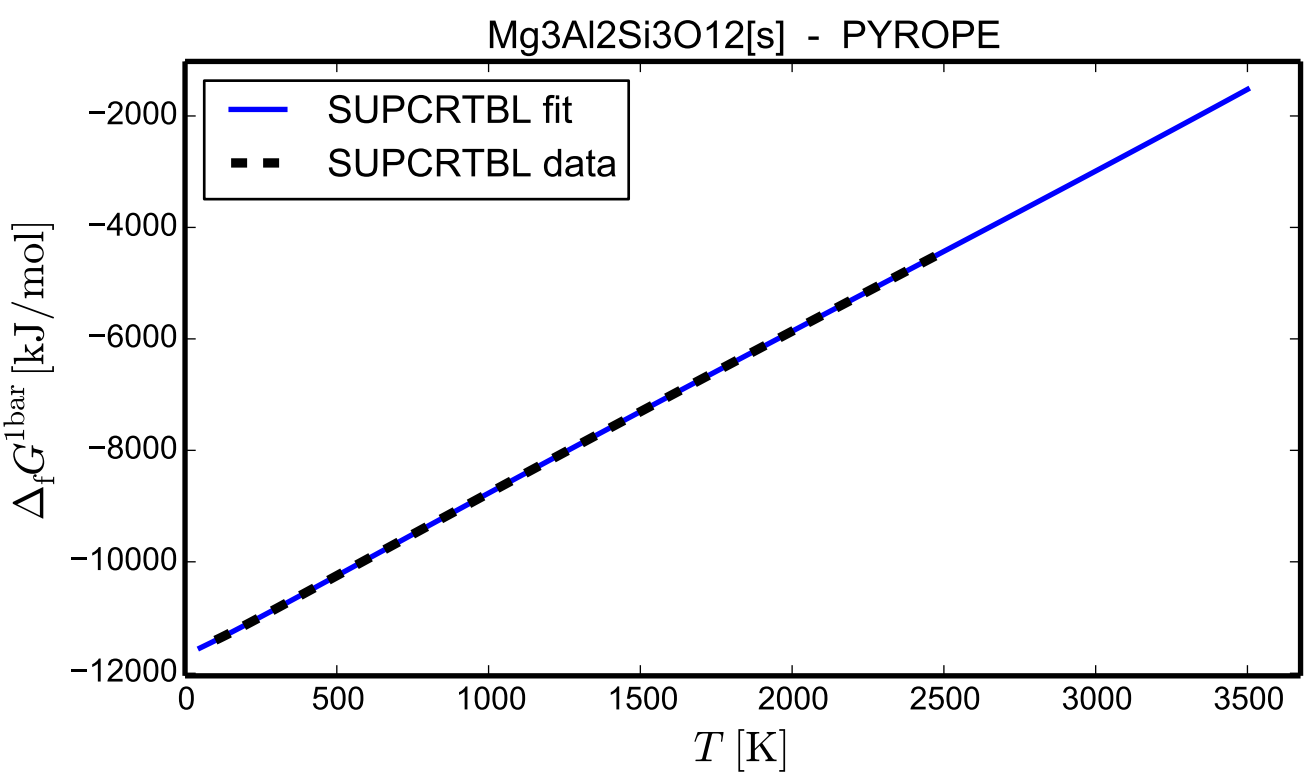

K[s] -
BURCAT
−55
−60
−65
−70
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

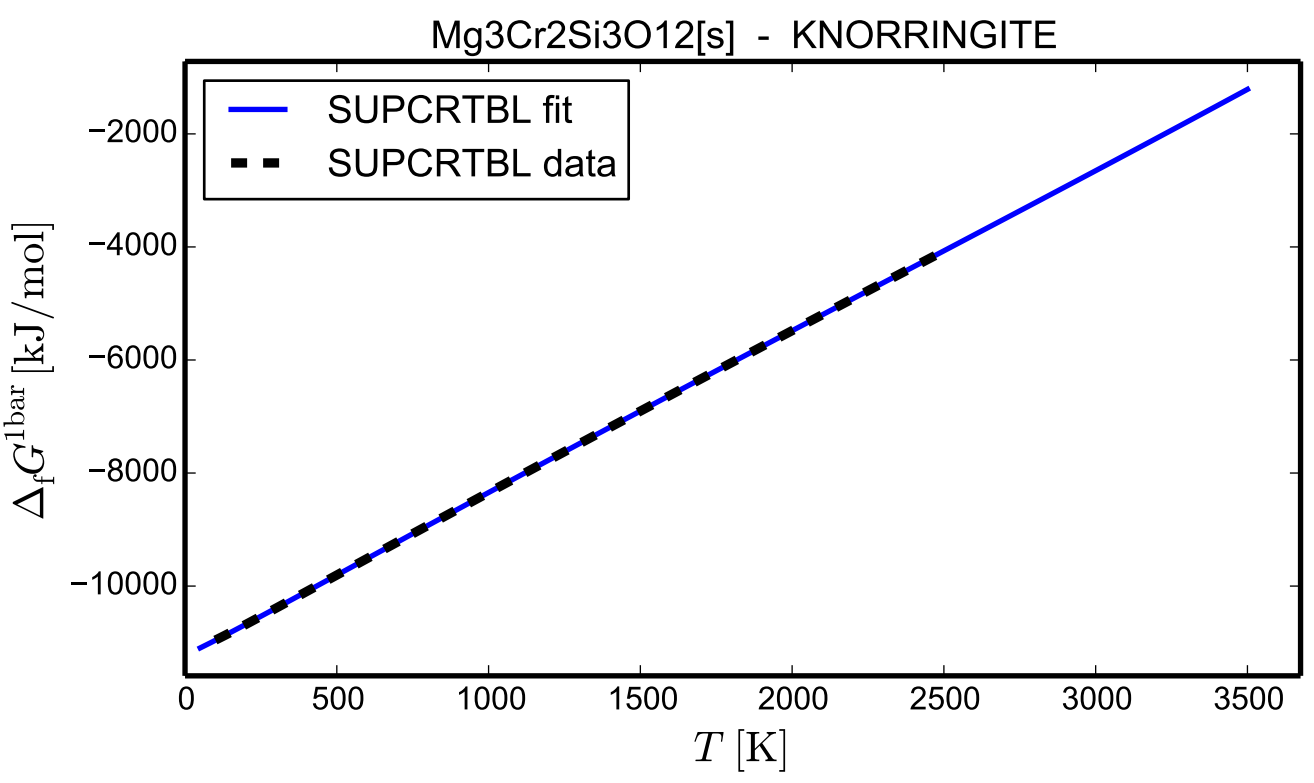

Mg2Al2Si3O12H2[s] - TSCHERMAK-TALC
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

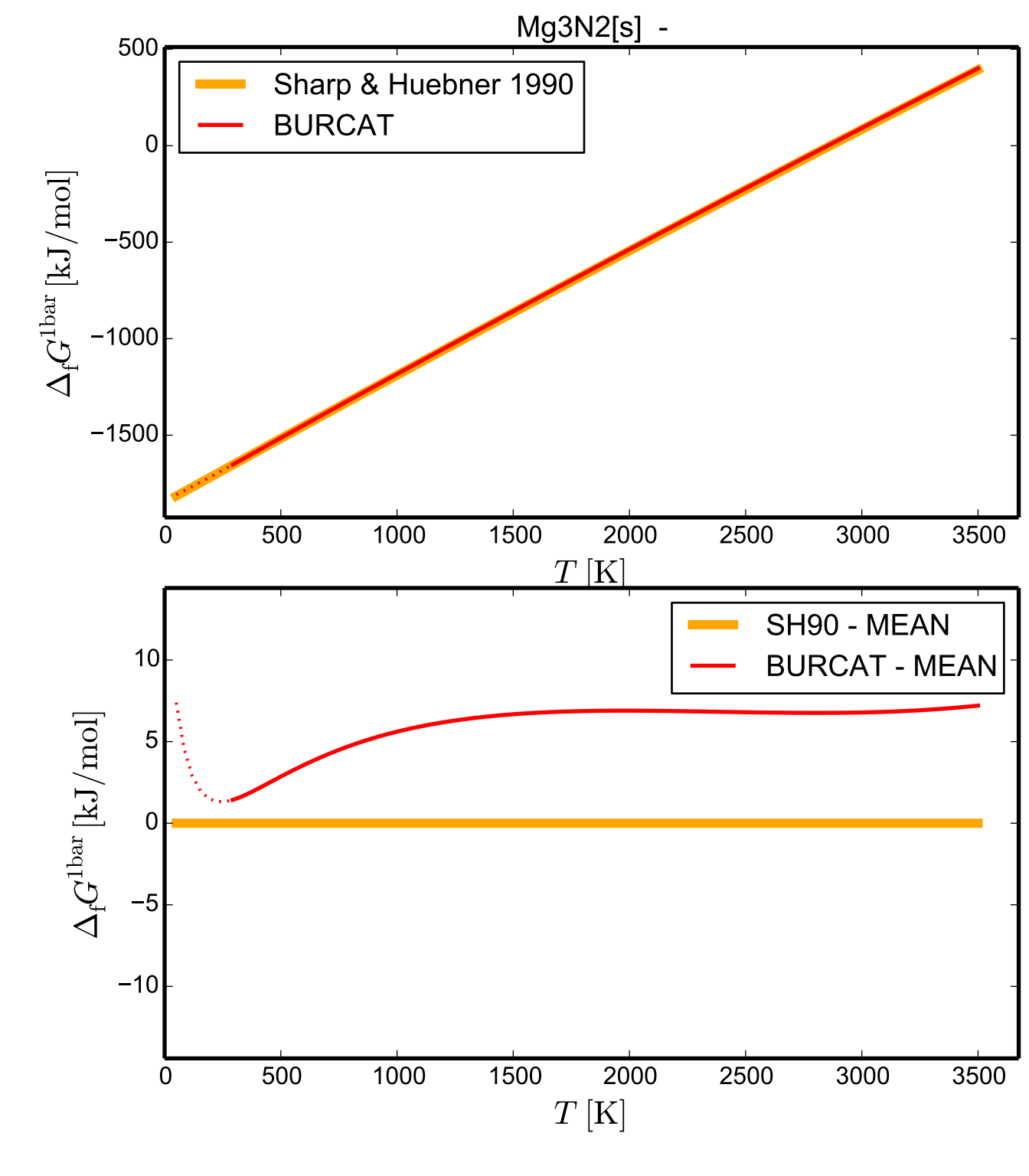

Mg2SiO4[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

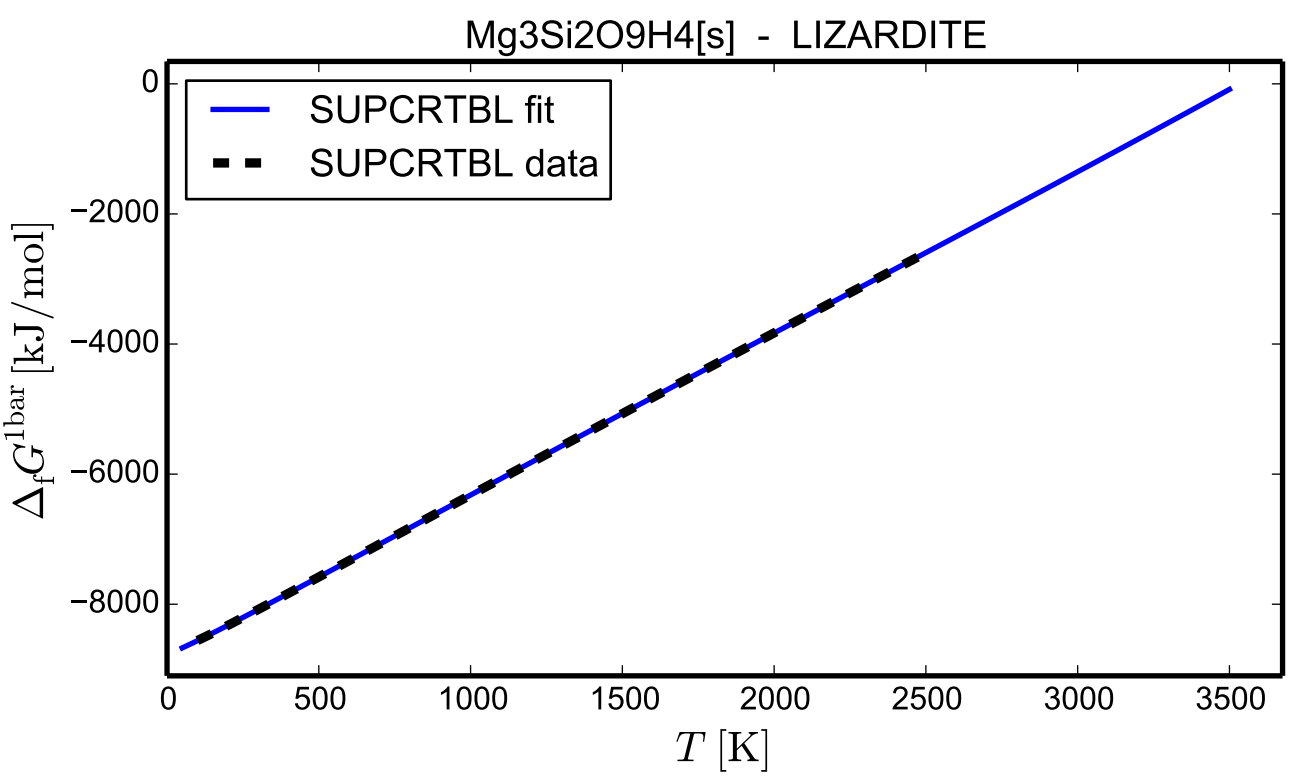

Mg2SiO4[s] - FORSTERITE
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
0
500
1000
1500
2000
2500
3000
3500
T [K]
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
40
20
0
−20
−40
0
500
1000
1500
2000
2500
3000
3500
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN

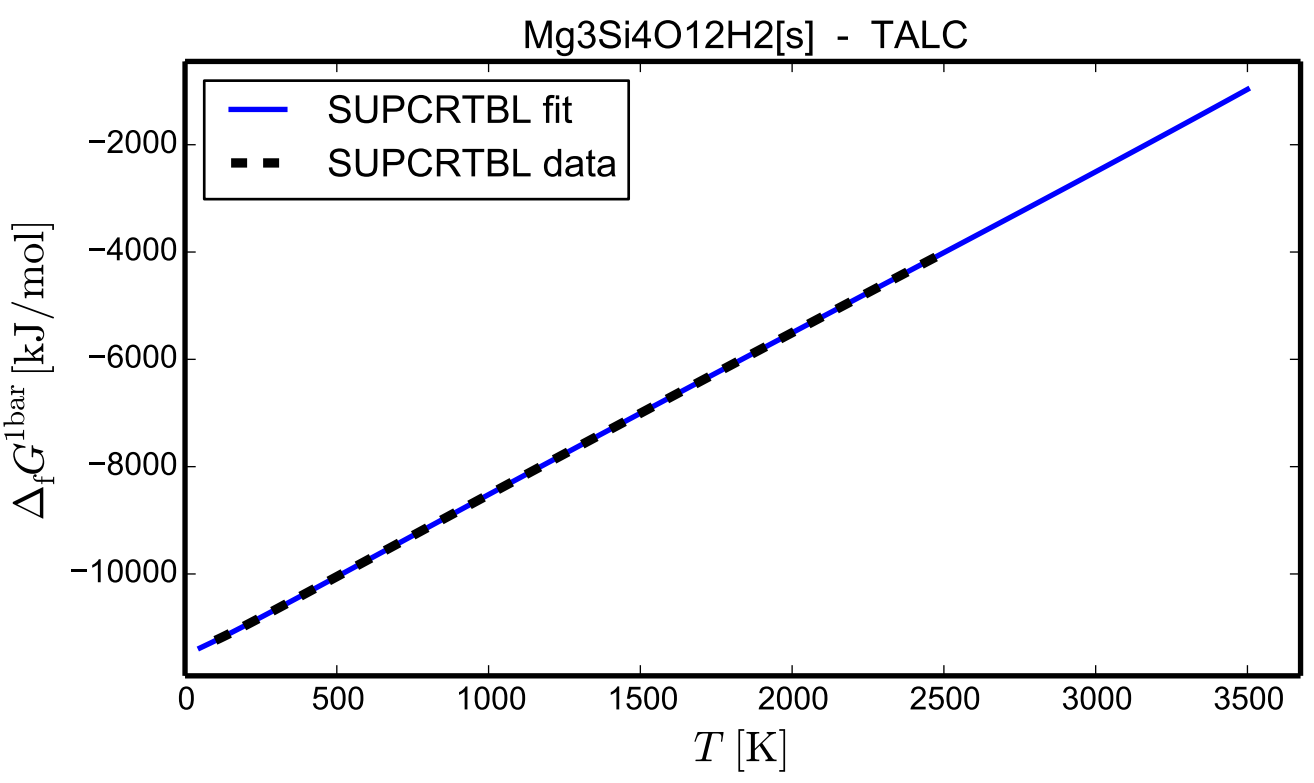

Mg2TiO4[s] -
old GGchem
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

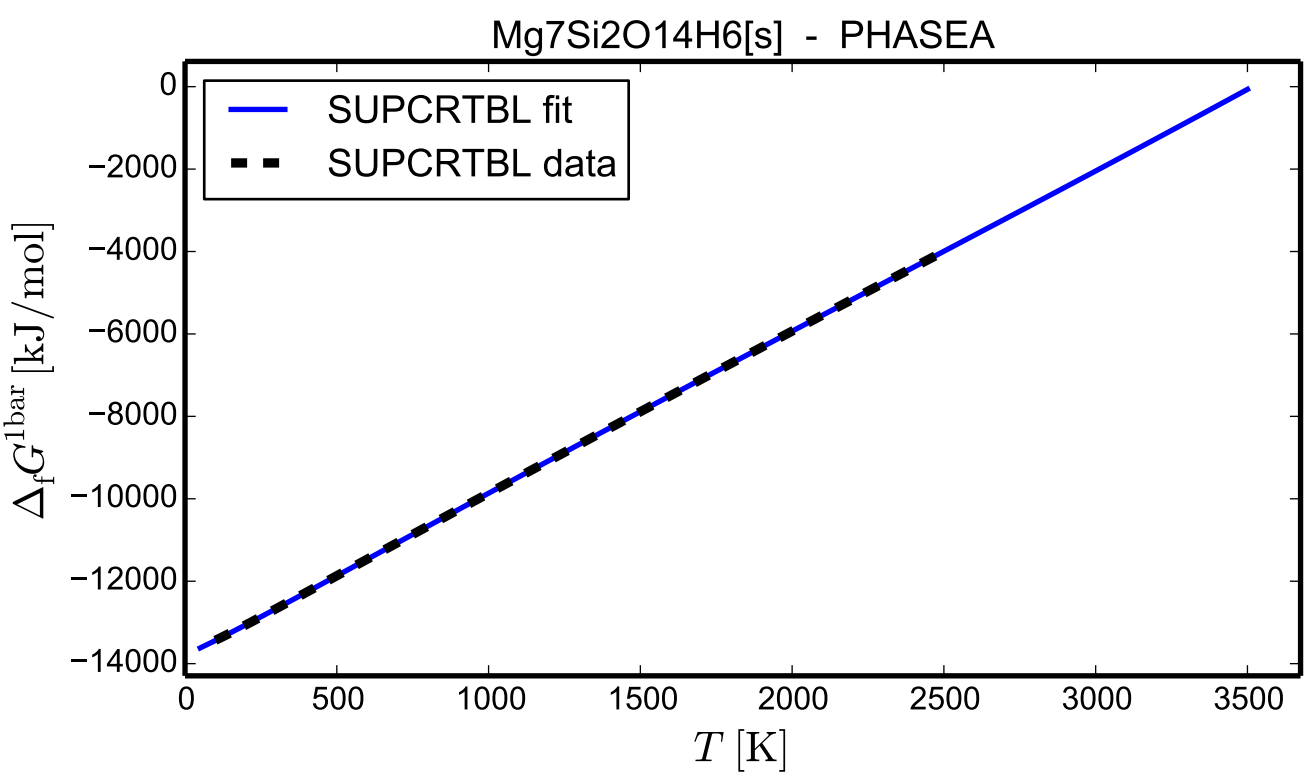

Mg3Al2Si3O12[s] - PYROPE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

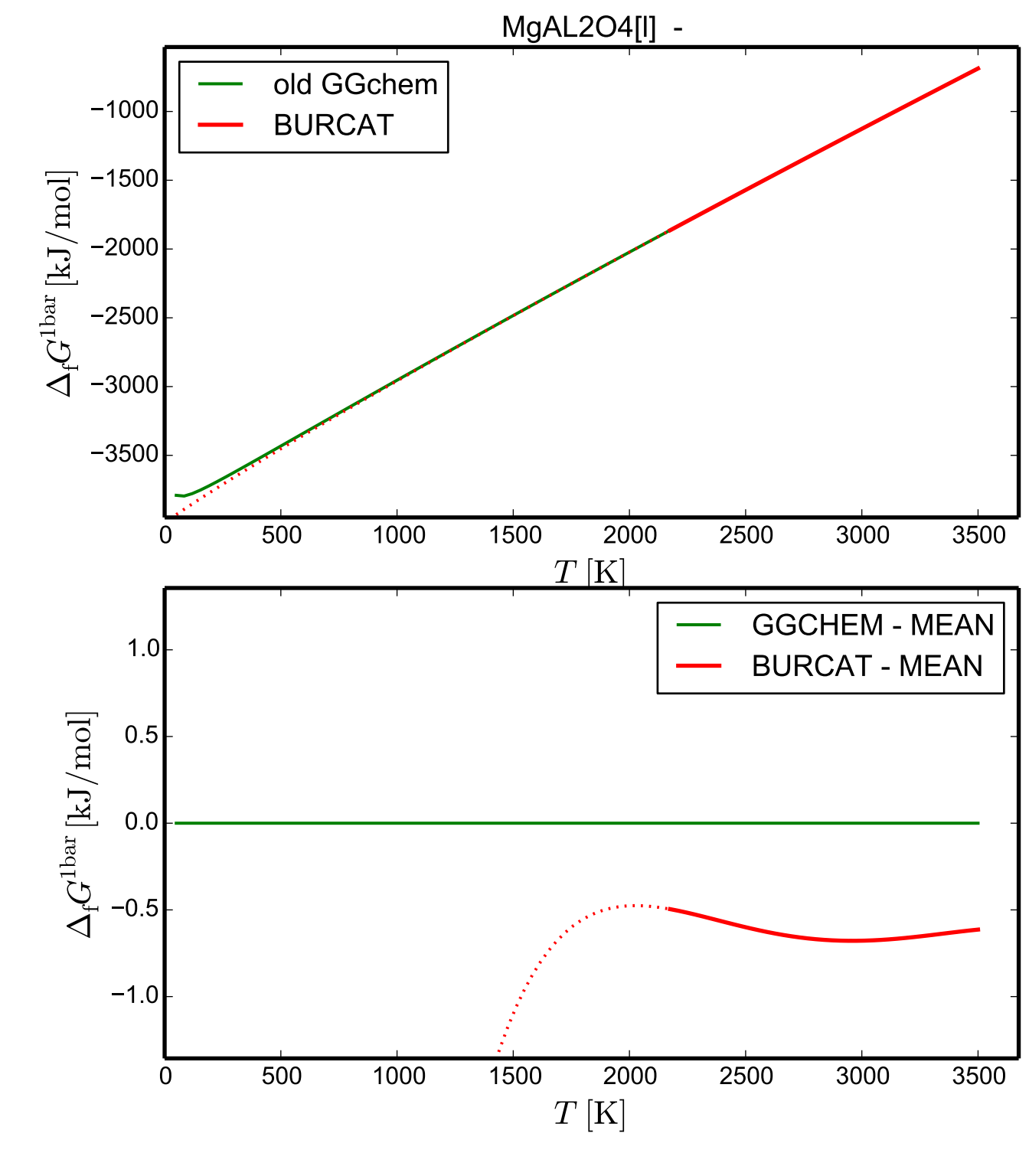

Mg3Cr2Si3O12[s] - KNORRINGITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

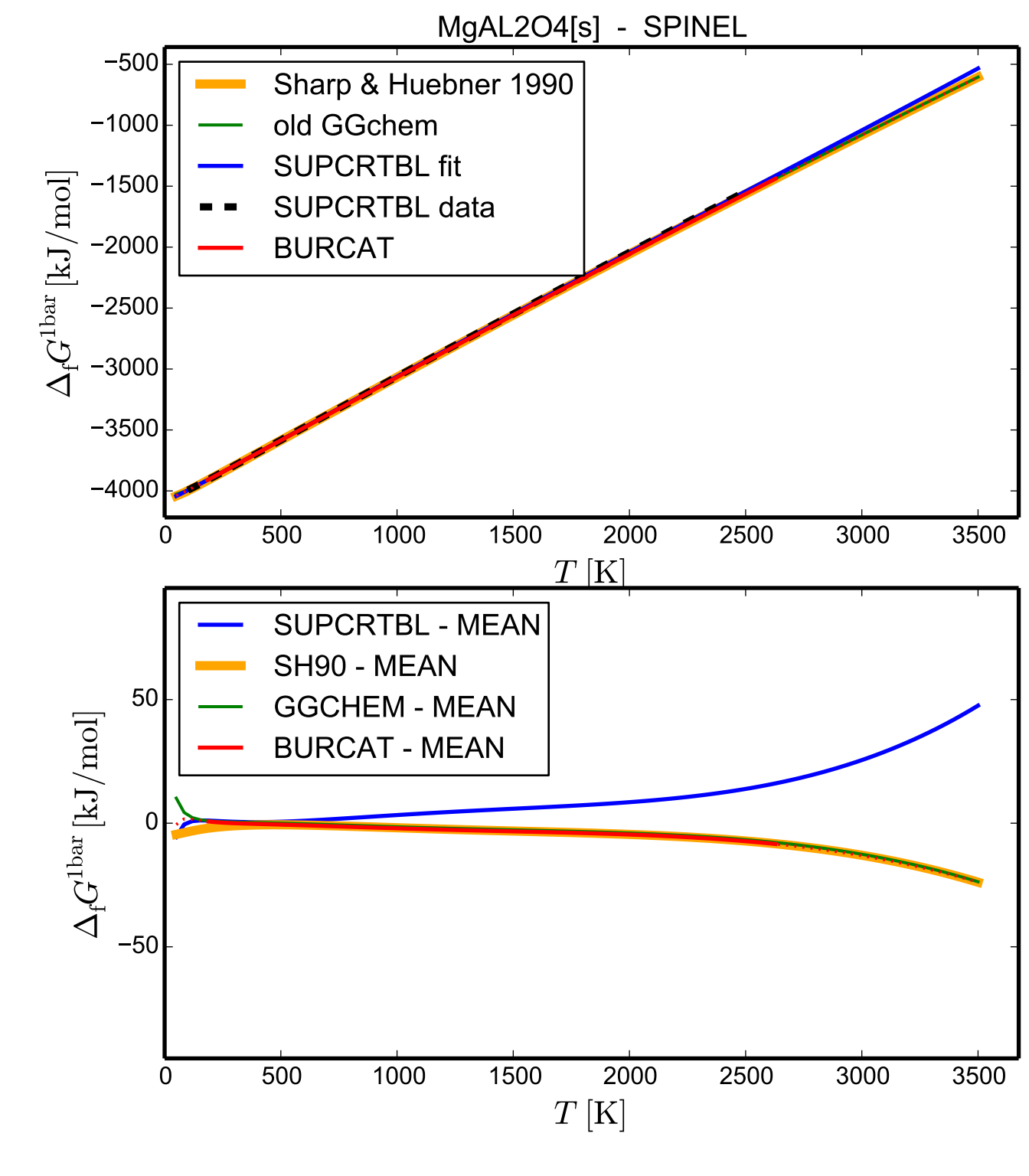

Mg3N2[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

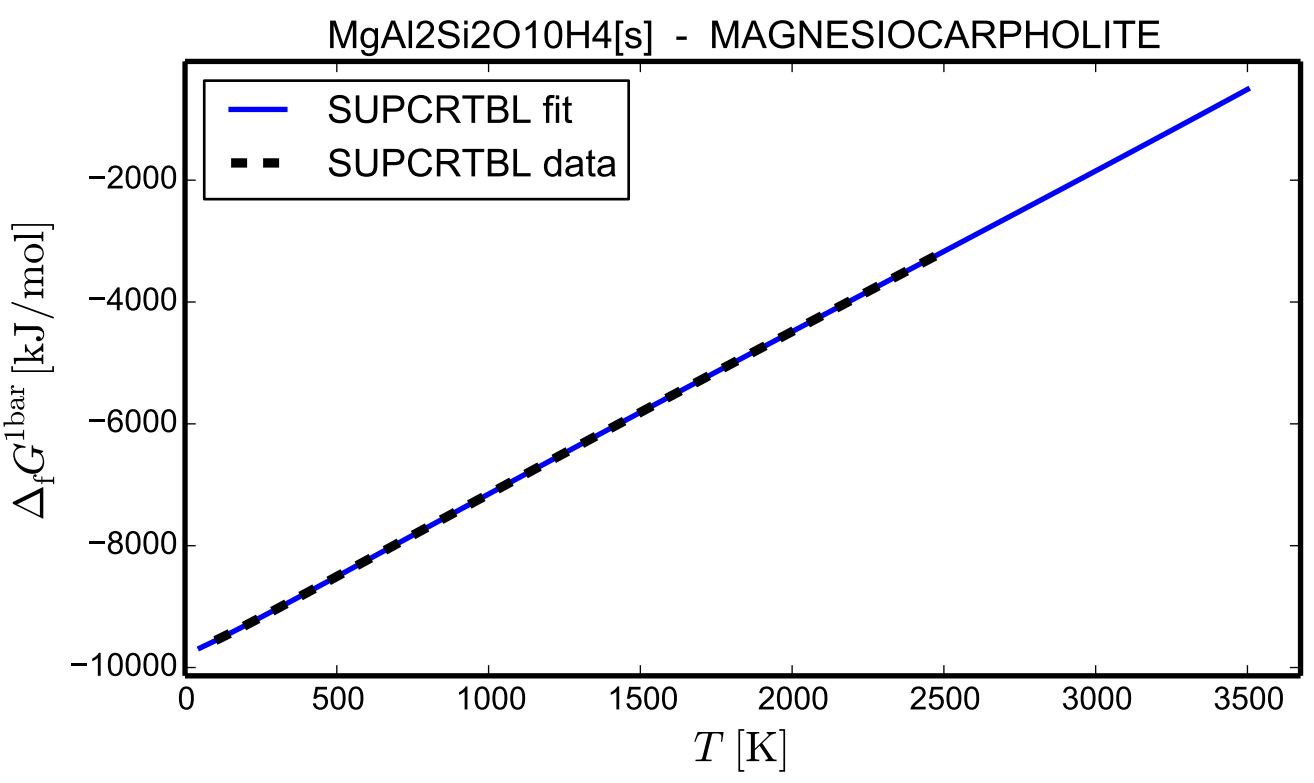

Mg3Si2O9H4[s] - LIZARDITE
SUPCRTBL fit
SUPCRTBL data
0
−2000
−4000
−6000
−8000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

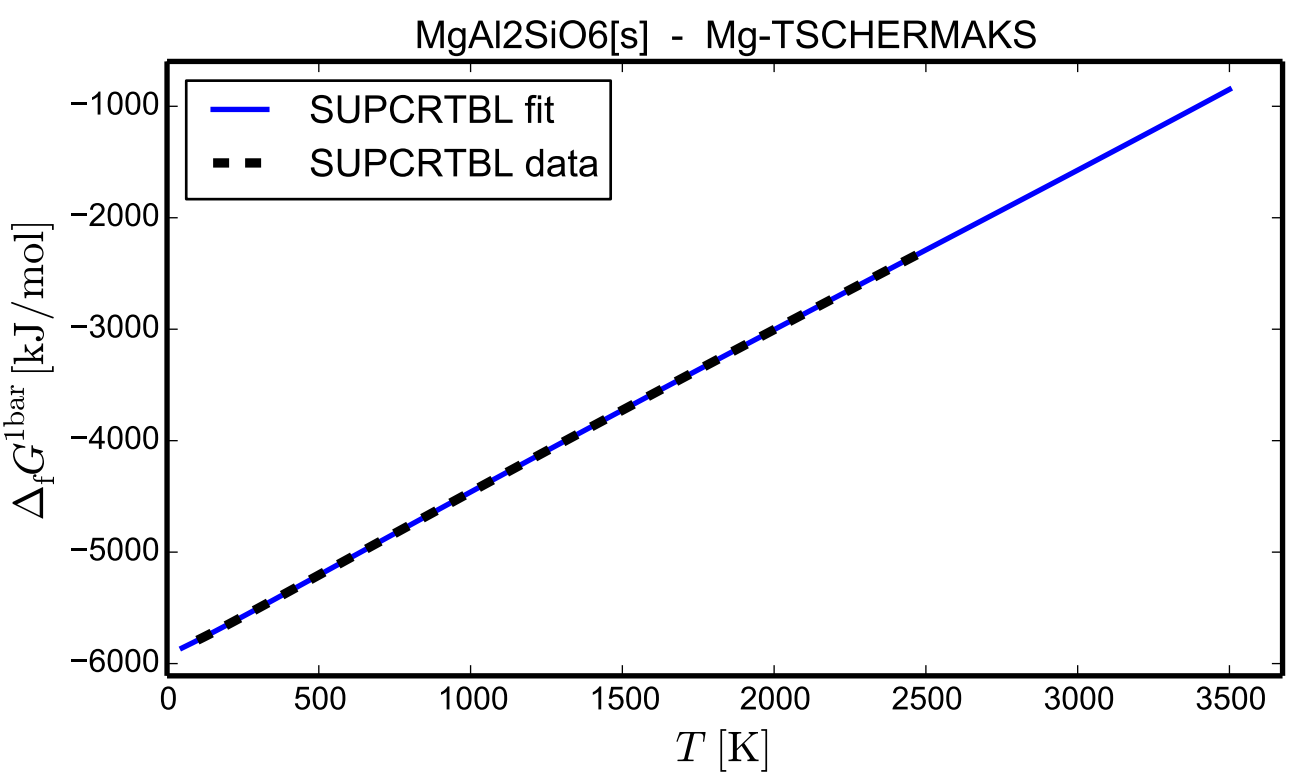

Mg3Si4O12H2[s] - TALC
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

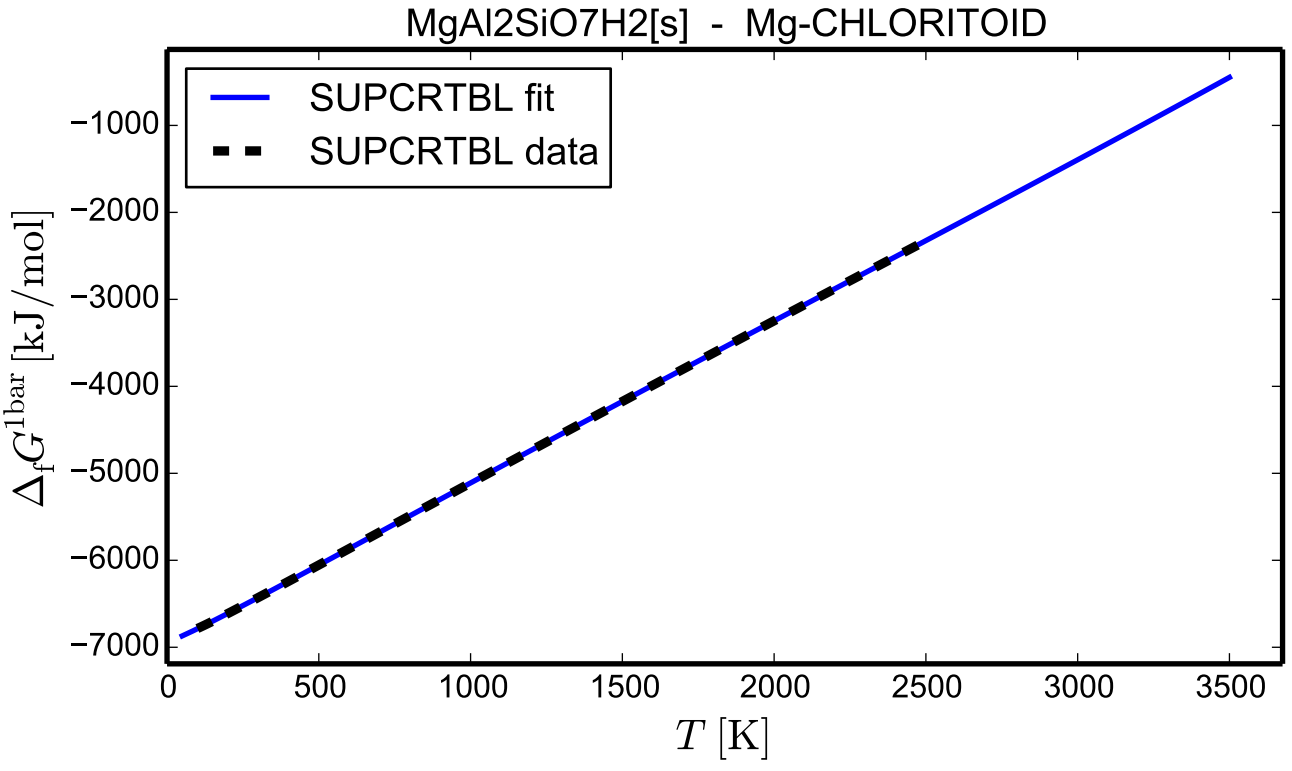

Mg7Si2O14H6[s] - PHASEA
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
0
−2000
−4000
−6000
−8000
−10000
−12000
−14000
0
500
1000
1500
2000
2500
3000
3500

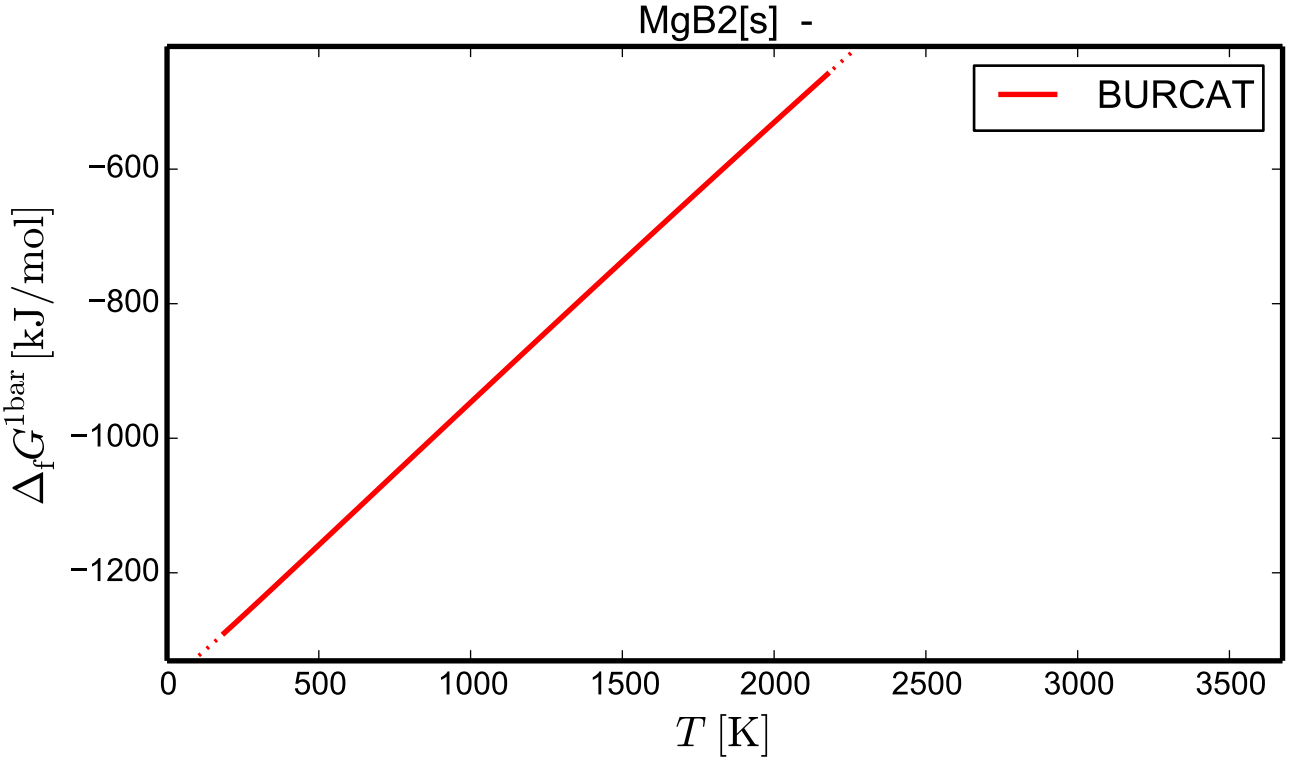

MgAL2O4[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
−1000
−1500
−2000
−2500
−3000
−3500
0
500
1000
1500
2000
2500
3000
3500
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
1.0
0.5
0.0
−0.5
−1.0
0
500
1000
1500
2000
2500
3000
3500
T [K]

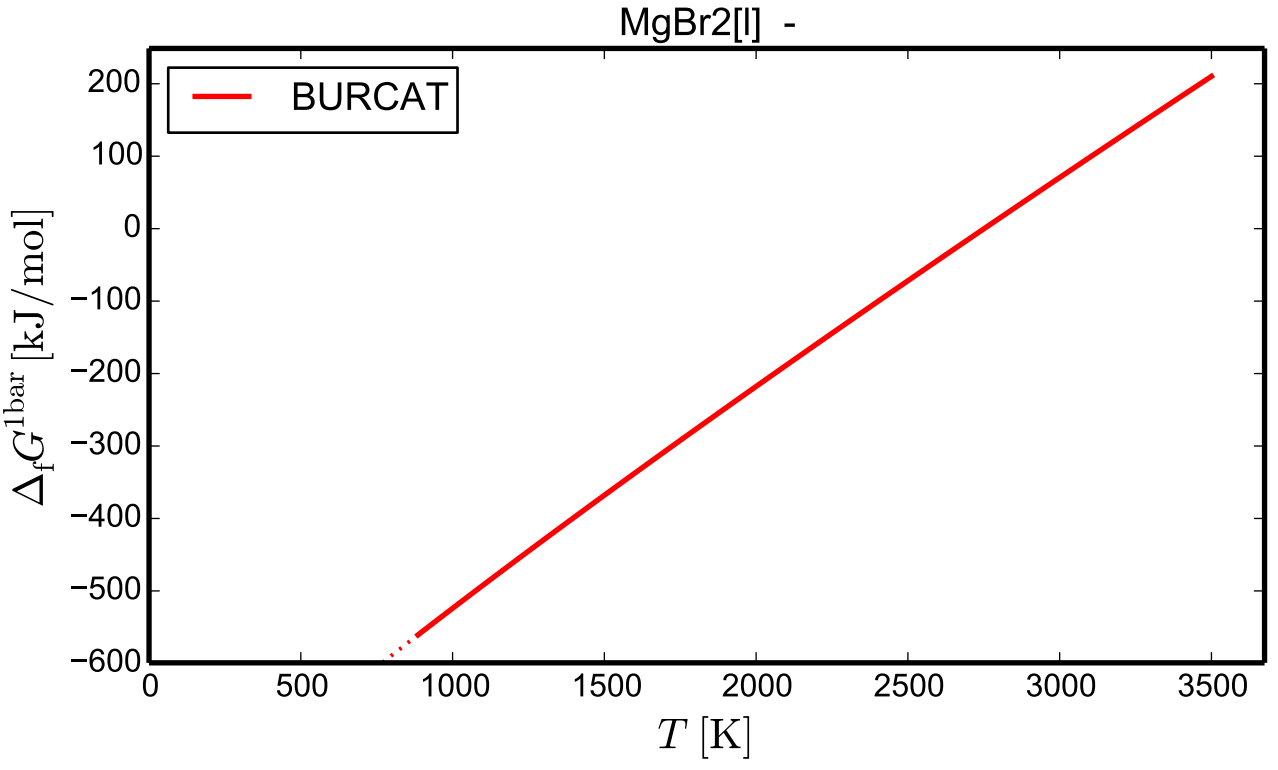

MgAL2O4[s] - SPINEL
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

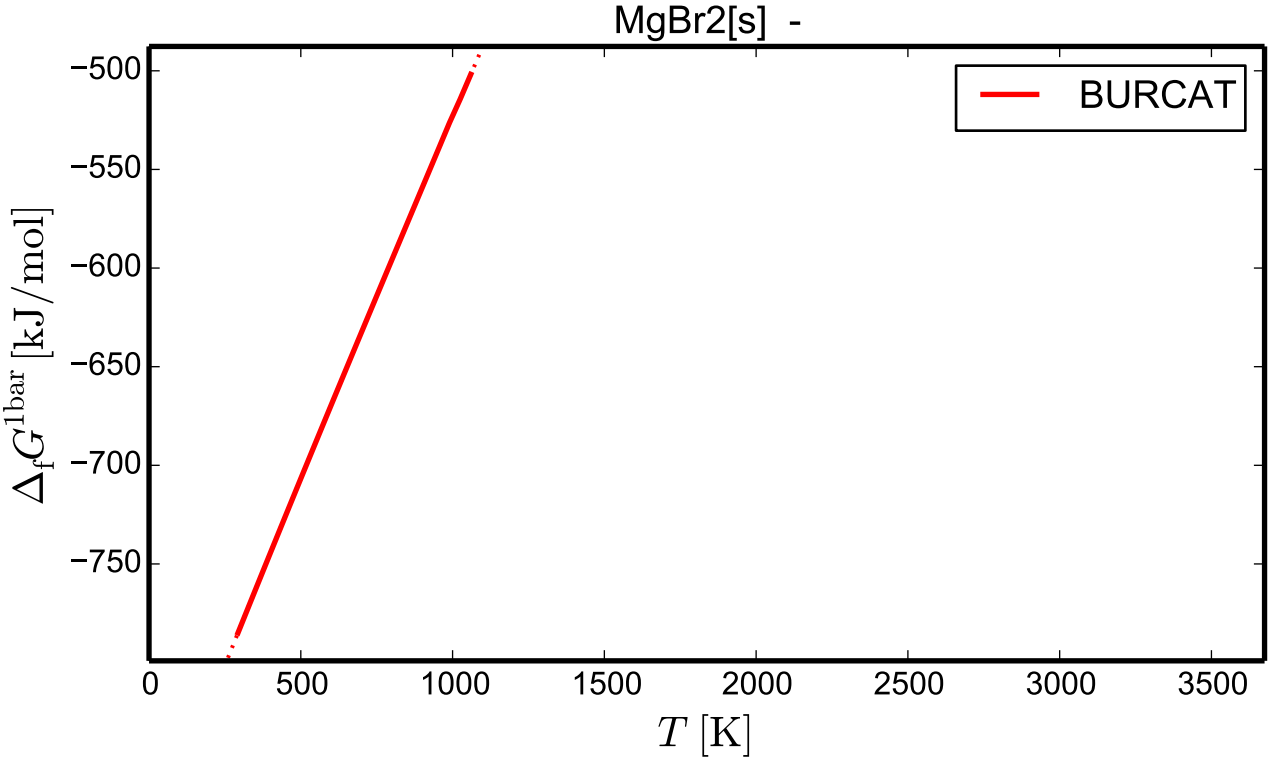

MgAl2Si2O10H4[s] - MAGNESIOCARPHOLITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

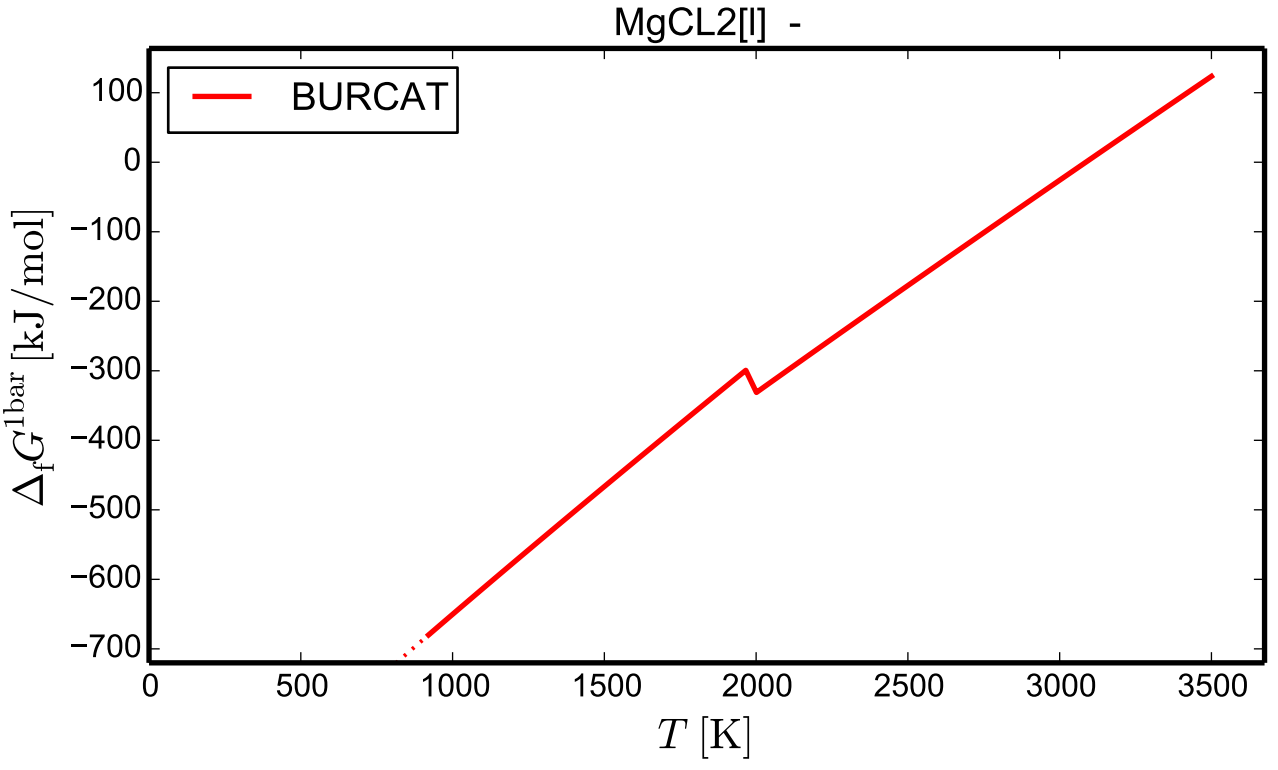

MgAl2SiO6[s] - Mg-TSCHERMAKS
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

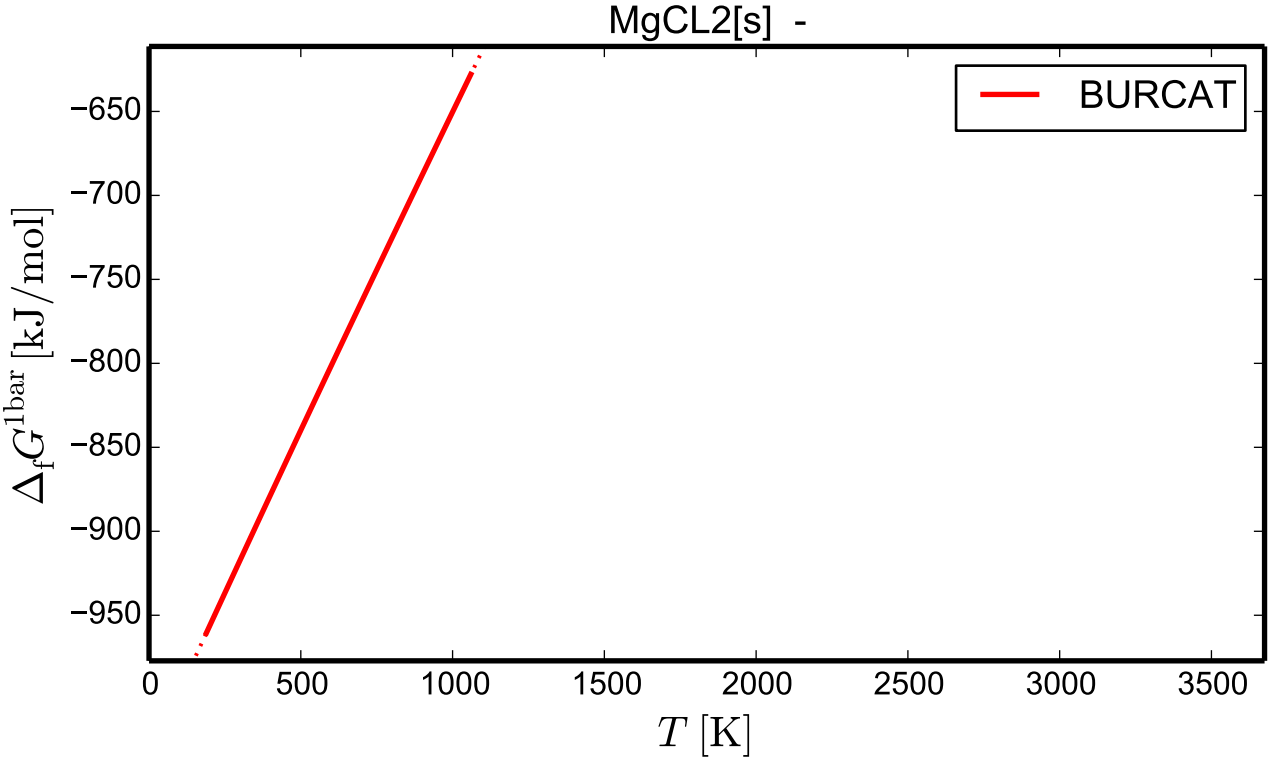

MgAl2SiO7H2[s] - Mg-CHLORITOID
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

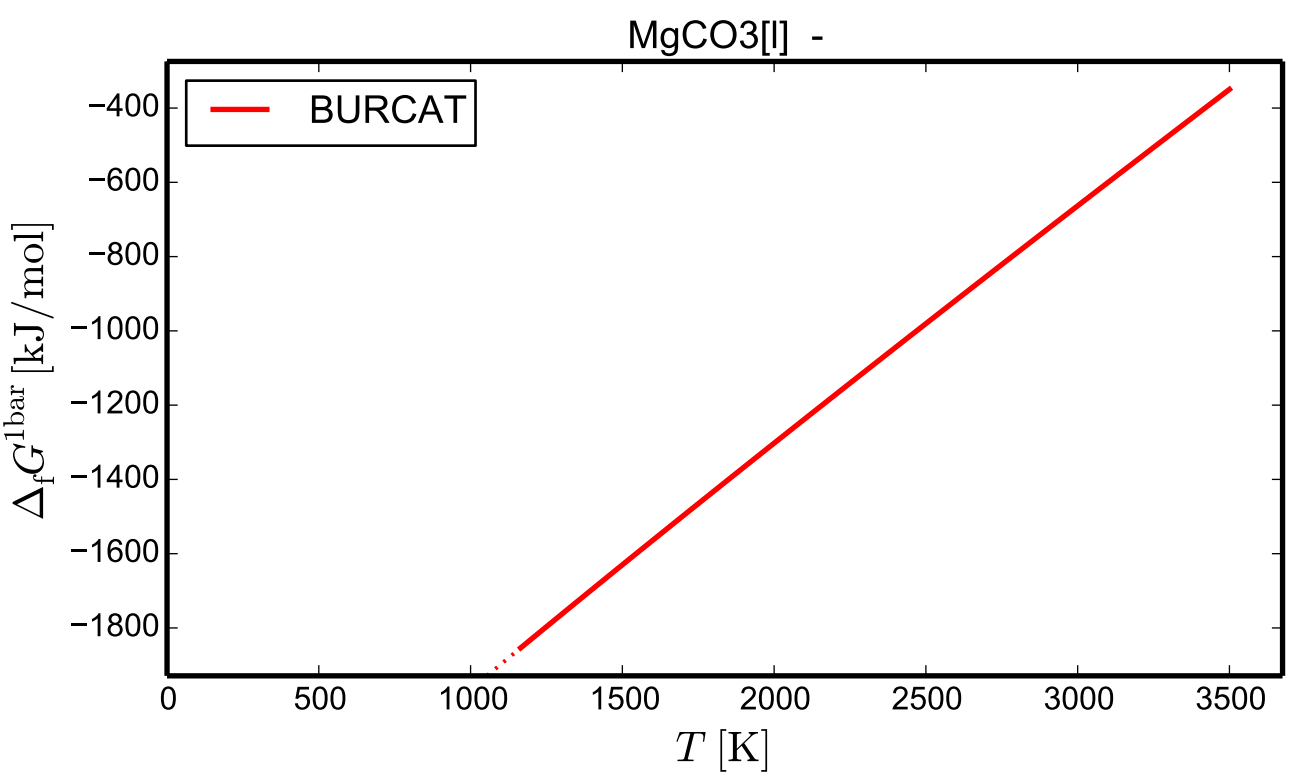

MgB2[s] -
BURCAT
−600
−800
−1000
−1200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

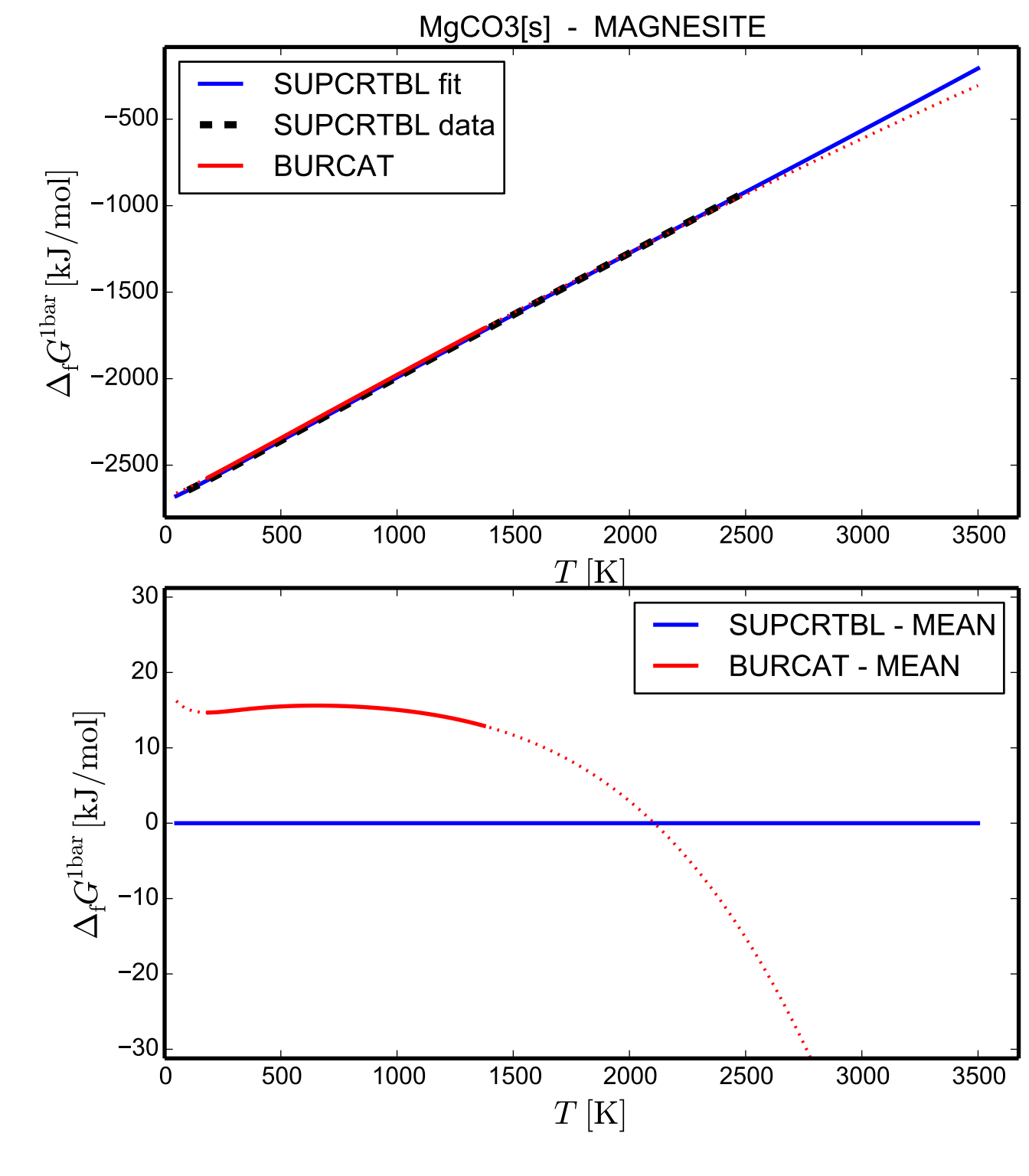

MgBr2[l] -
BURCAT
200
100
0
−100
−200
−300
−400
−500
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

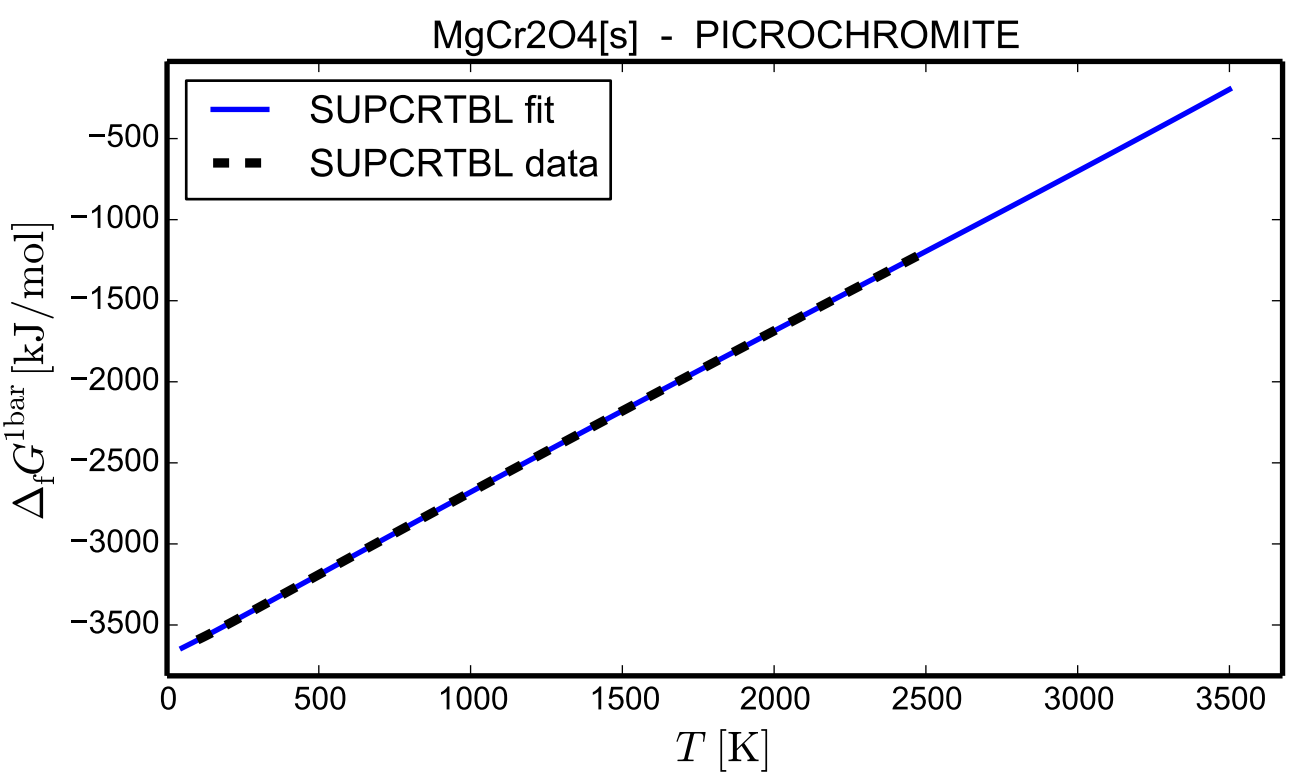

MgBr2[s] -
BURCAT
−500
−550
−600
−650
−700
−750
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

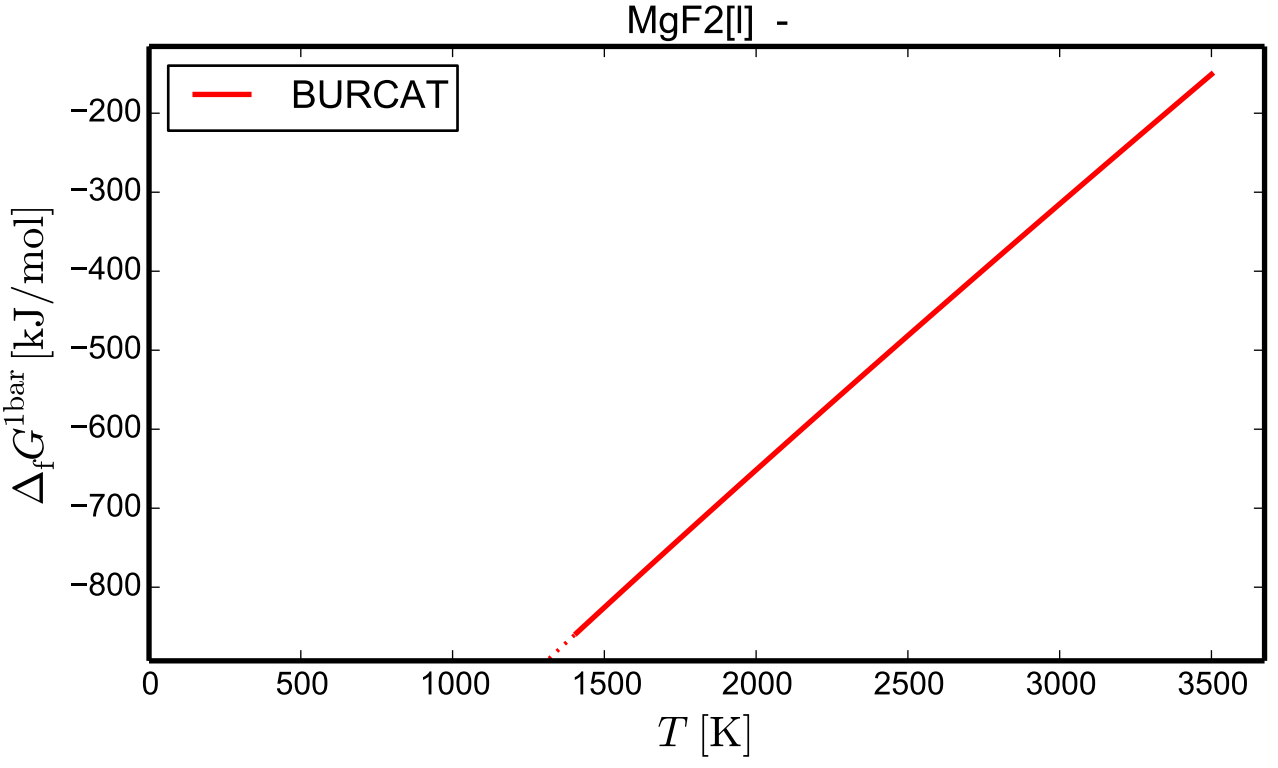

MgCL2[l] -
BURCAT
100
0
−100
−200
−300
−400
−500
−600
−700
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

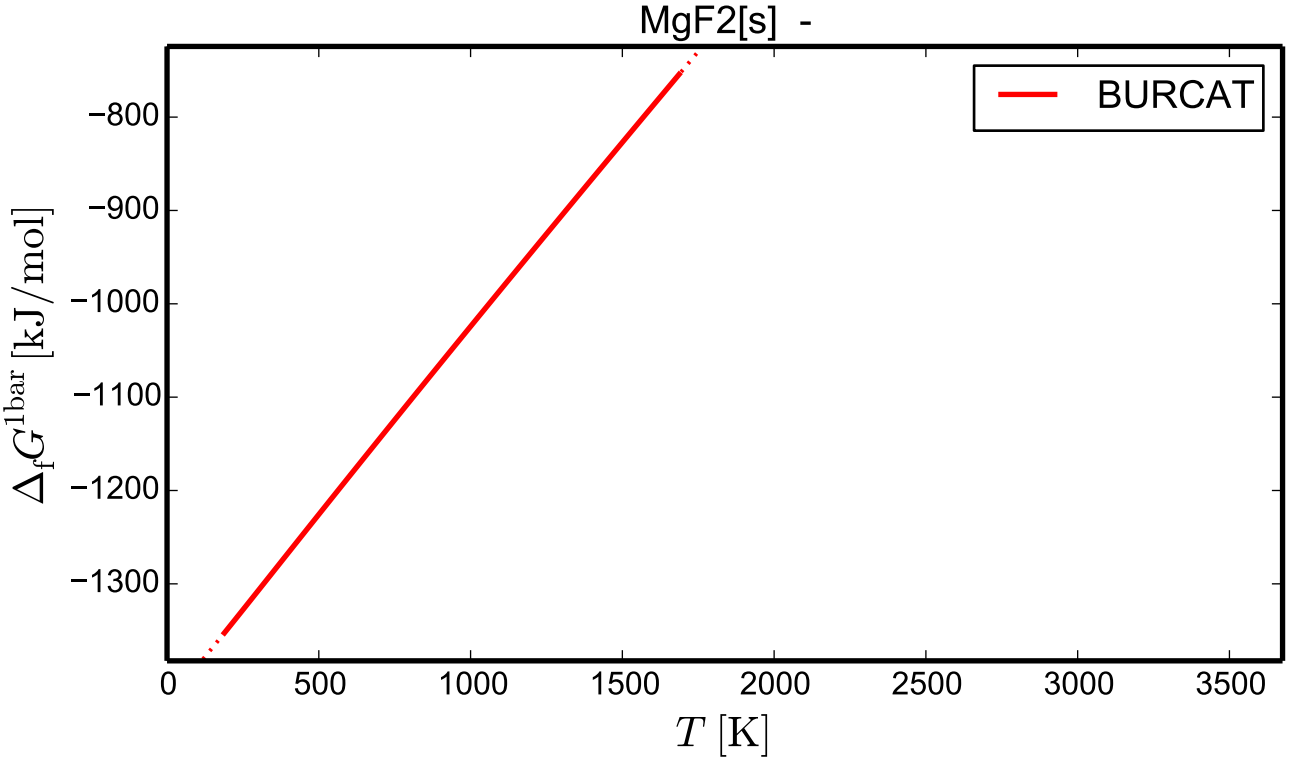

MgCL2[s] -
BURCAT
−650
−700
−750
−800
−850
−900
−950
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

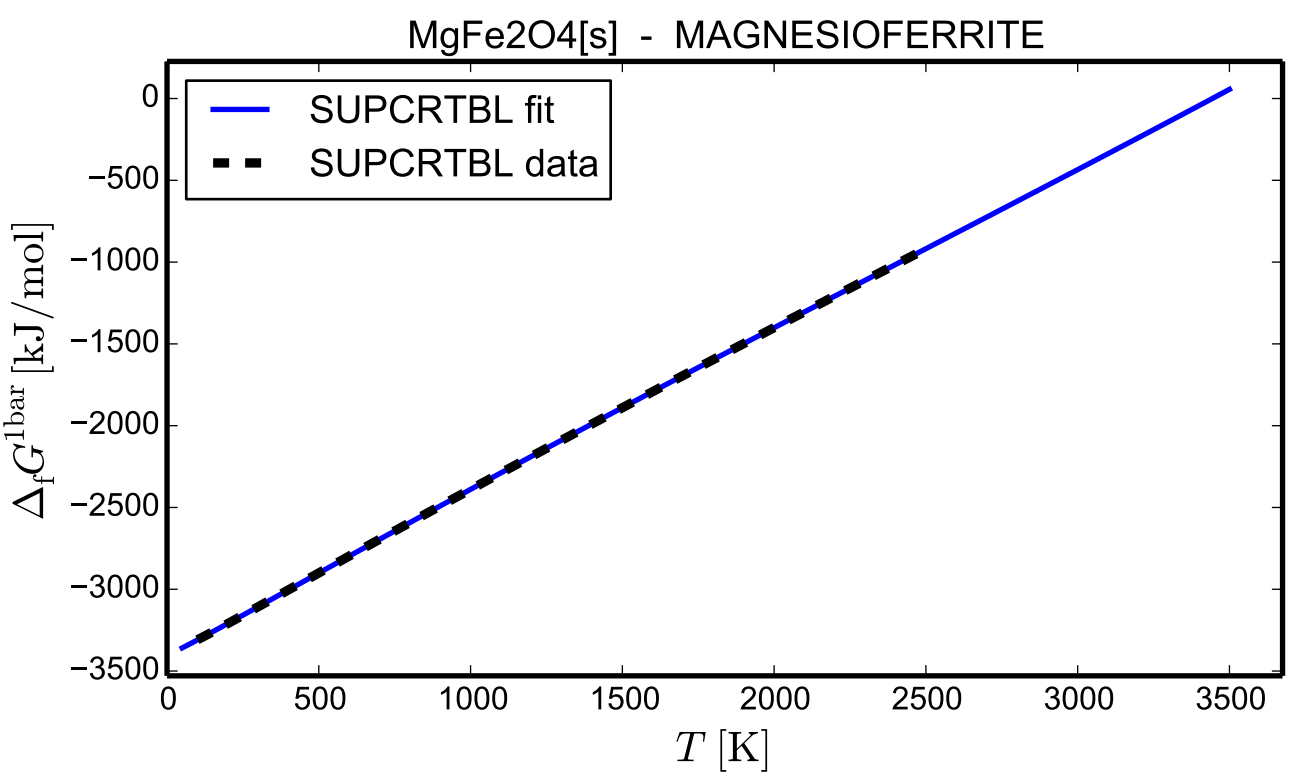

MgCO3[l] -
BURCAT
−400
−600
−800
−1000
−1200
−1400
−1600
−1800
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

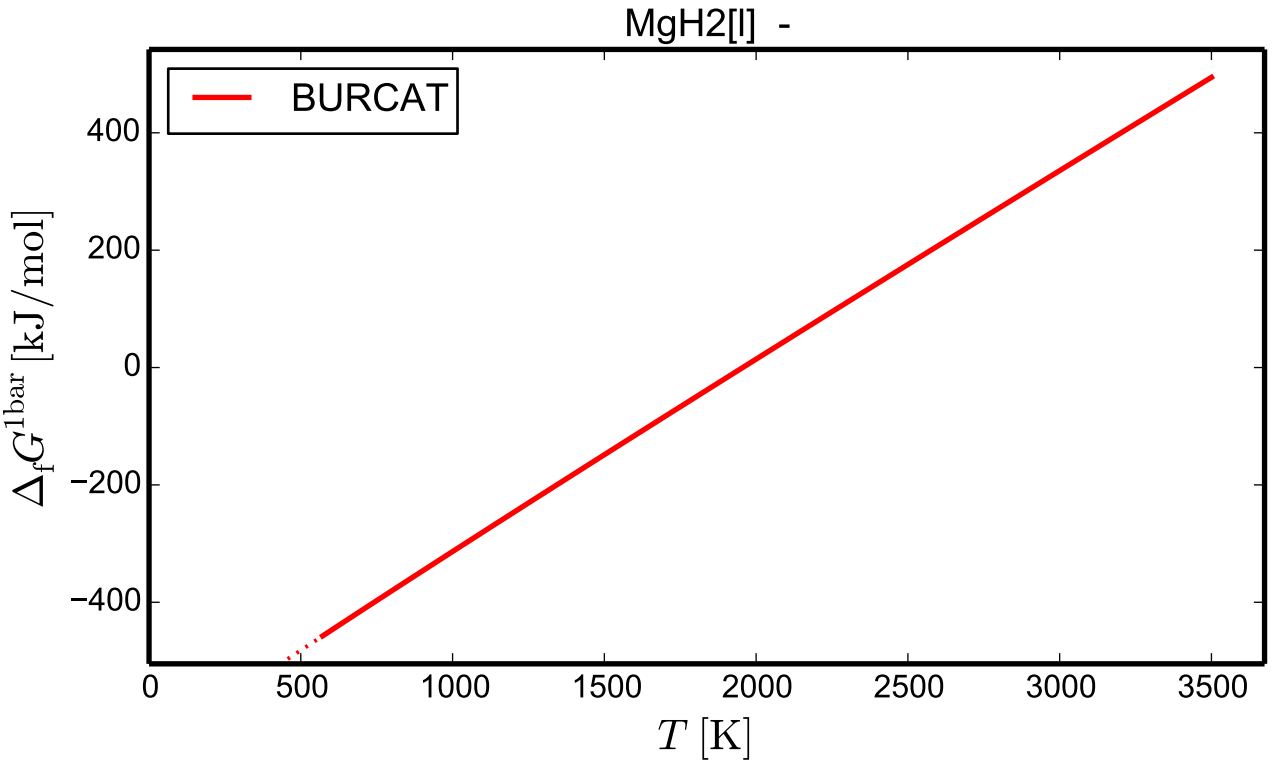

MgCO3[s] - MAGNESITE
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

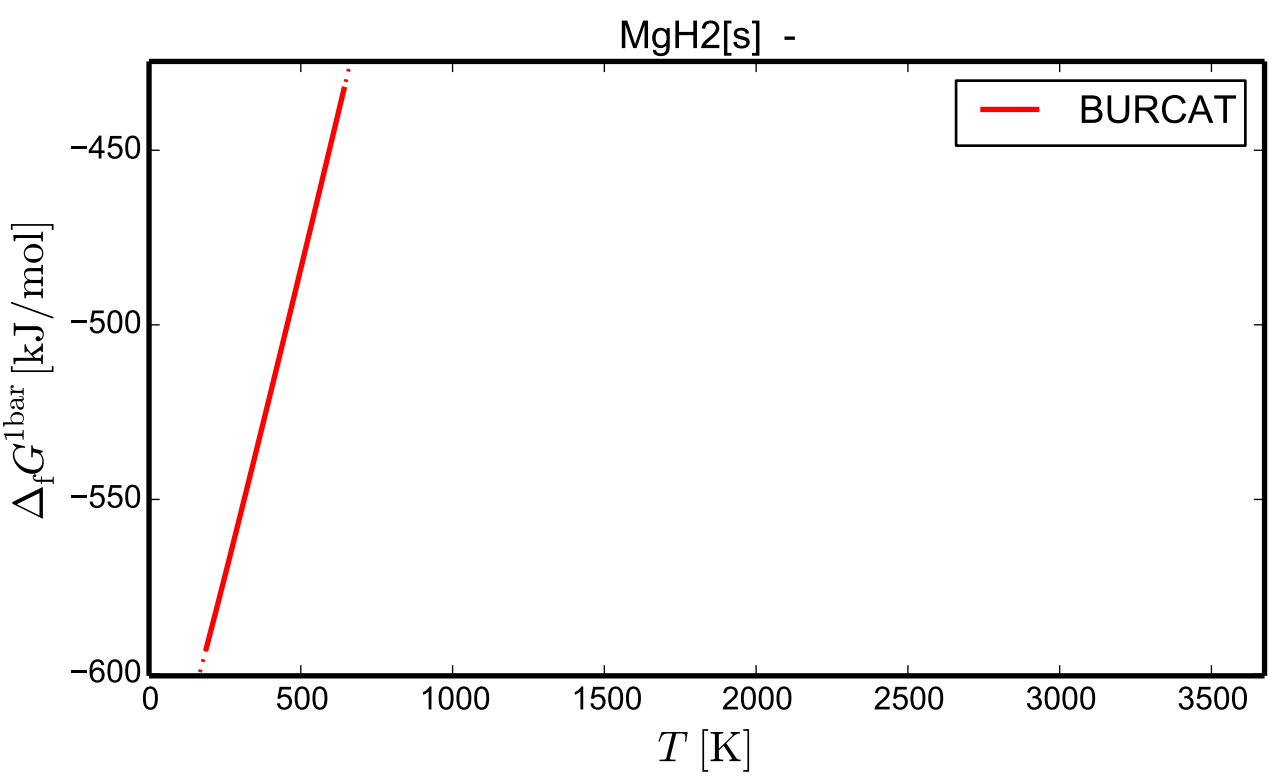

MgCr2O4[s] - PICROCHROMITE
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
−500
−1000
−1500
−2000
−2500
−3000
−3500
0
500
1000
1500
2000
2500
3000
3500

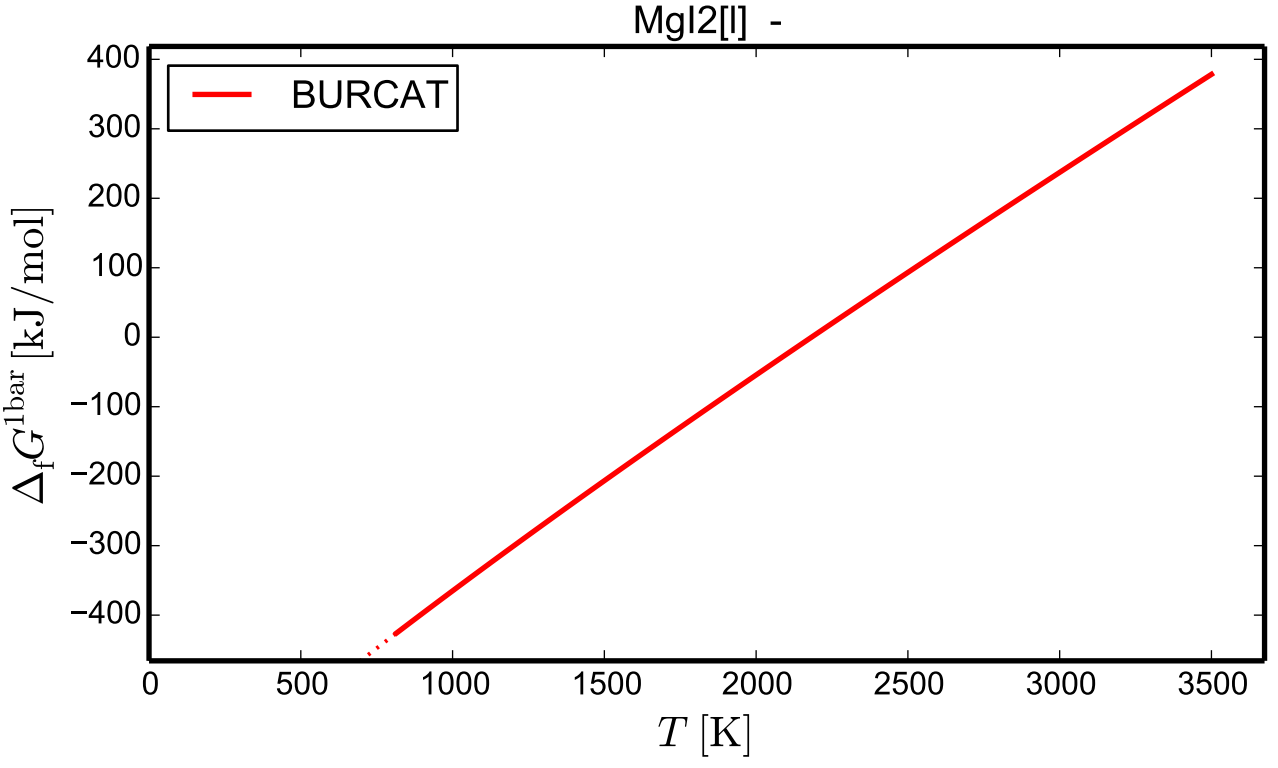

MgF2[l] -
BURCAT
−200
−300
−400
−500
−600
−700
−800
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

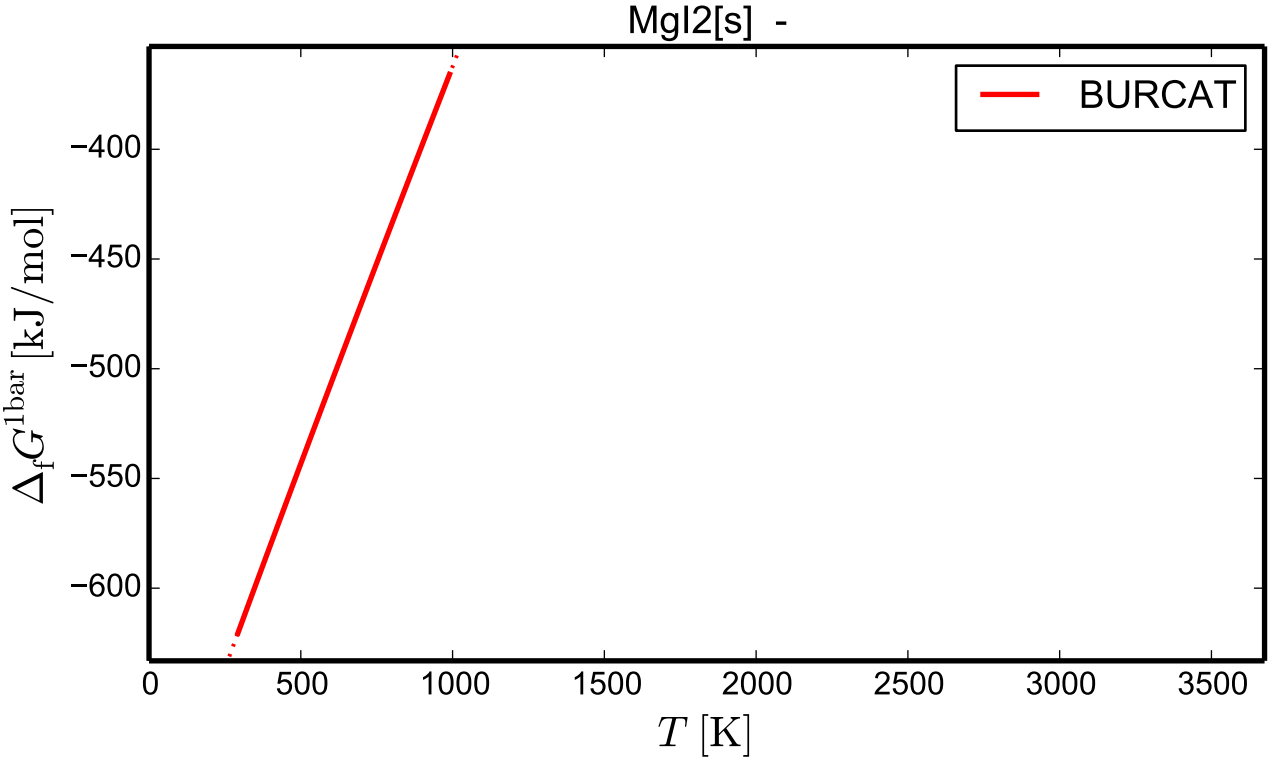

MgF2[s] -
BURCAT
−800
−900
−1000
−1100
−1200
−1300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

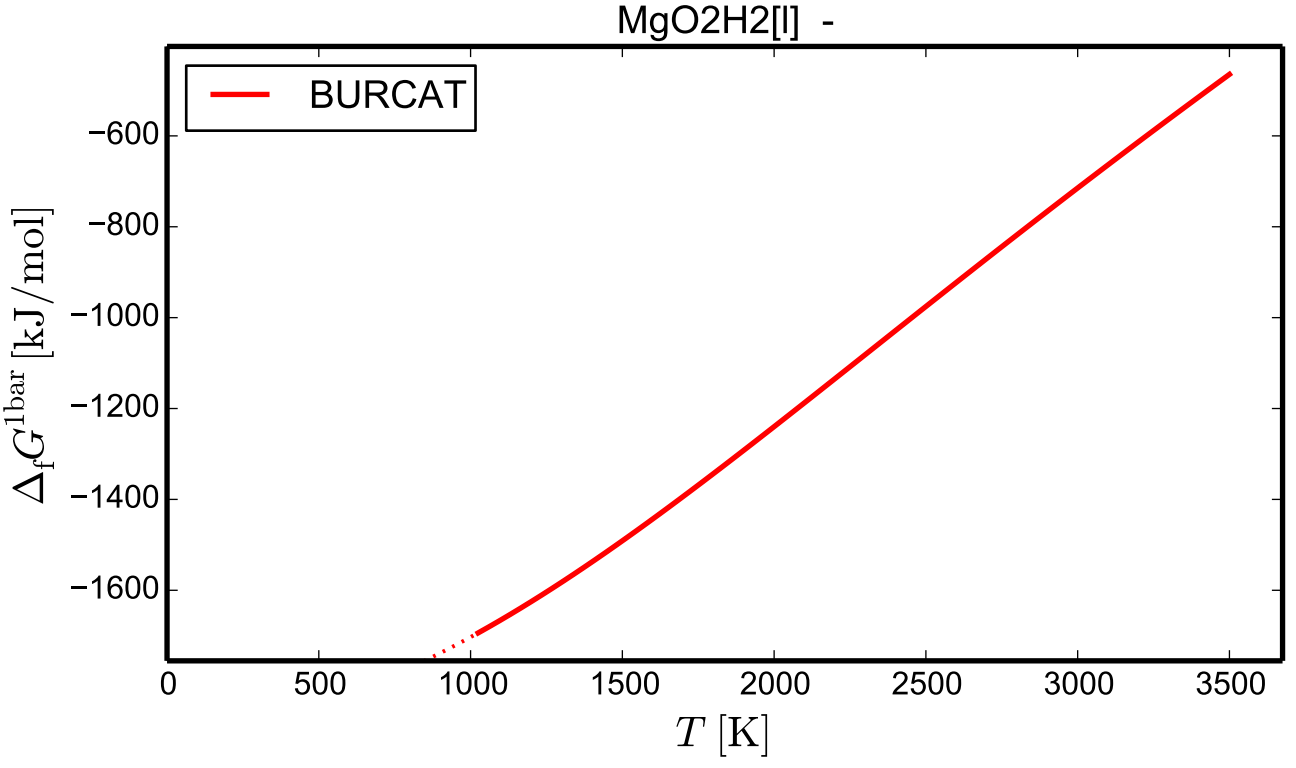

MgFe2O4[s] - MAGNESIOFERRITE
SUPCRTBL fit
SUPCRTBL data
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

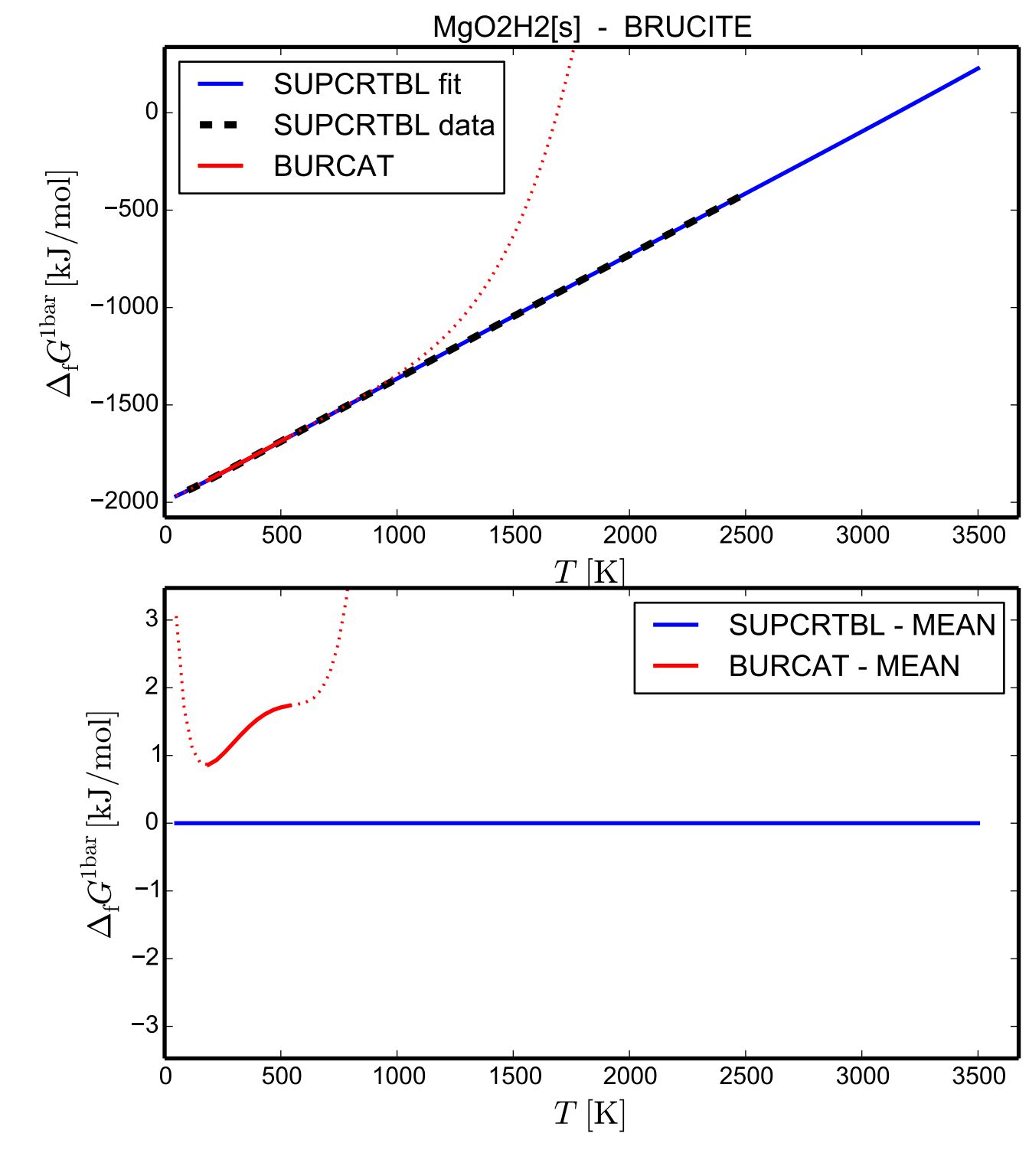

MgH2[l] -
BURCAT
400
200
0
−200
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

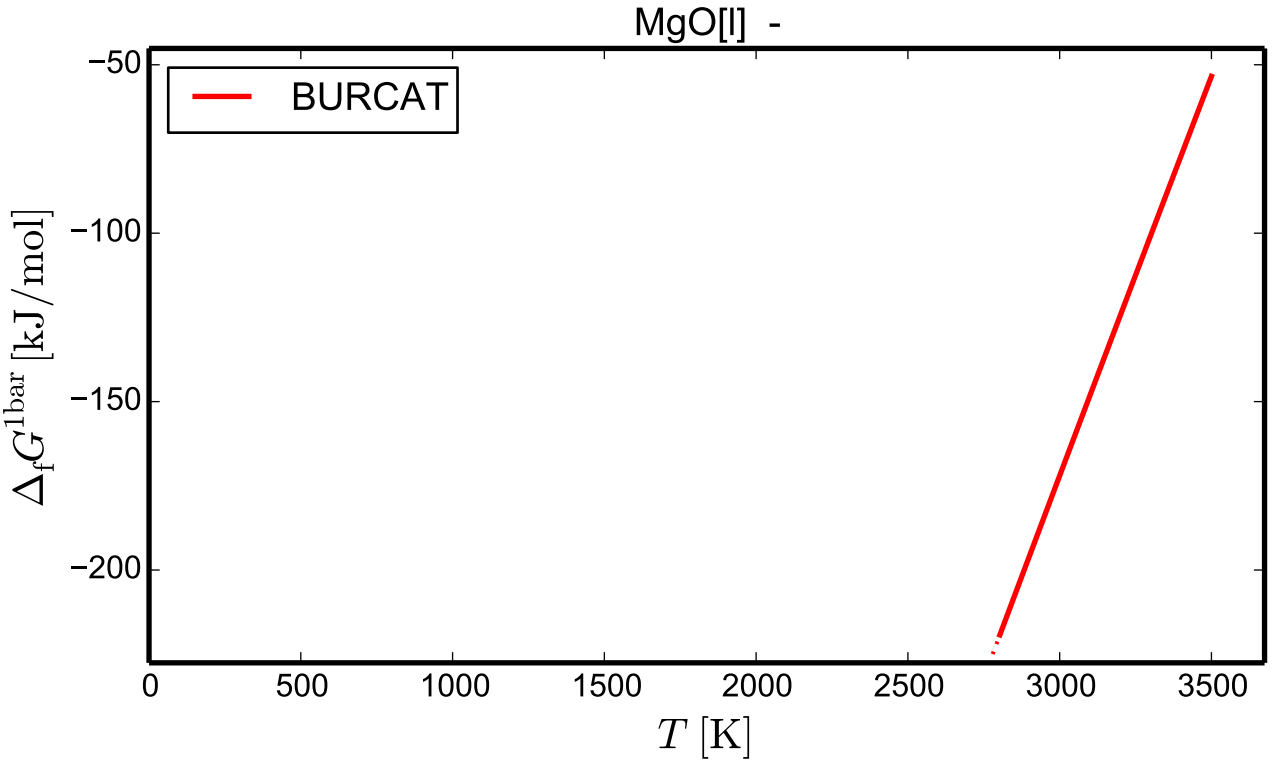

MgH2[s] -
BURCAT
−450
−500
−550
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

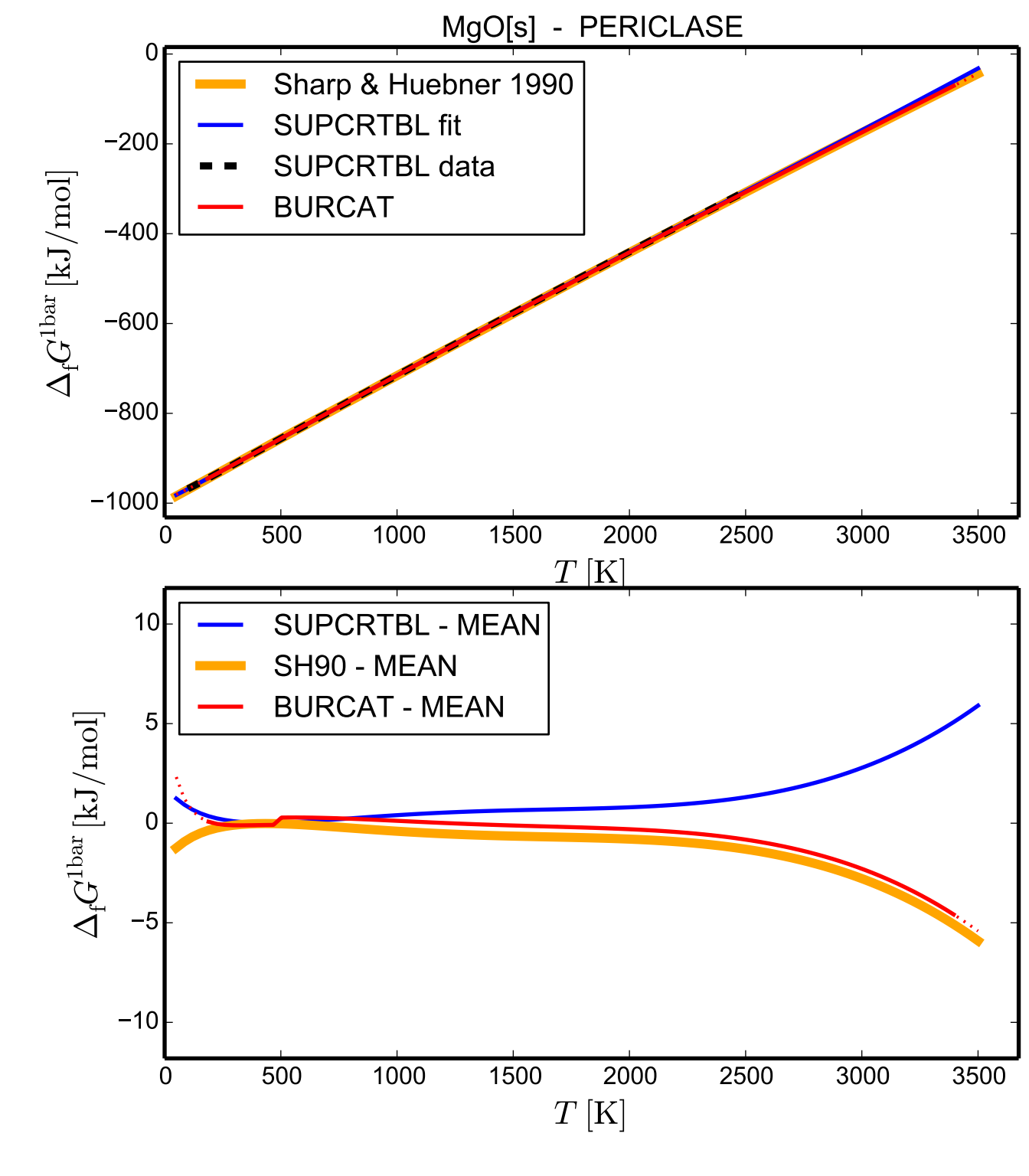

MgI2[l] -
BURCAT
400
300
200
100
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

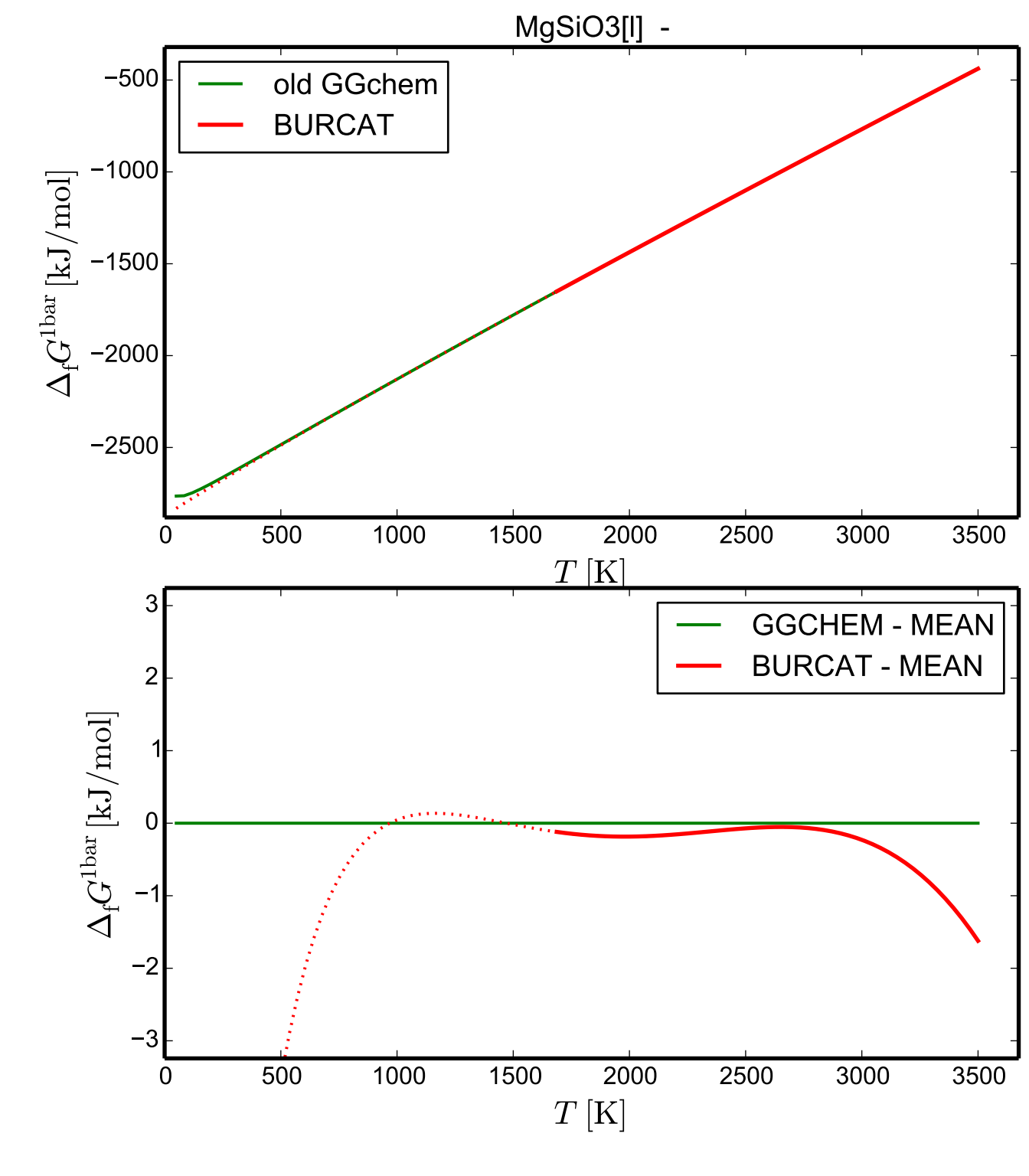

MgI2[s] -
BURCAT
−400
−450
−500
−550
−600
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

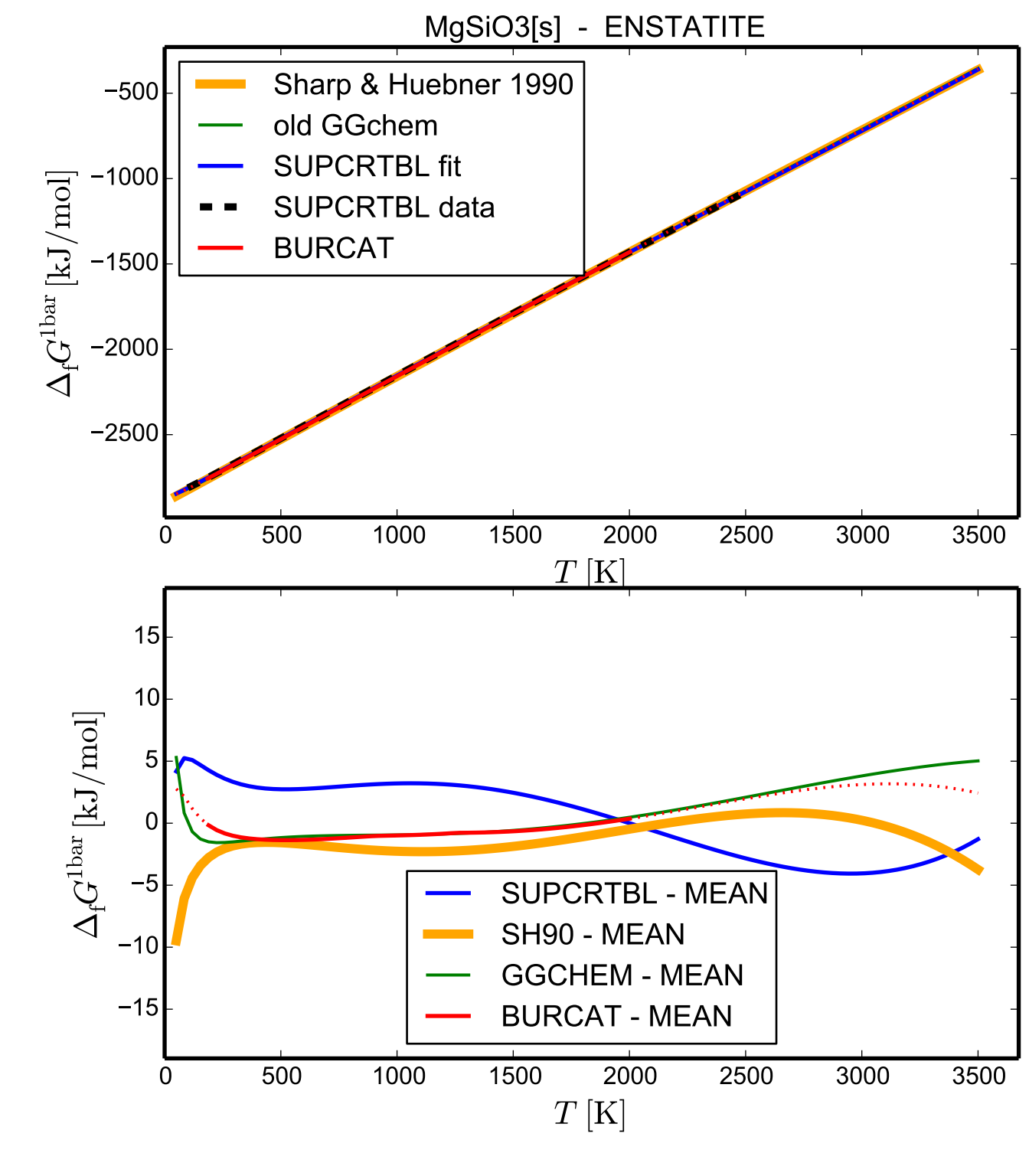

MgO2H2[l] -
BURCAT
−600
−800
−1000
−1200
−1400
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

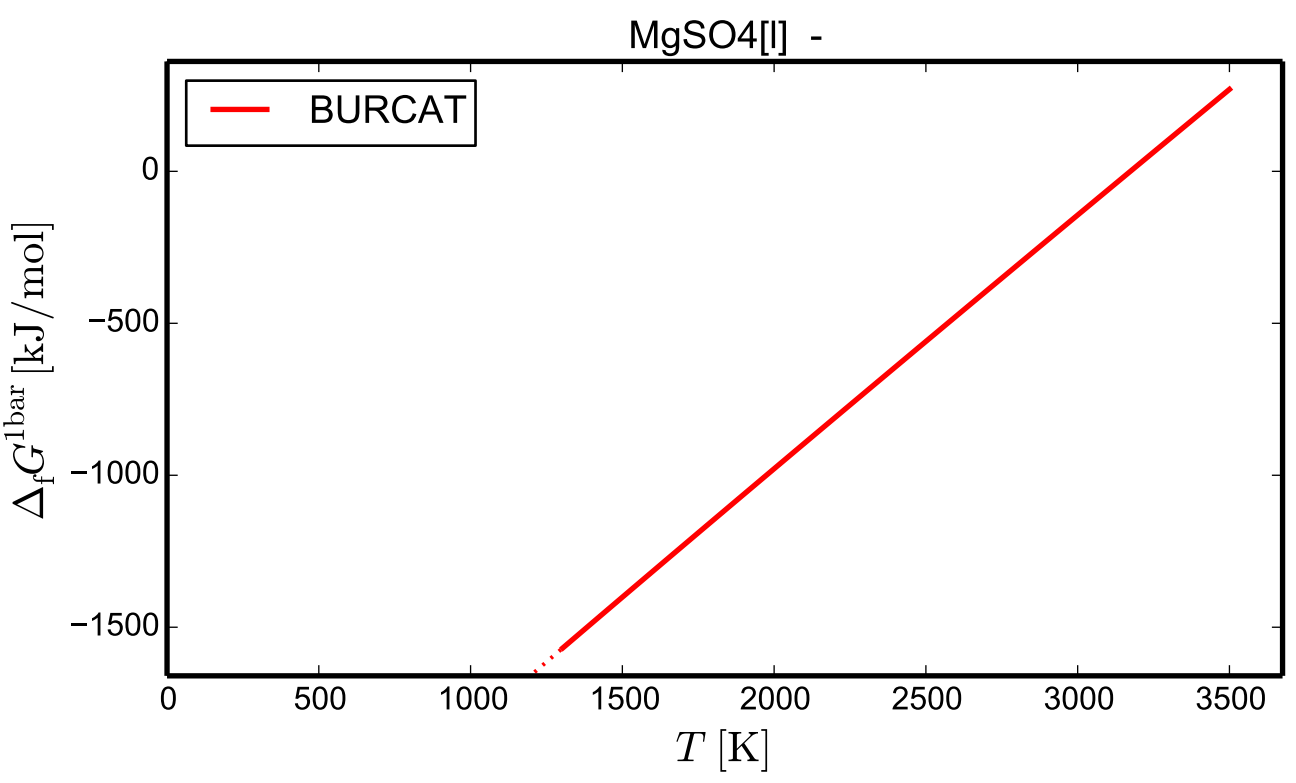

MgO2H2[s] - BRUCITE
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

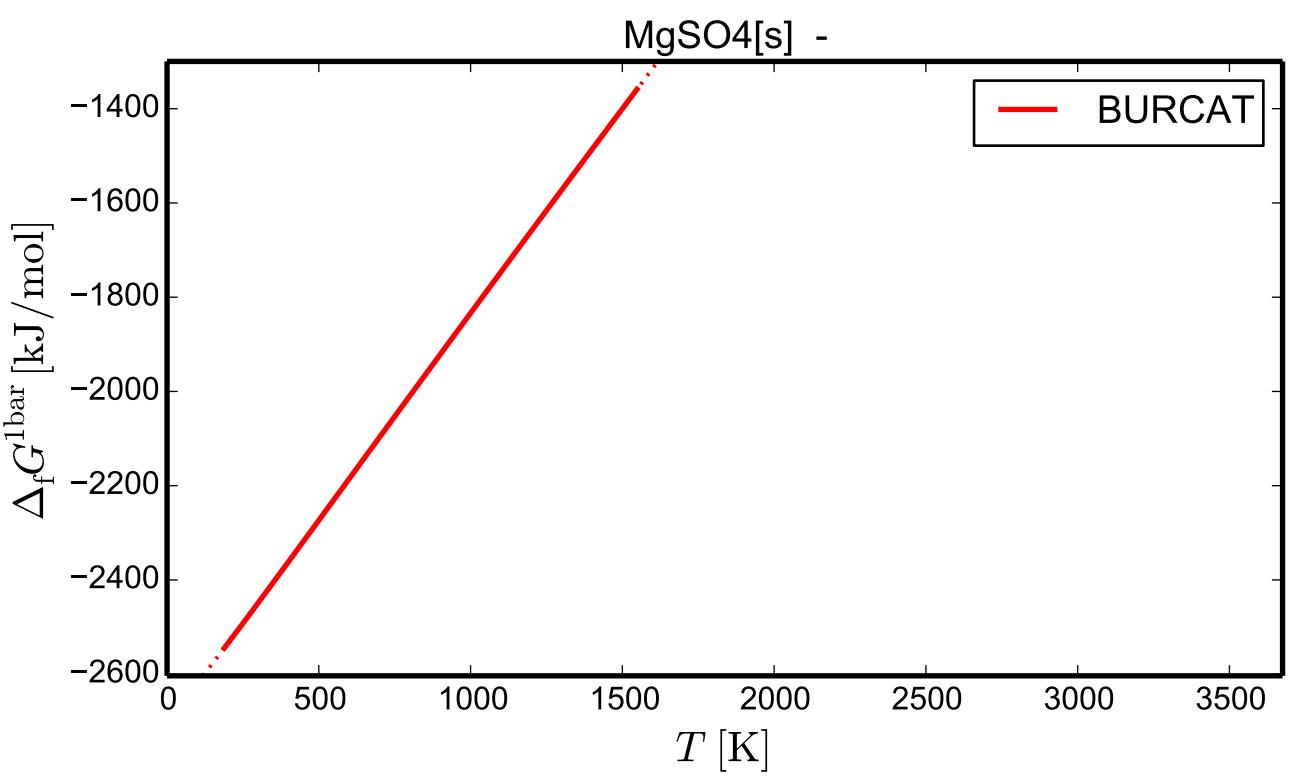

MgO[l] -
BURCAT
−50
−100
−150
−200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

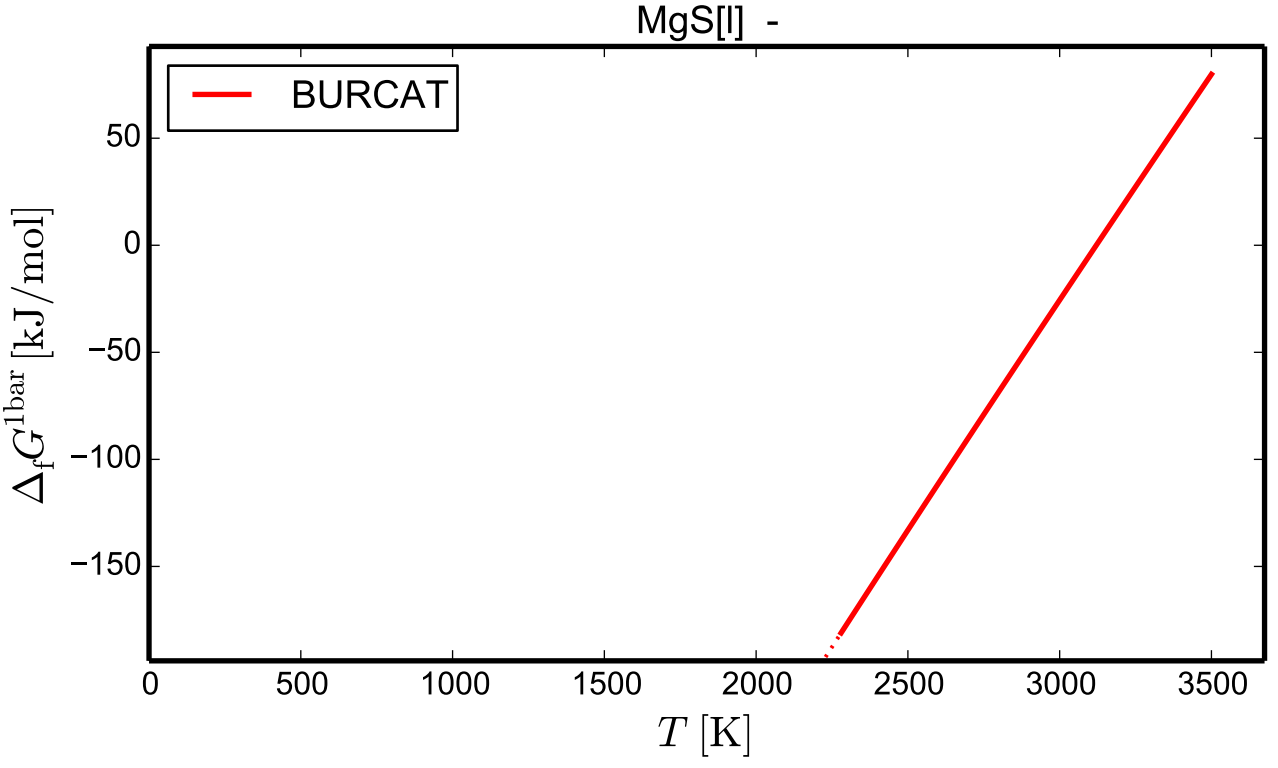

MgO[s] - PERICLASE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

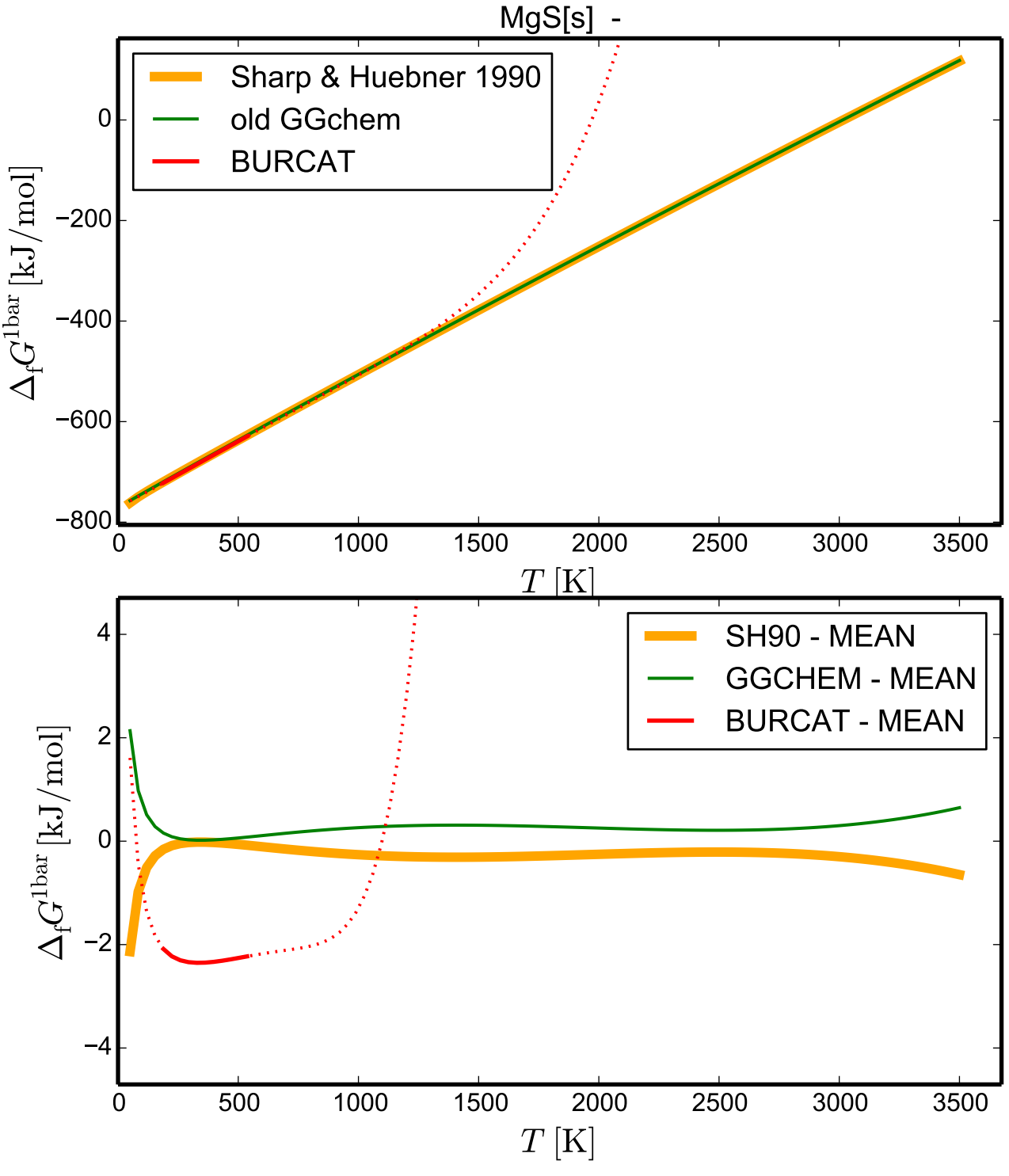

MgSiO3[l] -
old GGchem
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

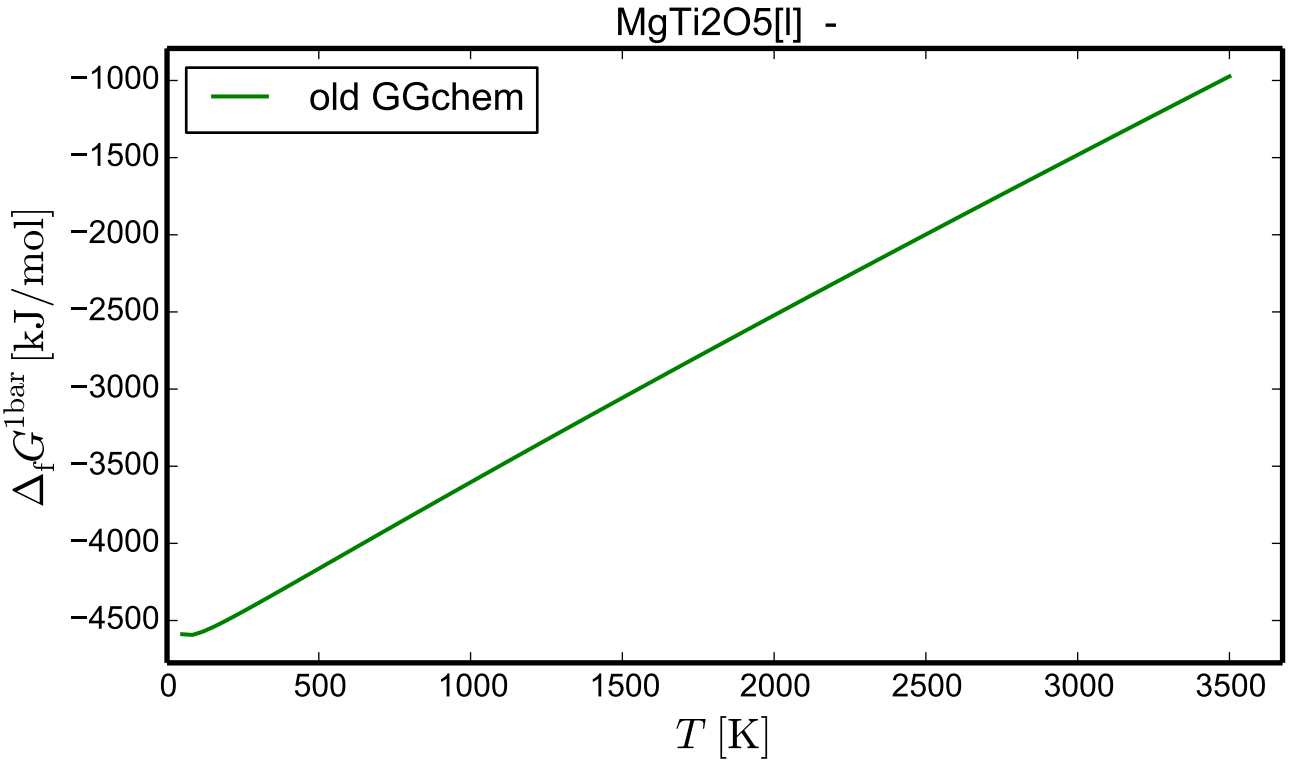

MgSiO3[s] - ENSTATITE
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

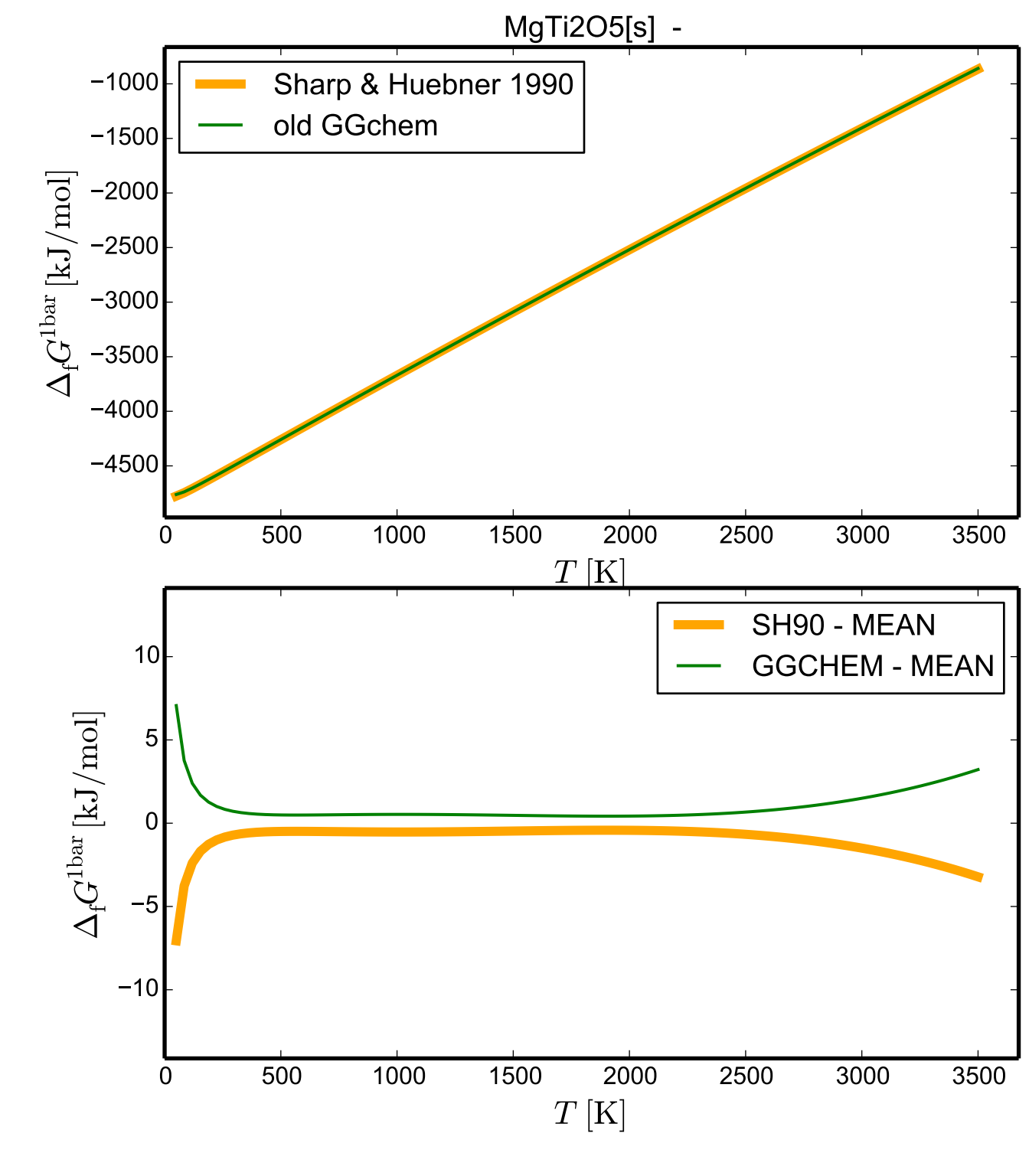

MgSO4[l] -
BURCAT
0
−500
−1000
−1500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

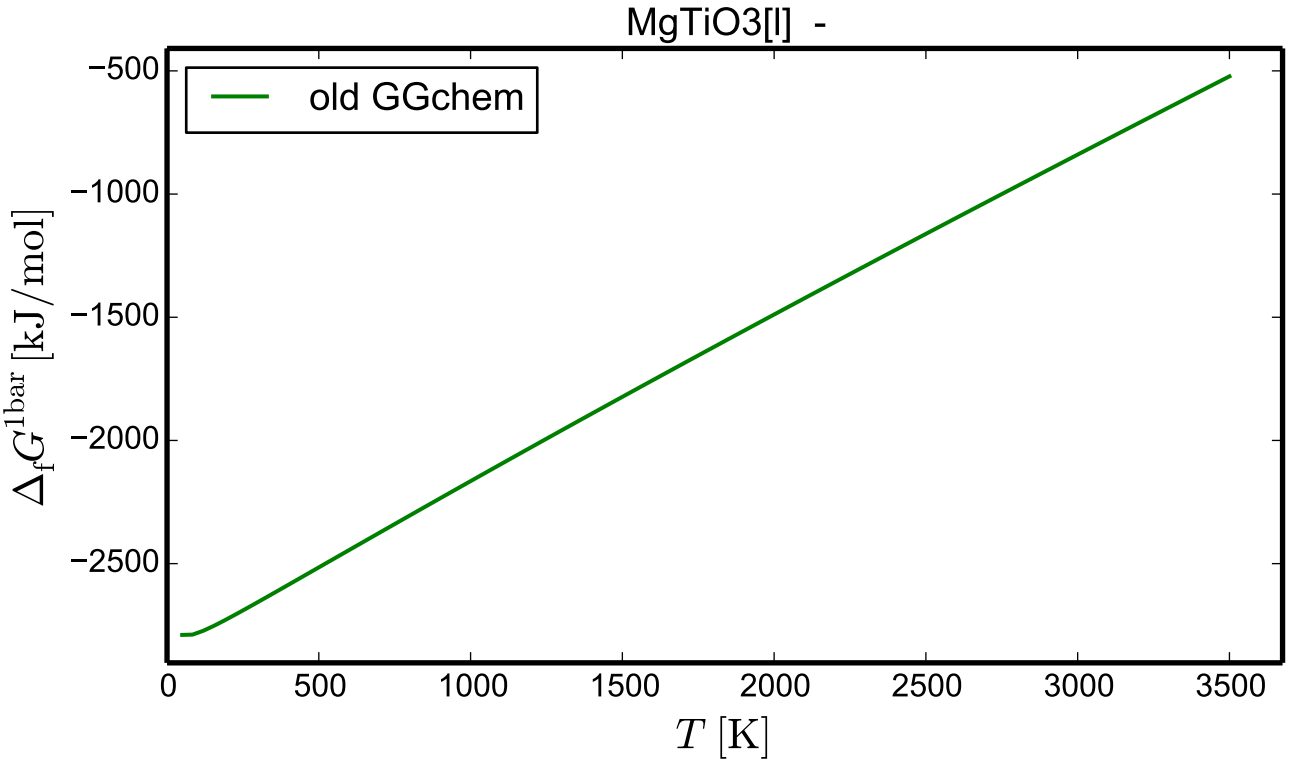

MgSO4[s] -
BURCAT
−1400
−1600
−1800
−2000
−2200
−2400
−2600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

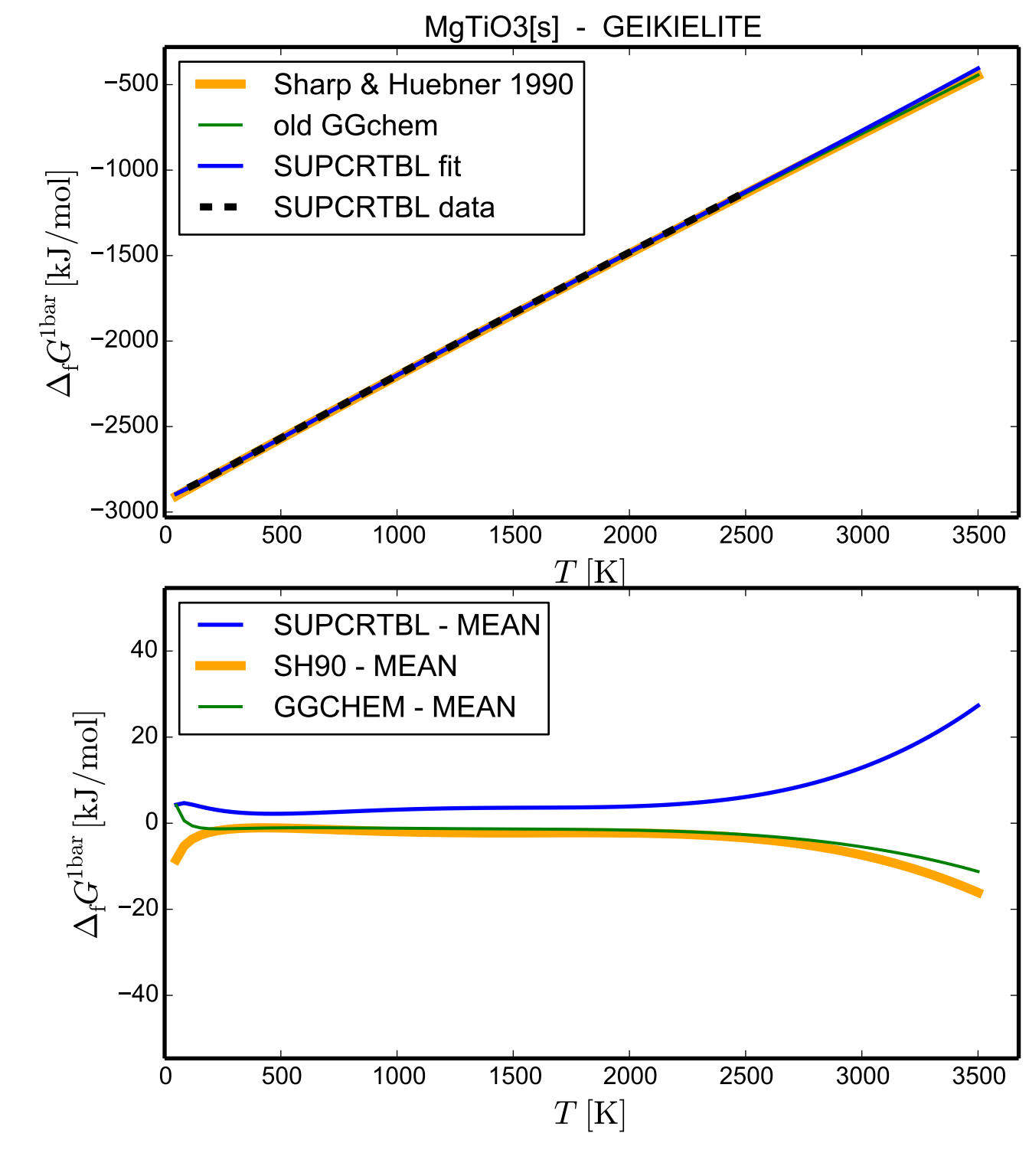

MgS[l] -
BURCAT
50
0
−50
−100
−150
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

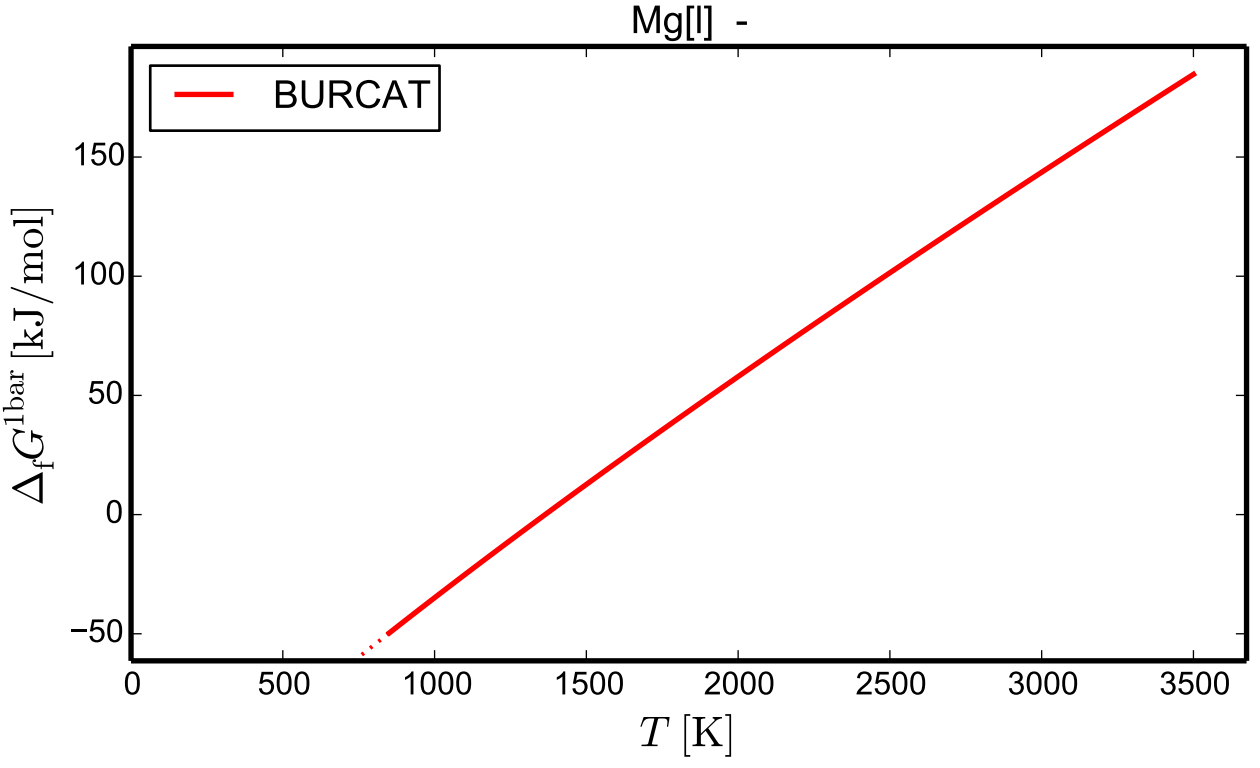

MgS[s] -
Sharp & Huebner 1990
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

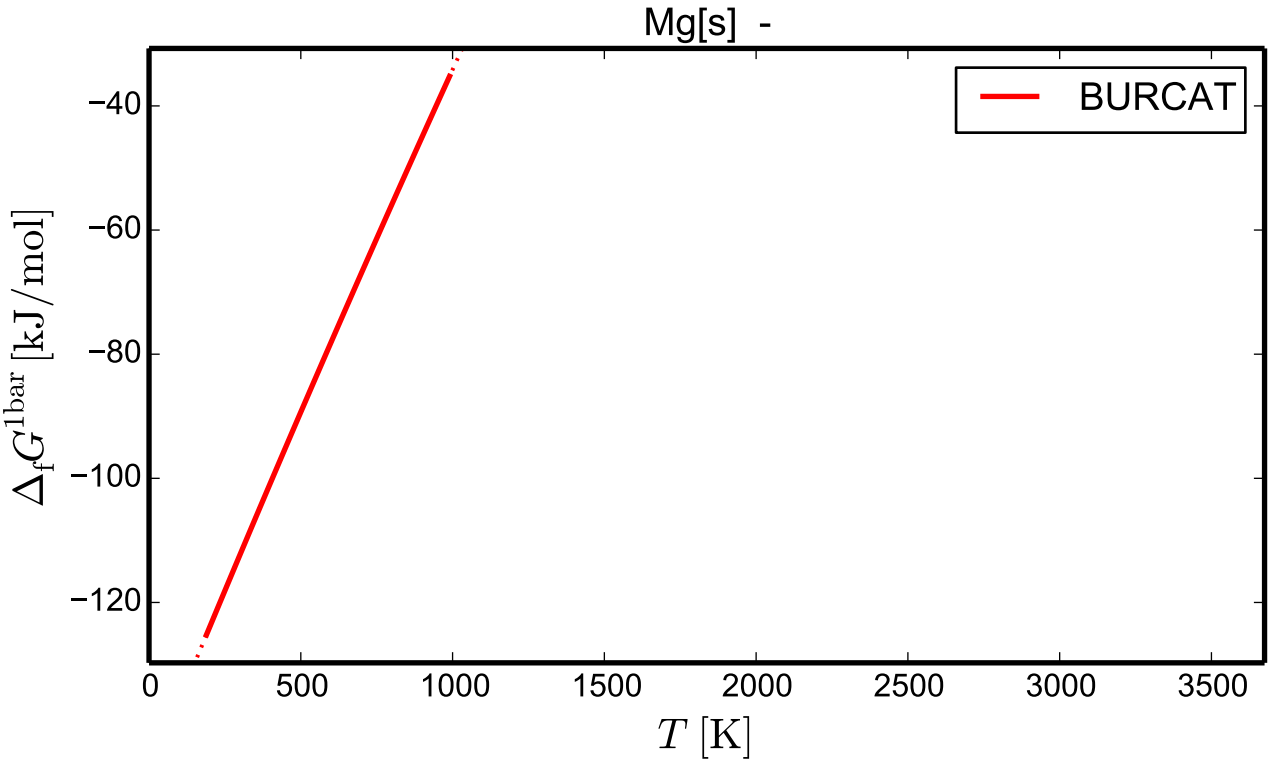

MgTi2O5[l] -
old GGchem
−1000
−1500
−2000
−2500
−3000
−3500
−4000
−4500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

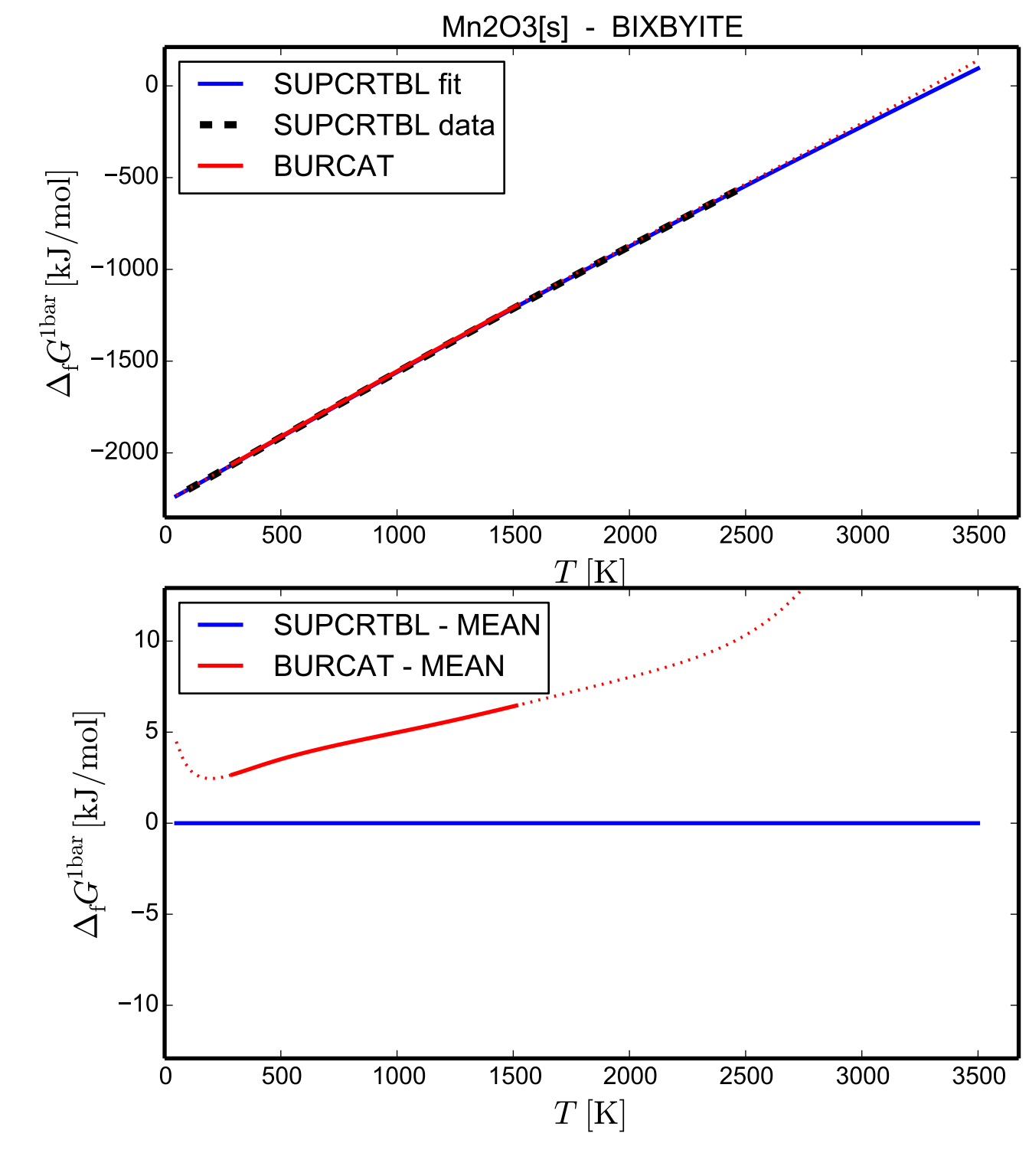

MgTi2O5[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

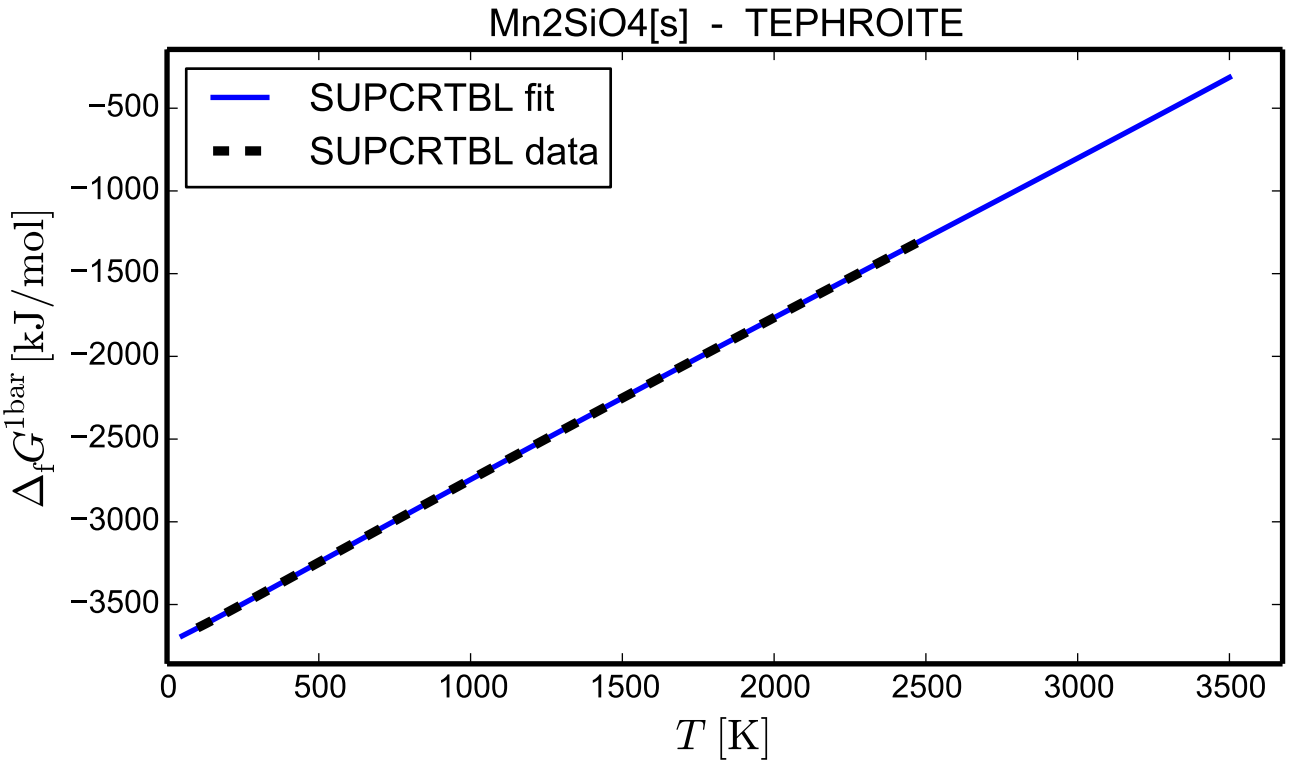

MgTiO3[l] -
old GGchem
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

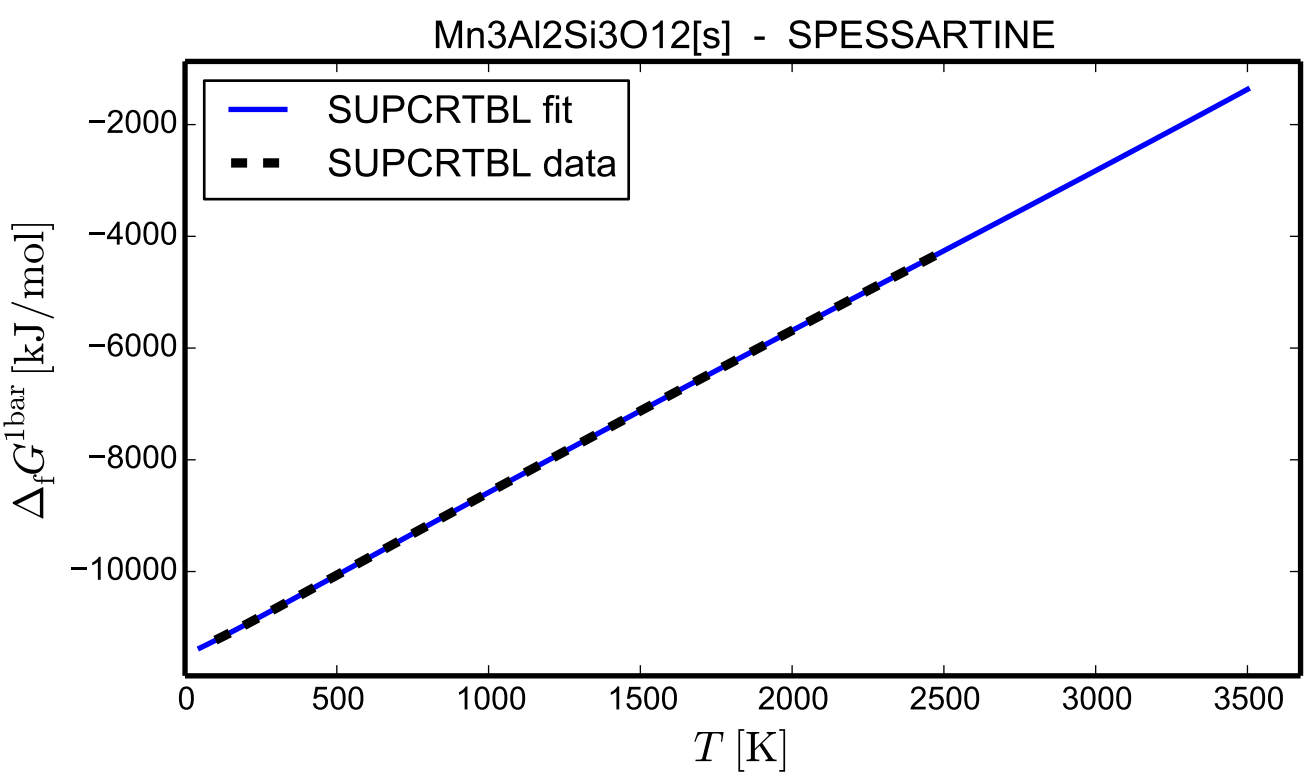

MgTiO3[s] - GEIKIELITE
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

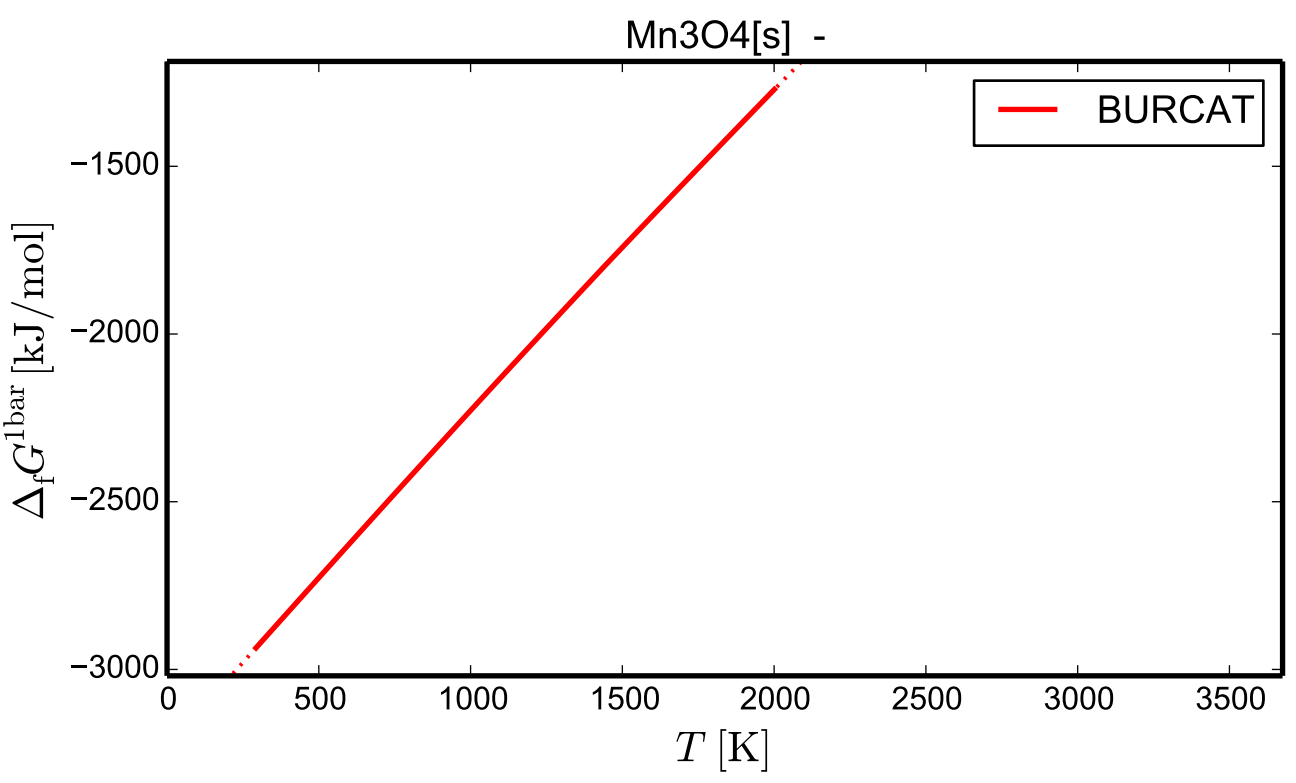

Mg[l] -
BURCAT
150
100
50
0
−50
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

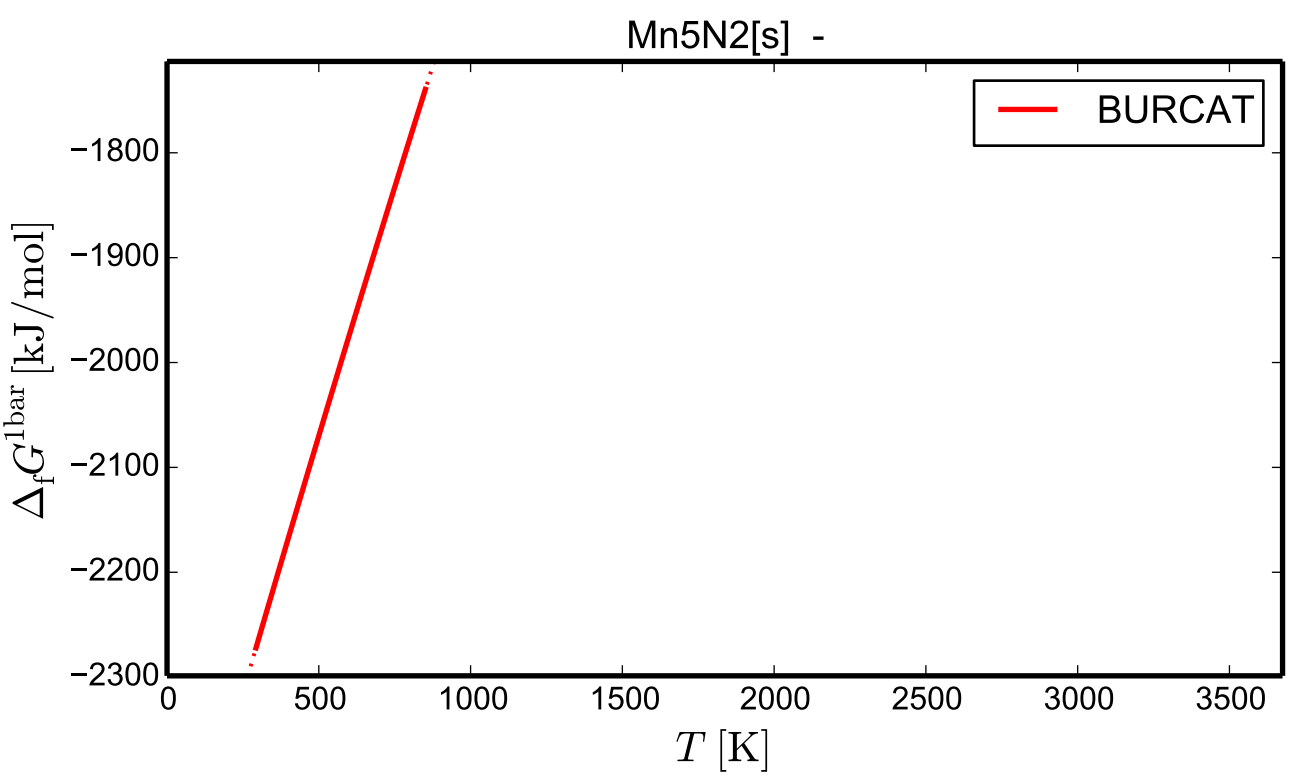

Mg[s] -
BURCAT
−40
−60
−80
−100
−120
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

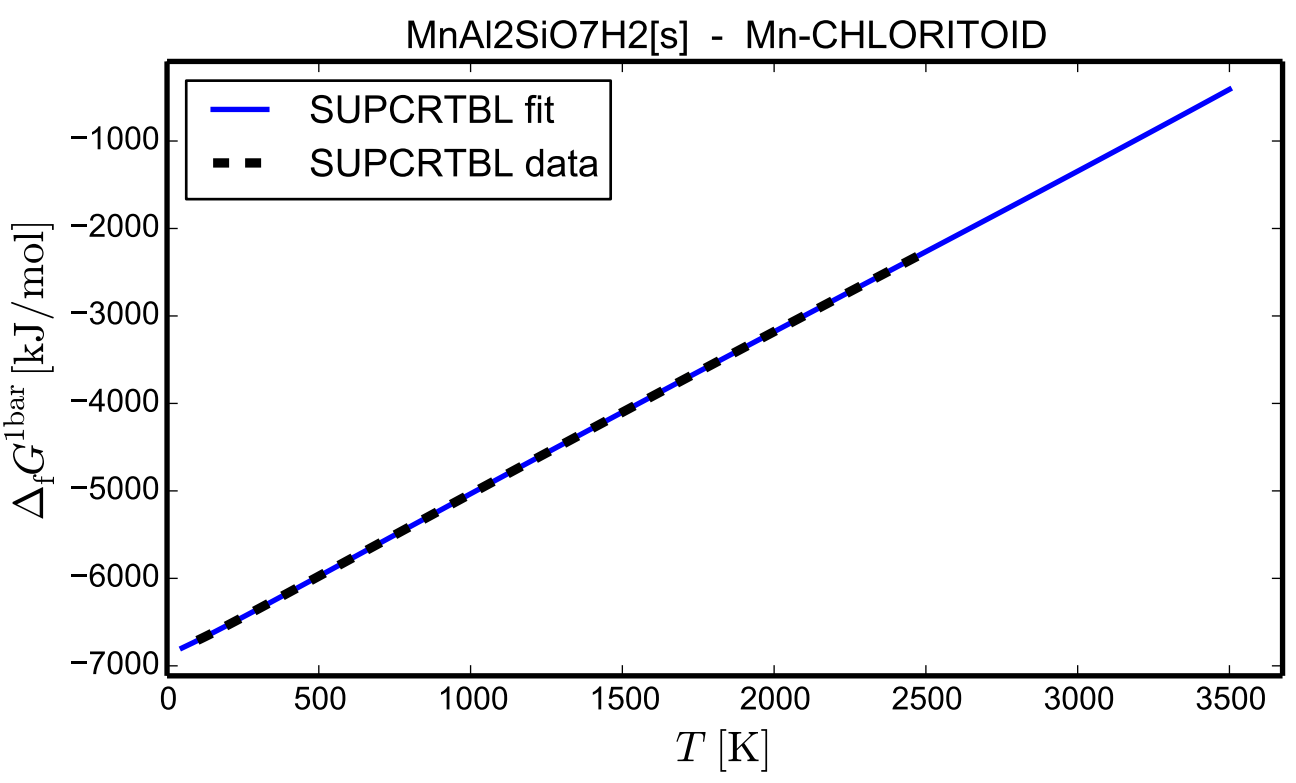

Mn2O3[s] - BIXBYITE
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

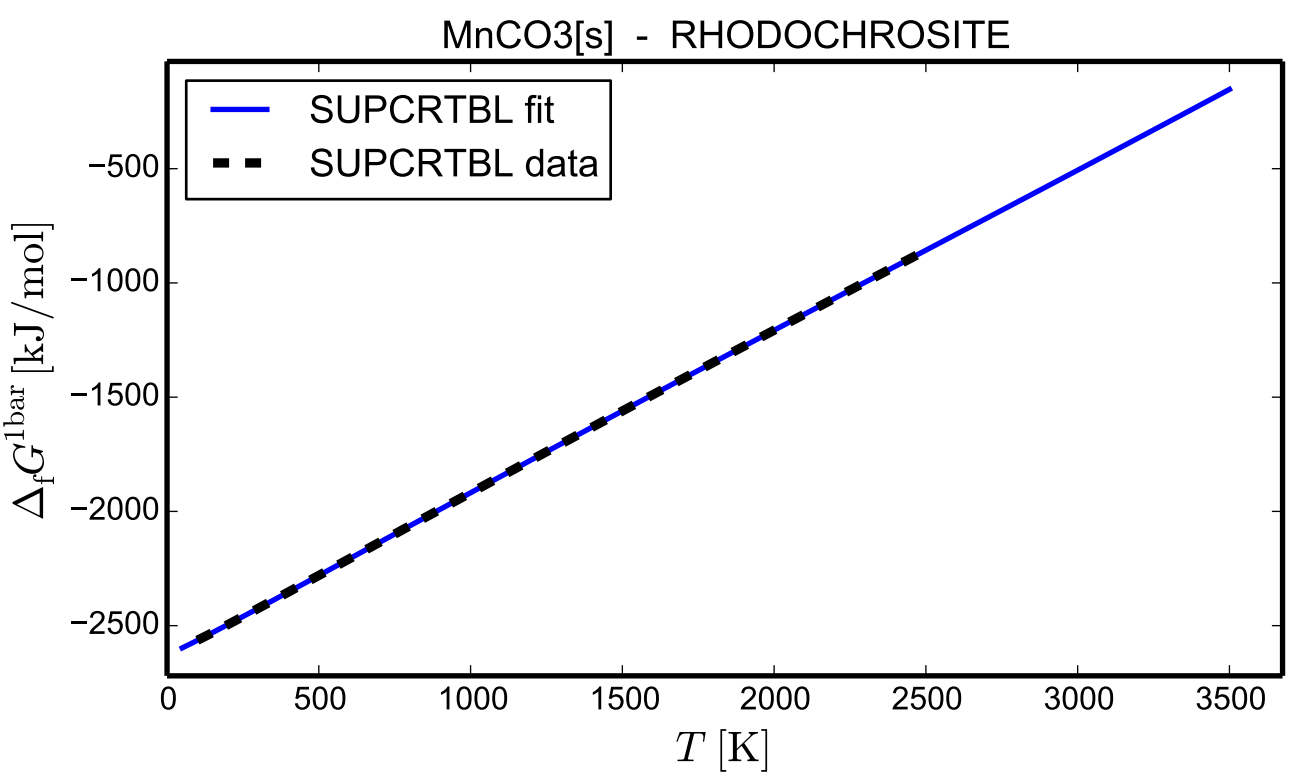

Mn2SiO4[s] - TEPHROITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
−3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

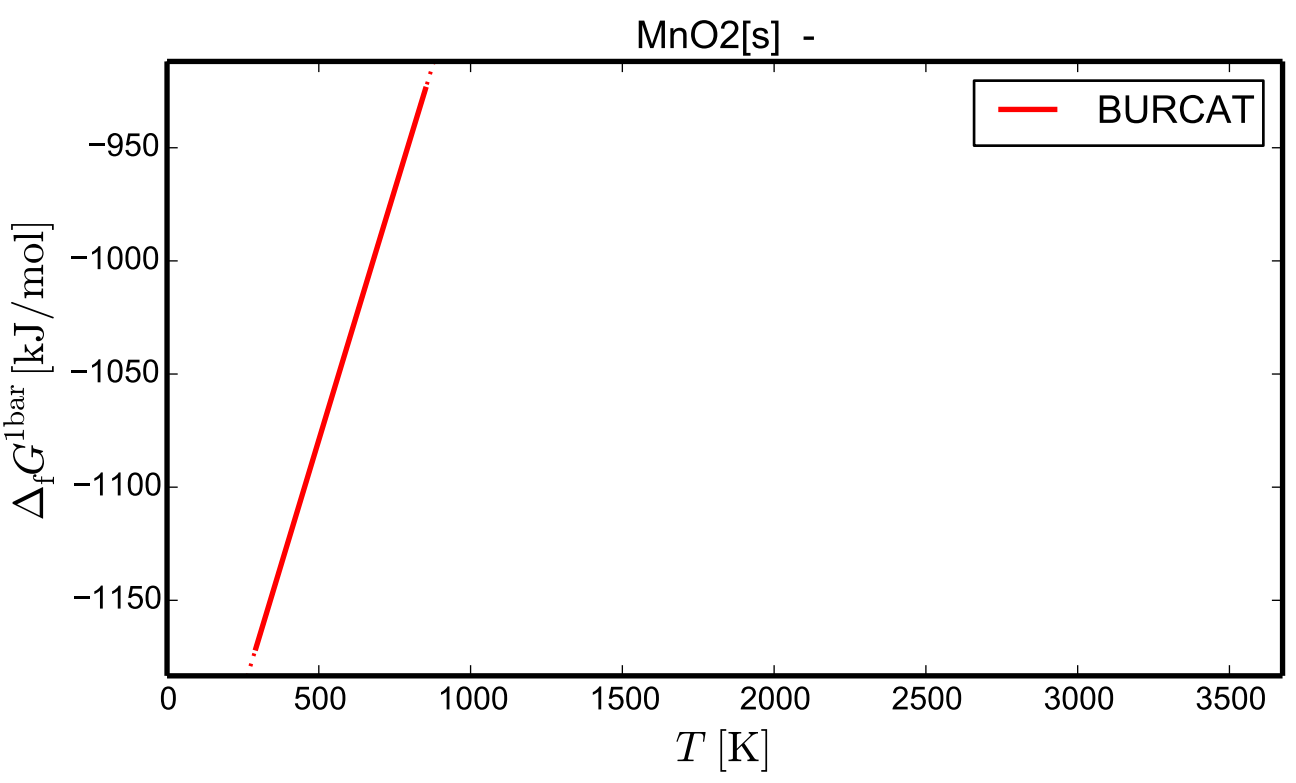

Mn3Al2Si3O12[s] - SPESSARTINE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

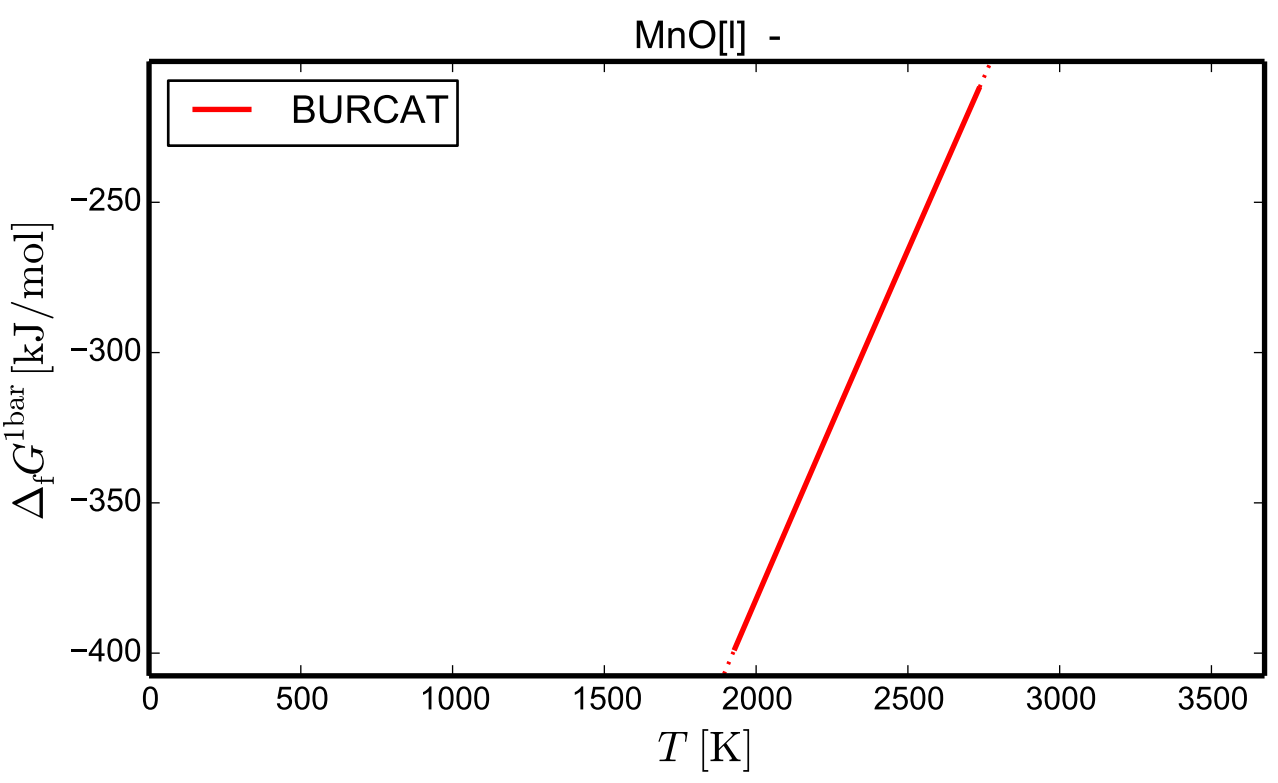

Mn3O4[s] -
BURCAT
−1500
−2000
−2500
−3000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

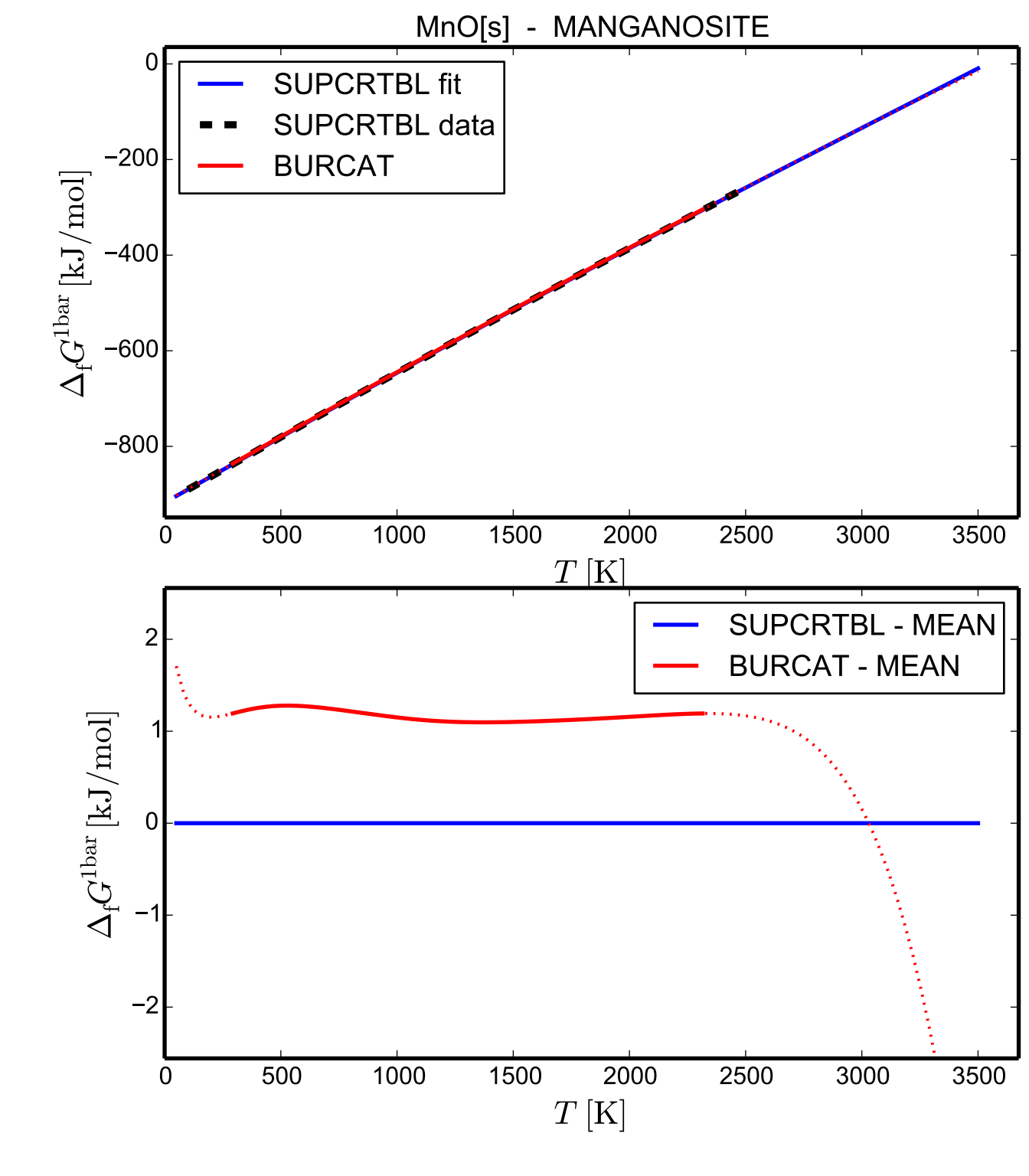

Mn5N2[s] -
BURCAT
−1800
−1900
−2000
−2100
−2200
−2300
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

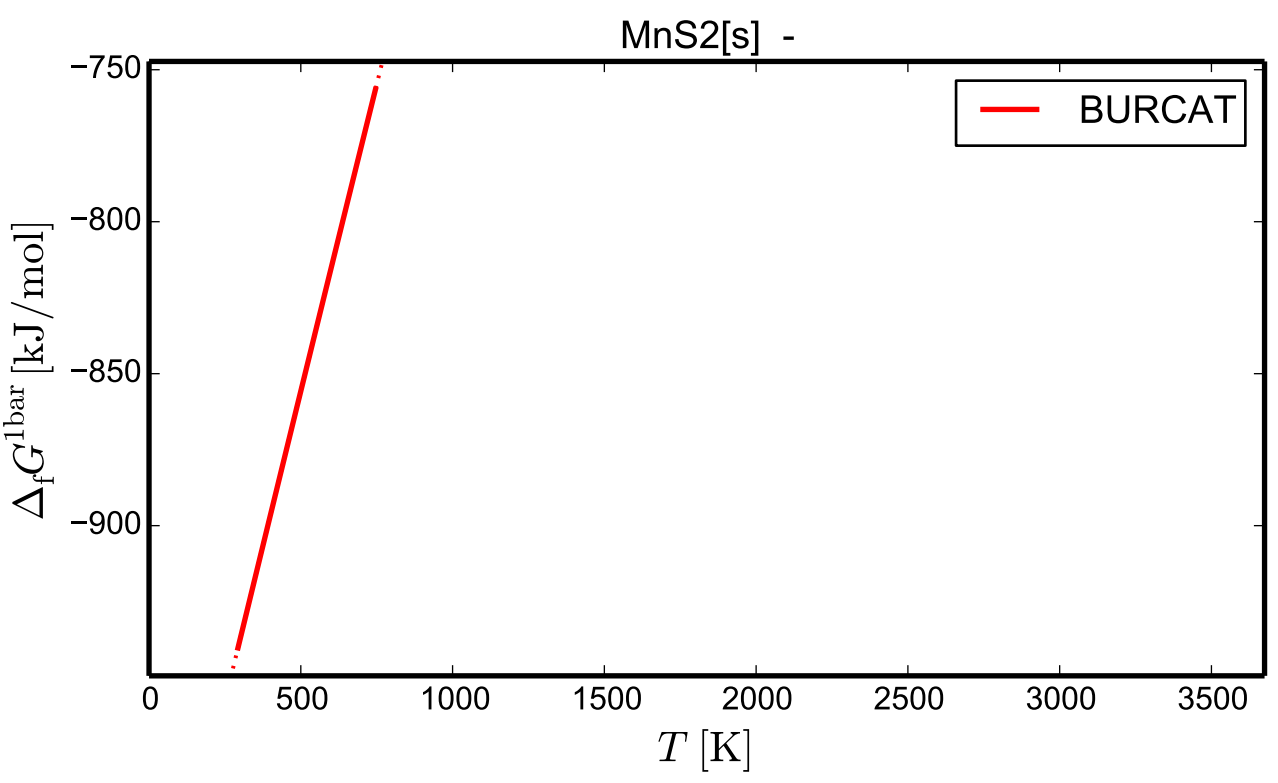

MnAl2SiO7H2[s] - Mn-CHLORITOID
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

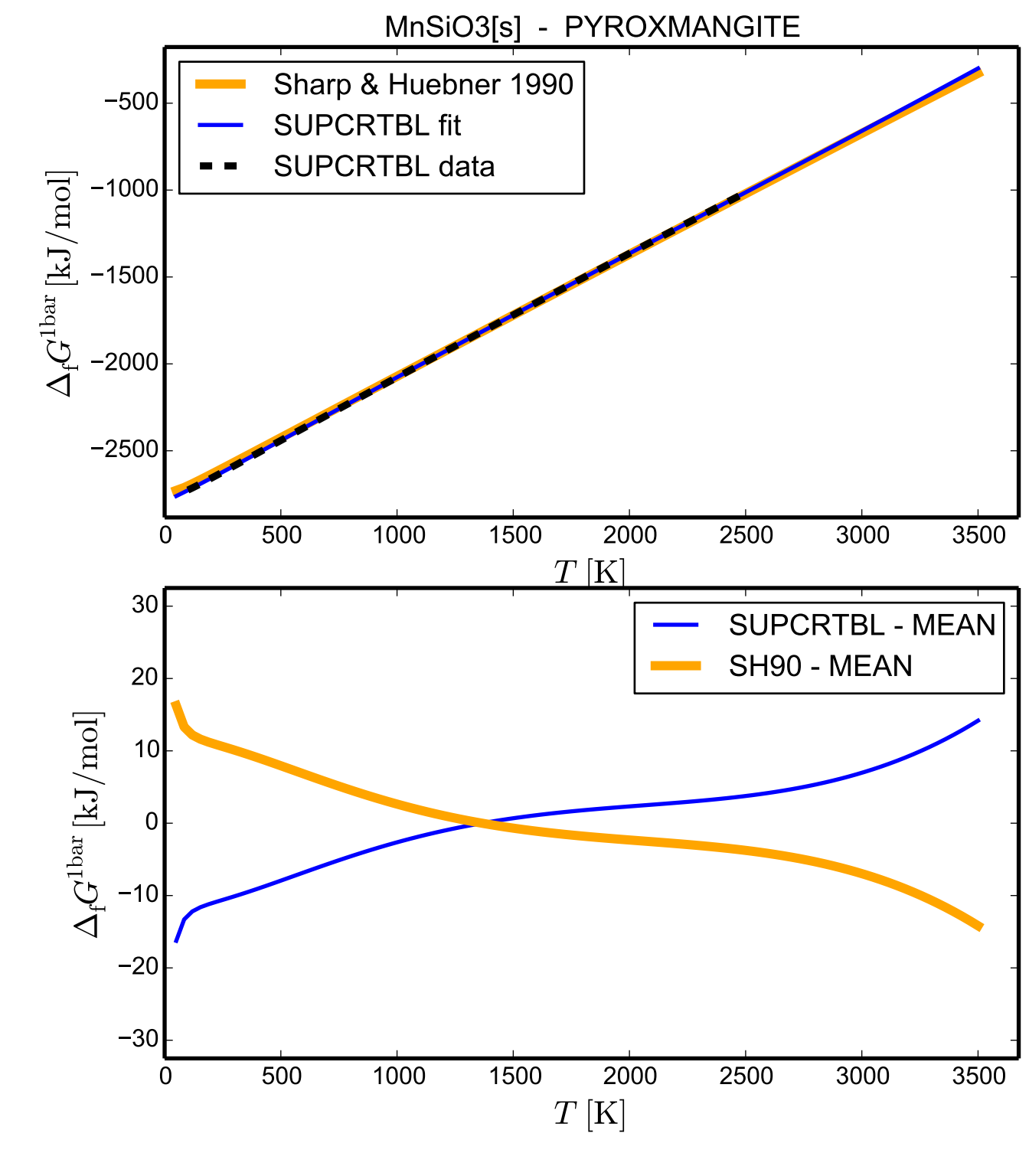

MnCO3[s] - RHODOCHROSITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

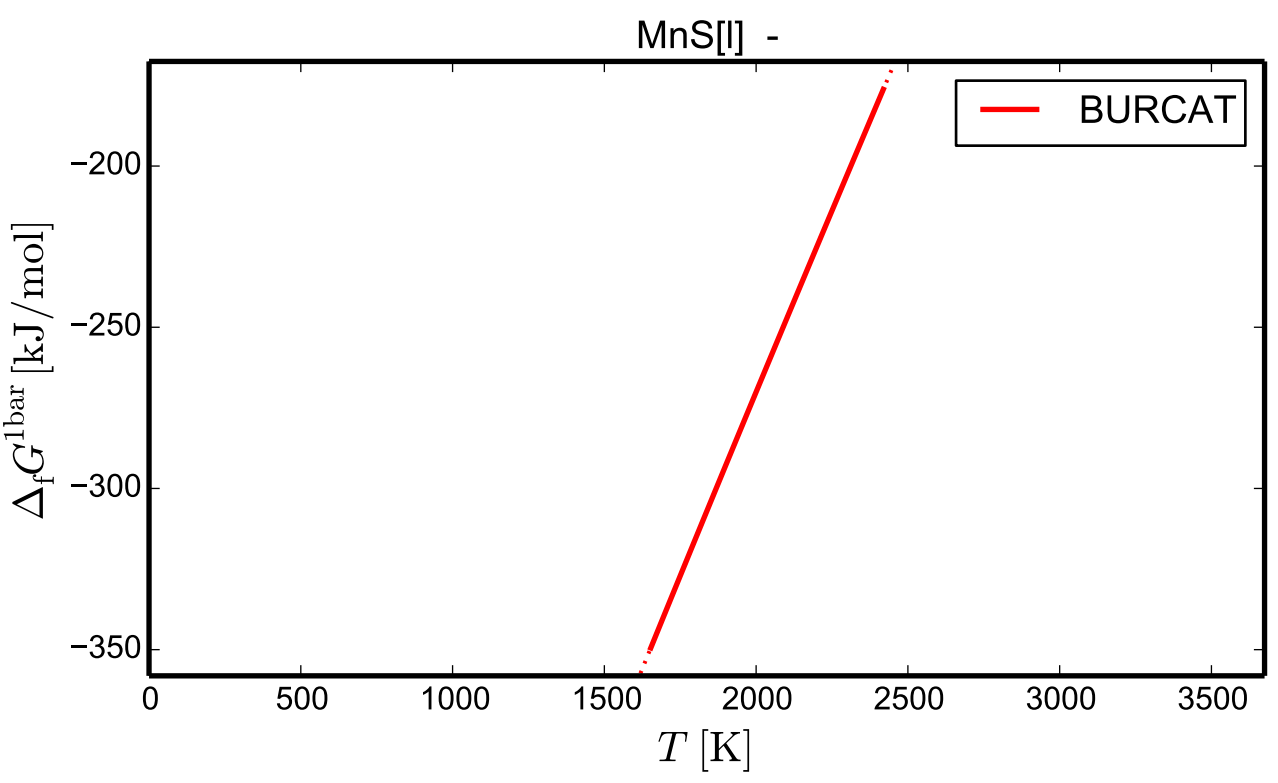

MnO2[s] -
BURCAT
−950
−1000
−1050
−1100
−1150
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

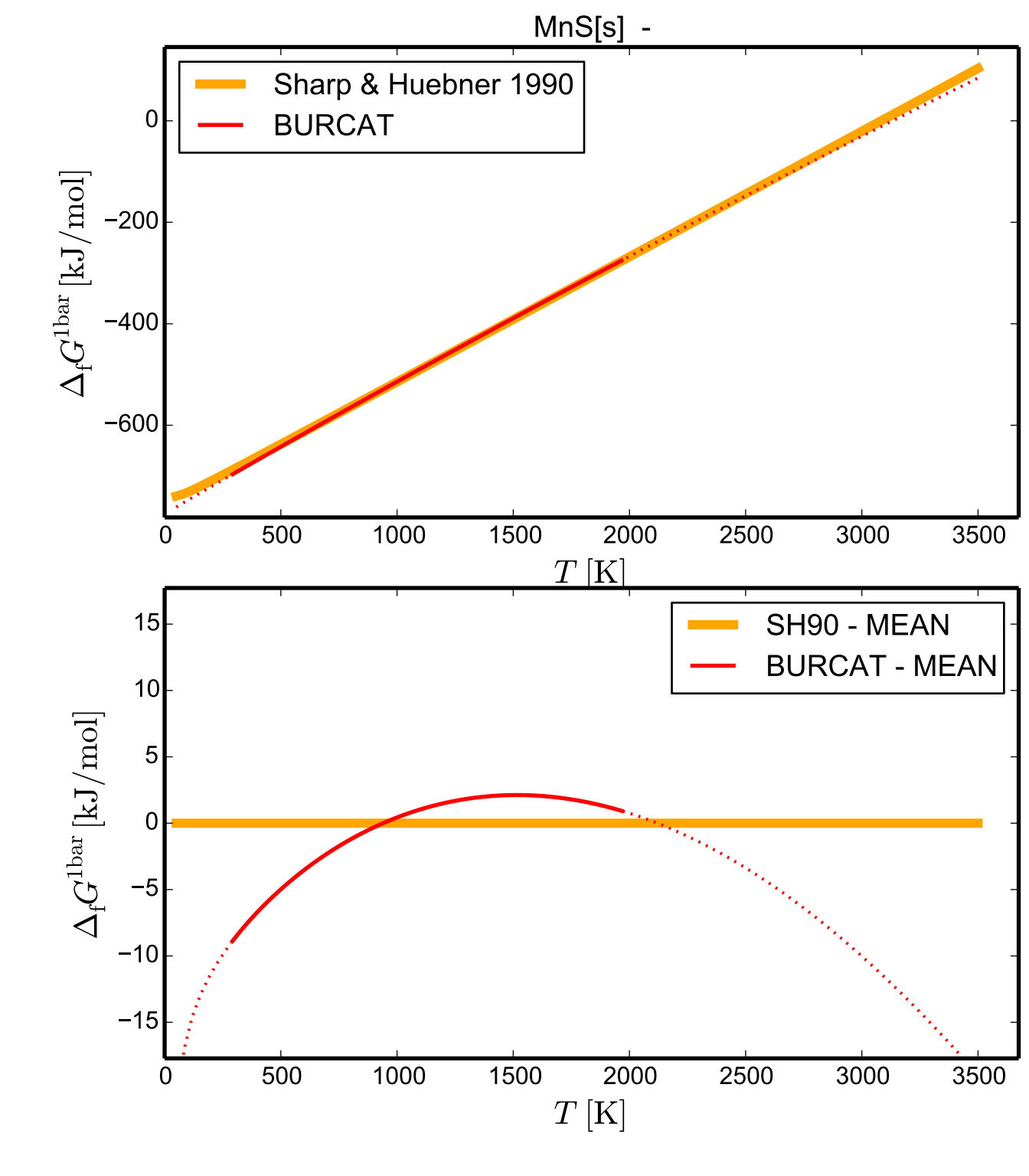

MnO[l] -
BURCAT
−250
−300
−350
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

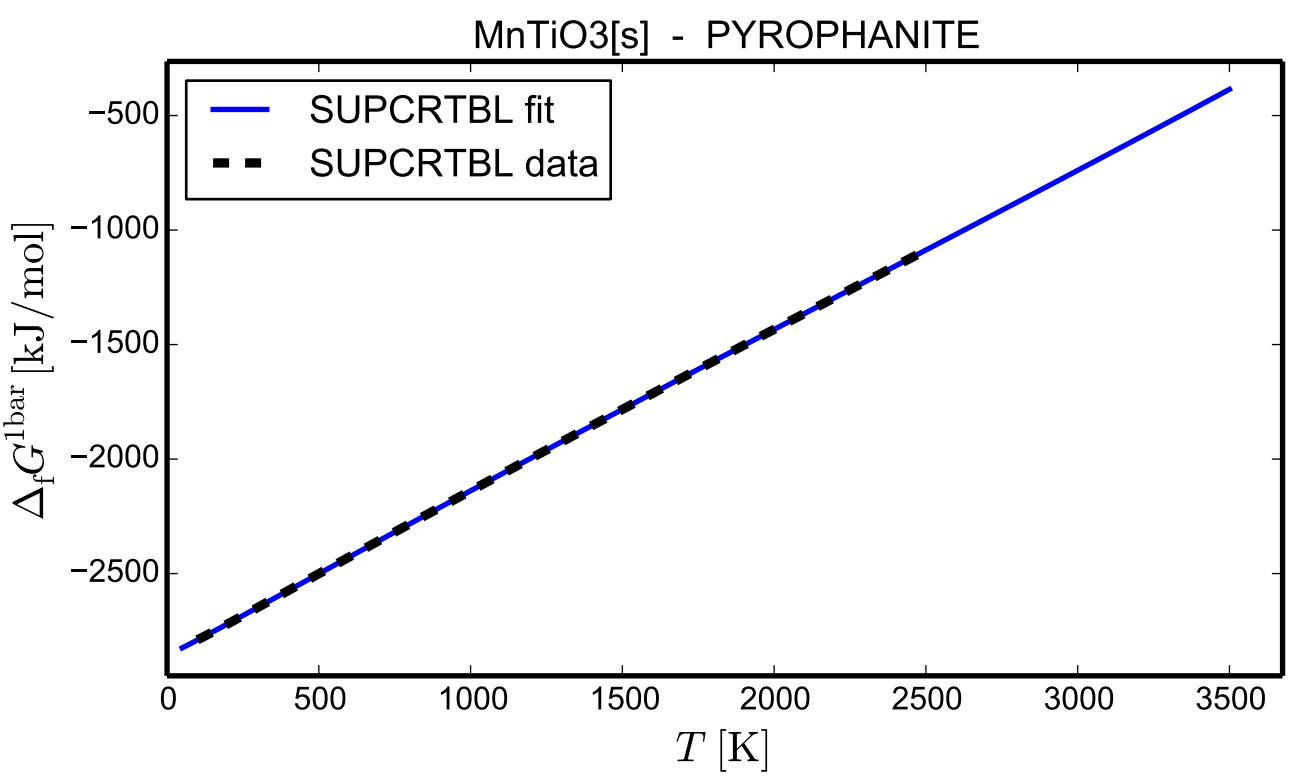

MnO[s] - MANGANOSITE
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

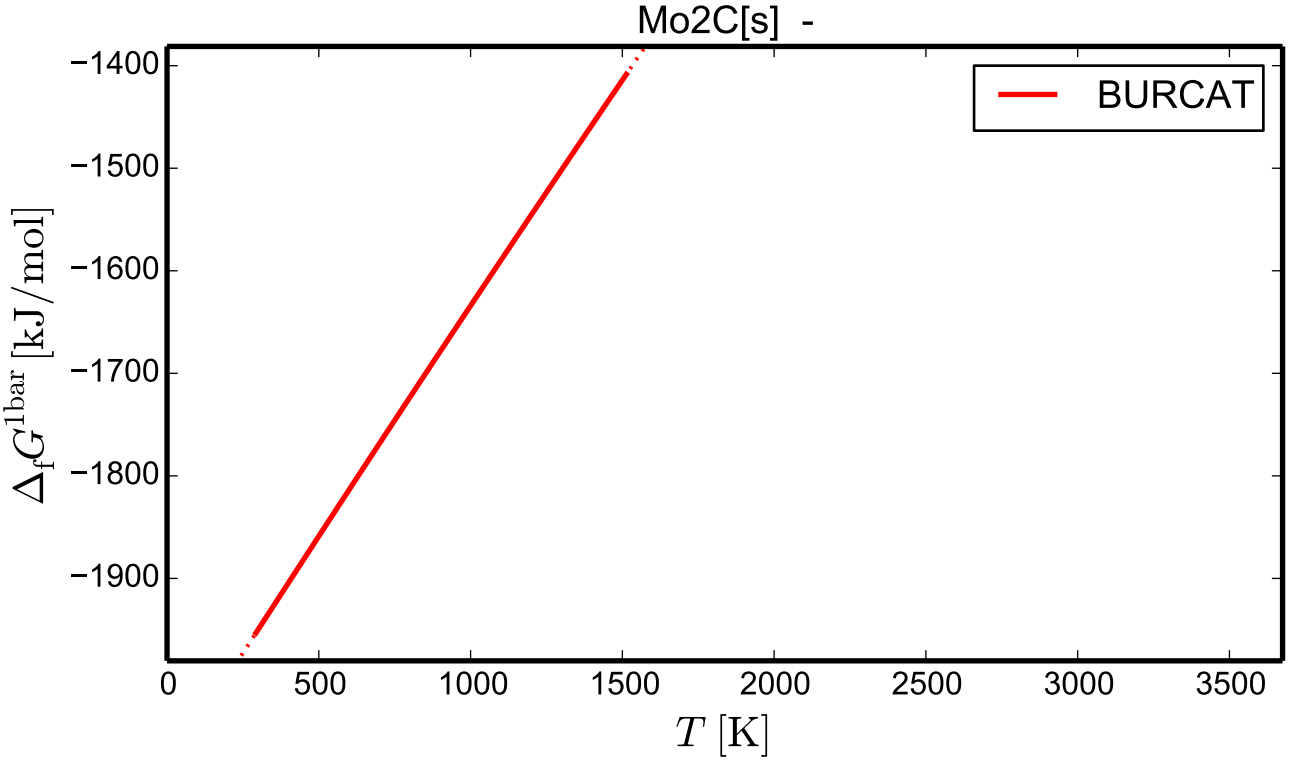

MnS2[s] -
BURCAT
−750
−800
−850
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

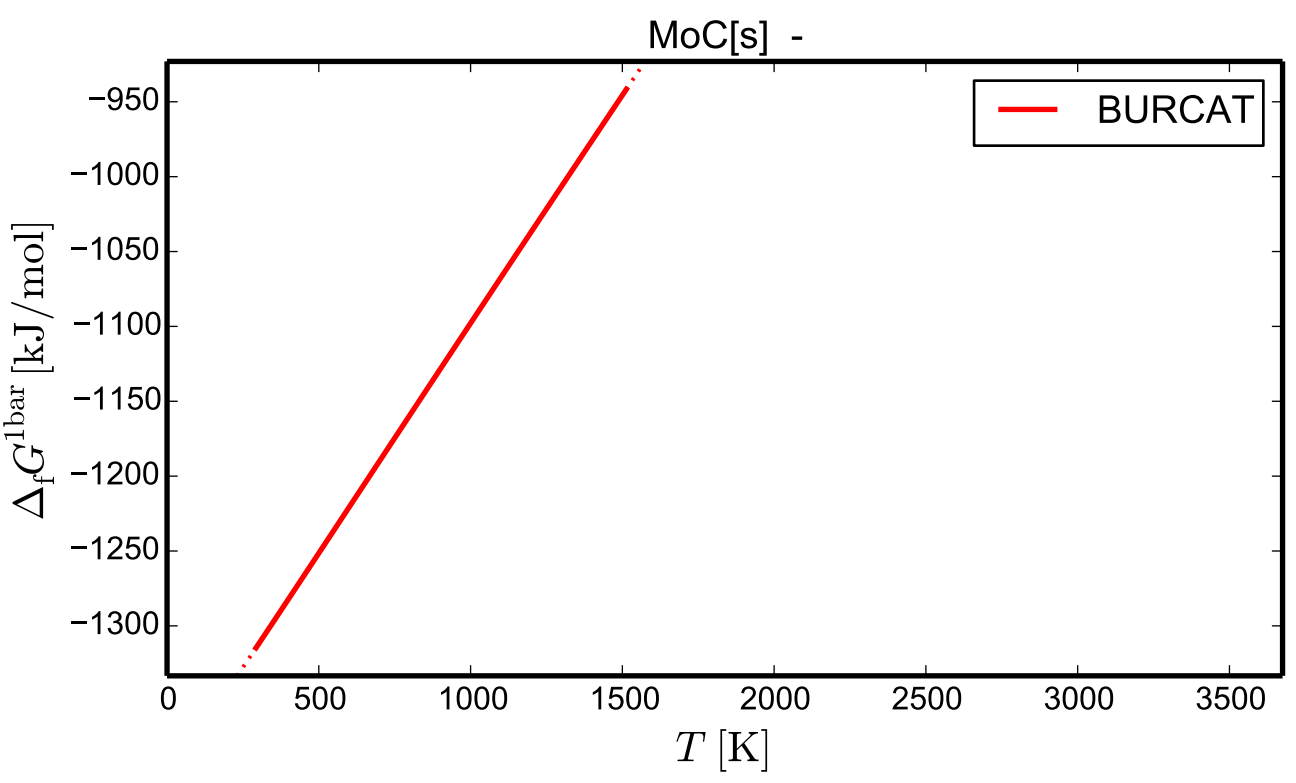

MnSiO3[s] - PYROXMANGITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

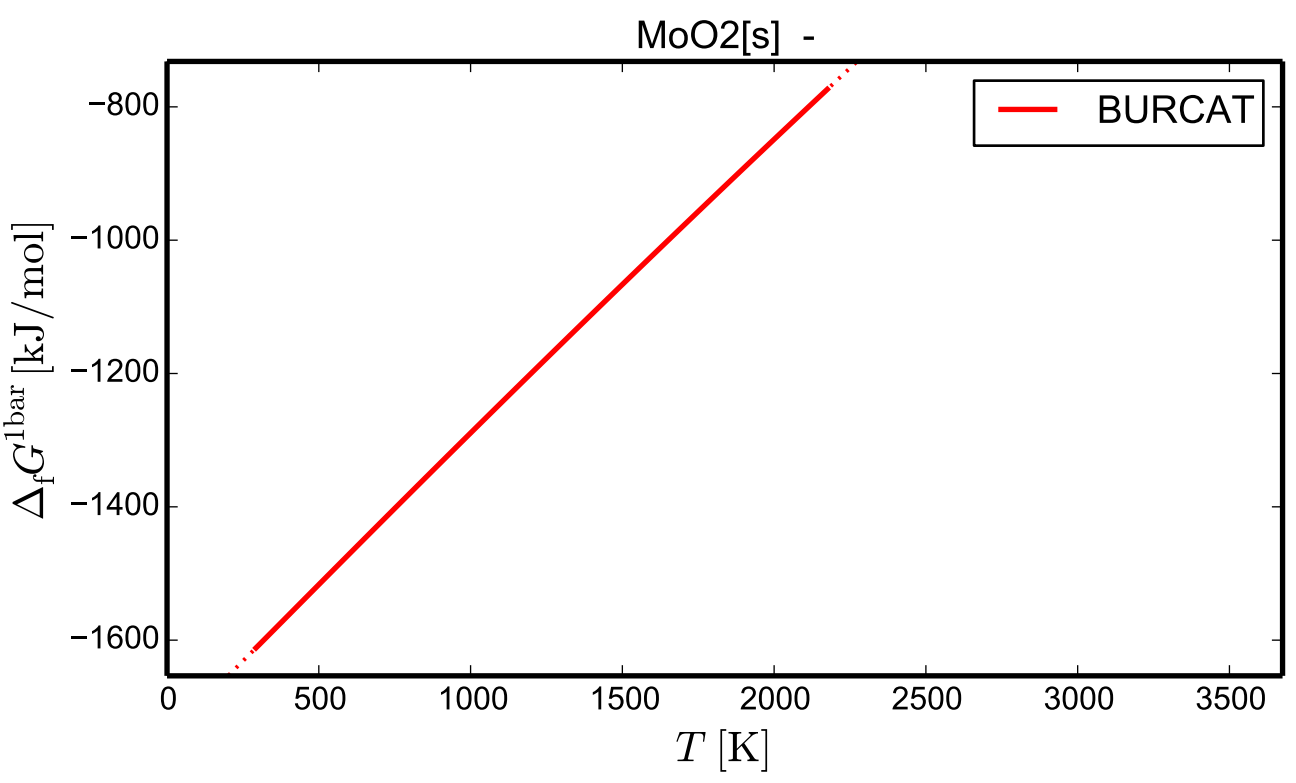

MnS[l] -
BURCAT
−200
−250
−300
−350
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

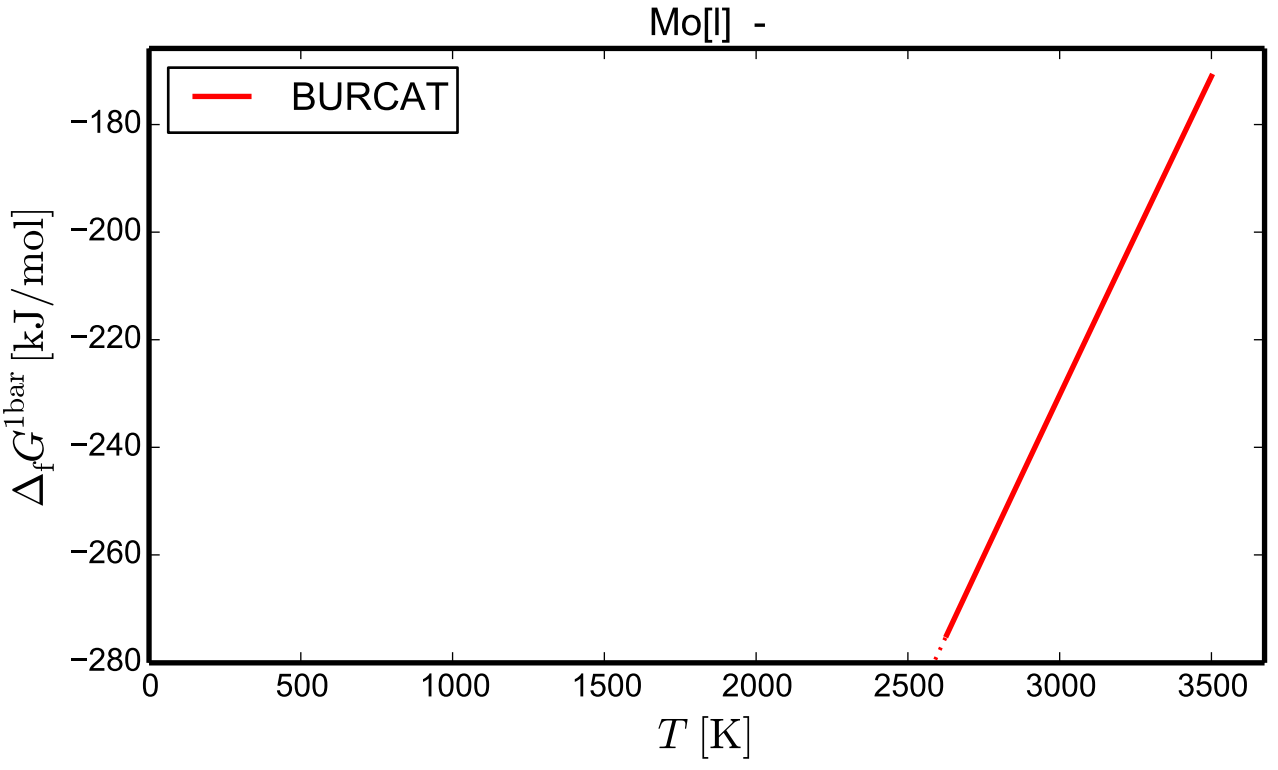

MnS[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
0
−200
−400
−600
0
500
1000
1500
2000
2500
3000
3500
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
15
10
5
0
−5
−10
−15
0
500
1000
1500
2000
2500
3000
3500
T [K]

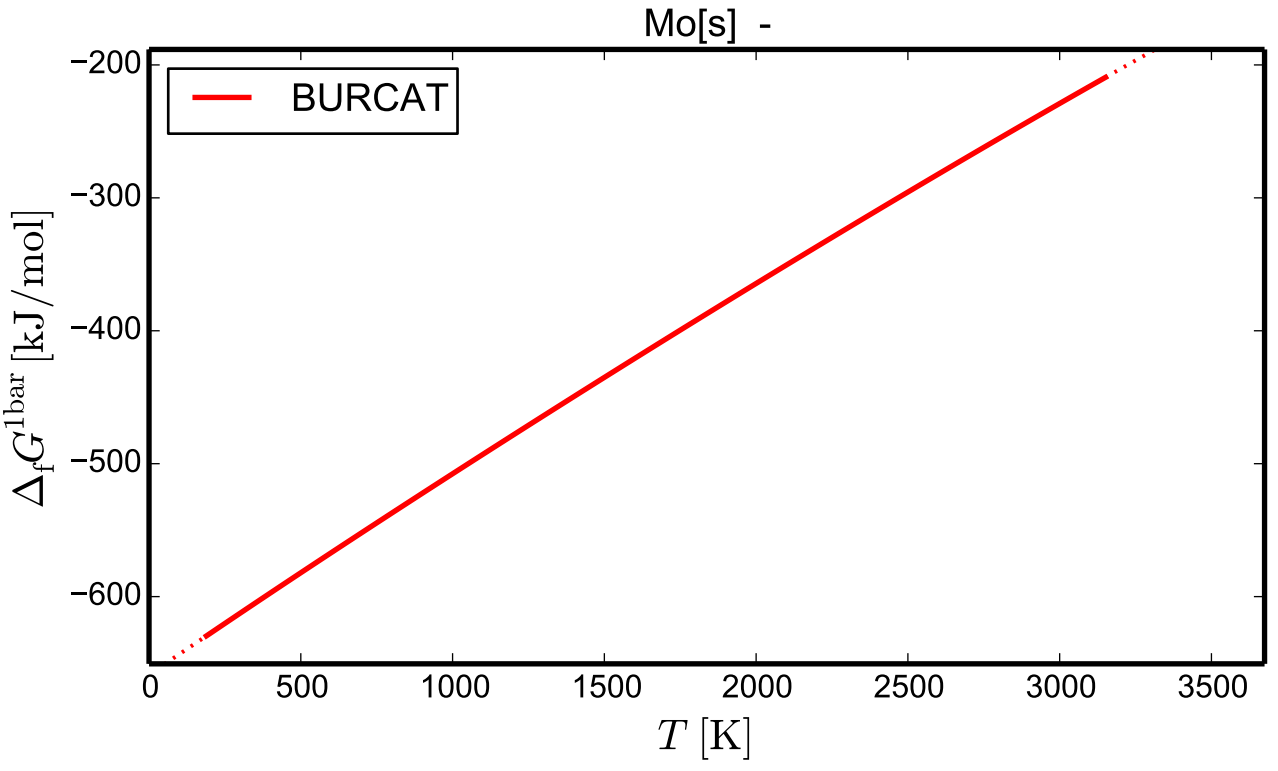

MnTiO3[s] - PYROPHANITE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

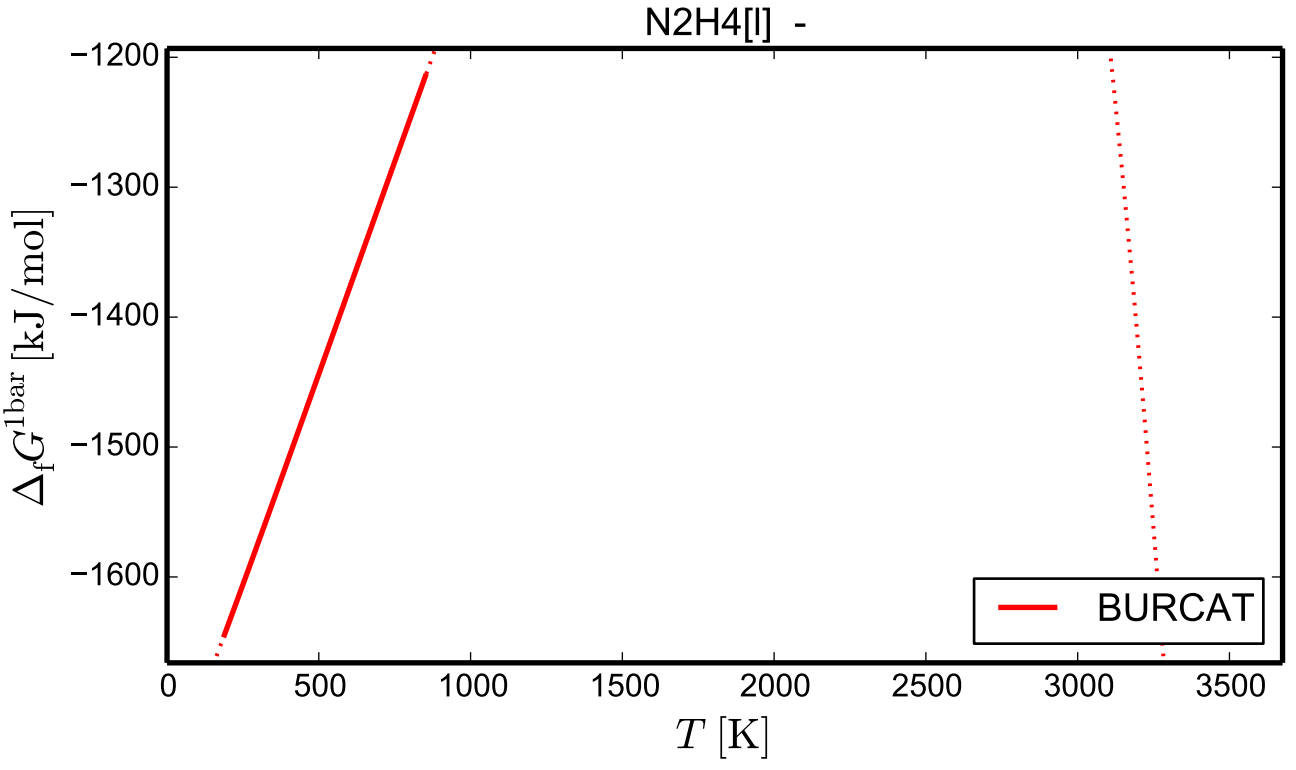

Mo2C[s] -
BURCAT
−1400
−1500
−1600
−1700
−1800
−1900
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

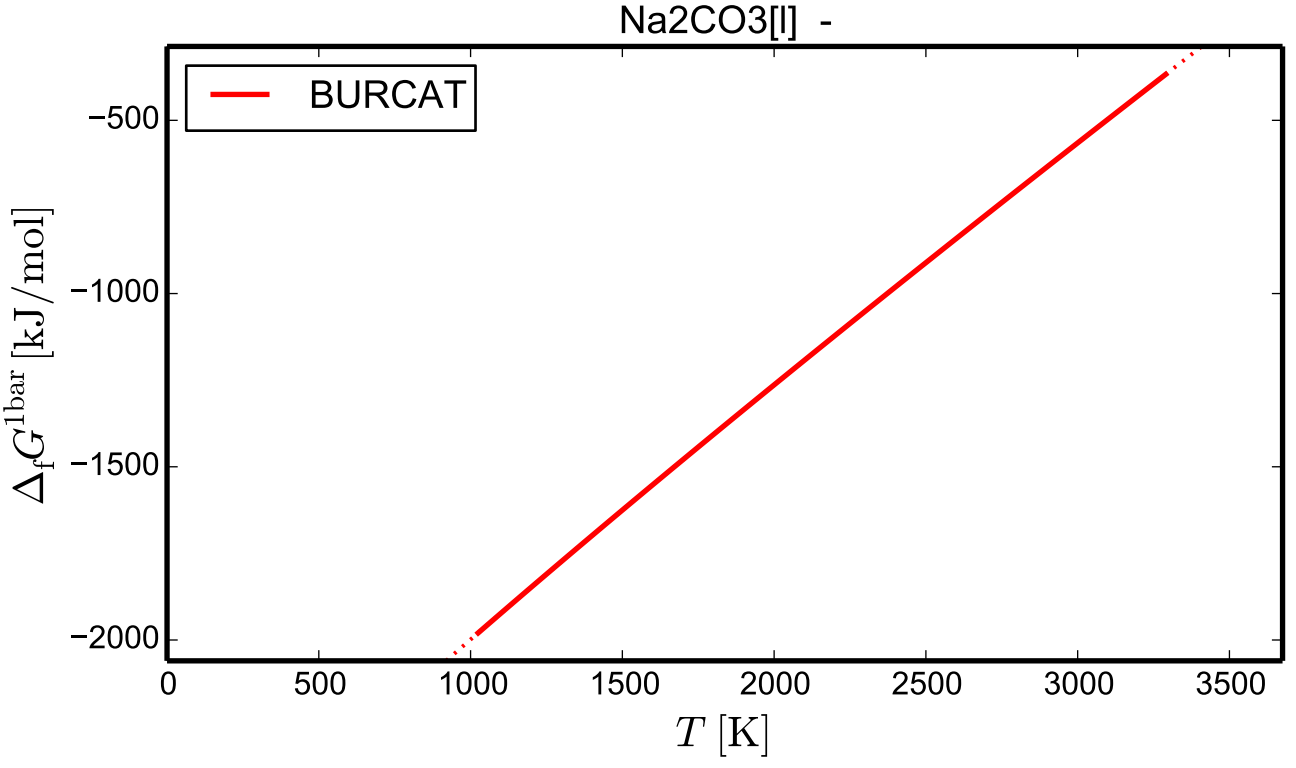

MoC[s] -
BURCAT
−950
−1000
−1050
−1100
−1150
−1200
−1250
−1300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

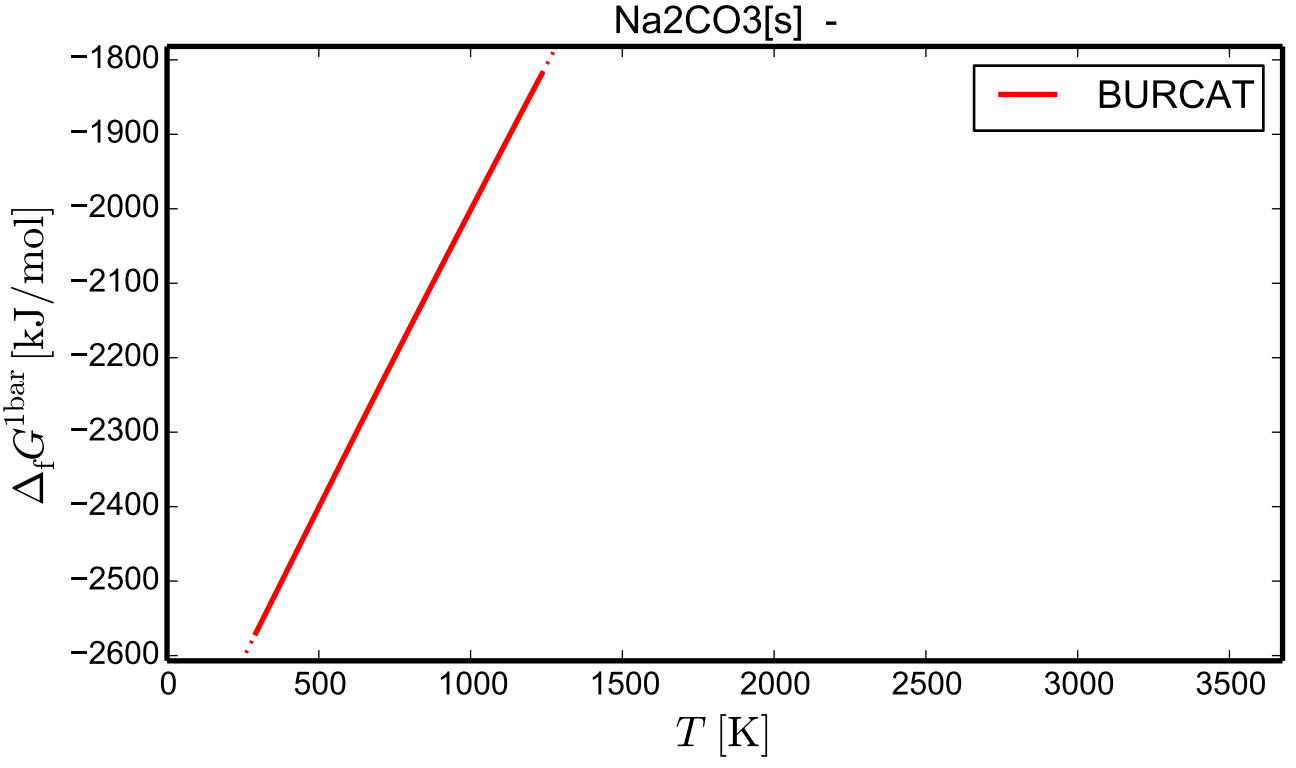

MoO2[s] -
BURCAT
−800
−1000
−1200
−1400
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

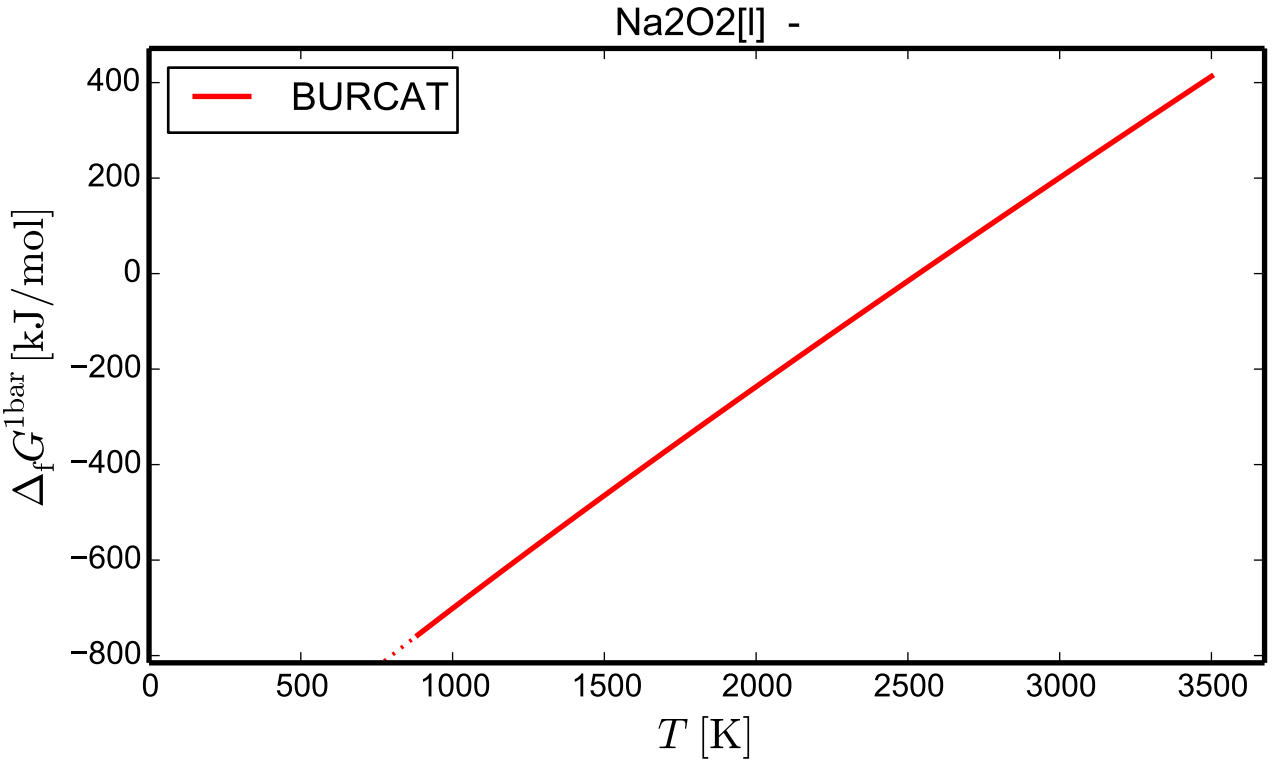

Mo[l] -
BURCAT
−180
−200
−220
−240
−260
−280
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

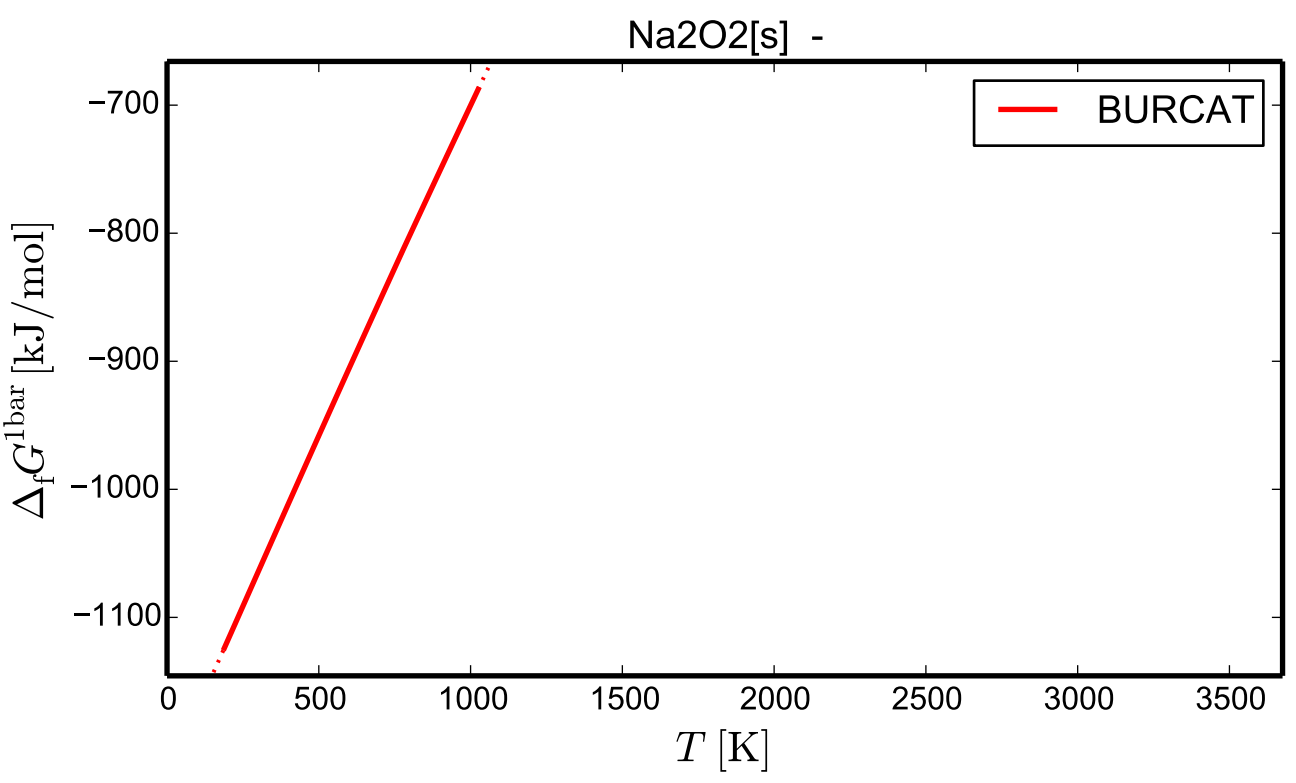

Mo[s] -
BURCAT
−200
−300
−400
−500
−600
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

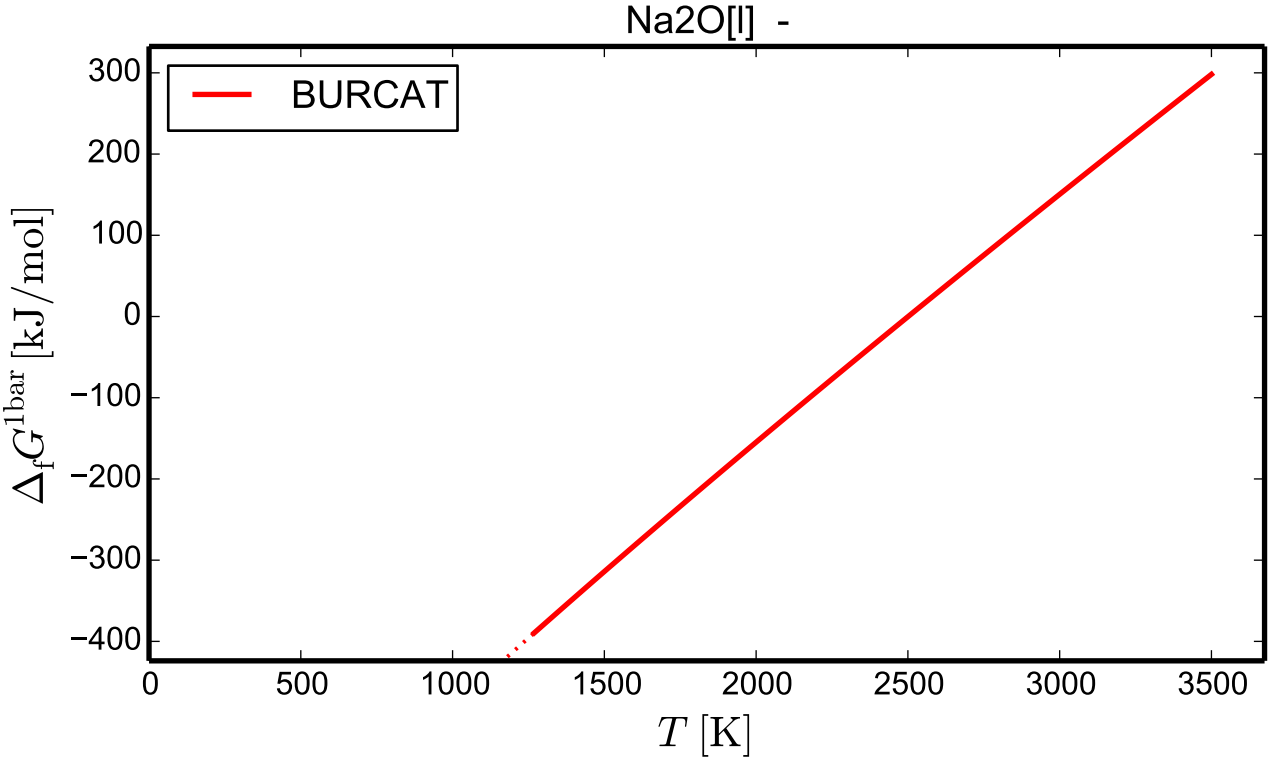

N2H4[l] -
−1200
−1300
−1400
−1500
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]
BURCAT

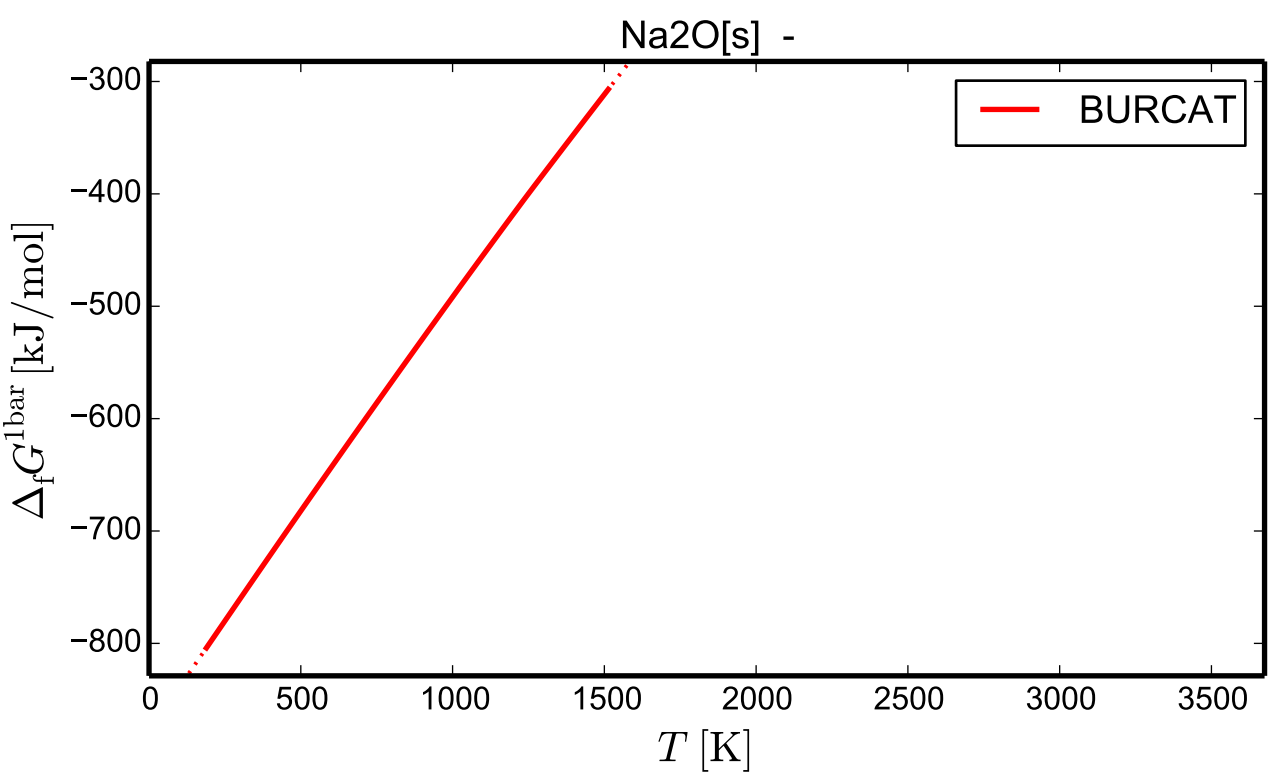

Na2CO3[l] -
BURCAT
−500
−1000
−1500
−2000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

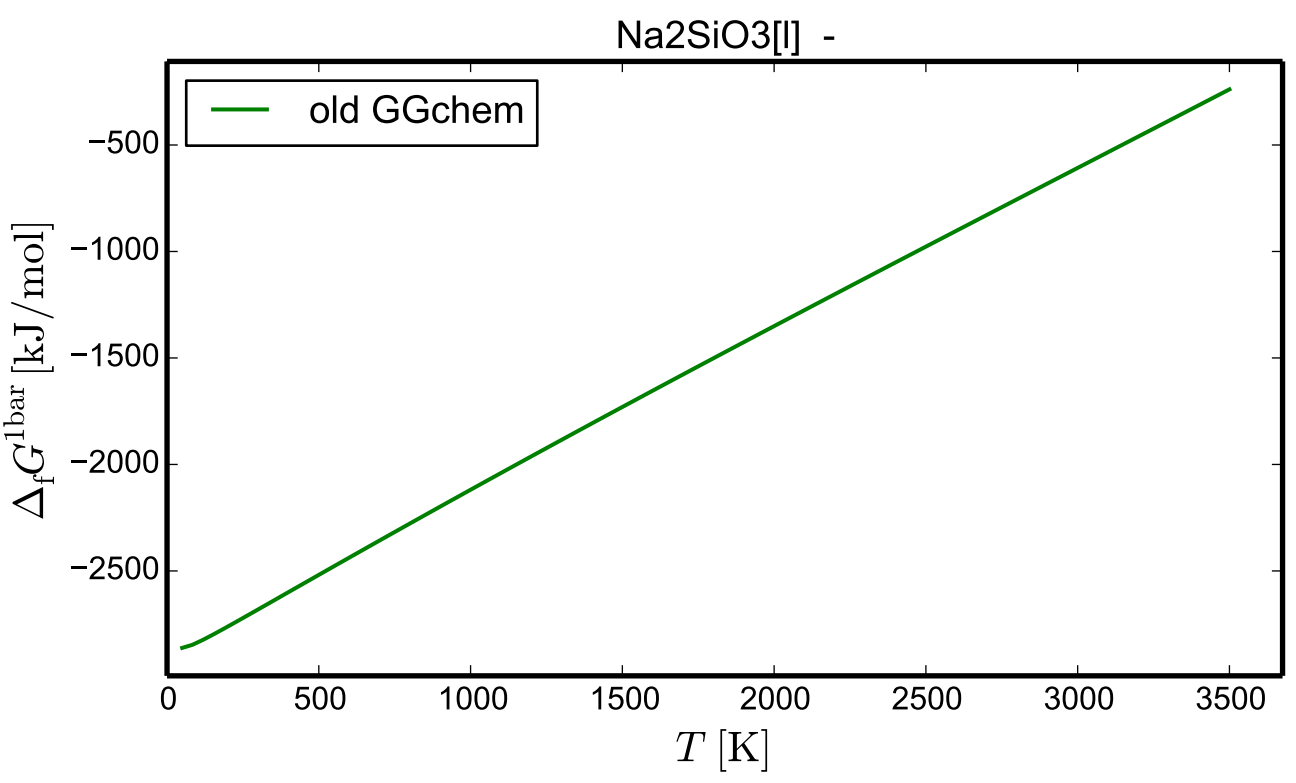

Na2CO3[s] -
BURCAT
−1800
−1900
−2000
−2100
−2200
−2300
−2400
−2500
−2600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

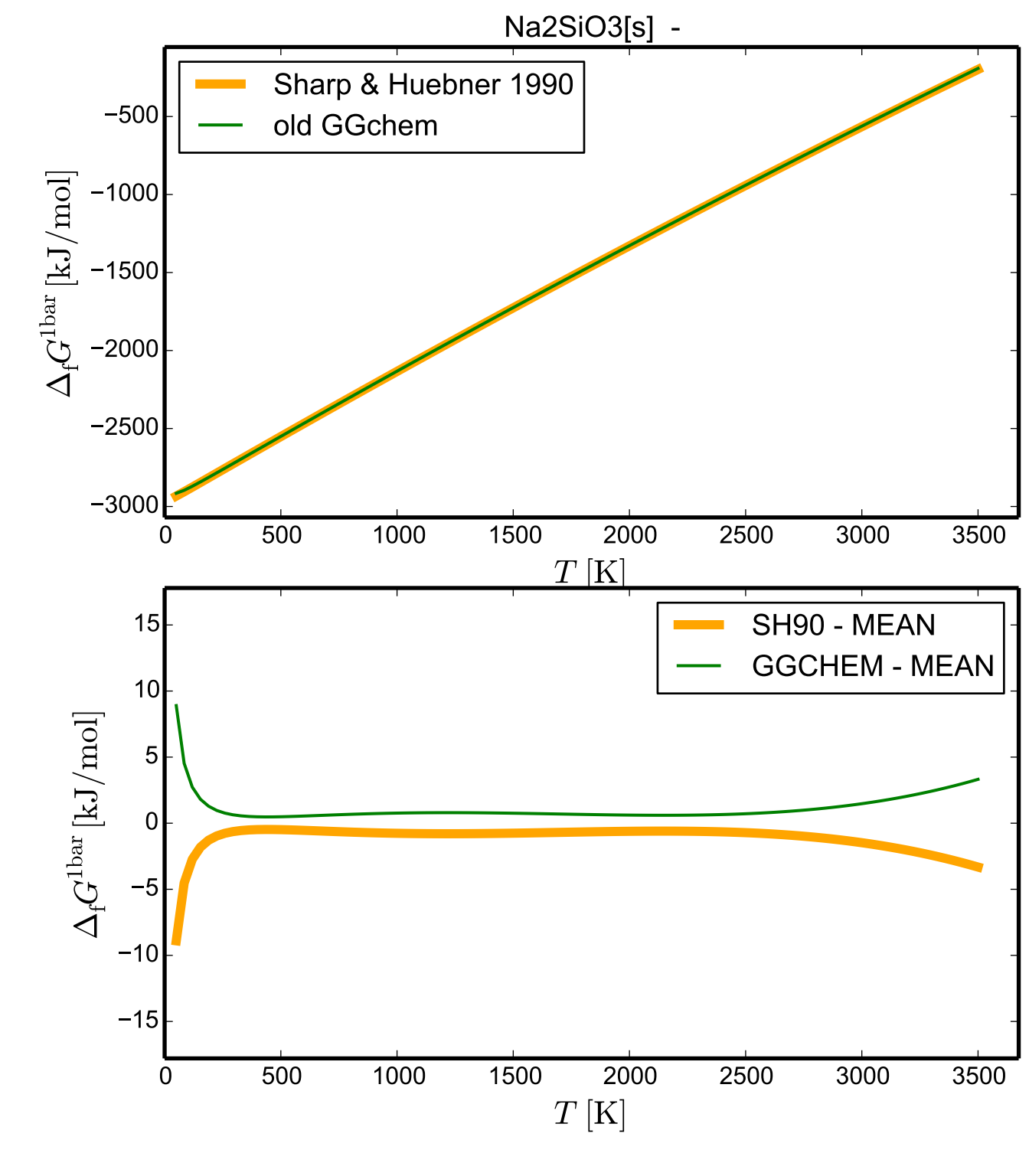

Na2O2[l] -
BURCAT
400
200
0
−200
−400
−600
−800
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

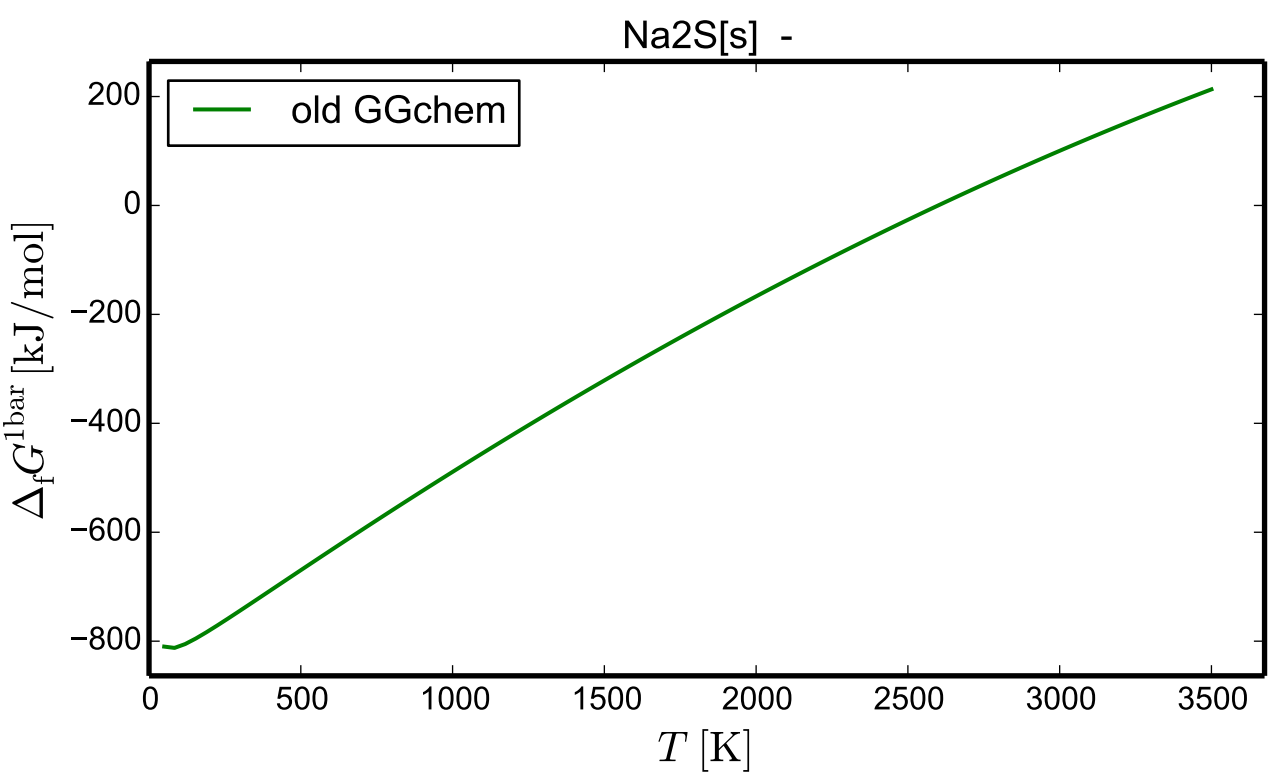

Na2O2[s] -
BURCAT
−700
−800
−900
−1000
−1100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

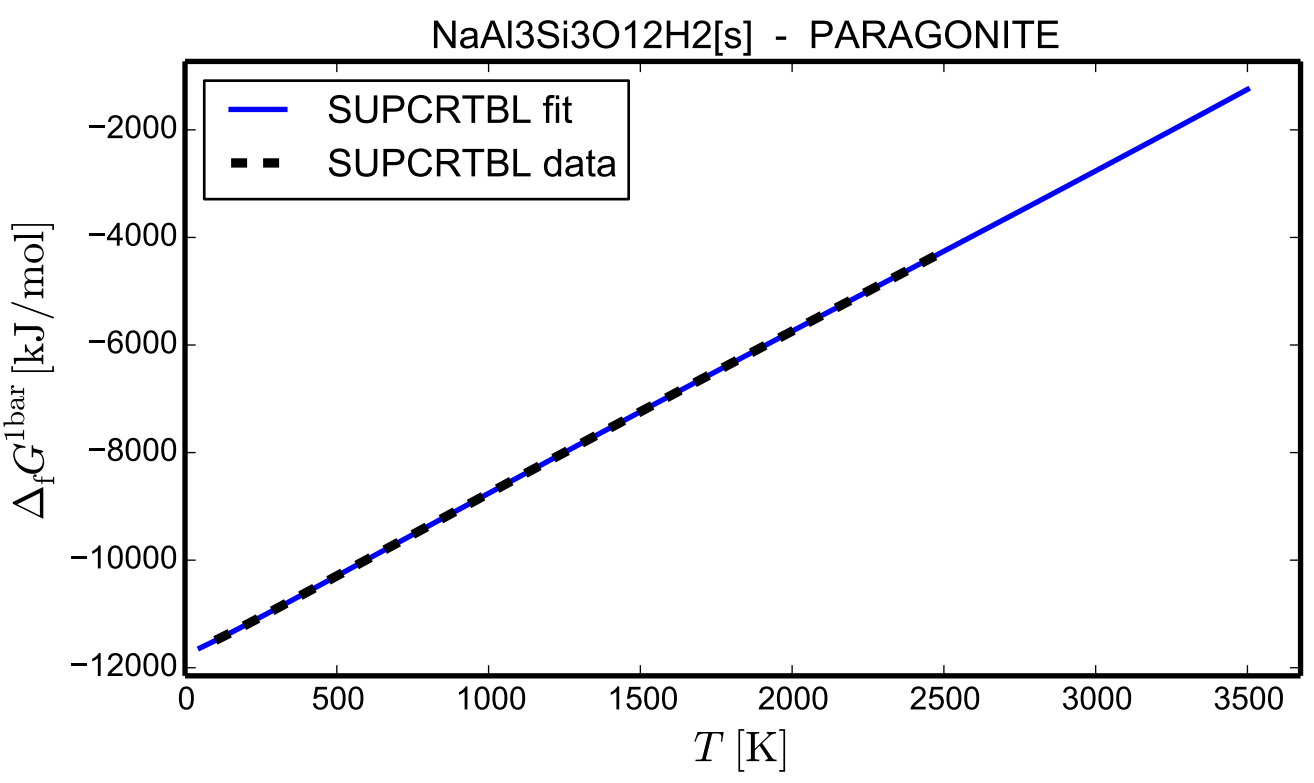

Na2O[l] -
BURCAT
300
200
100
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

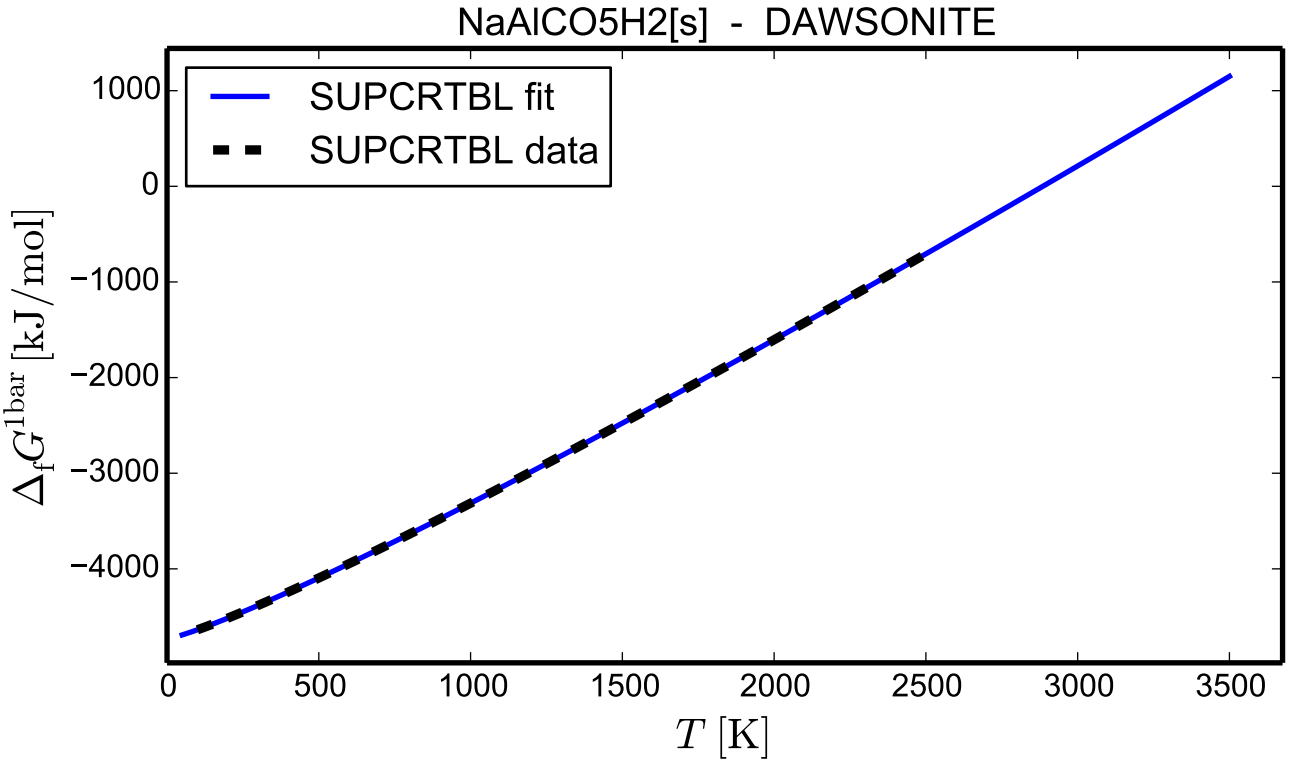

Na2O[s] -
BURCAT
−300
−400
−500
−600
−700
−800
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

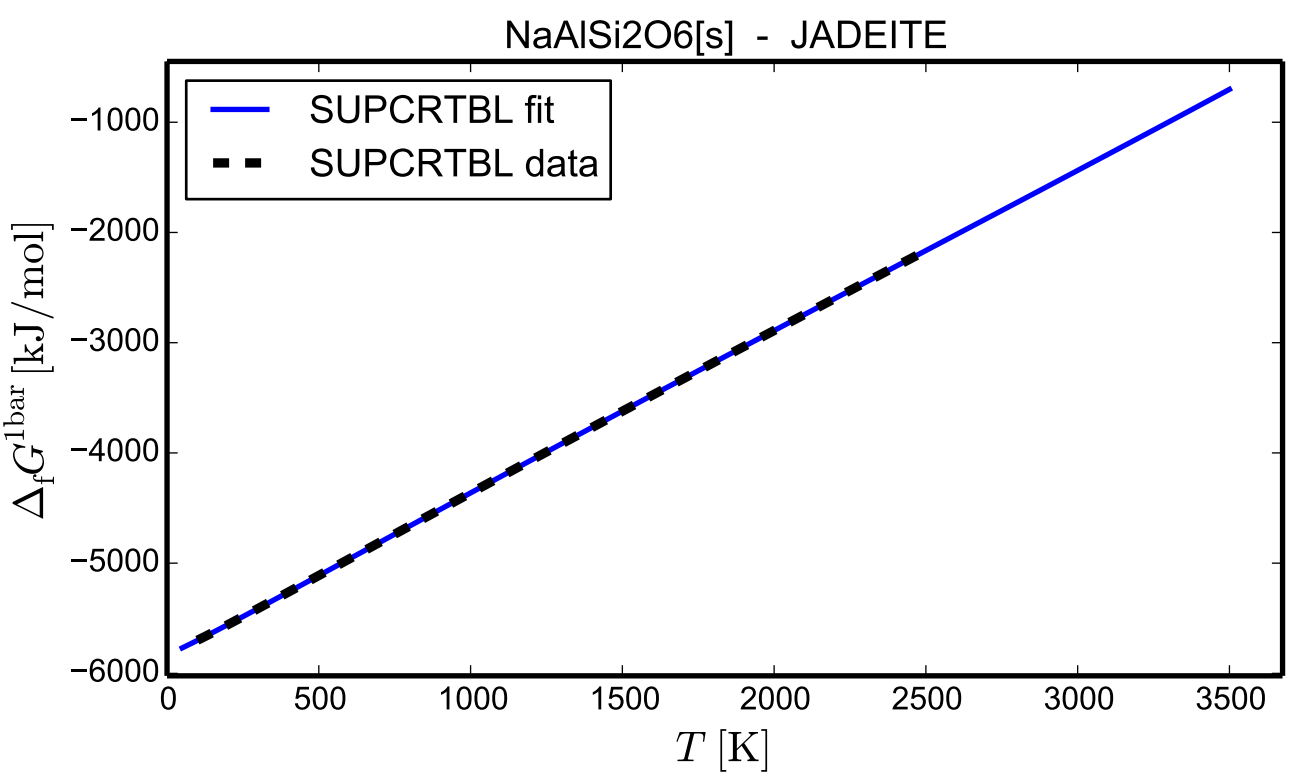

Na2SiO3[l] -
old GGchem
−500
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

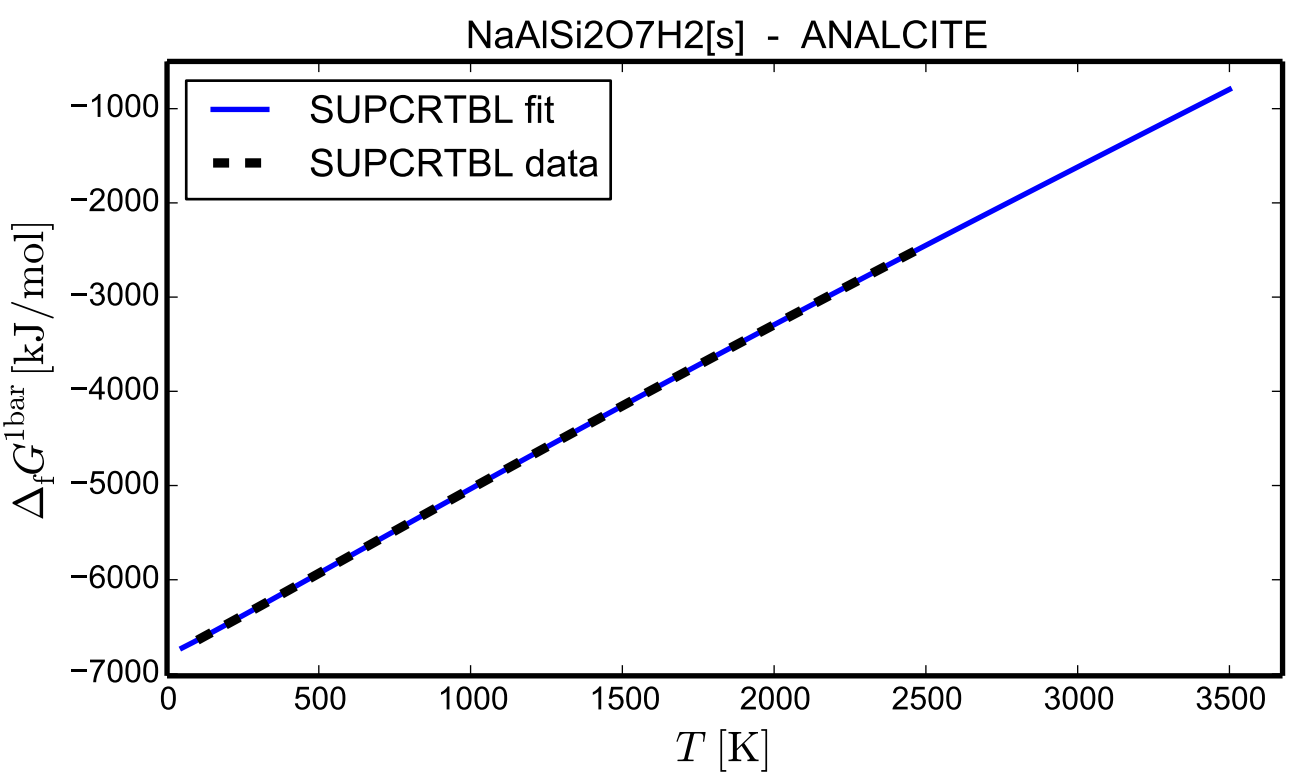

Na2SiO3[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

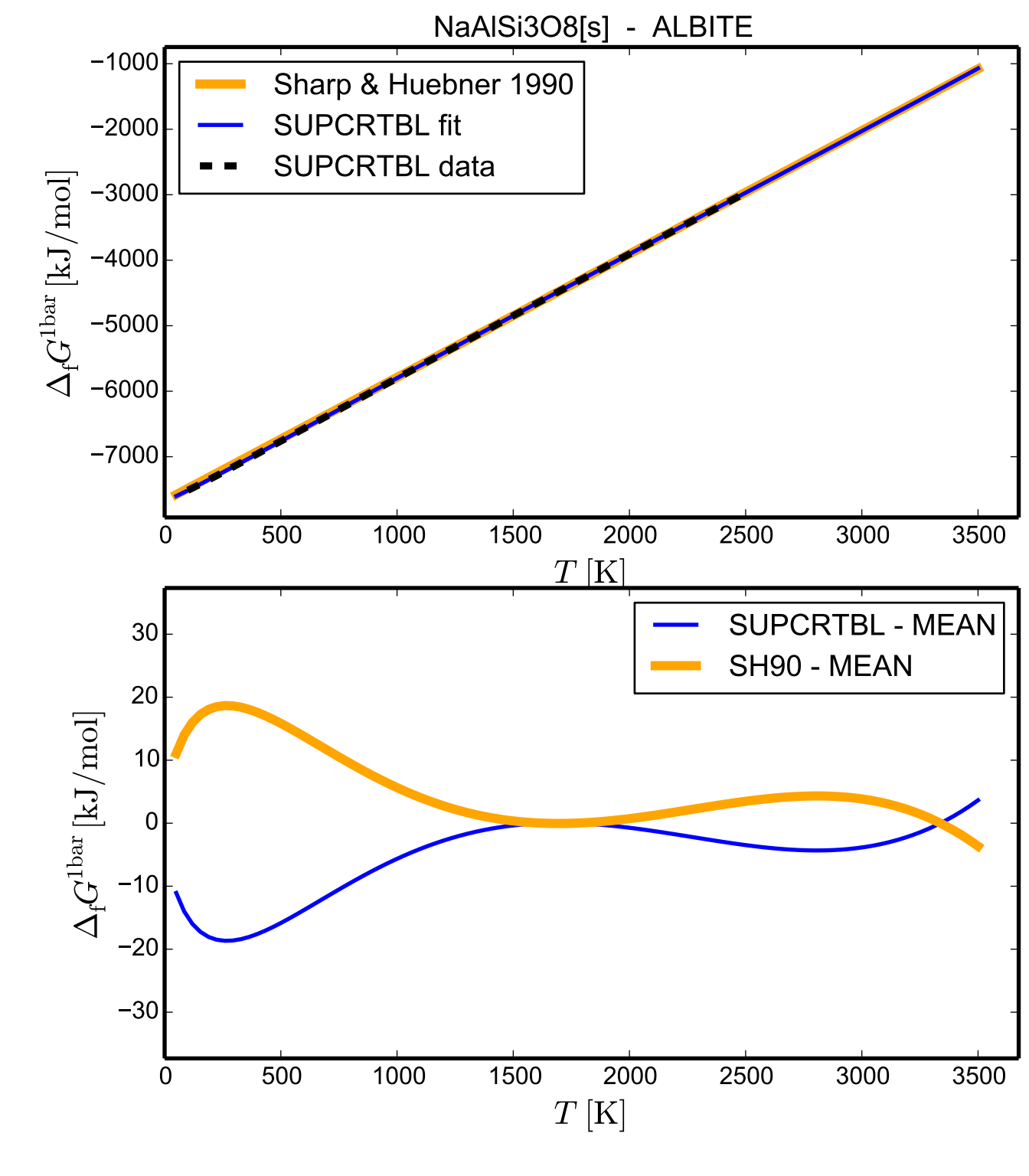

Na2S[s] -
old GGchem
200
0
−200
−400
−600
−800
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

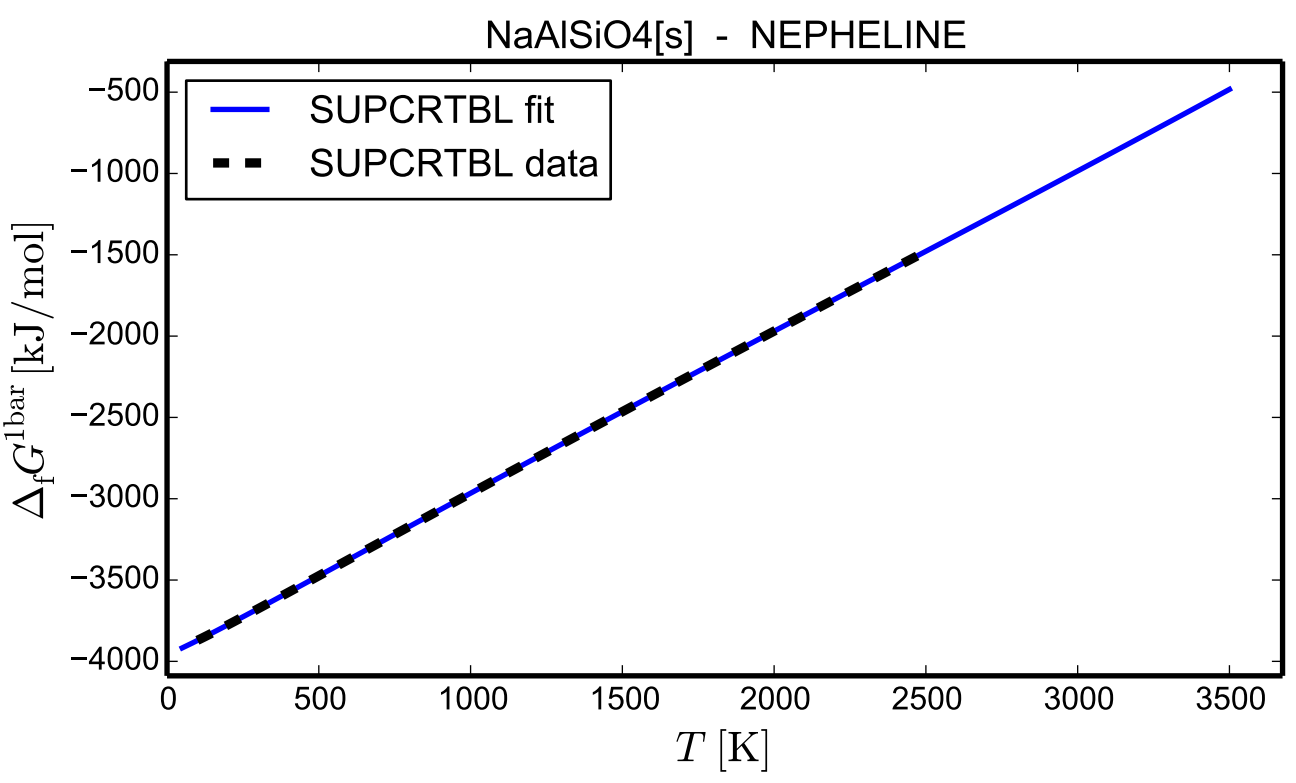

NaAl3Si3O12H2[s] - PARAGONITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

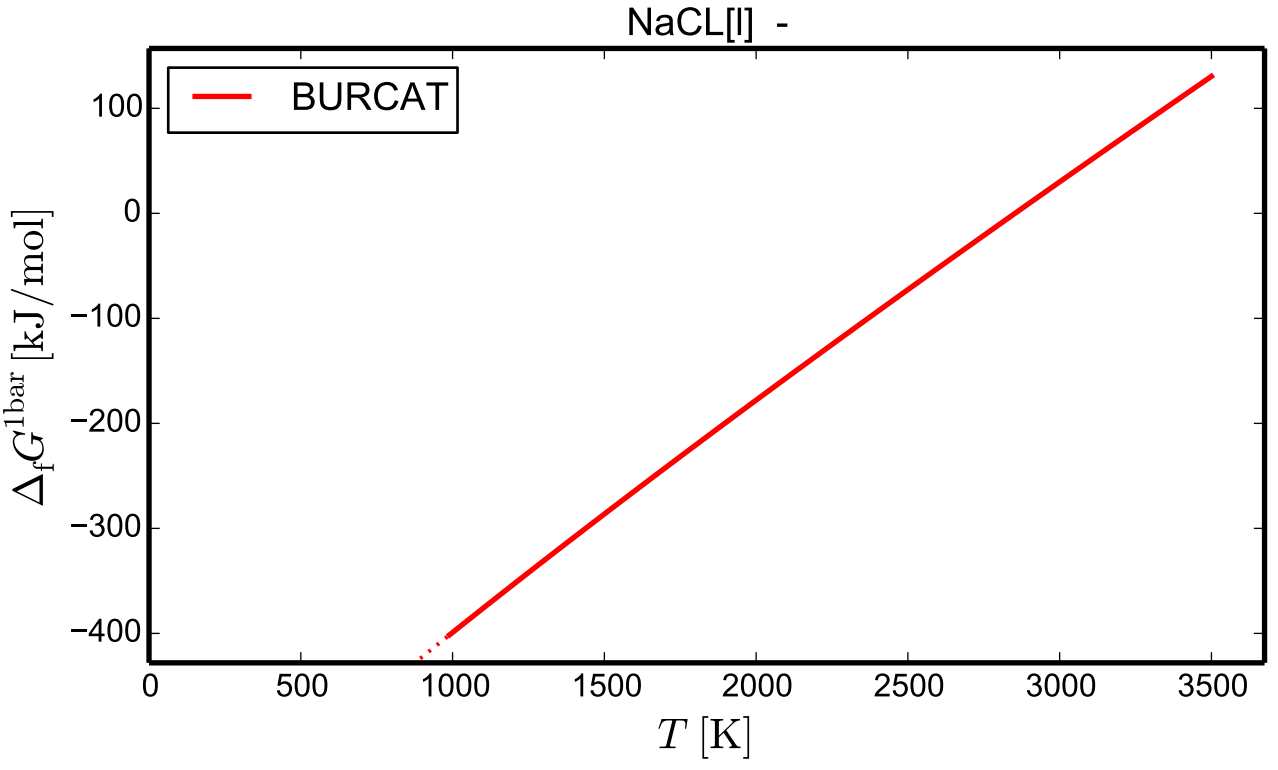

NaAlCO5H2[s] - DAWSONITE
SUPCRTBL fit
SUPCRTBL data
1000
0
−1000
−2000
−3000
−4000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

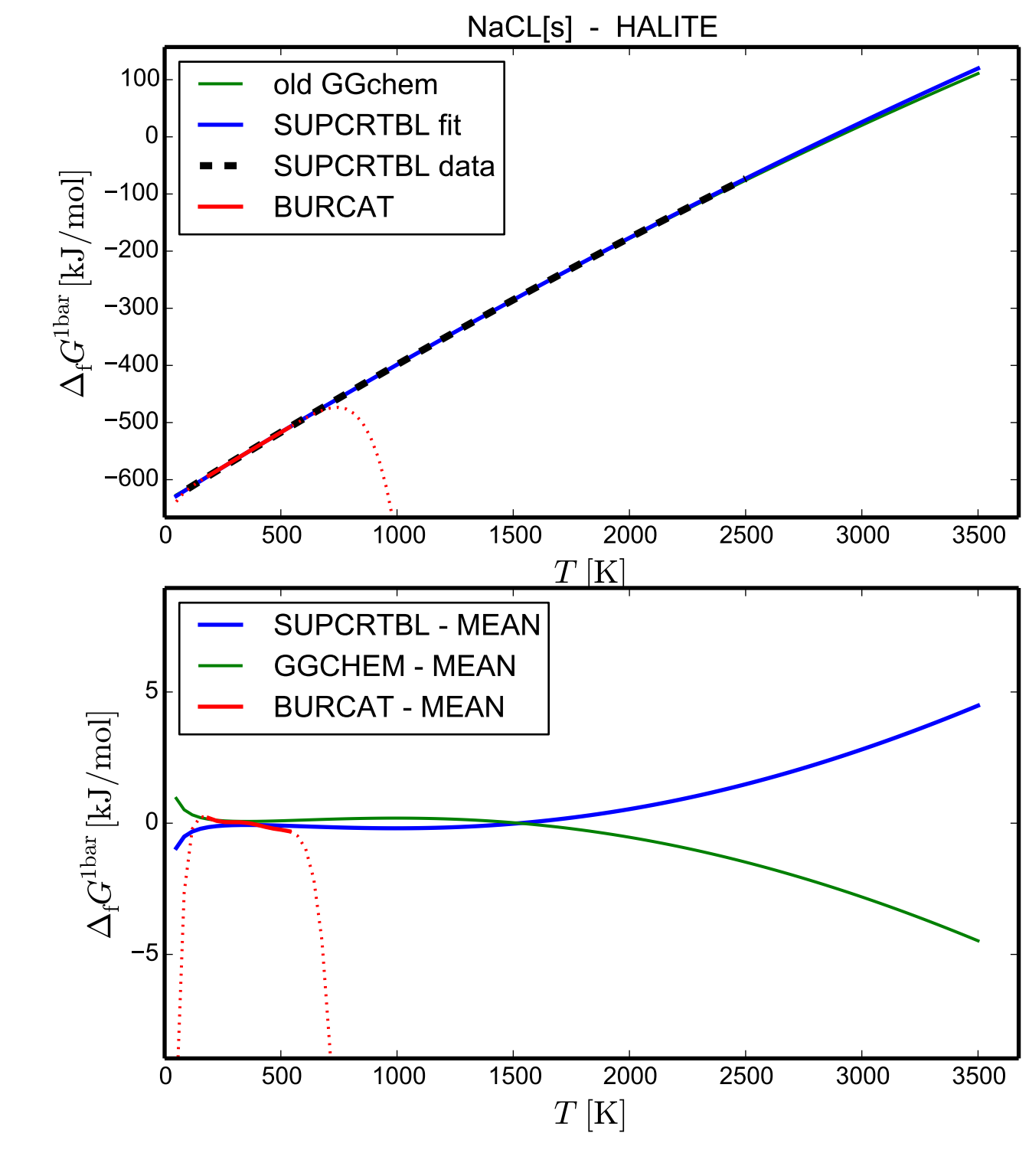

NaAlSi2O6[s] - JADEITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

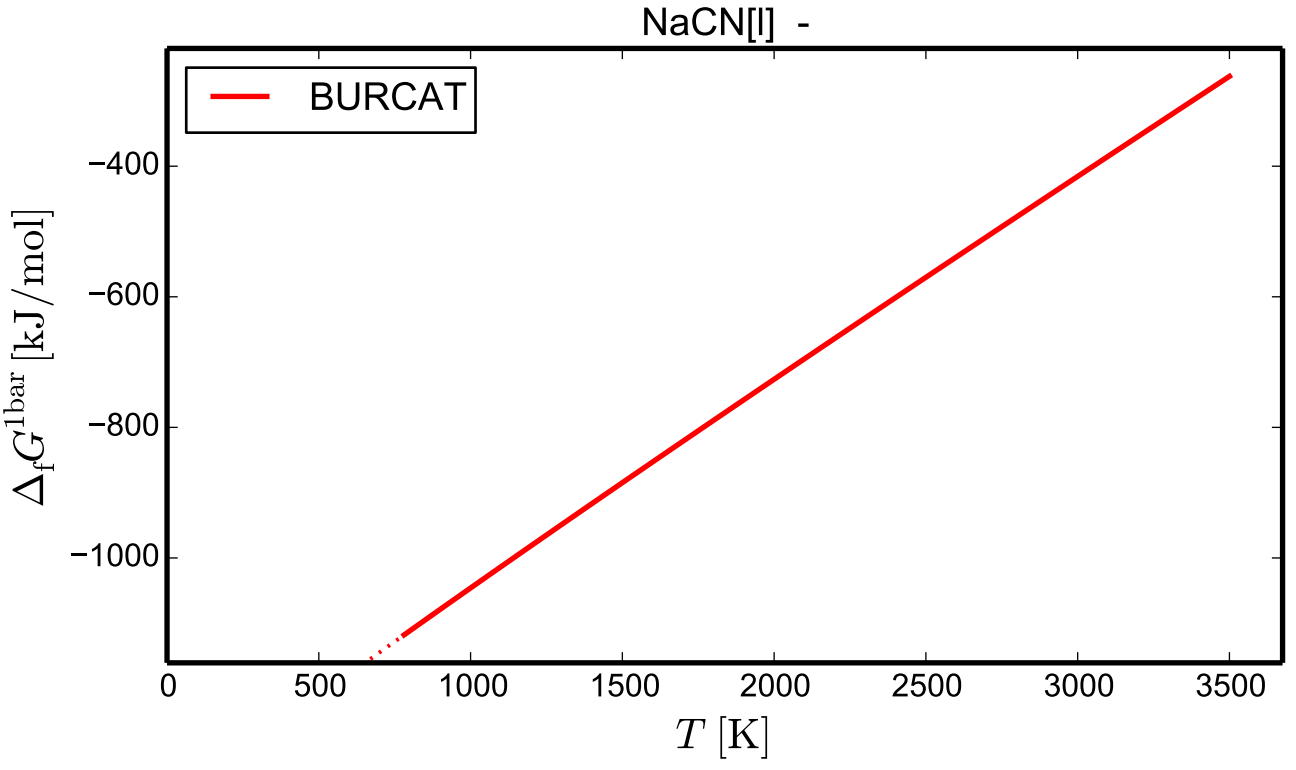

NaAlSi2O7H2[s] - ANALCITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
−6000
−7000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

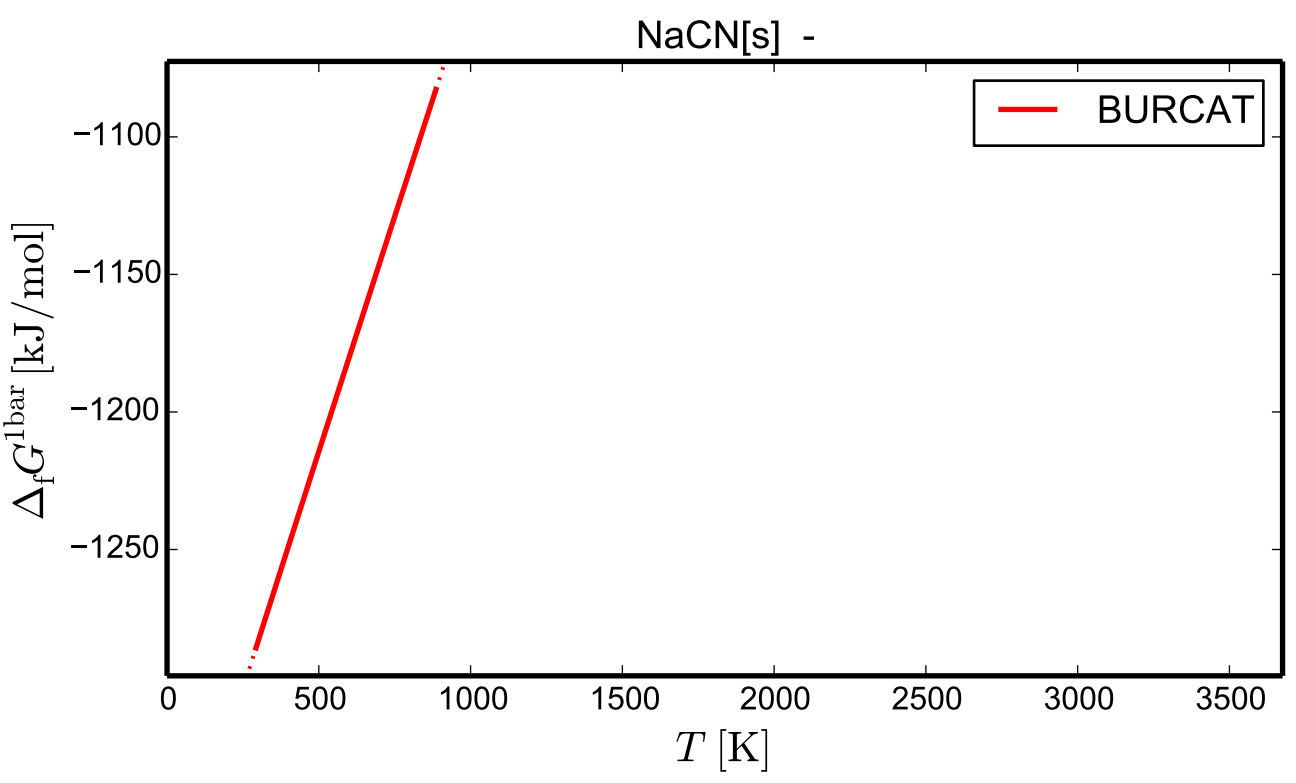

NaAlSi3O8[s] - ALBITE
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

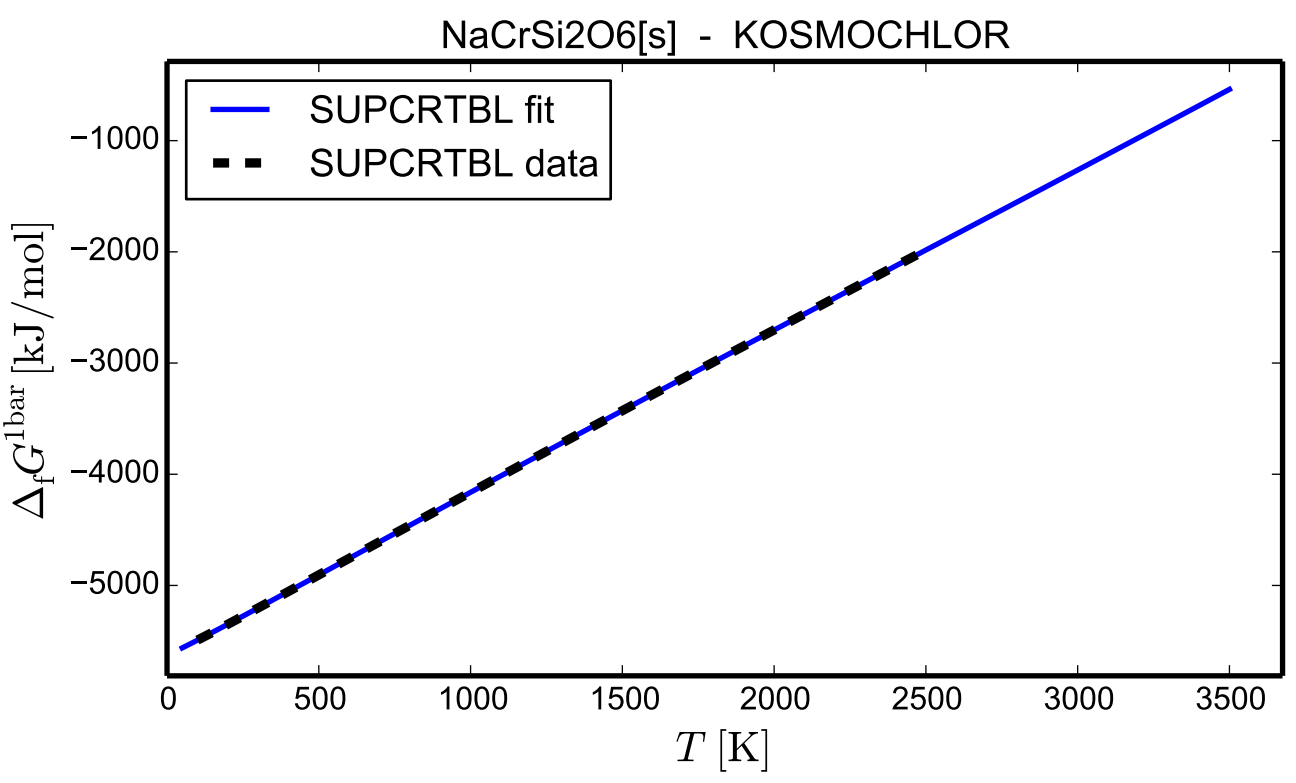

NaAlSiO4[s] - NEPHELINE
SUPCRTBL fit
SUPCRTBL data
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

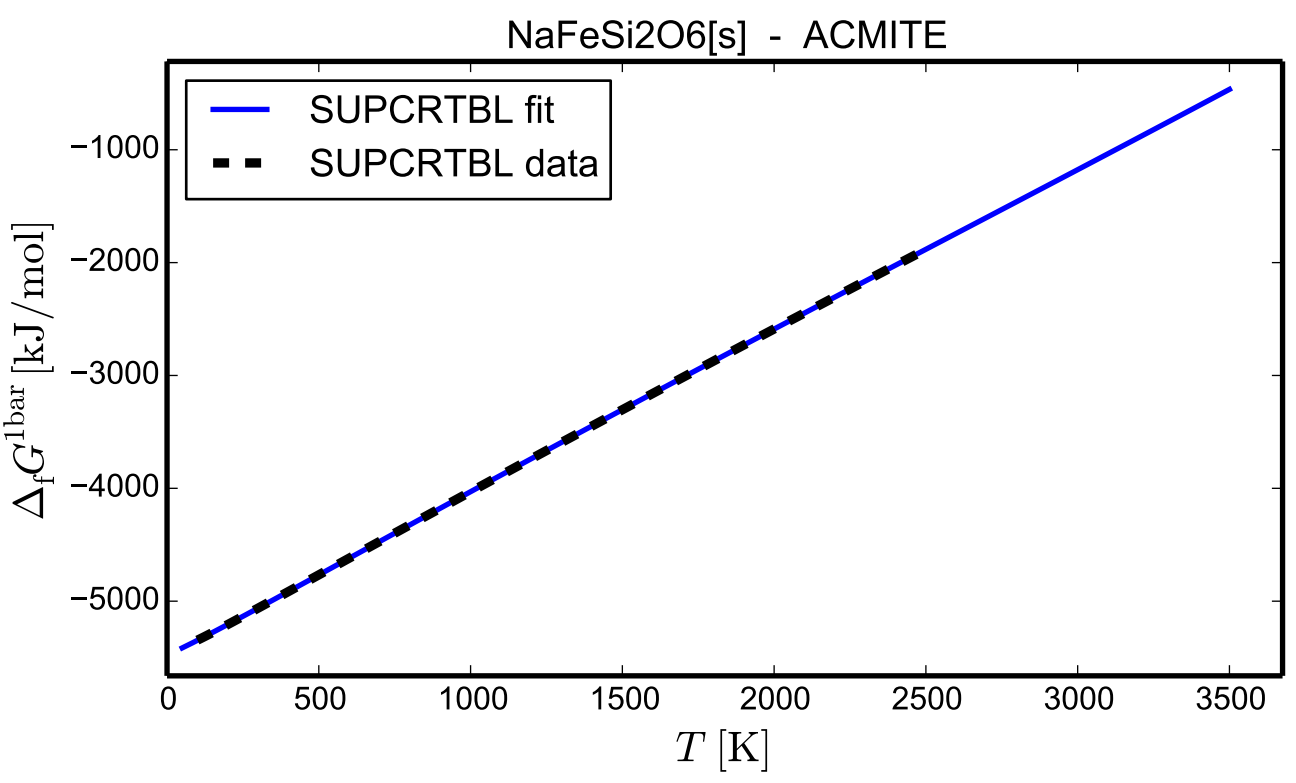

NaCL[l] -
BURCAT
100
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

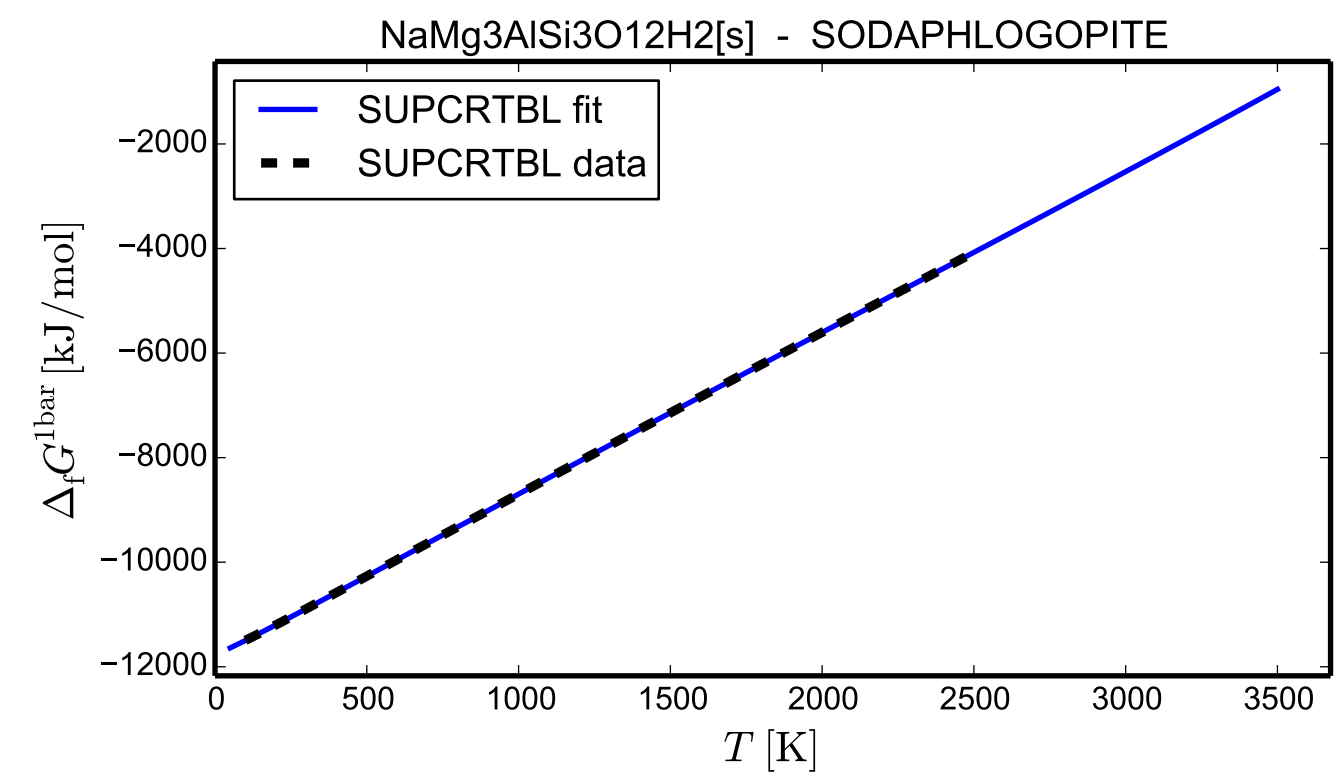

NaCL[s] - HALITE
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

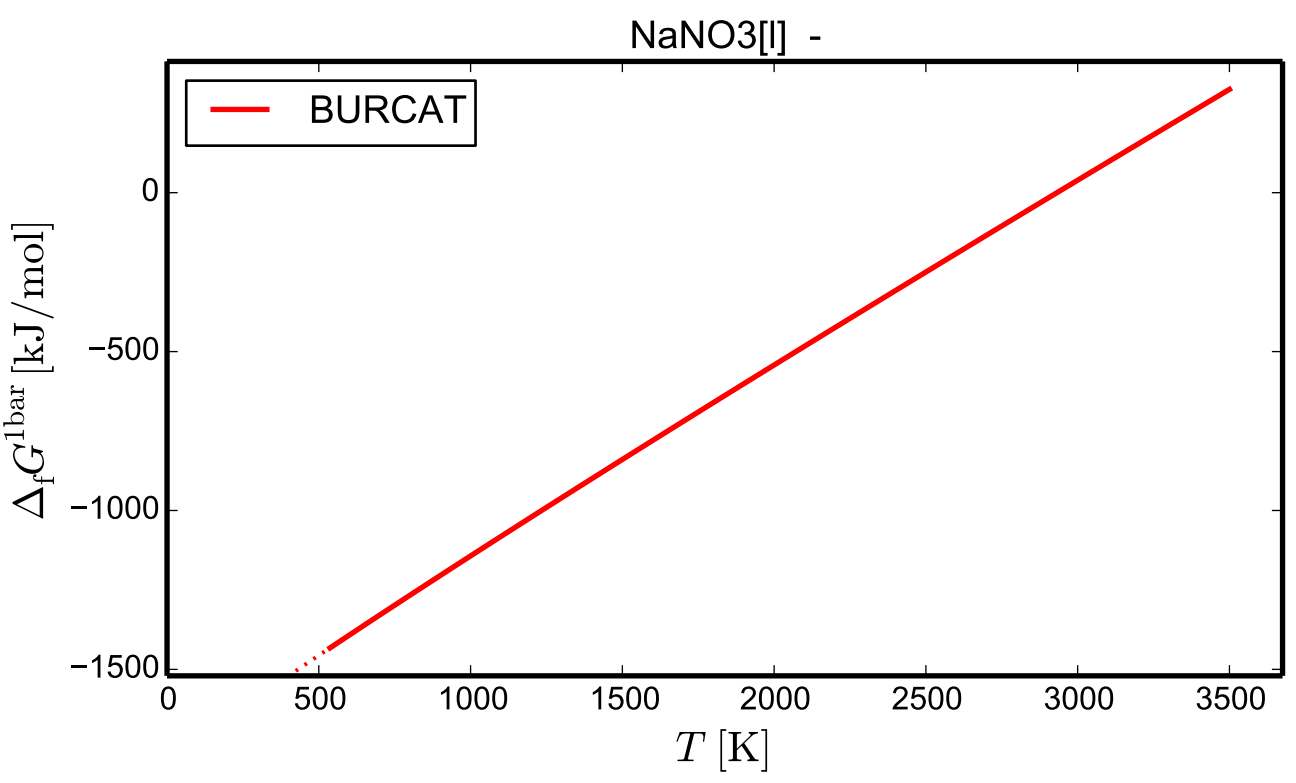

NaCN[l] -
BURCAT
−400
−600
−800
−1000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

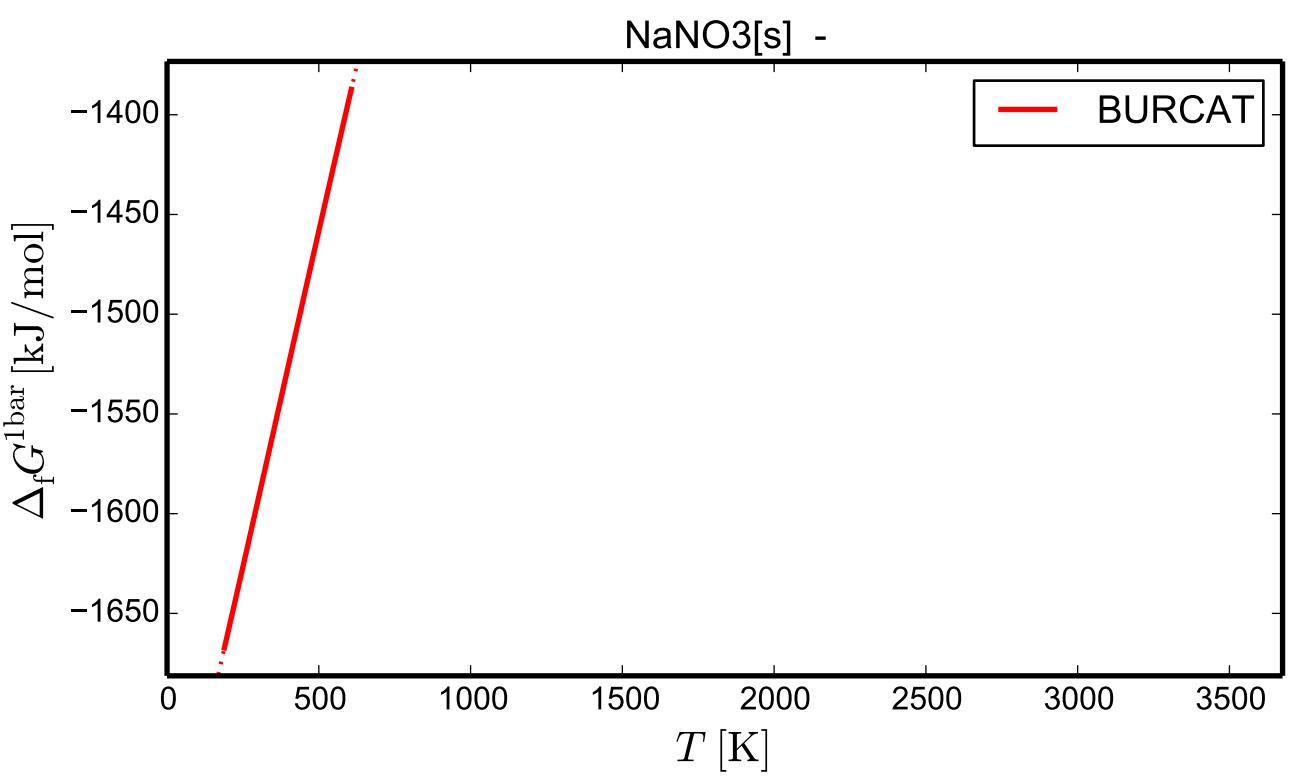

NaCN[s] -
BURCAT
−1100
−1150
−1200
−1250
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

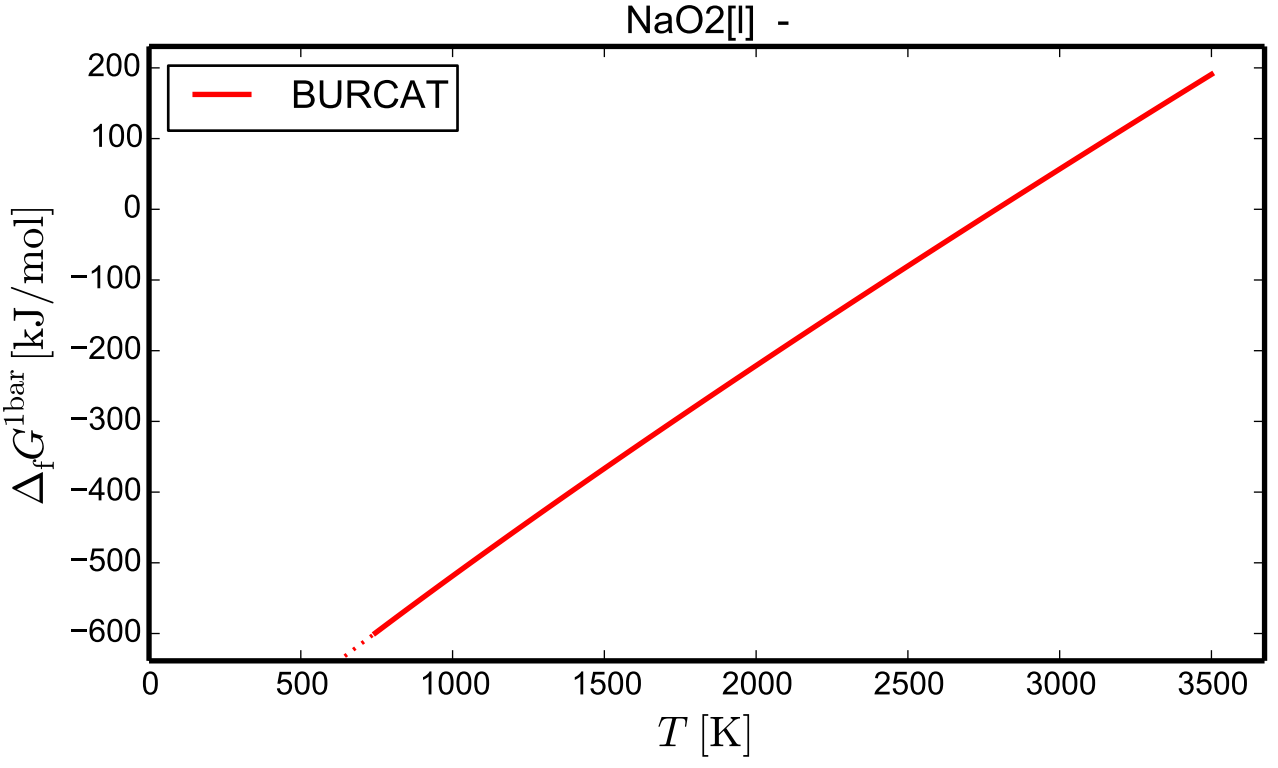

NaCrSi2O6[s] - KOSMOCHLOR
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

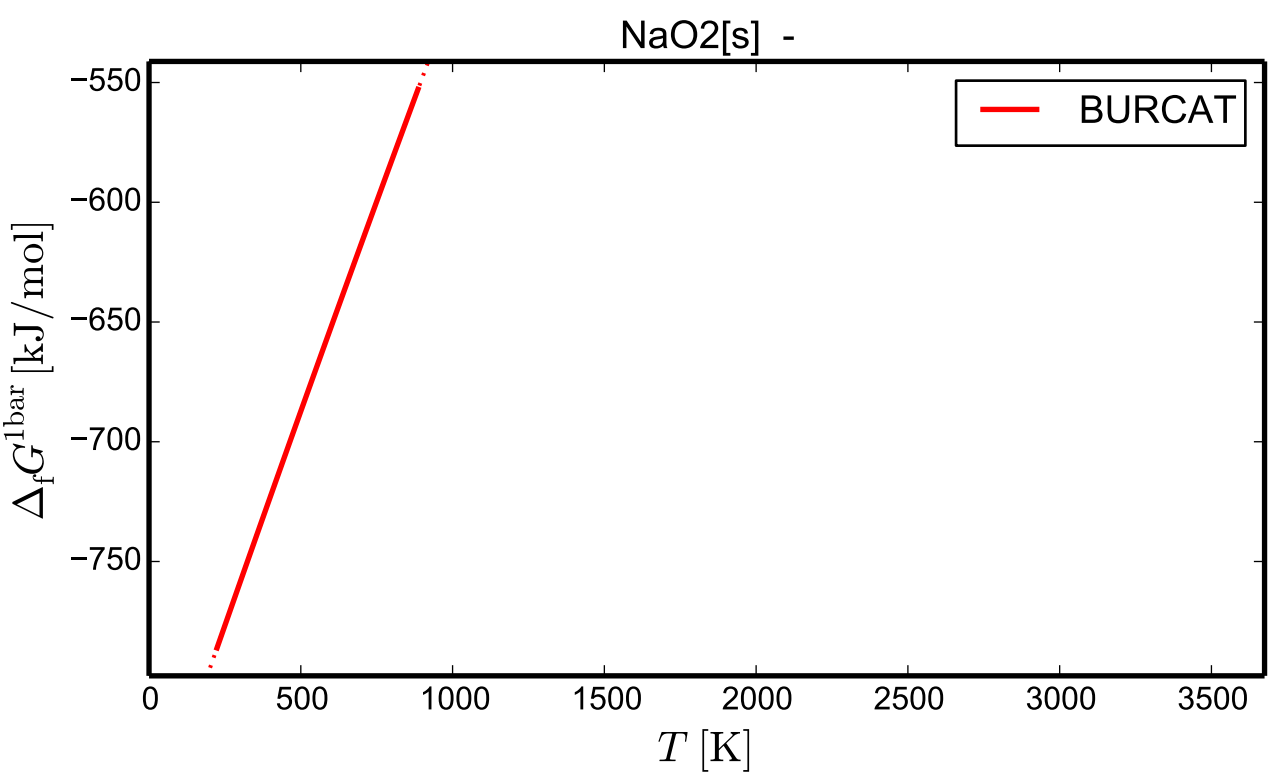

NaFeSi2O6[s] - ACMITE
SUPCRTBL fit
SUPCRTBL data
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

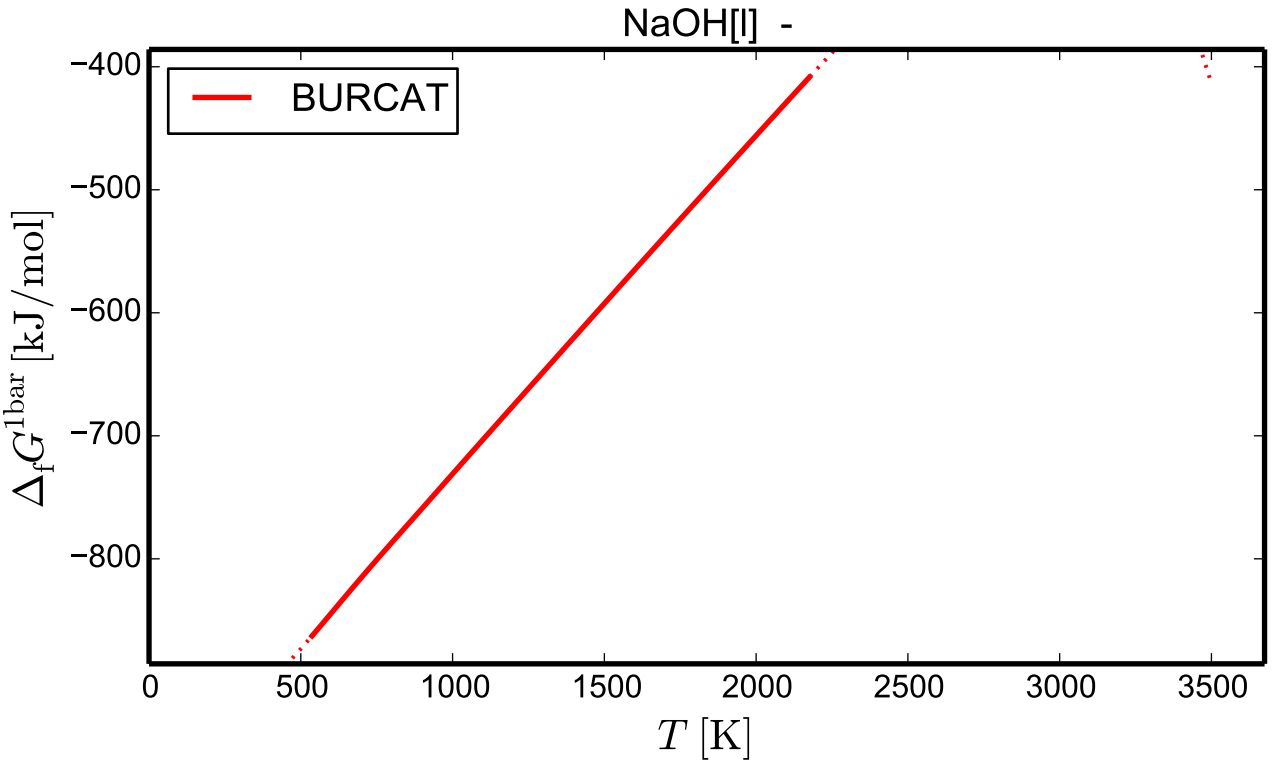

NaMg3AlSi3O12H2[s] - SODAPHLOGOPITE
SUPCRTBL fit
SUPCRTBL data
−2000
−4000
−6000
−8000
−10000
−12000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

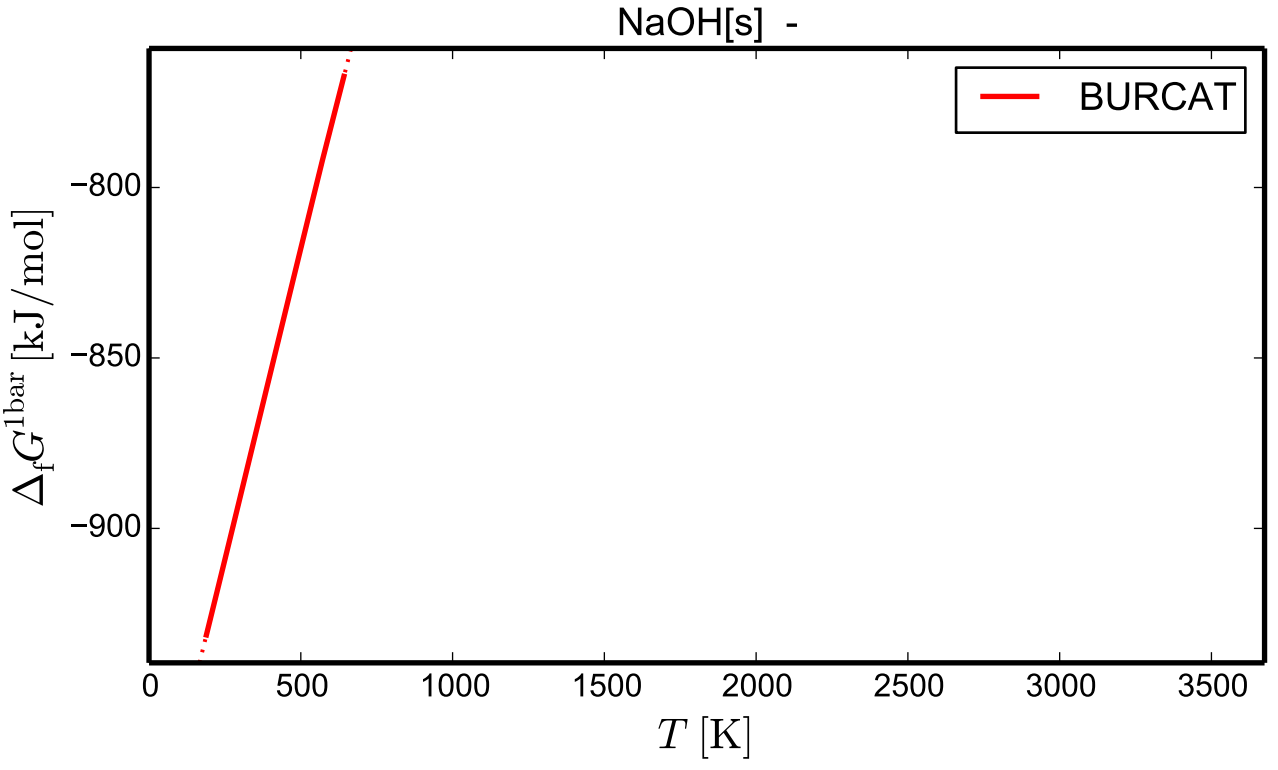

NaNO3[l] -
BURCAT
0
−500
−1000
−1500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

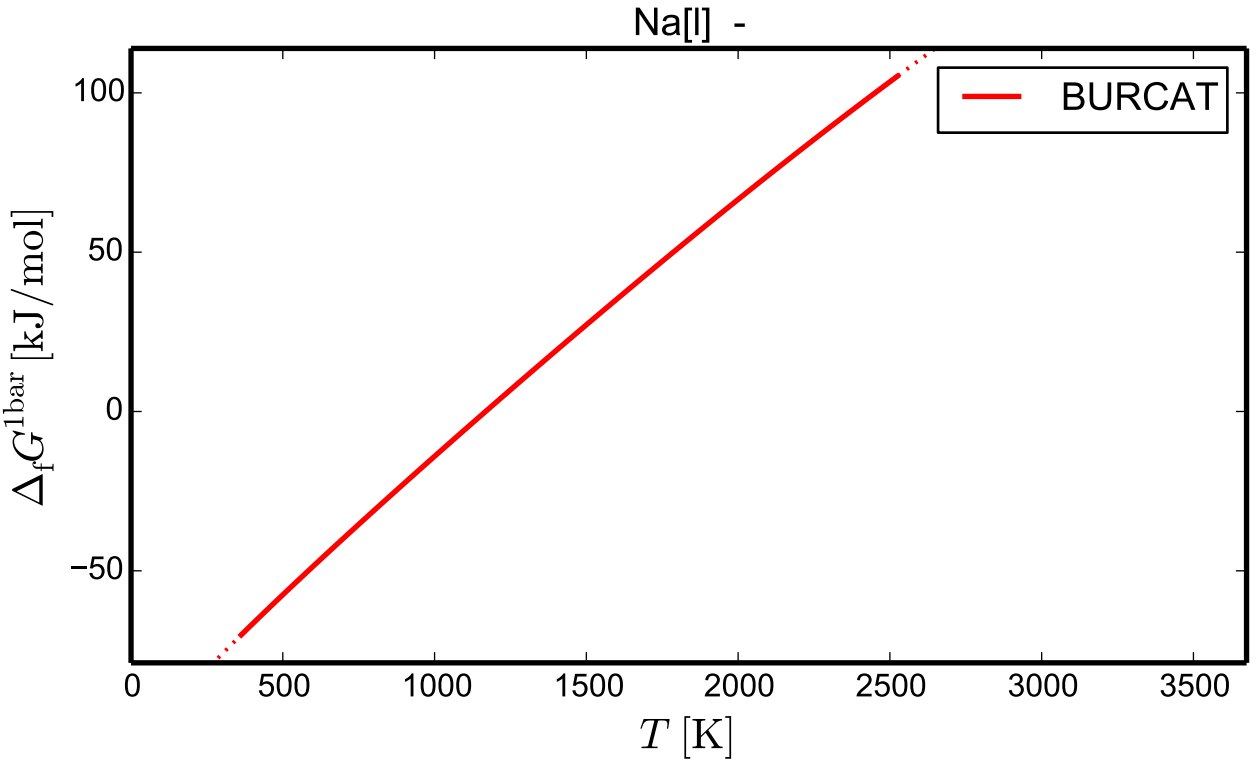

NaNO3[s] -
BURCAT
−1400
−1450
−1500
−1550
−1600
−1650
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

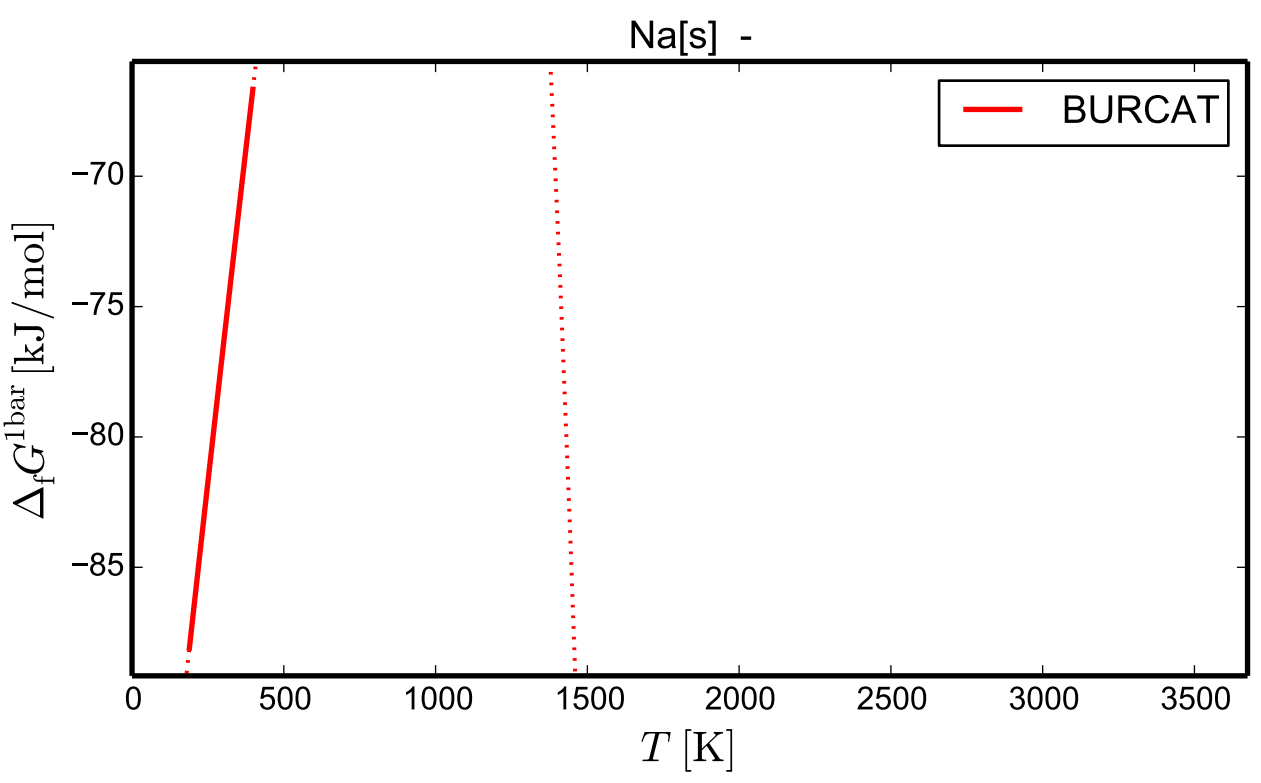

NaO2[l] -
BURCAT
200
100
0
−100
−200
−300
−400
−500
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

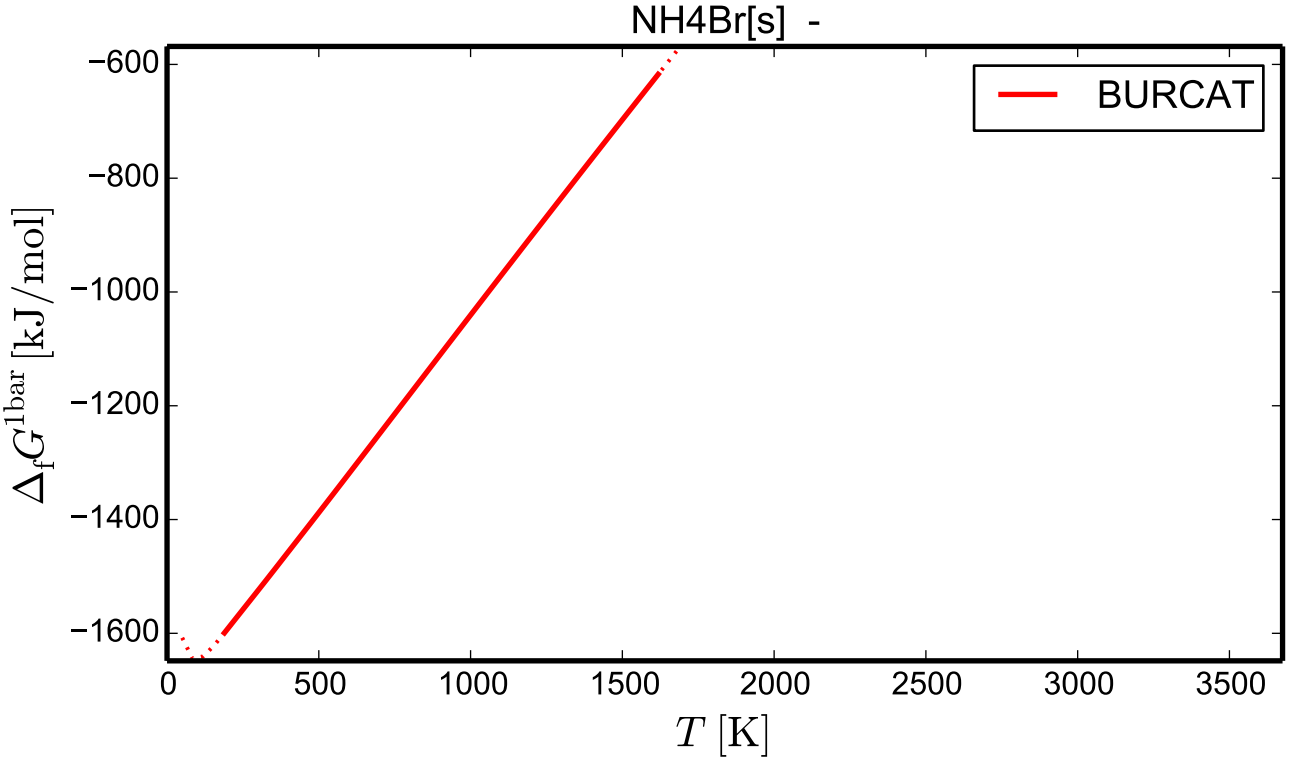

NaO2[s] -
BURCAT
−550
−600
−650
−700
−750
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

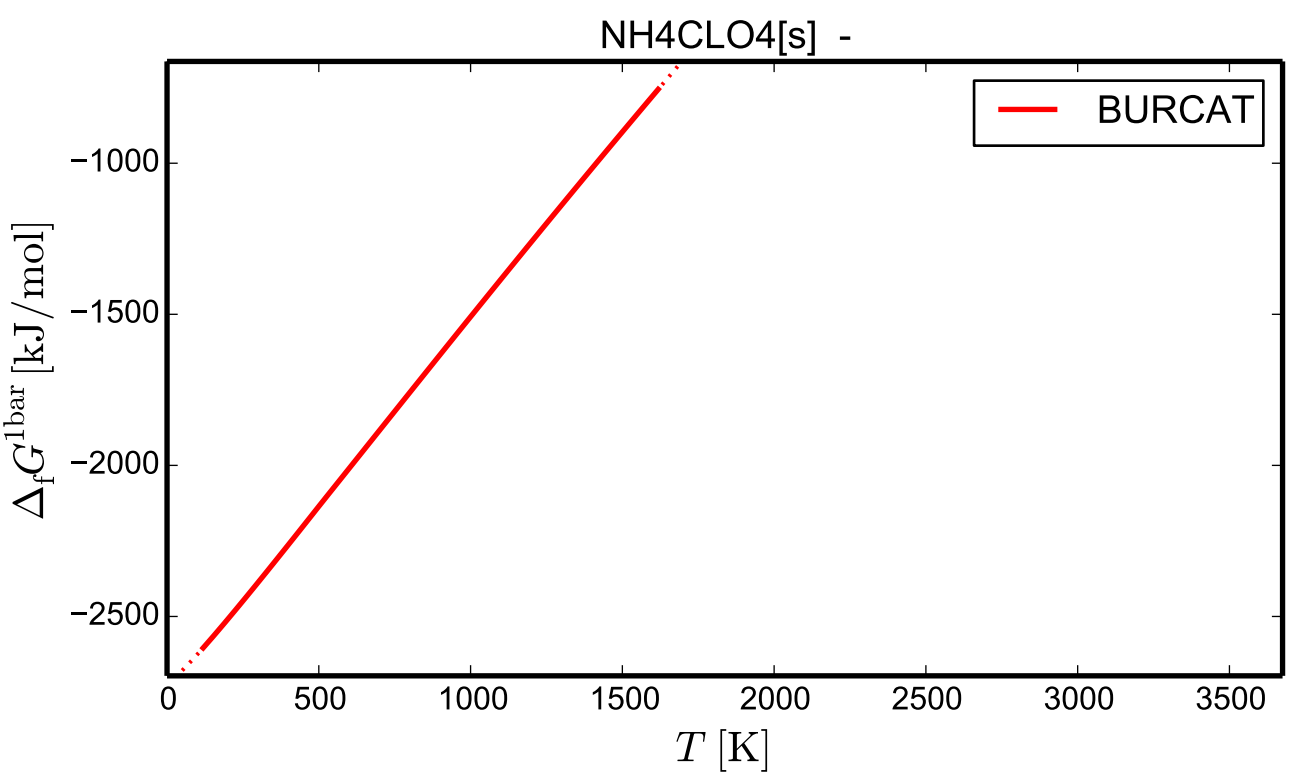

NaOH[l] -
BURCAT
−400
−500
−600
−700
−800
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

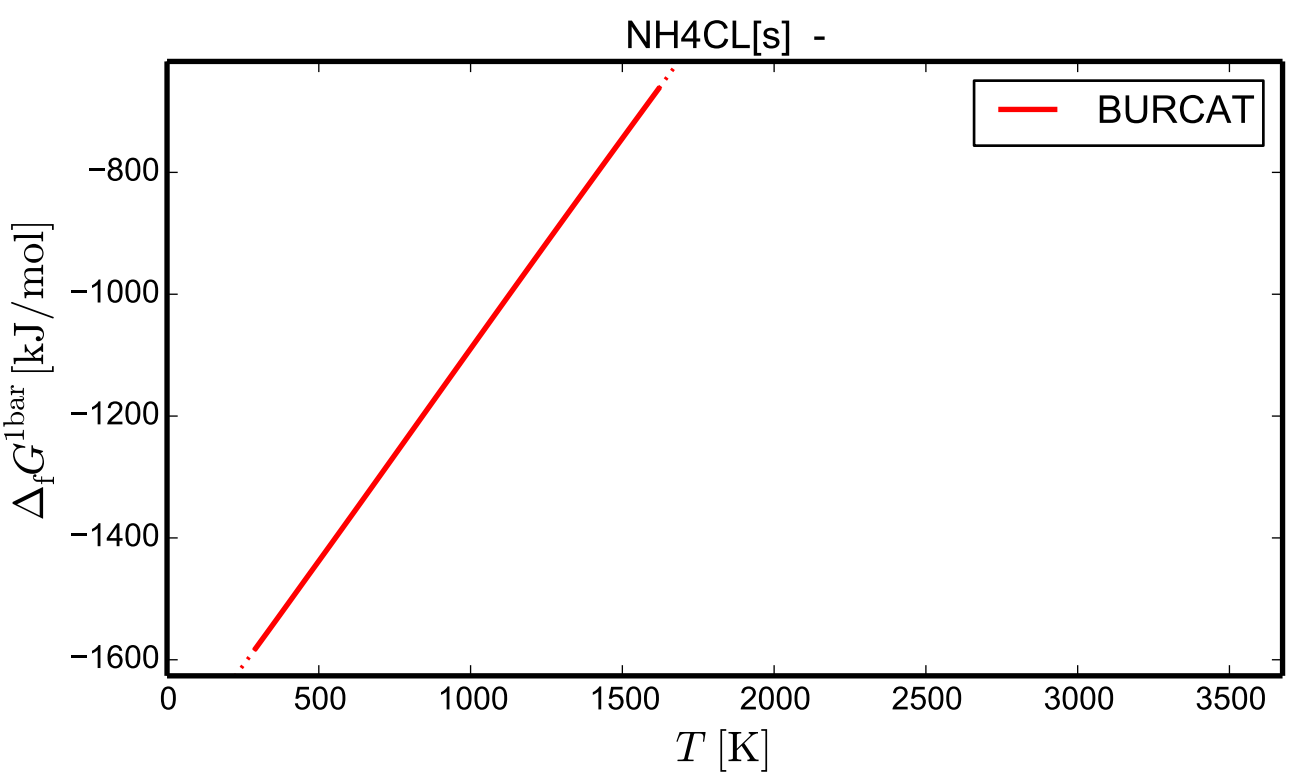

NaOH[s] -
BURCAT
−800
−850
−900
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

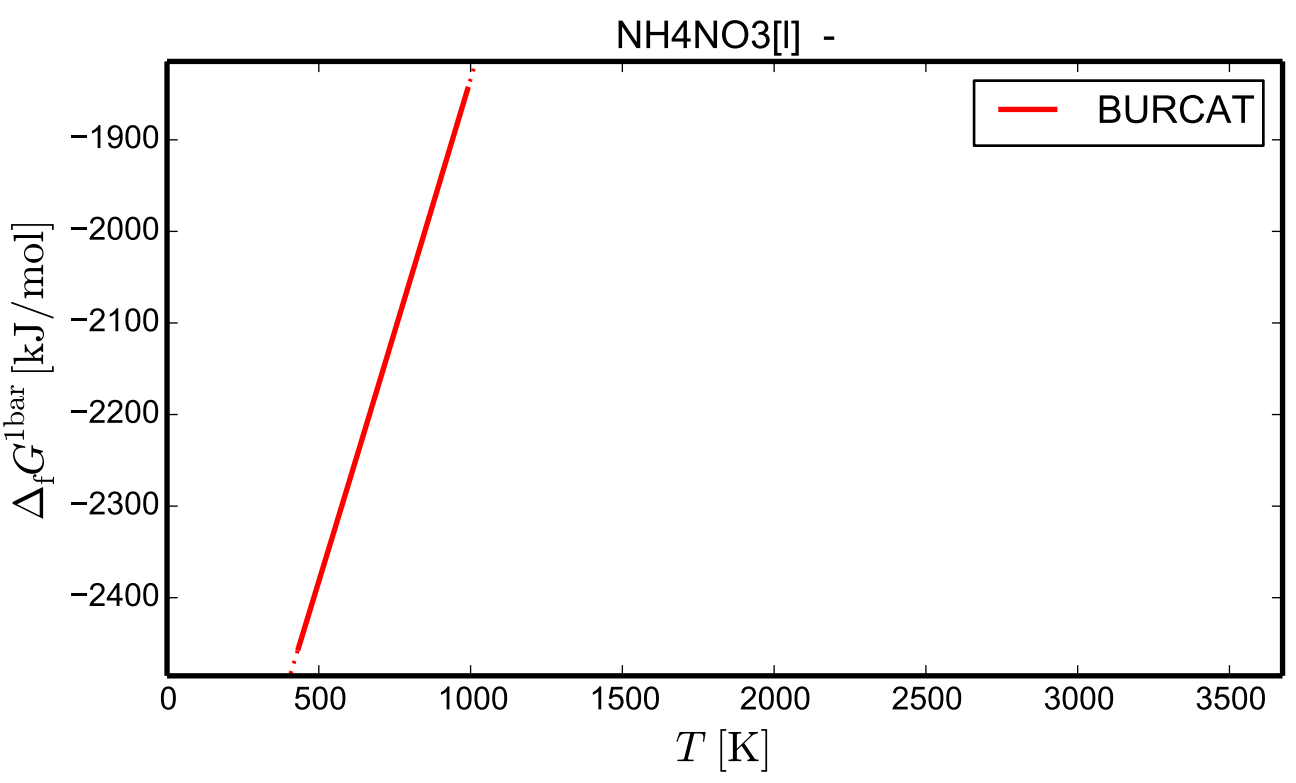

Na[l] -
BURCAT
100
50
0
−50
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

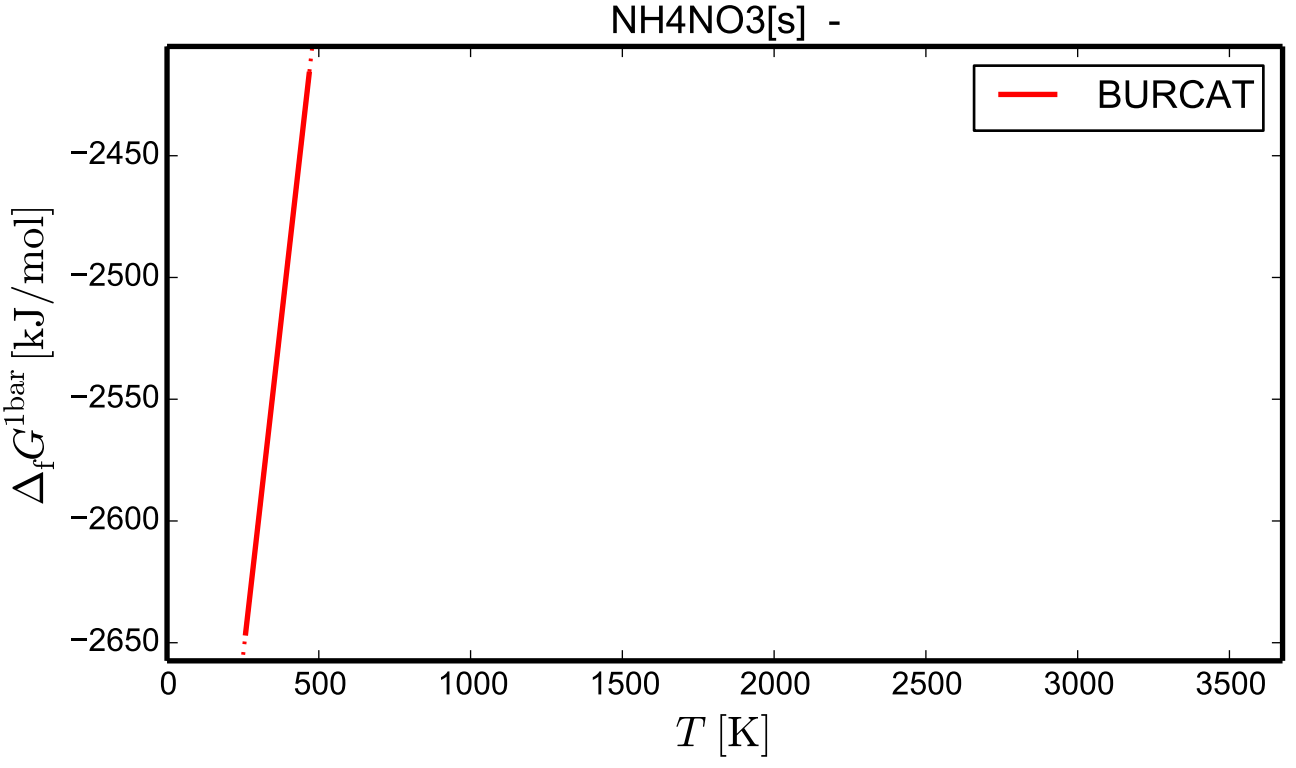

Na[s] -
BURCAT
−70
−75
−80
−85
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

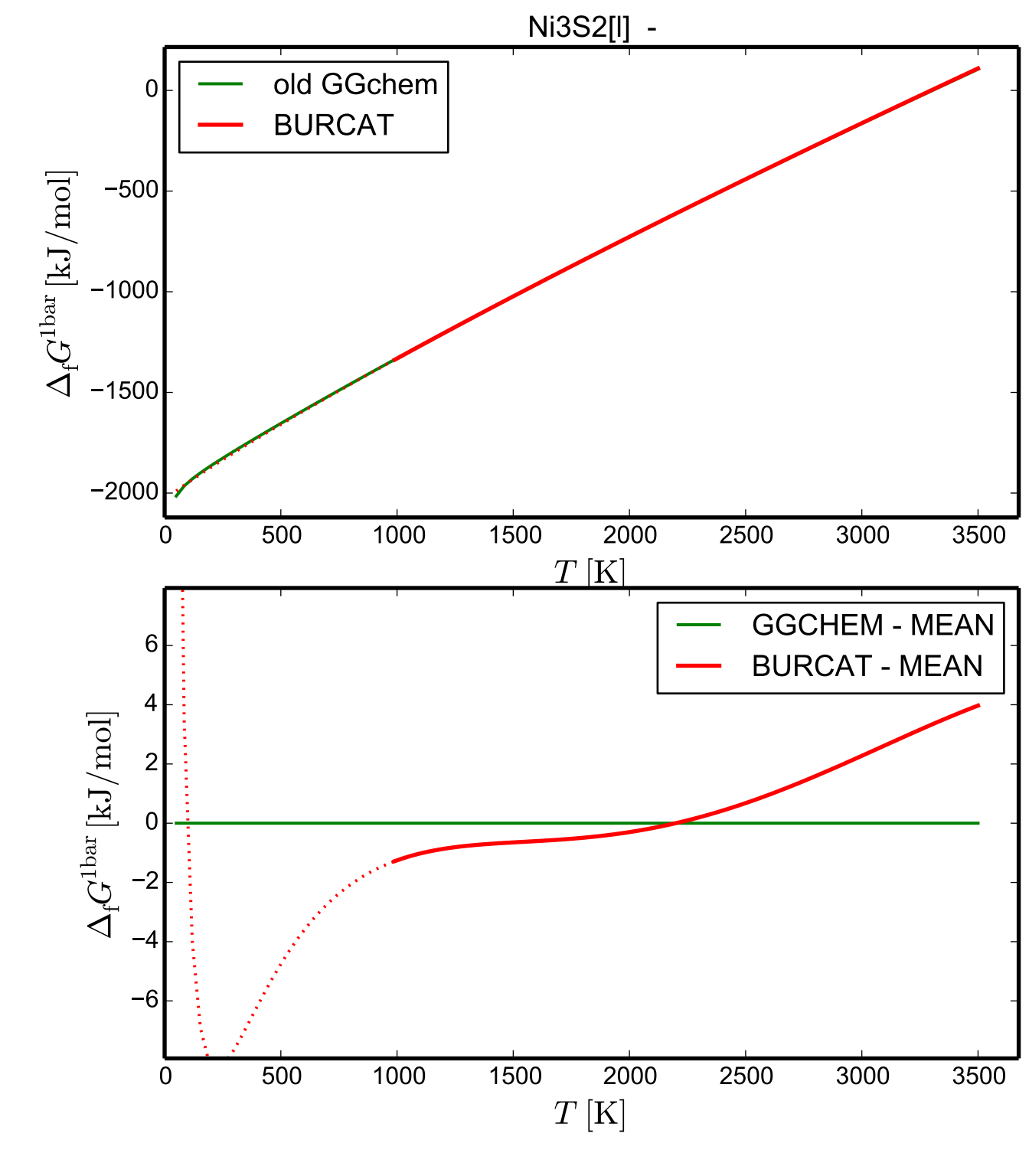

NH4Br[s] -
BURCAT
−600
−800
−1000
−1200
−1400
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

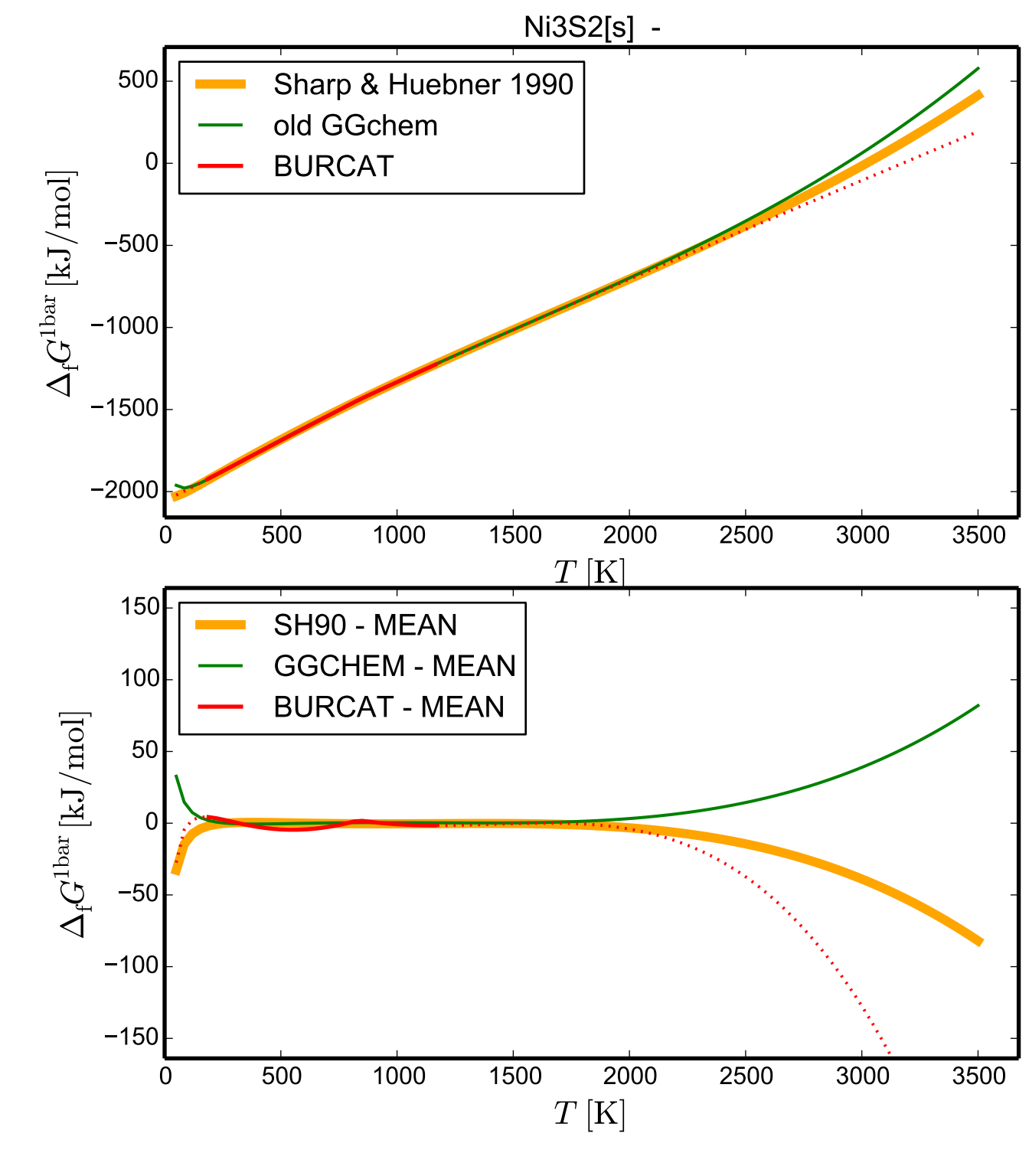

NH4CLO4[s] -
BURCAT
−1000
−1500
−2000
−2500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

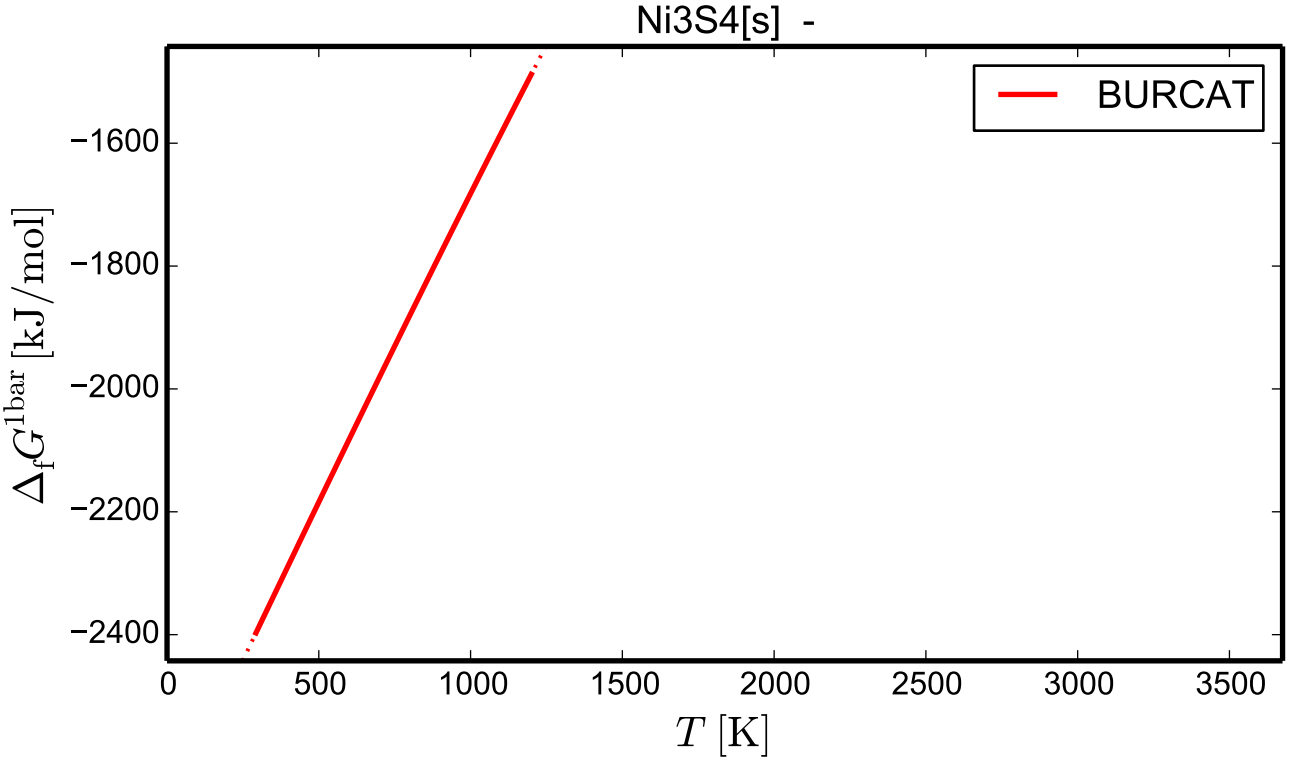

NH4CL[s] -
BURCAT
−800
−1000
−1200
−1400
−1600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

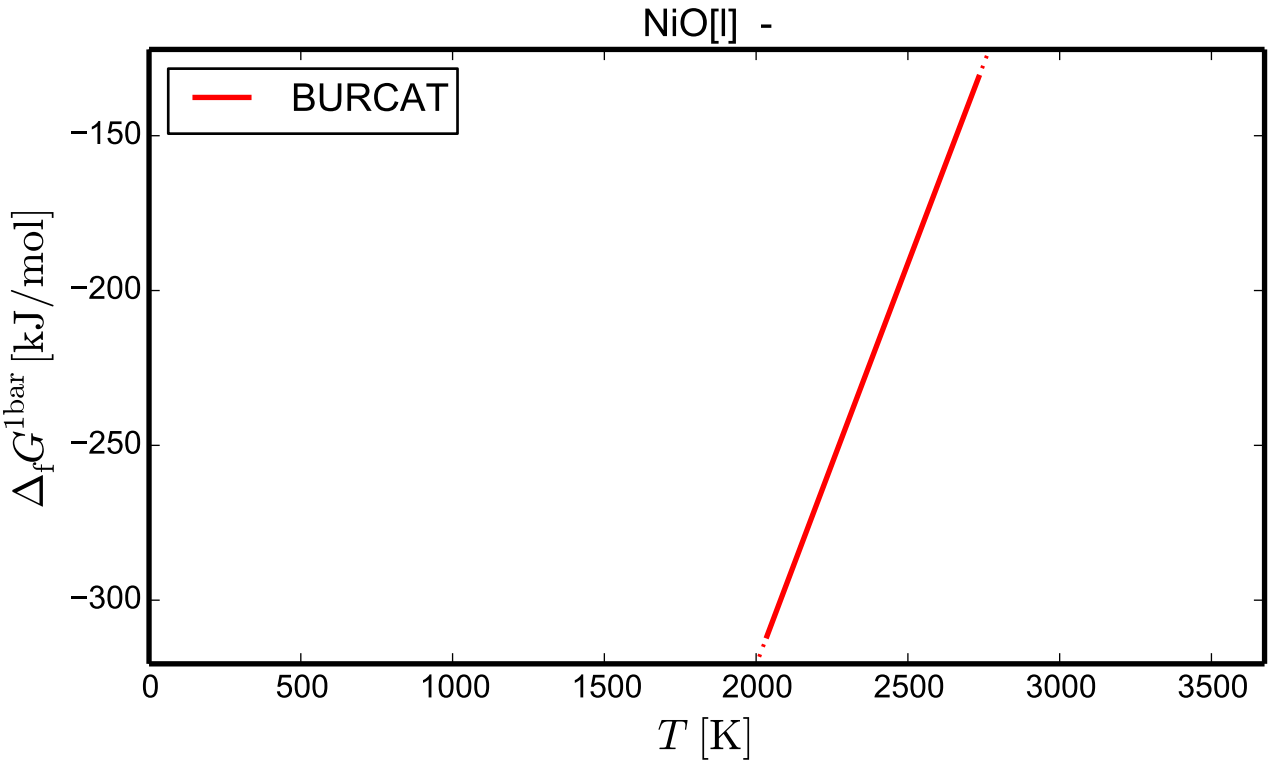

NH4NO3[l] -
BURCAT
−1900
−2000
−2100
−2200
−2300
−2400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

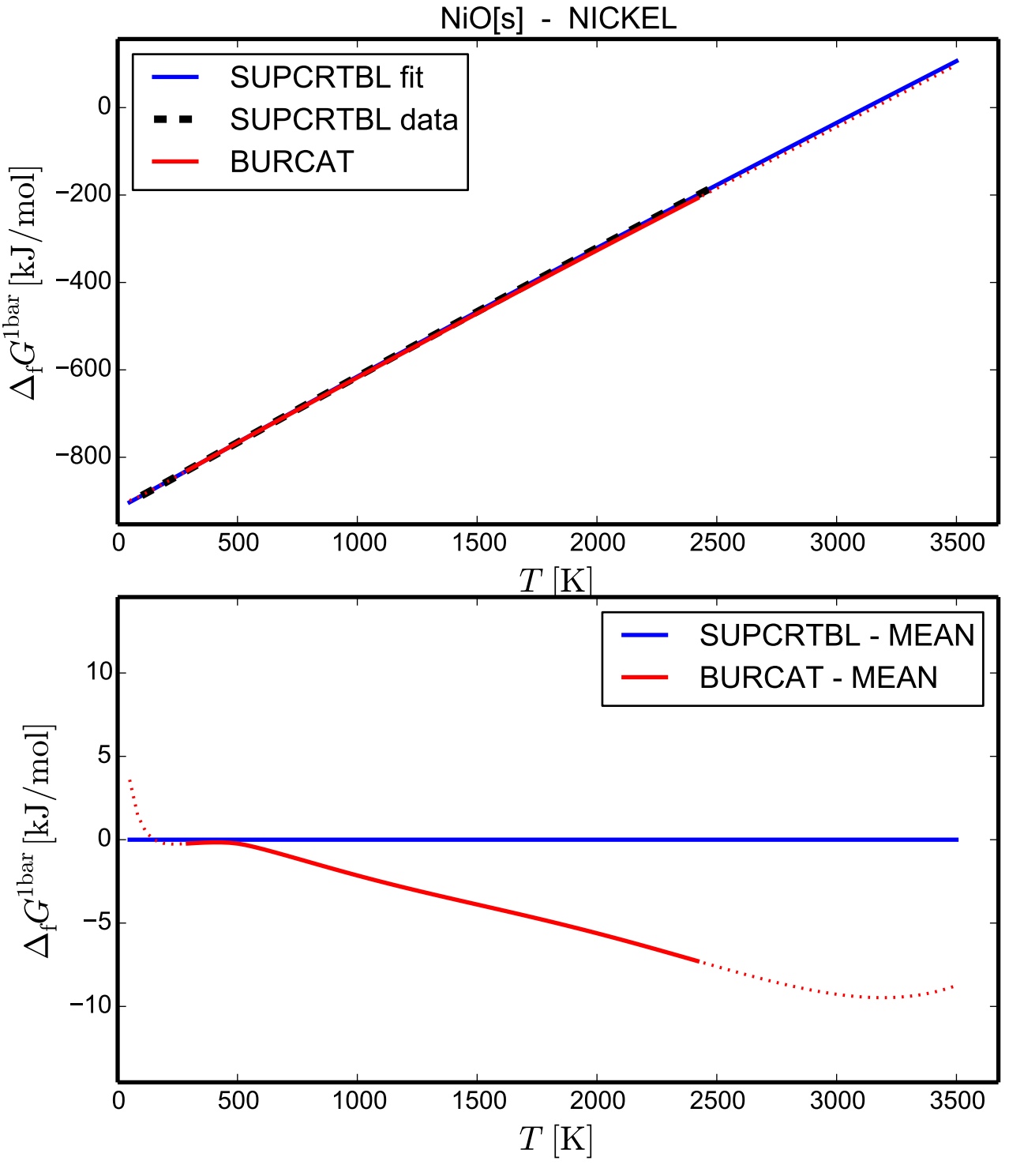

NH4NO3[s] -
BURCAT
−2450
−2500
−2550
−2600
−2650
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

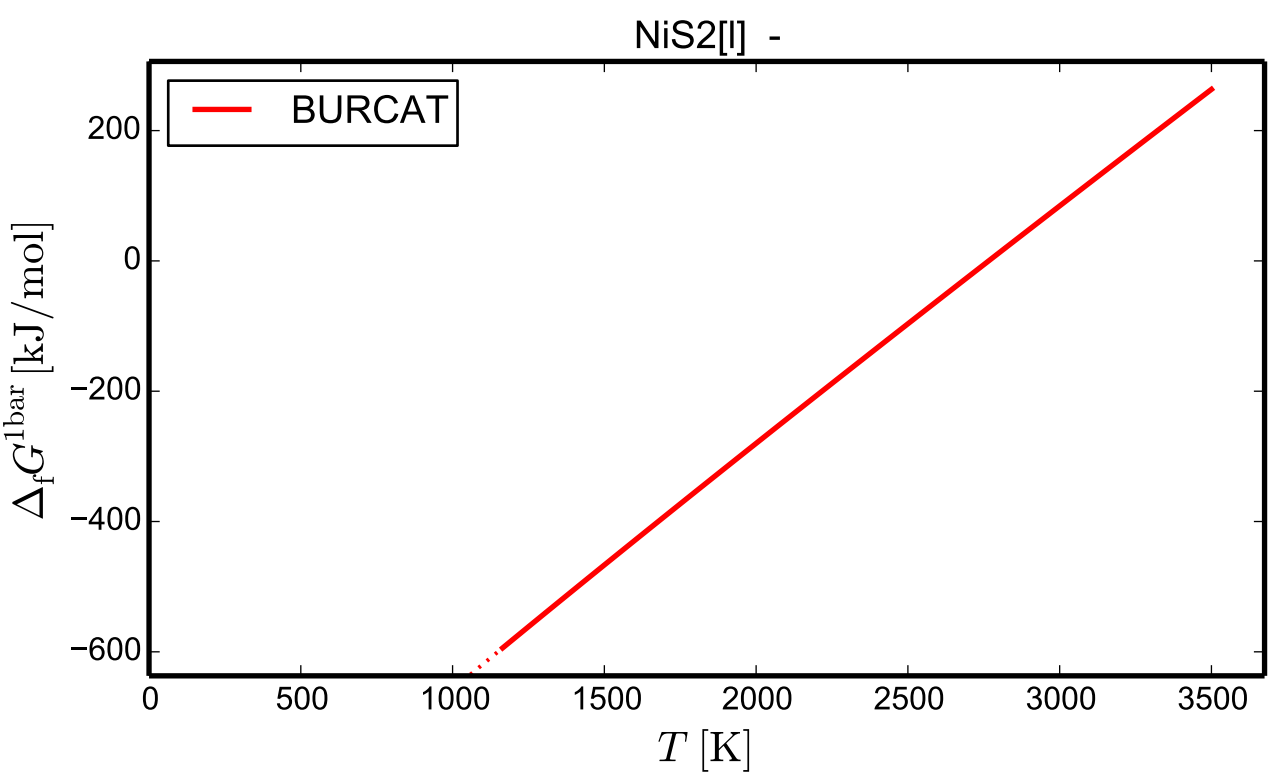

Ni3S2[l] -
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

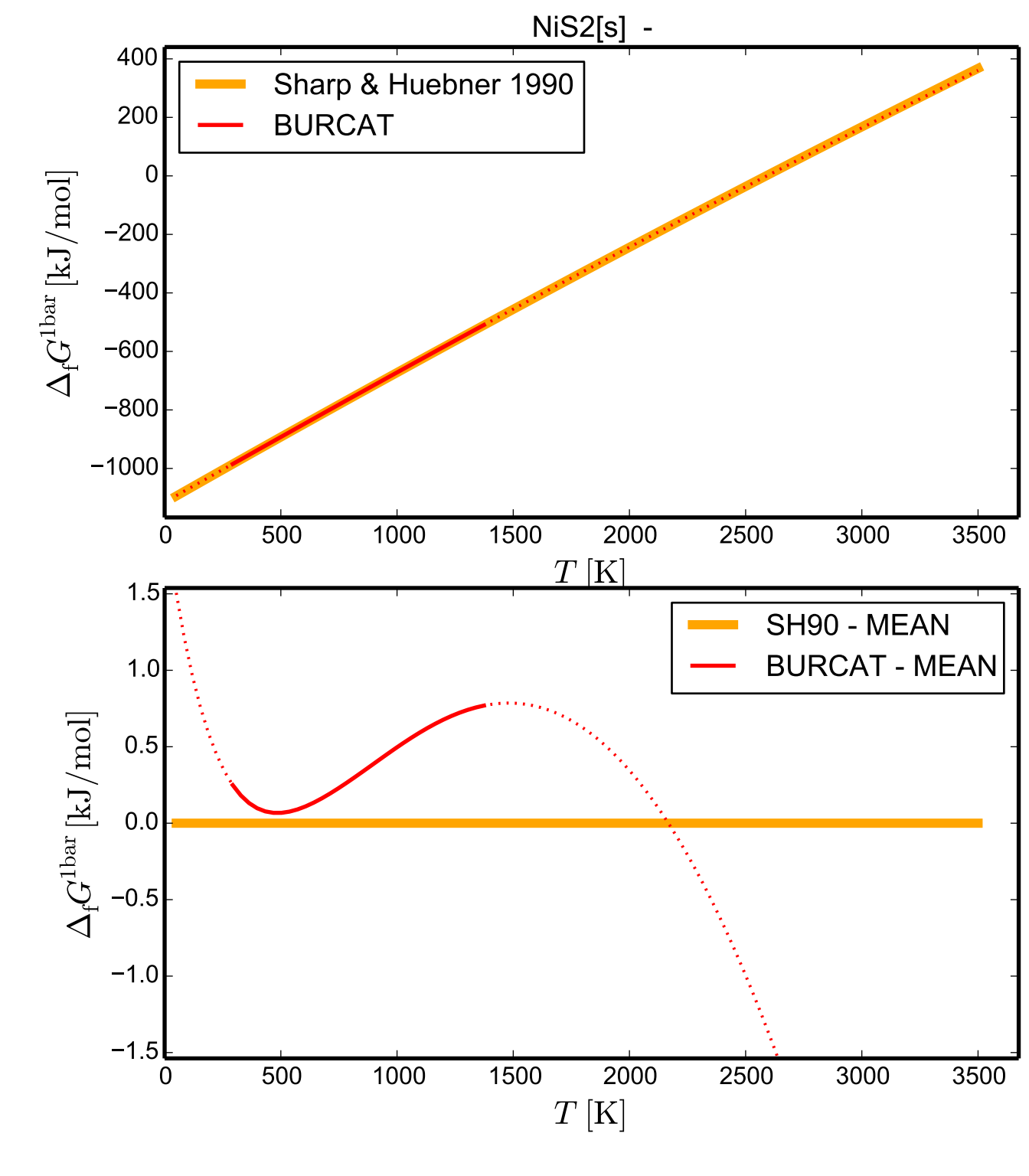

Ni3S2[s] -
Sharp & Huebner 1990
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

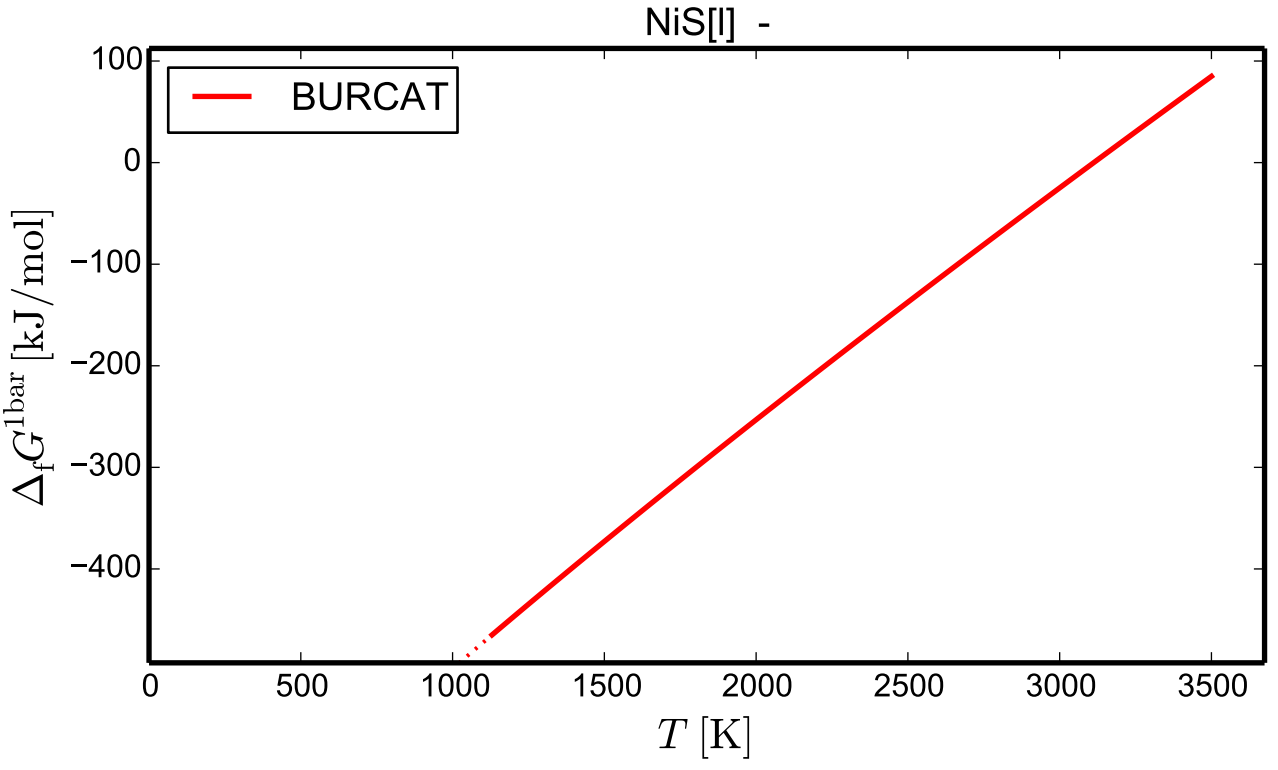

Ni3S4[s] -
BURCAT
−1600
−1800
−2000
−2200
−2400
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

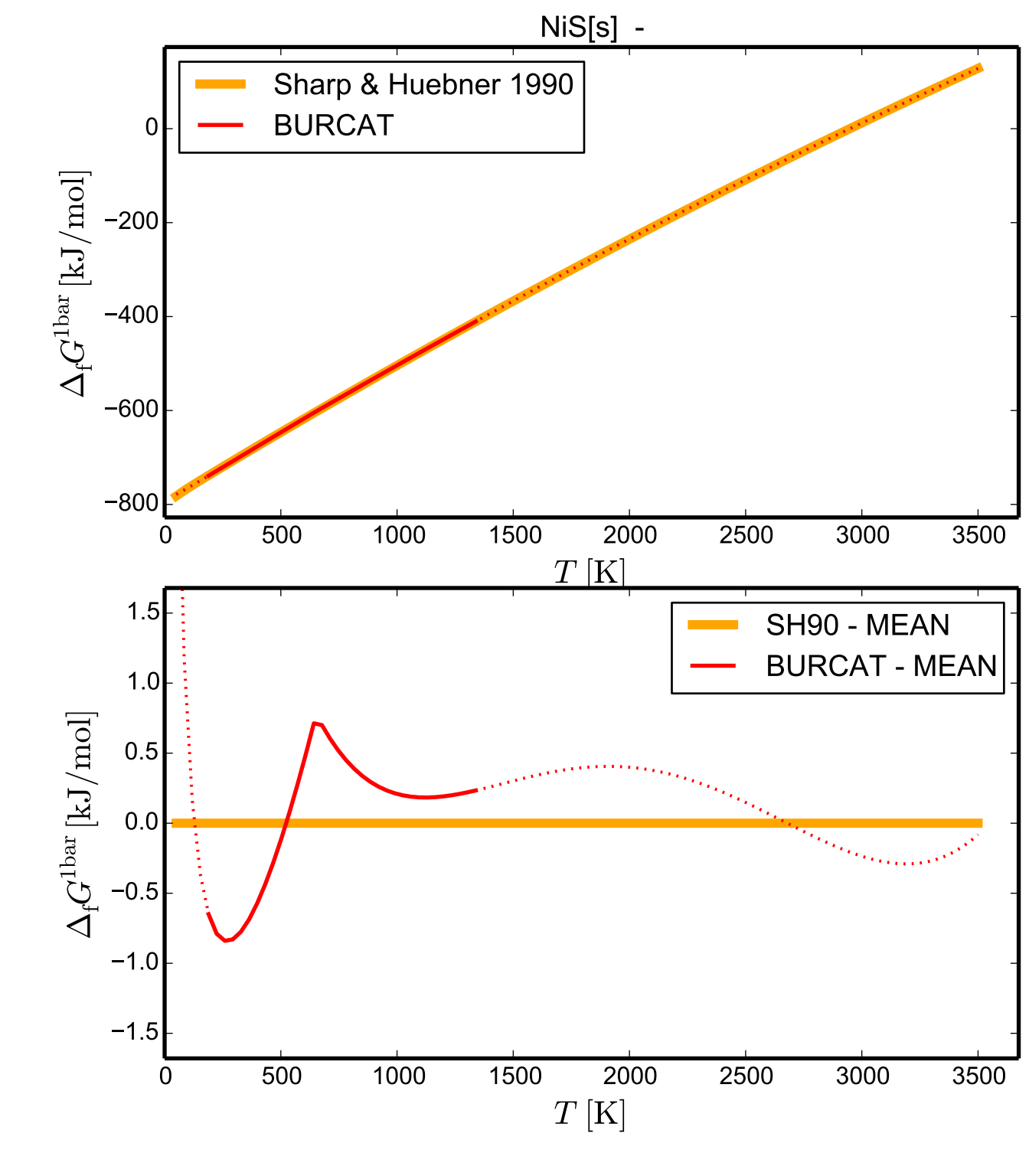

NiO[l] -
BURCAT
−150
−200
−250
−300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

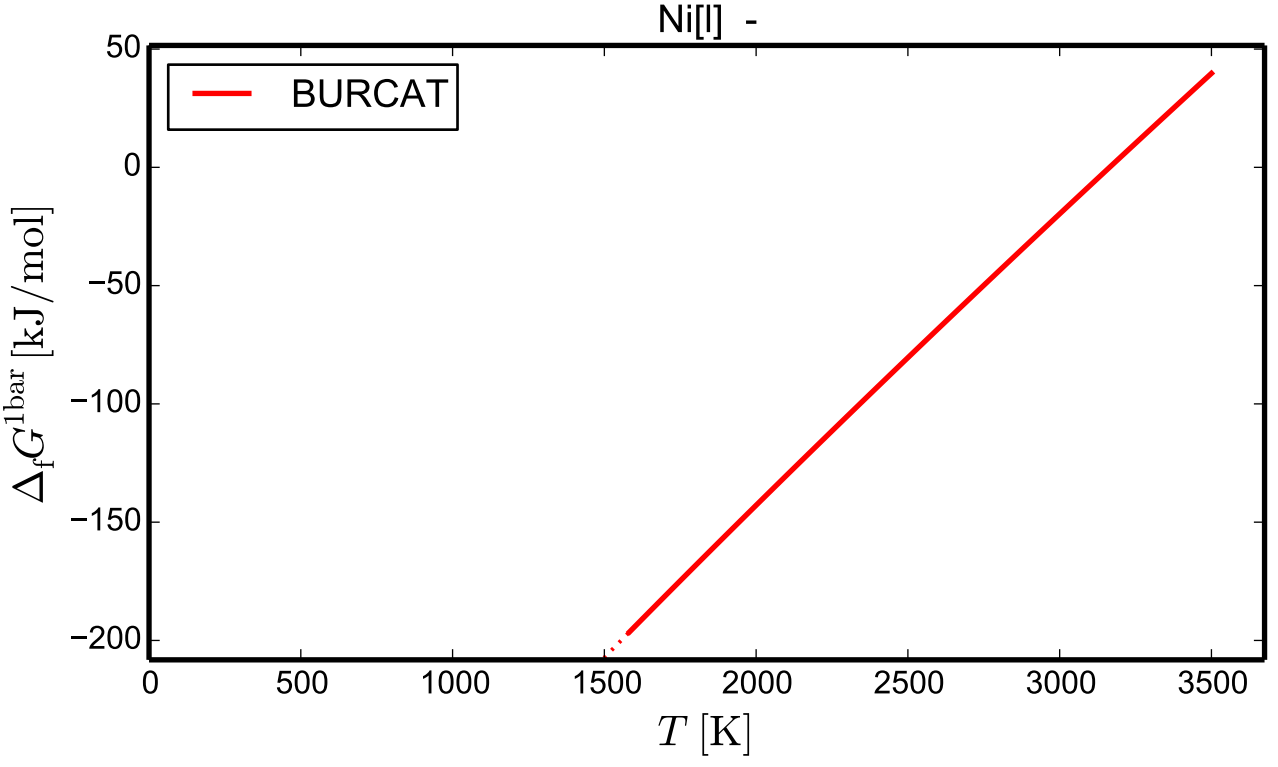

NiO[s] - NICKEL
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
−200
−400
−600
−800
0
500
1000
1500
2000
2500
3000
3500
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
10
5
0
−5
−10
0
500
1000
1500
2000
2500
3000
3500
T [K]

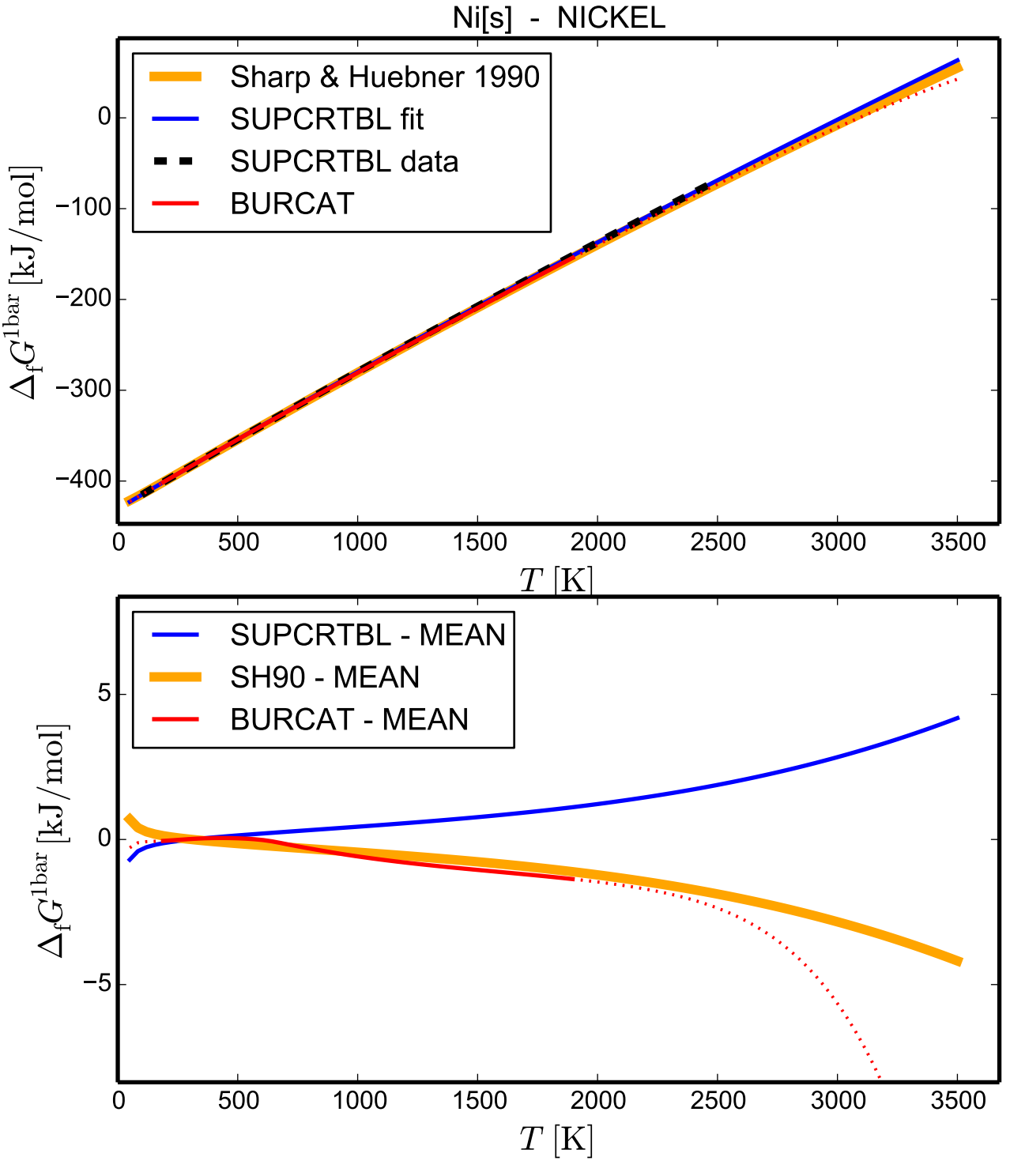

NiS2[l] -
BURCAT
200
0
−200
−400
−600
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

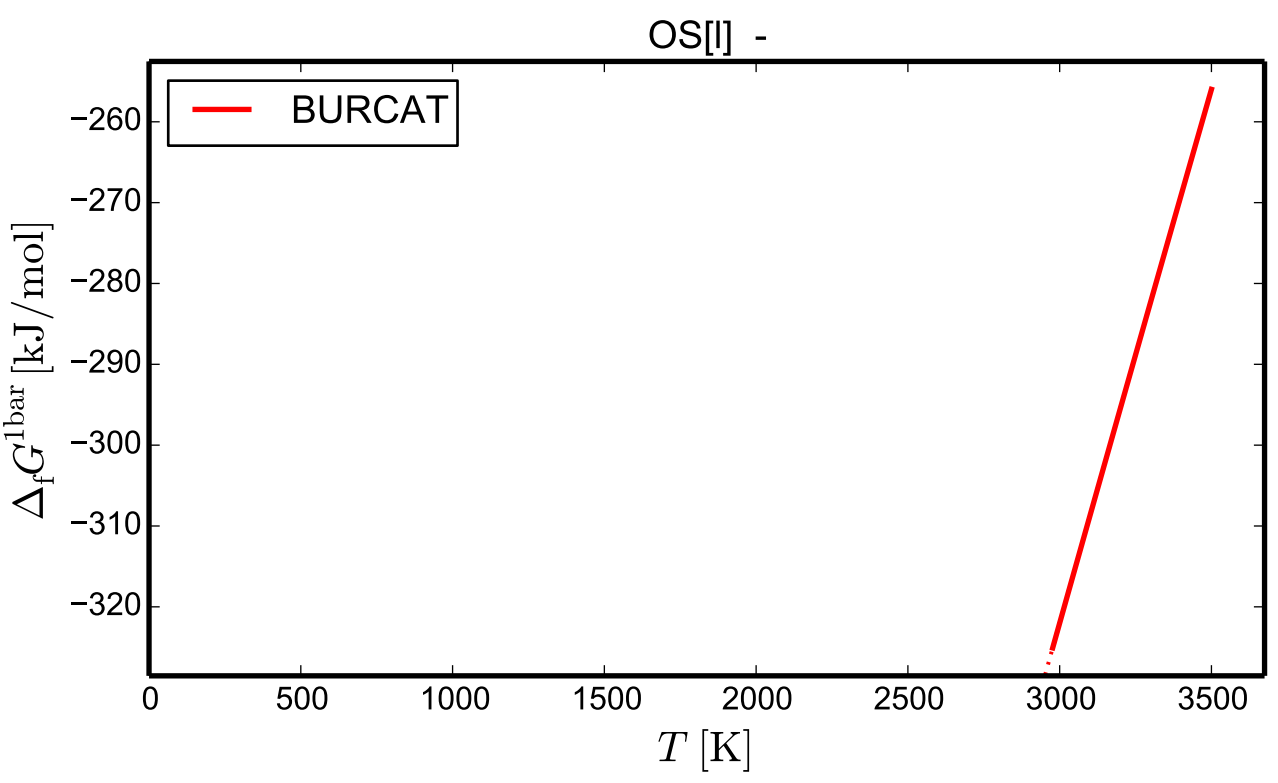

NiS2[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

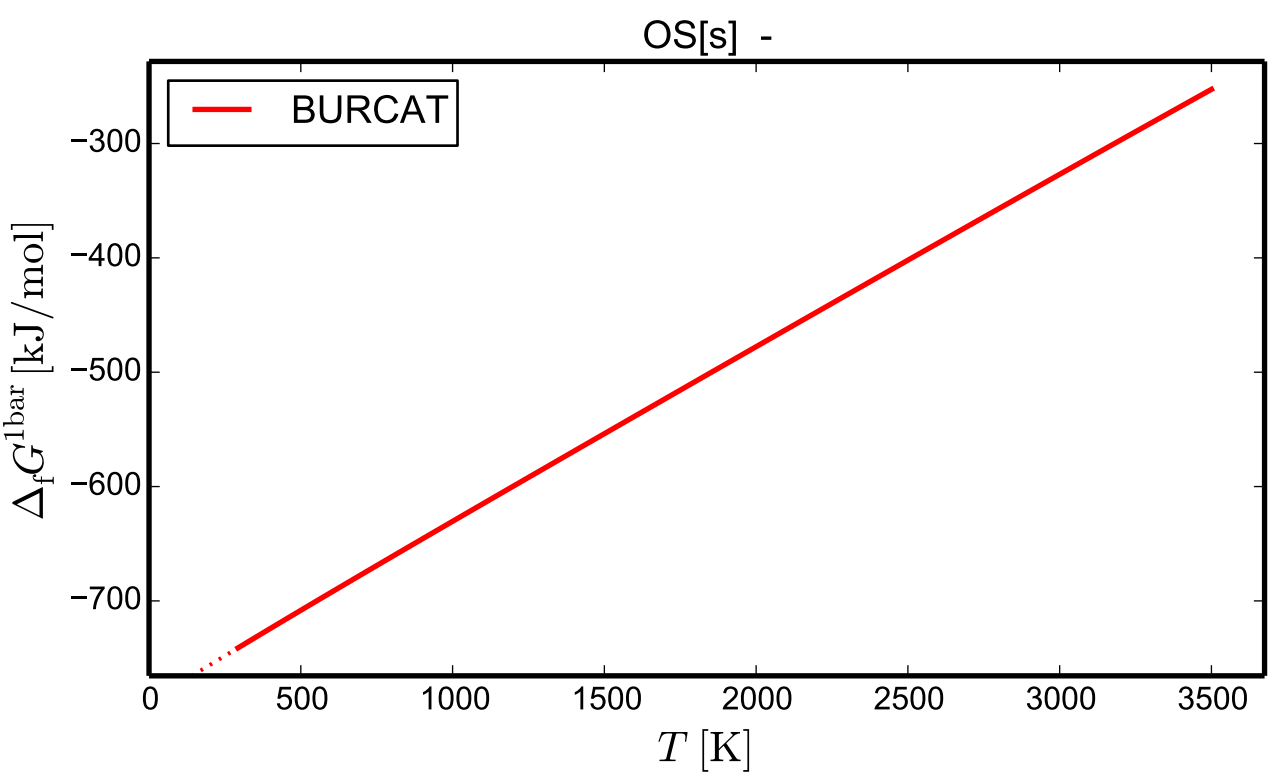

NiS[l] -
BURCAT
100
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
$T\,[\mathrm{K}]$

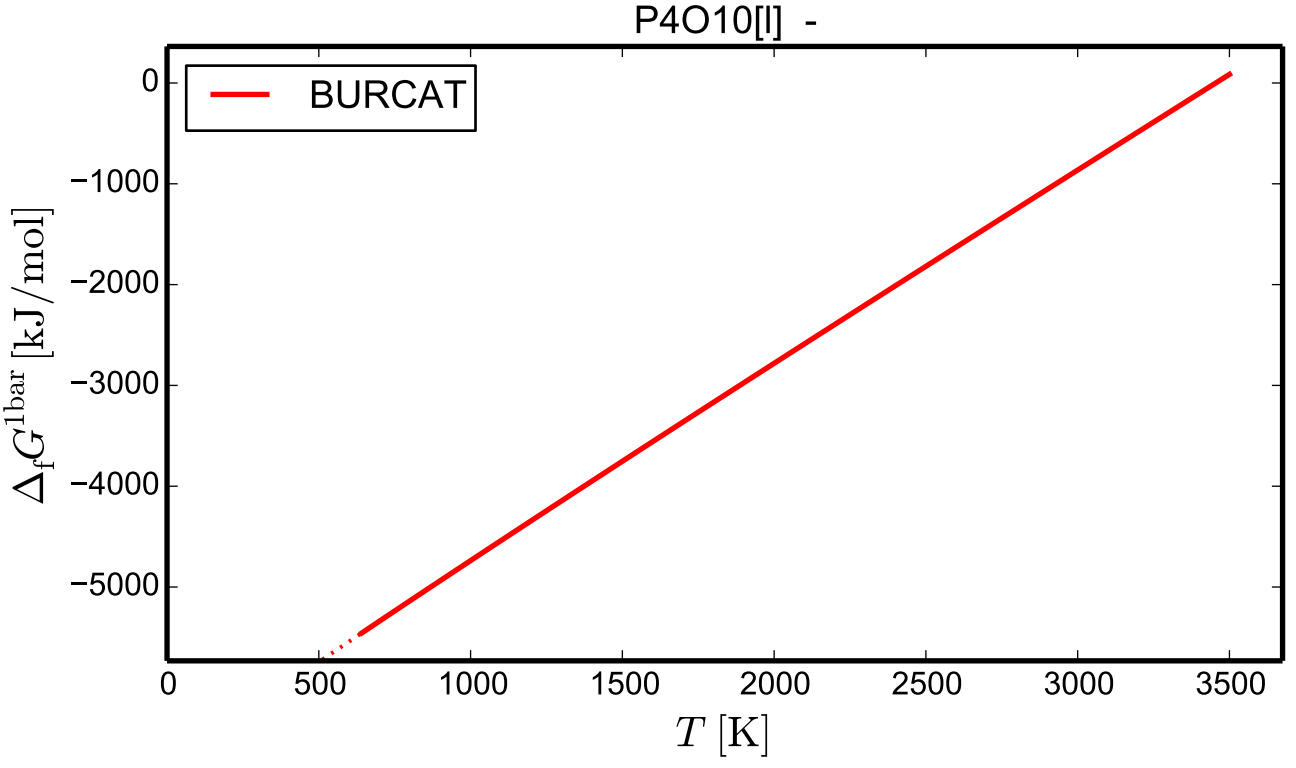

NiS[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

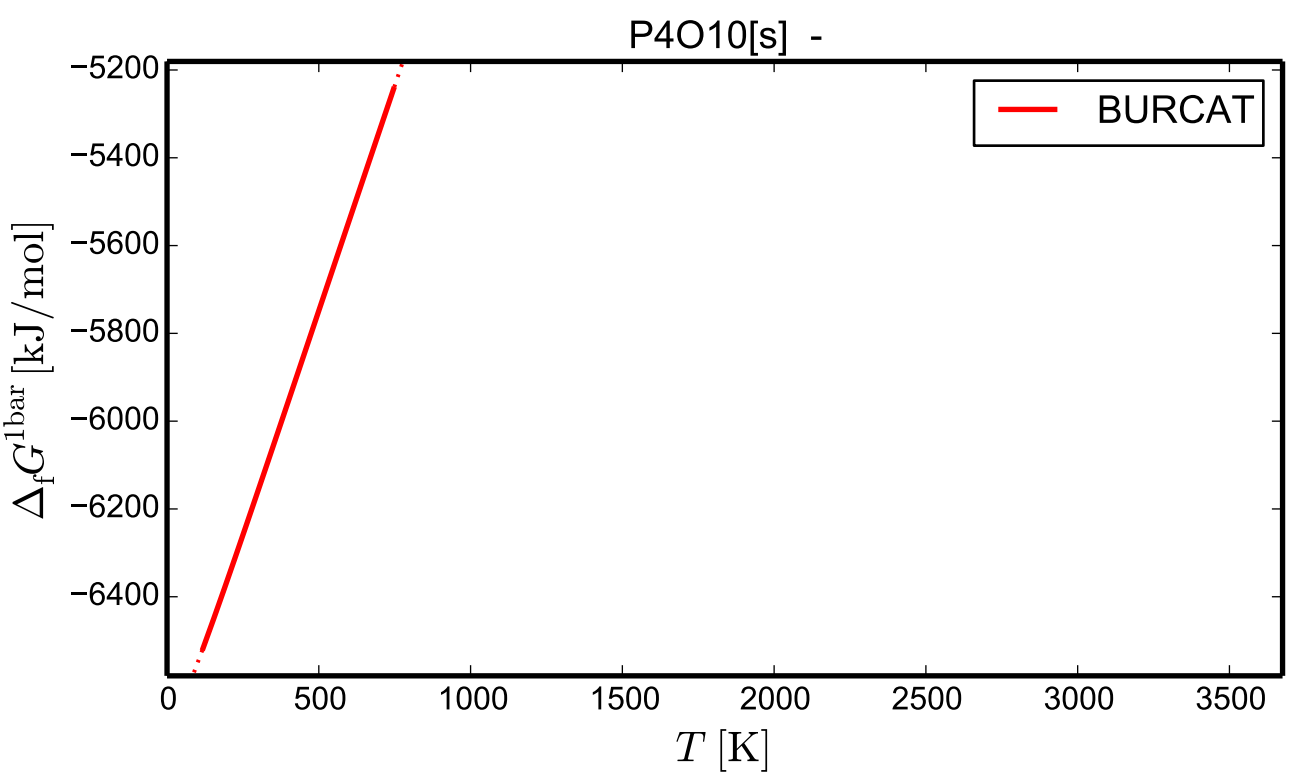

Ni[l] -
BURCAT
50
0
−50
−100
−150
−200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

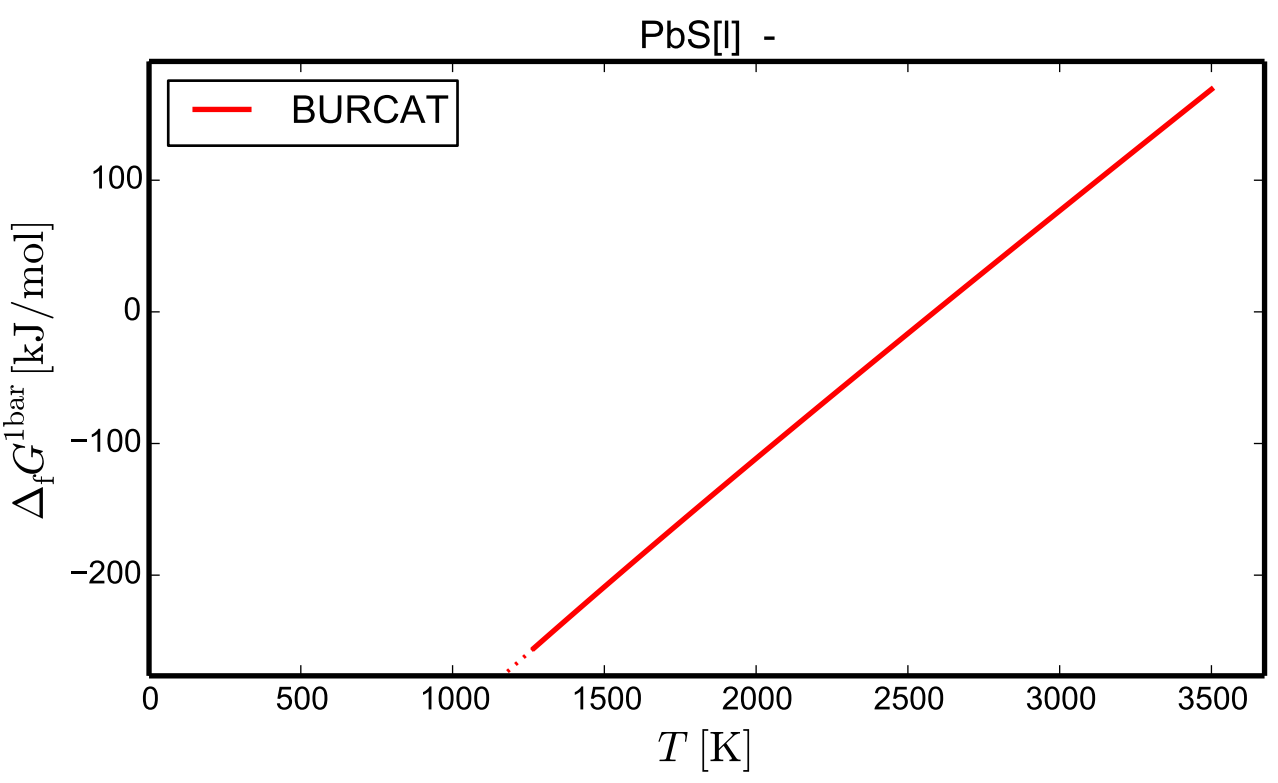

Ni[s] - NICKEL
Sharp & Huebner 1990
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

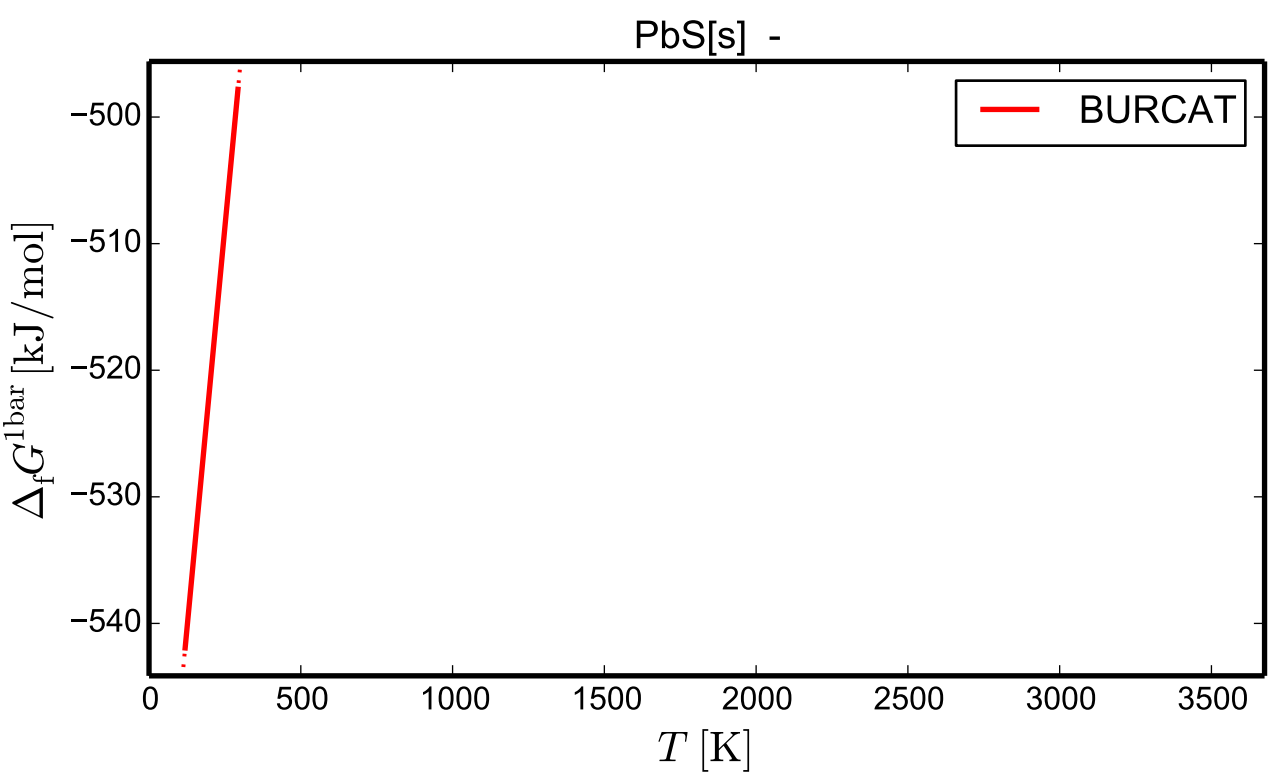

OS[l] -
BURCAT
−260
−270
−280
−290
−300
−310
−320
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

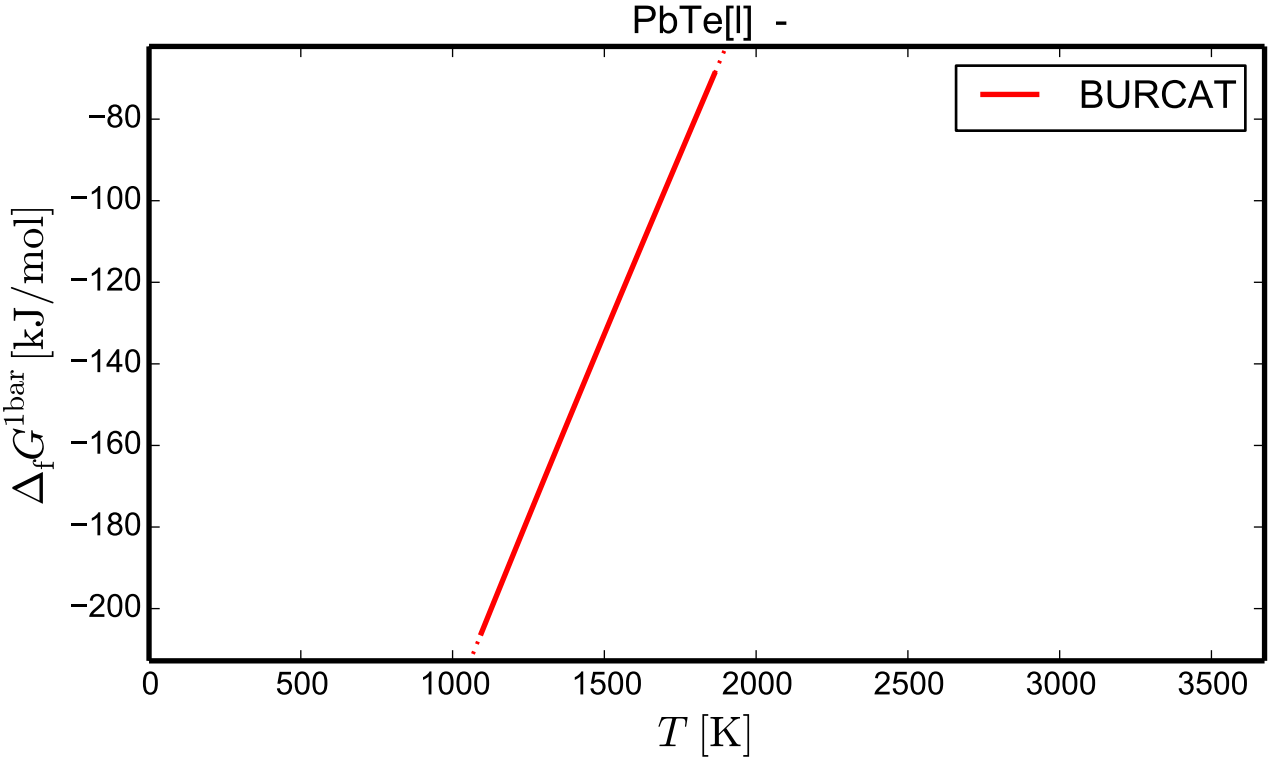

OS[s] -
BURCAT
−300
−400
−500
−600
−700
$\Delta_f G^{1\mathrm{bar}}\,[\mathrm{kJ/mol}]$
0
500
1000
1500
2000
2500
3000
3500
$T\,[\mathrm{K}]$

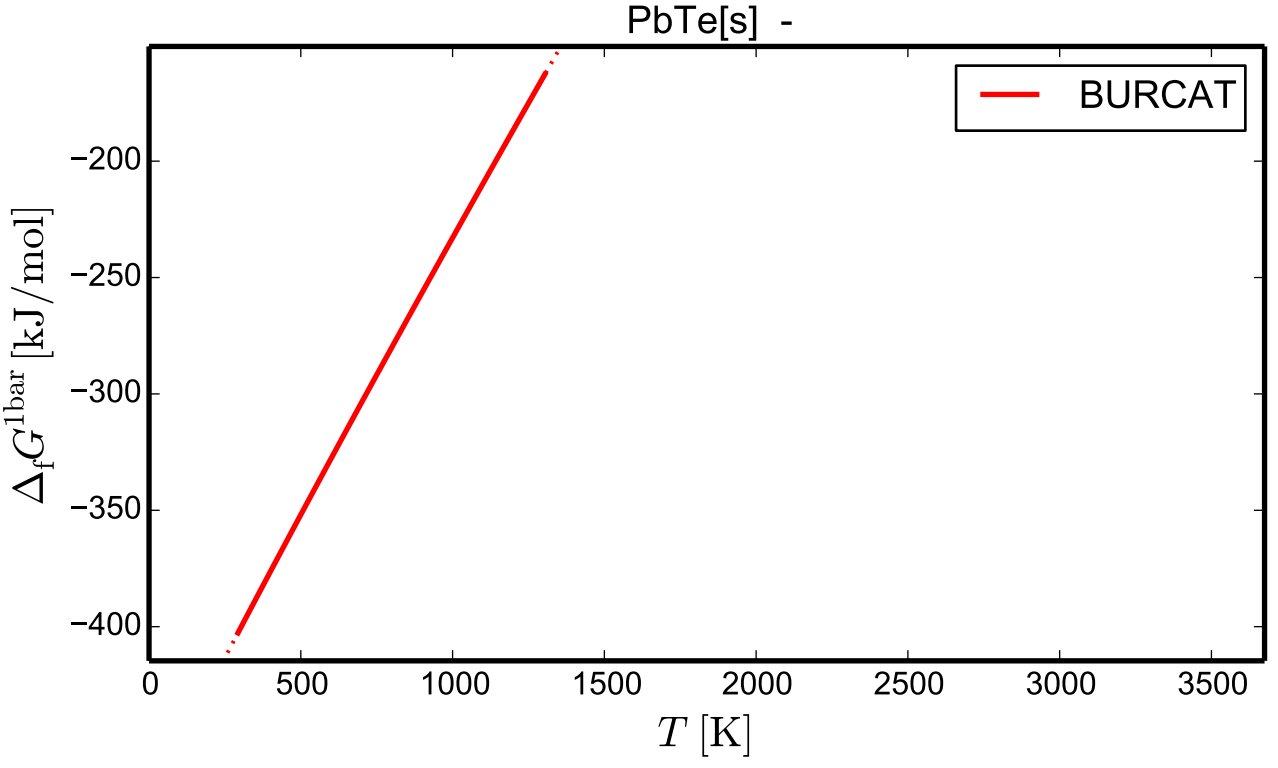

P4O10[l] -
BURCAT
0
−1000
−2000
−3000
−4000
−5000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

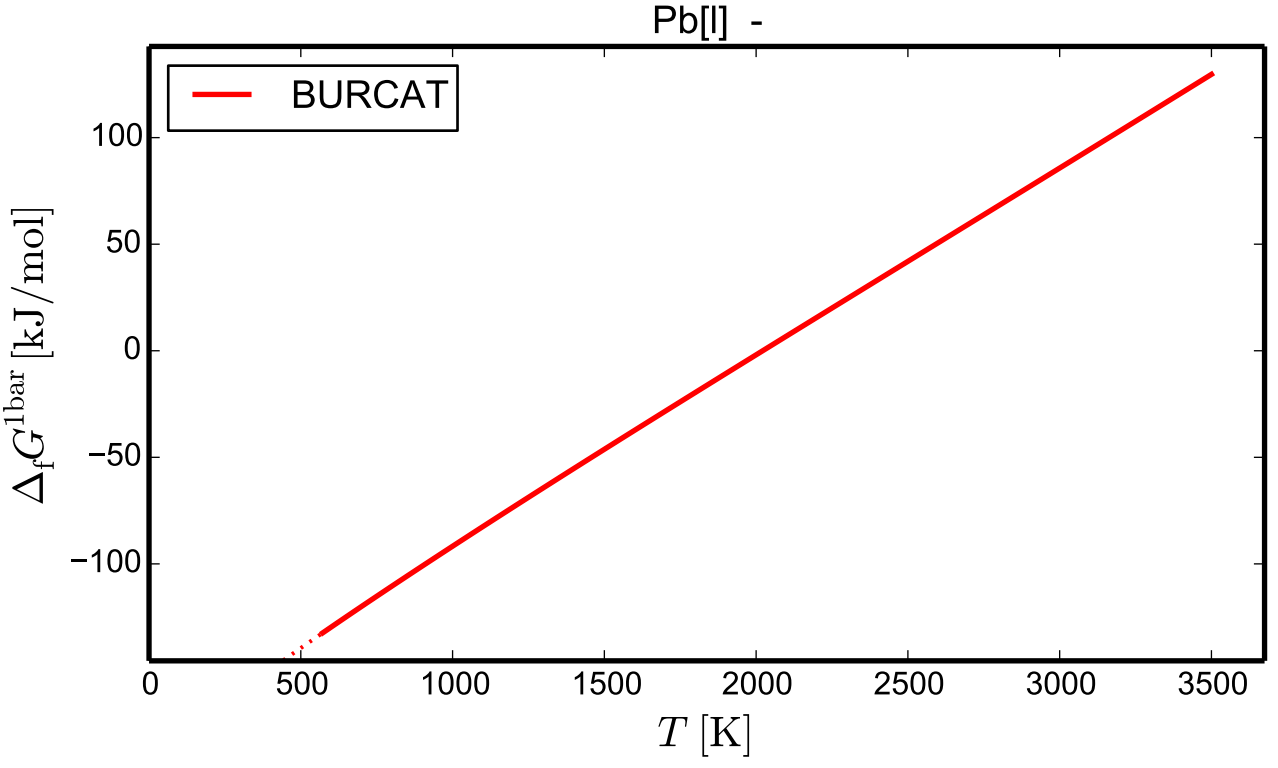

P4O10[s] -
BURCAT
−5200
−5400
−5600
−5800
−6000
−6200
−6400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

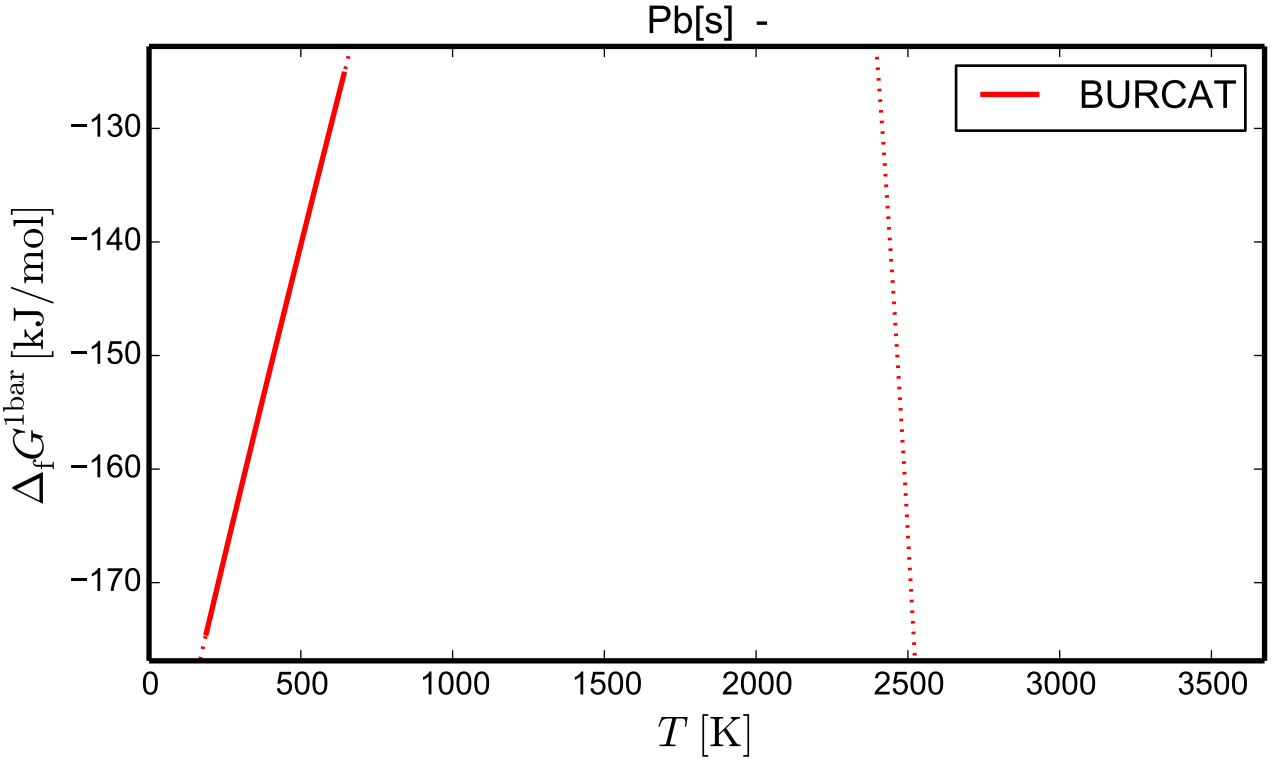

PbS[l] -
BURCAT
100
0
−100
−200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

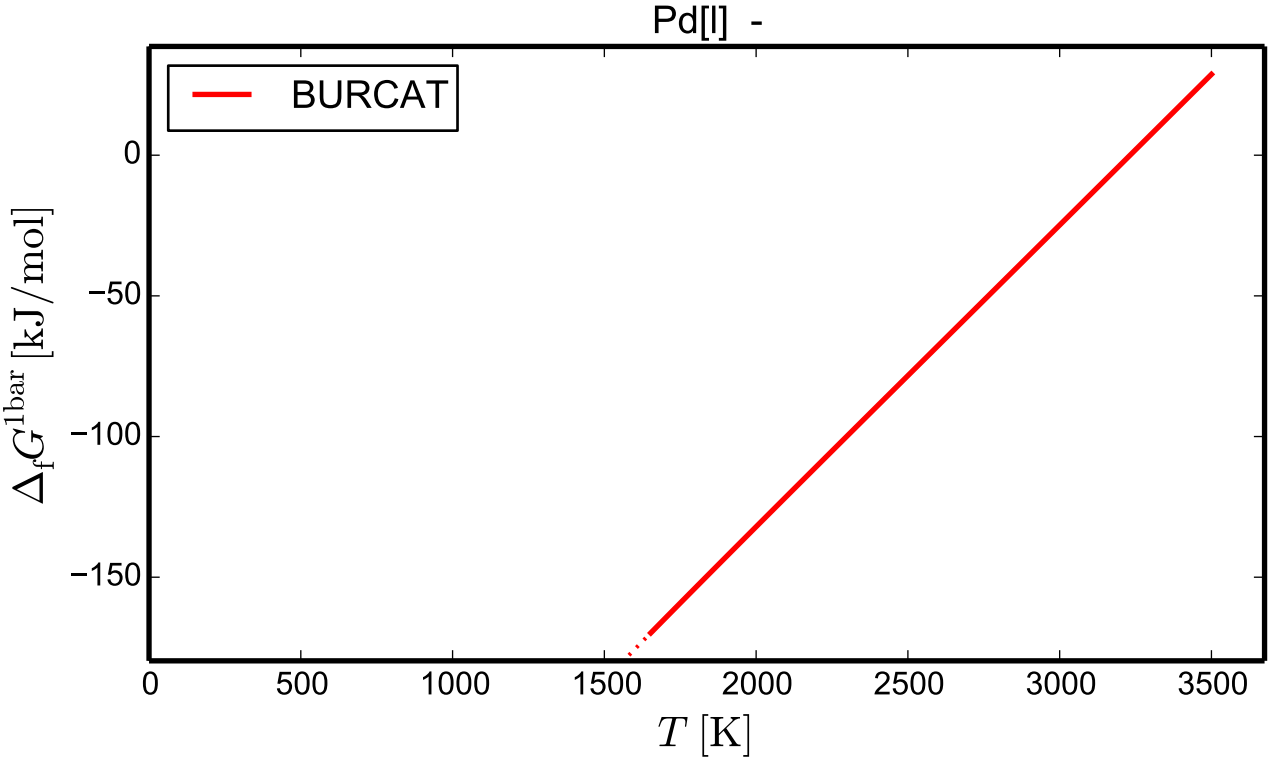

PbS[s] -
BURCAT
−500
−510
−520
−530
−540
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

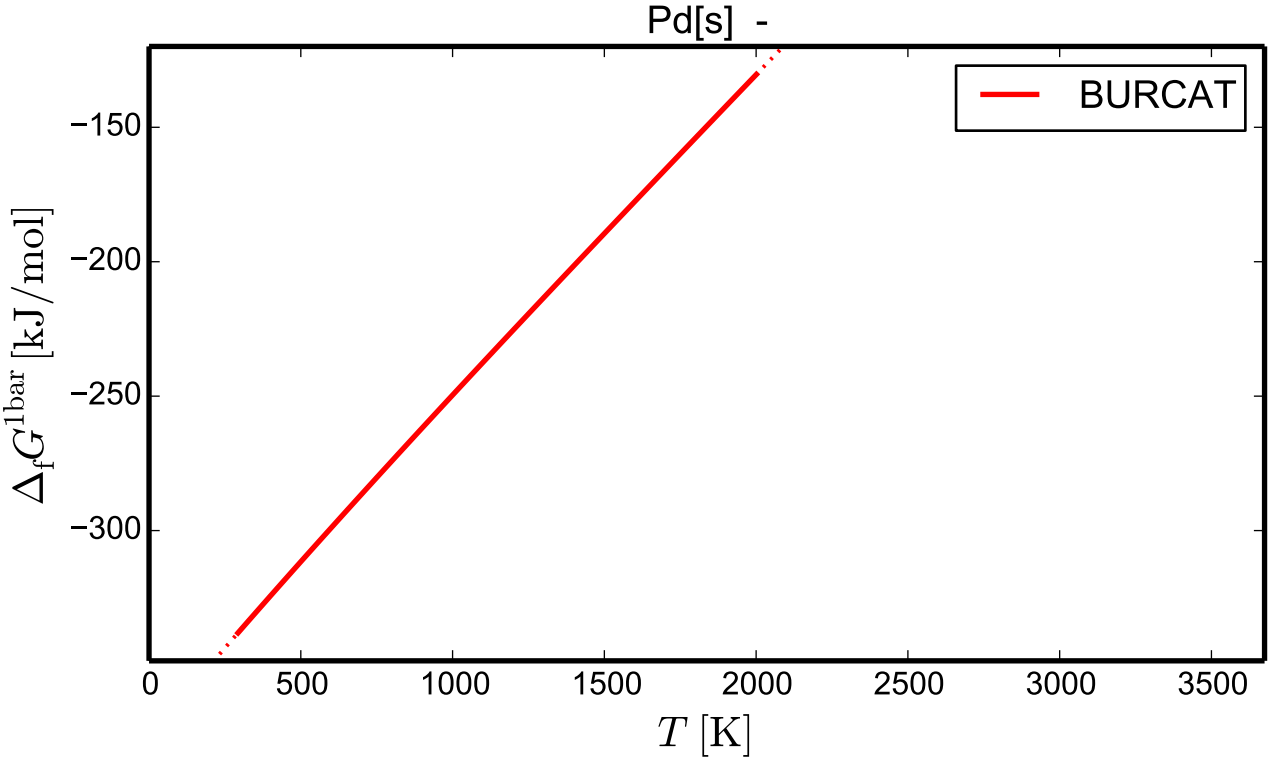

PbTe[l] -
BURCAT
−80
−100
−120
−140
−160
−180
−200
$\Delta_f G^{1bar}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

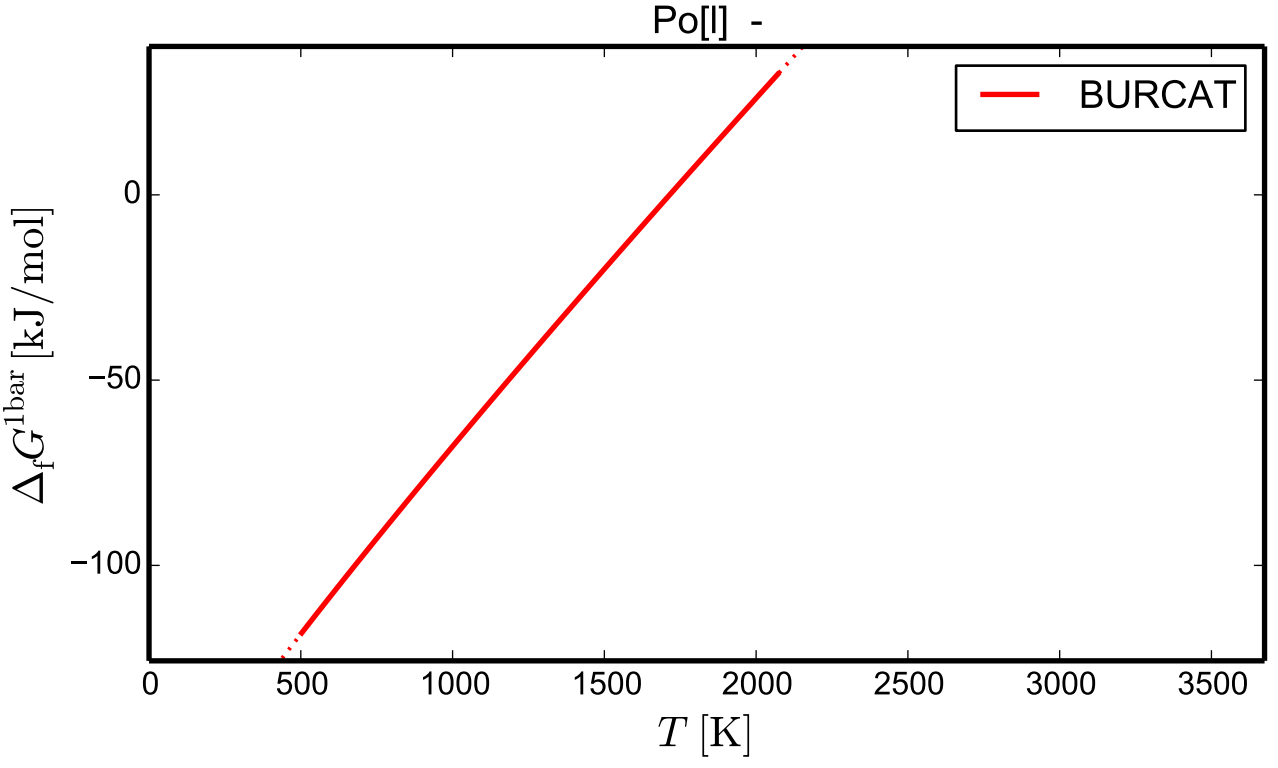

PbTe[s] -
BURCAT
−200
−250
−300
−350
−400
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

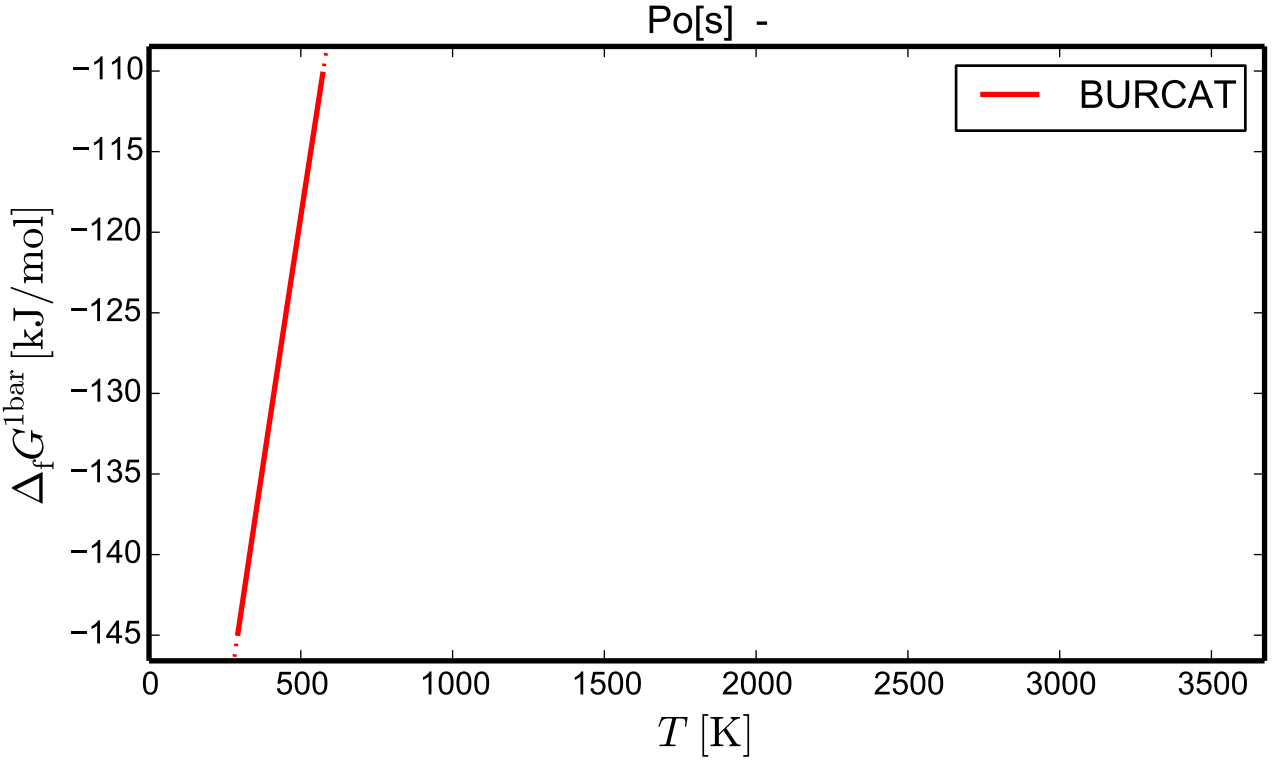

Pb[l] -
BURCAT
100
50
0
−50
−100
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

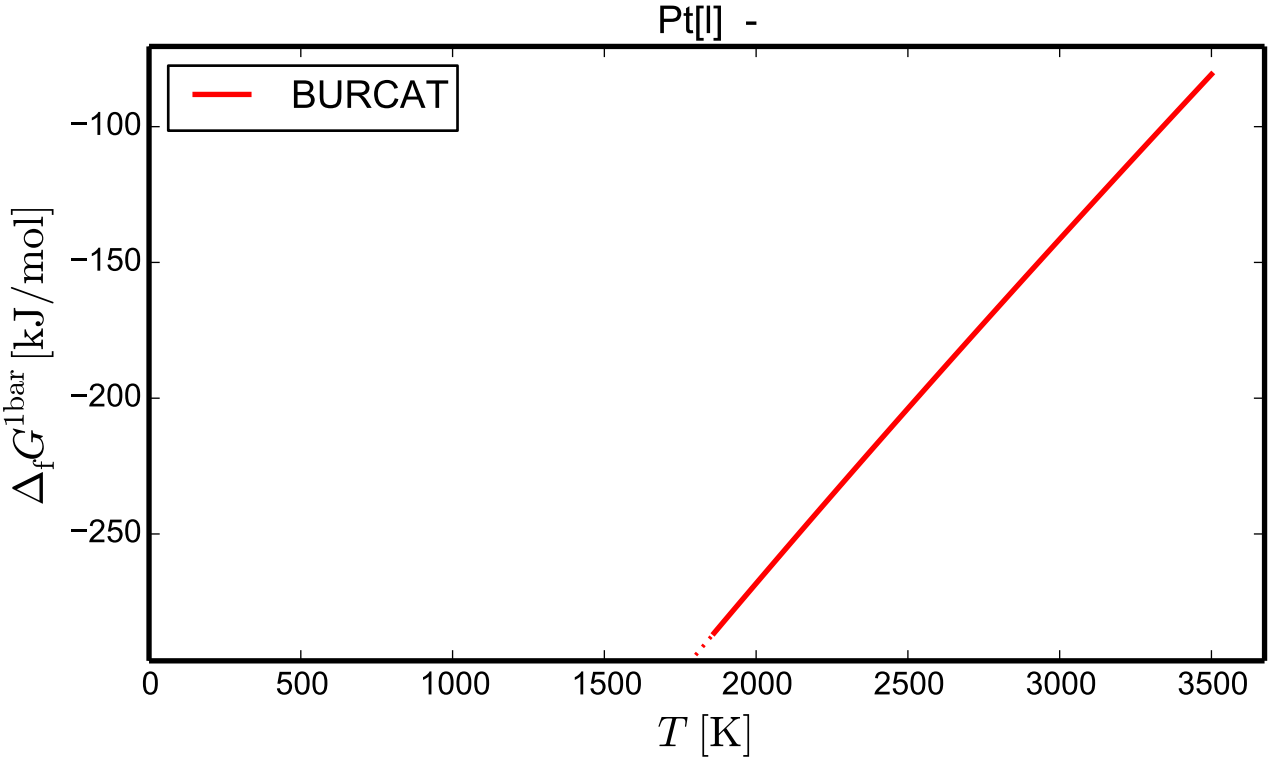

Pb[s] -
BURCAT
−130
−140
−150
−160
−170
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

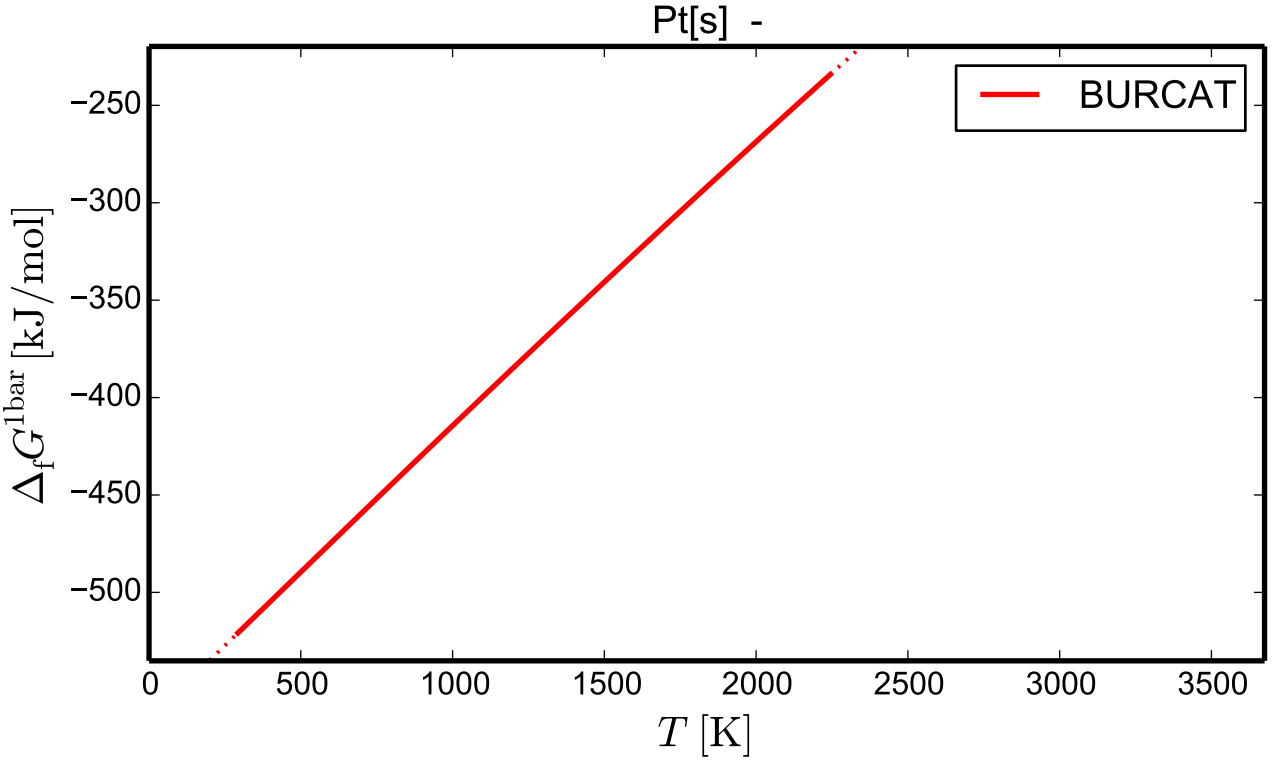

Pd[l] -
BURCAT
0
−50
−100
−150
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

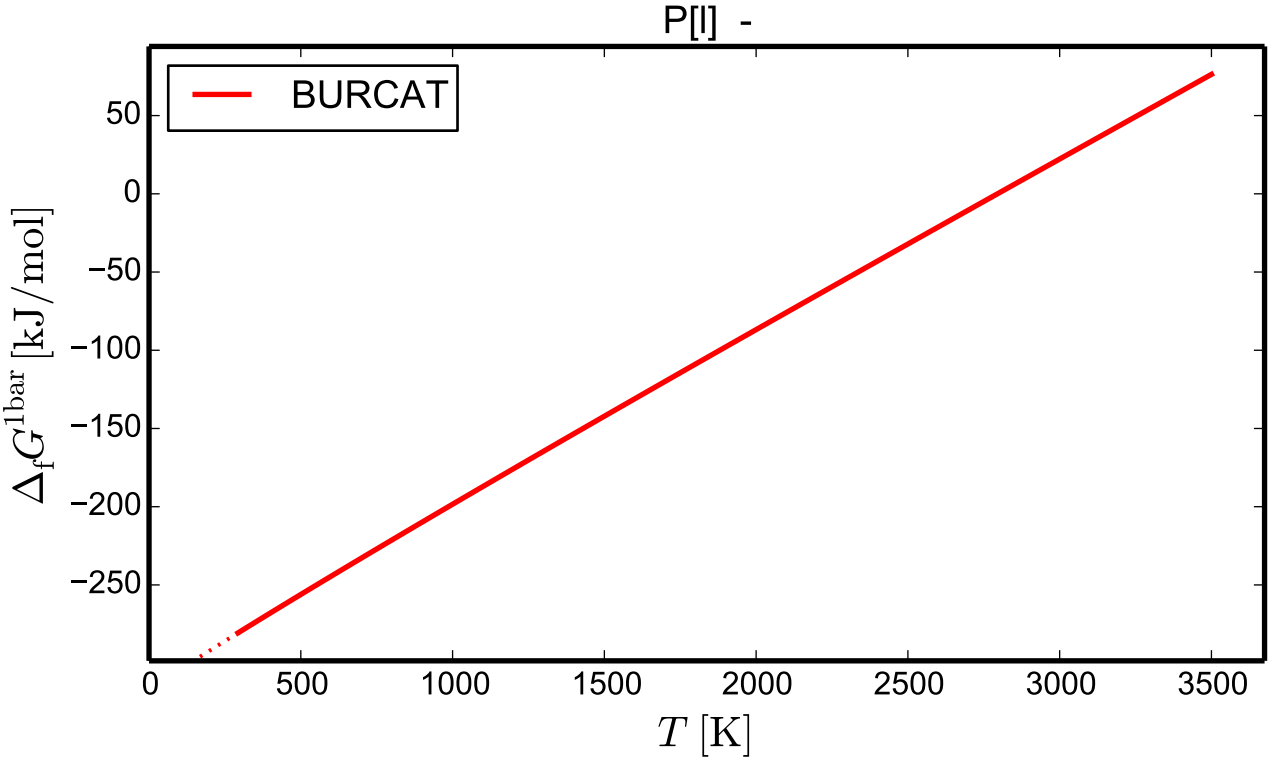

Pd[s] -
BURCAT
−150
−200
−250
−300
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

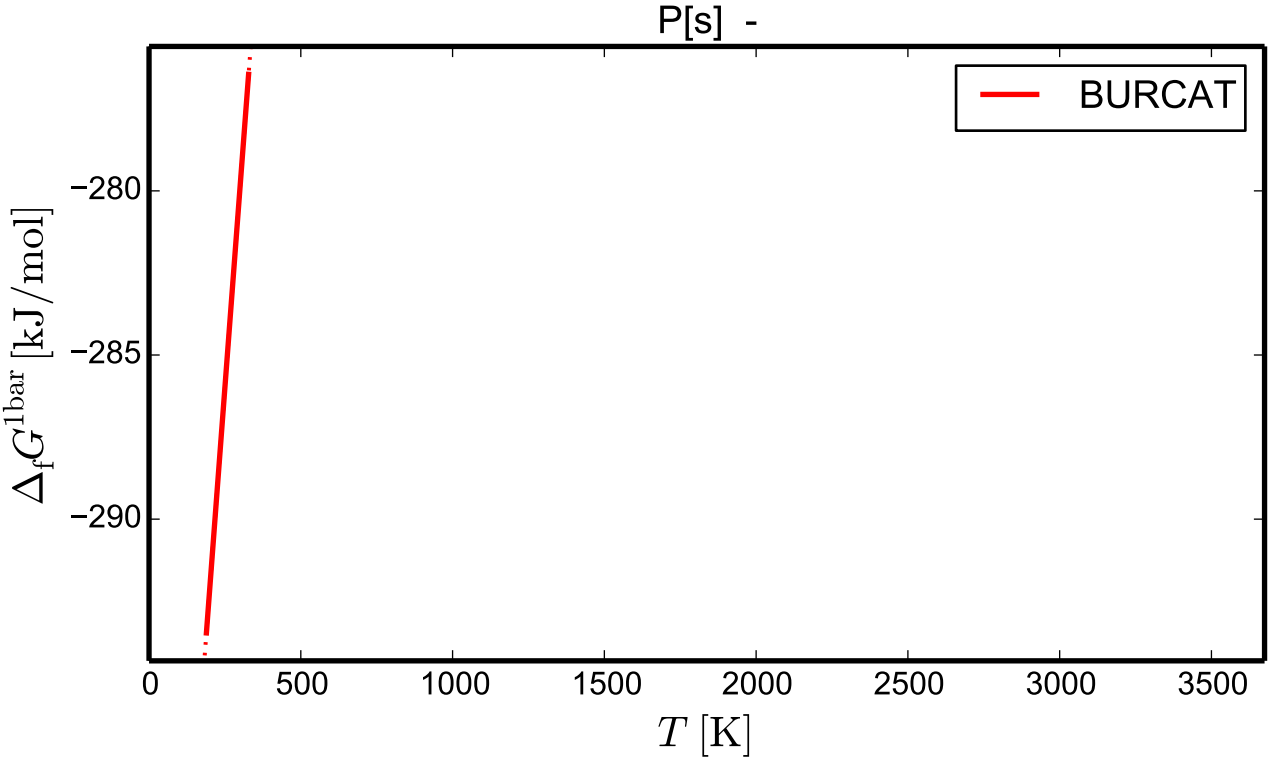

Po[l] -
BURCAT
0
−50
−100
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

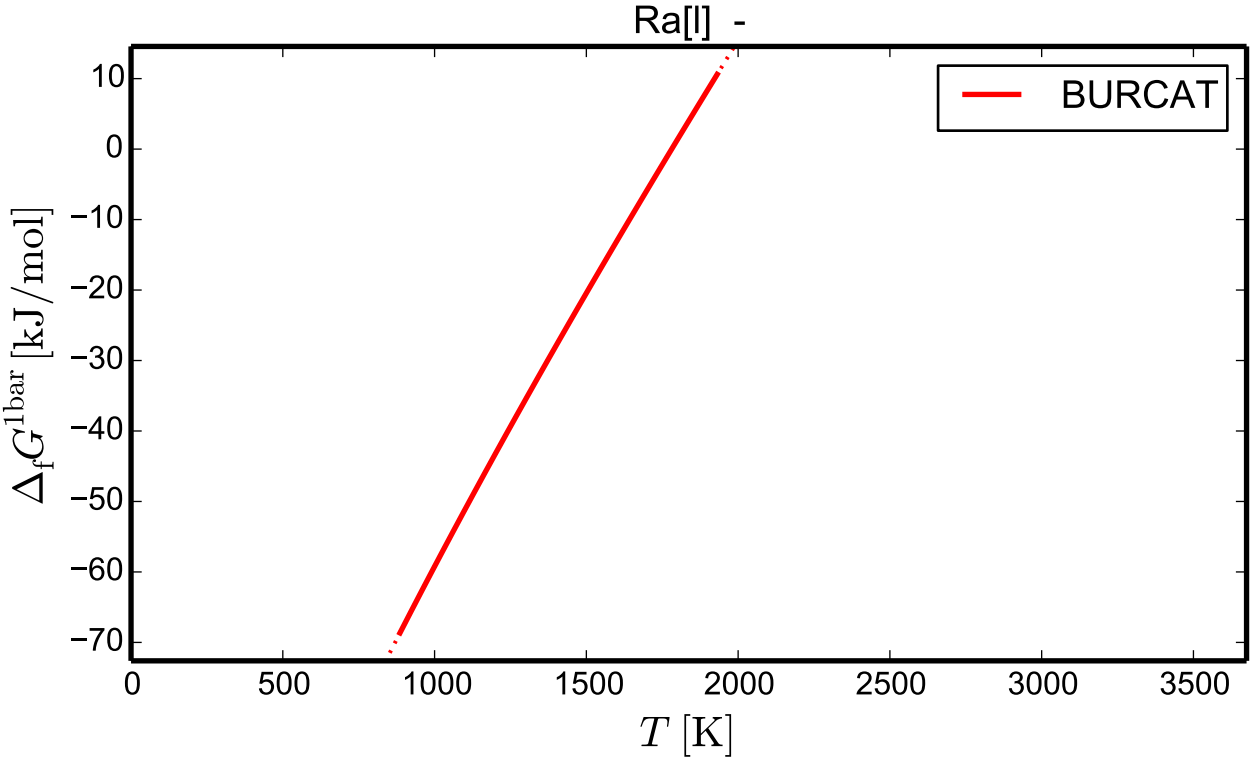

Po[s] -
BURCAT
−110
−115
−120
−125
−130
−135
−140
−145
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

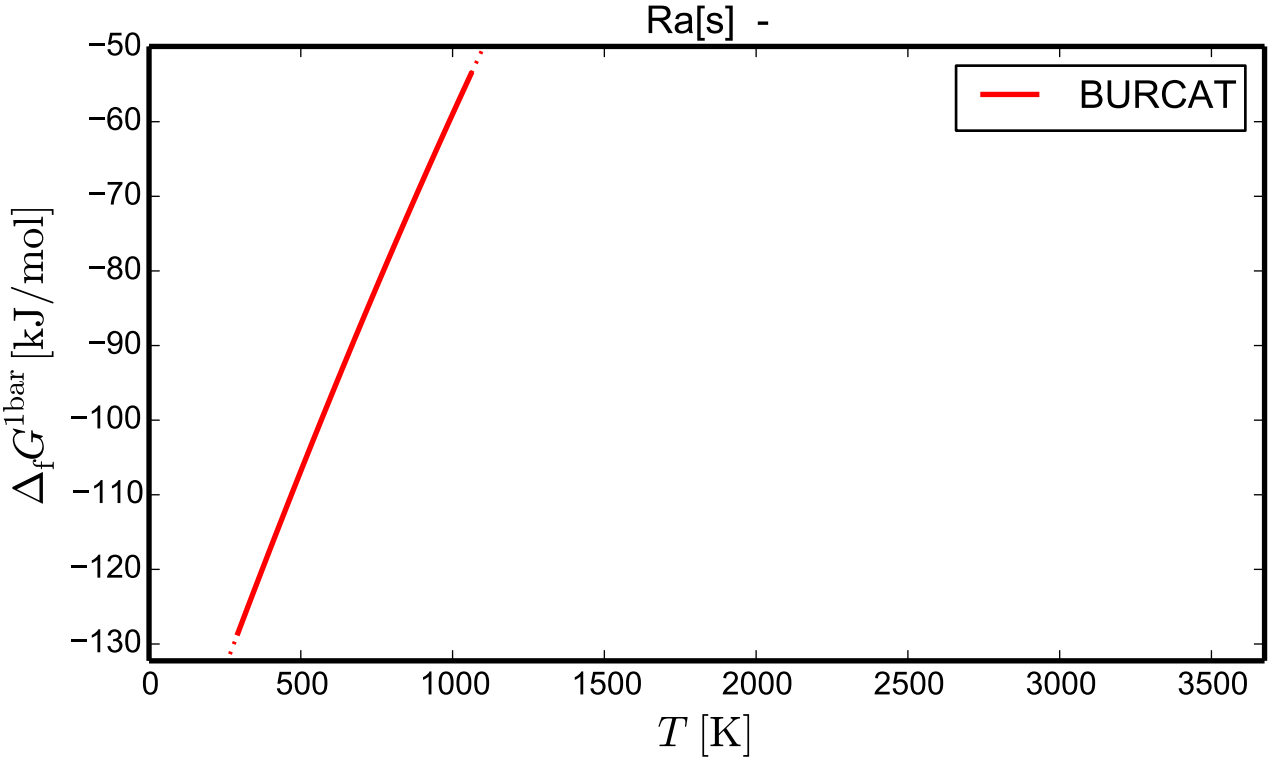

Pt[l] -
BURCAT
−100
−150
−200
−250
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

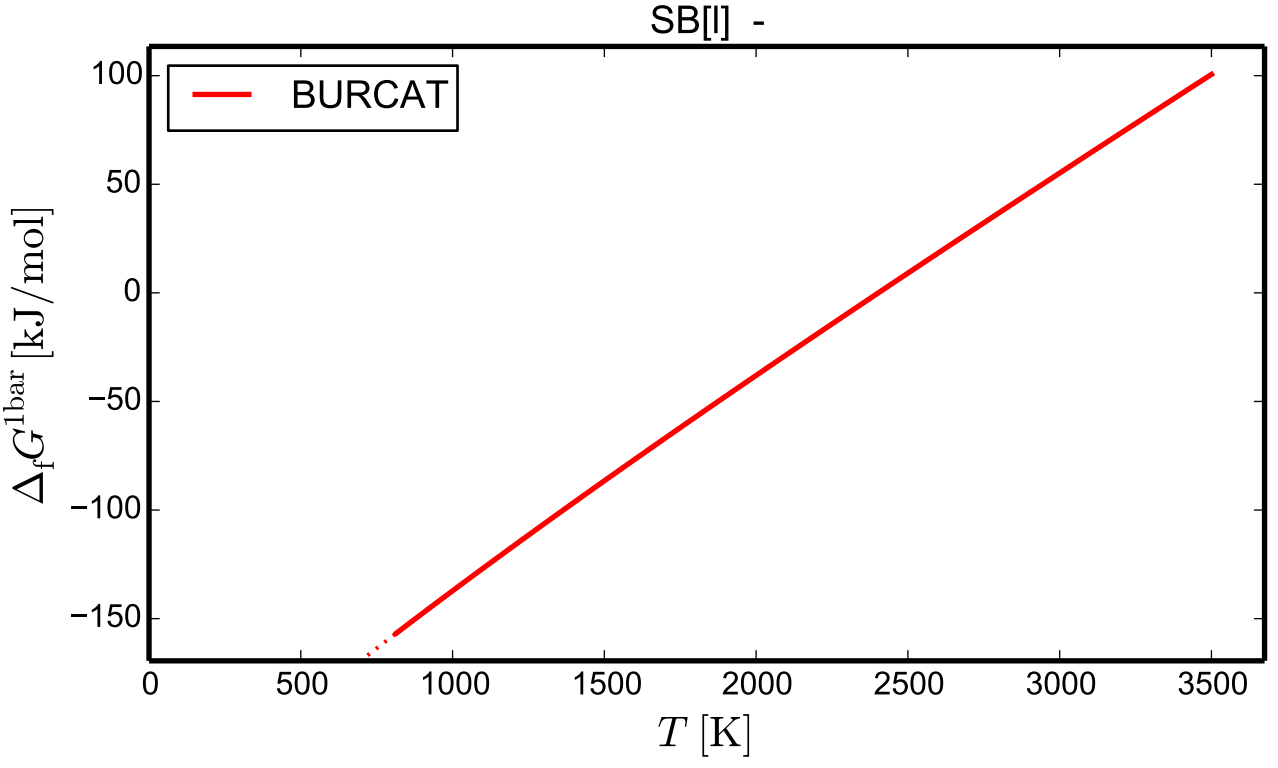

Pt[s] -
BURCAT
−250
−300
−350
−400
−450
−500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

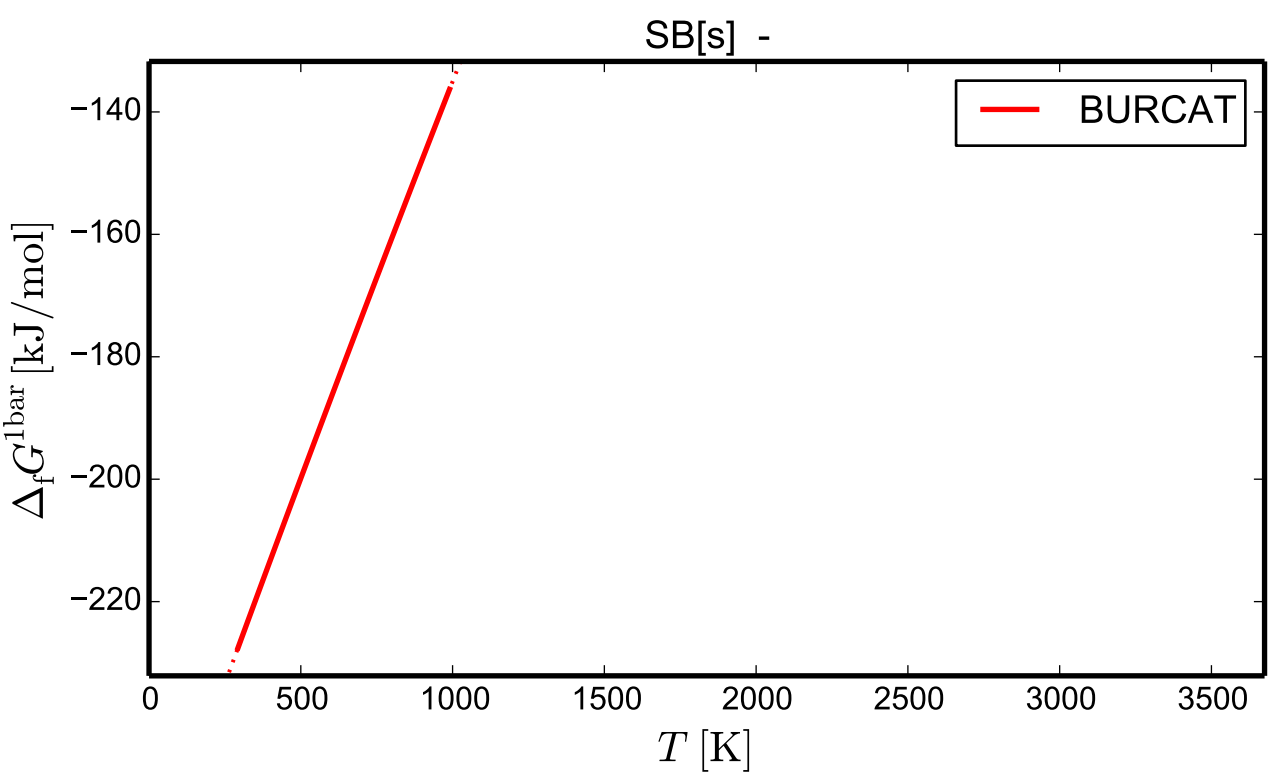

P[l] -
BURCAT
50
0
−50
−100
−150
−200
−250
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

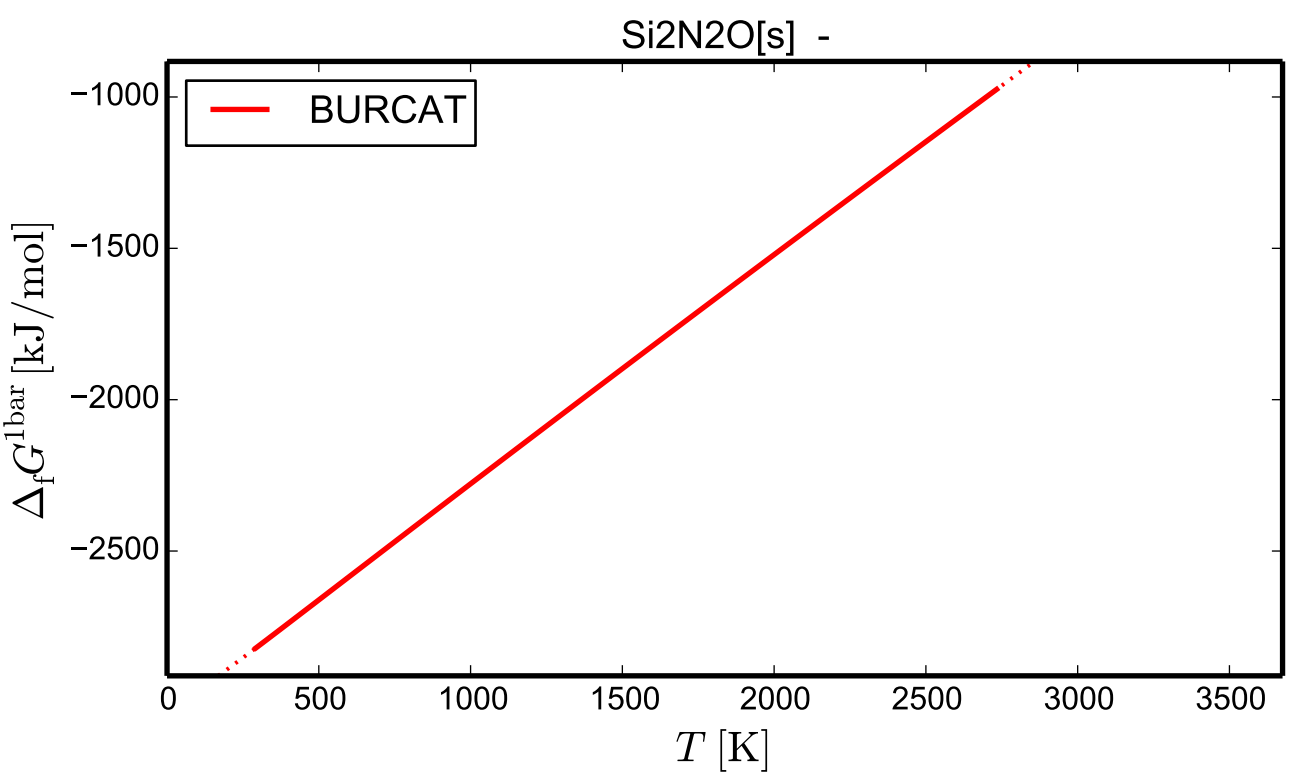

P[s] -
BURCAT
−280
−285
−290
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

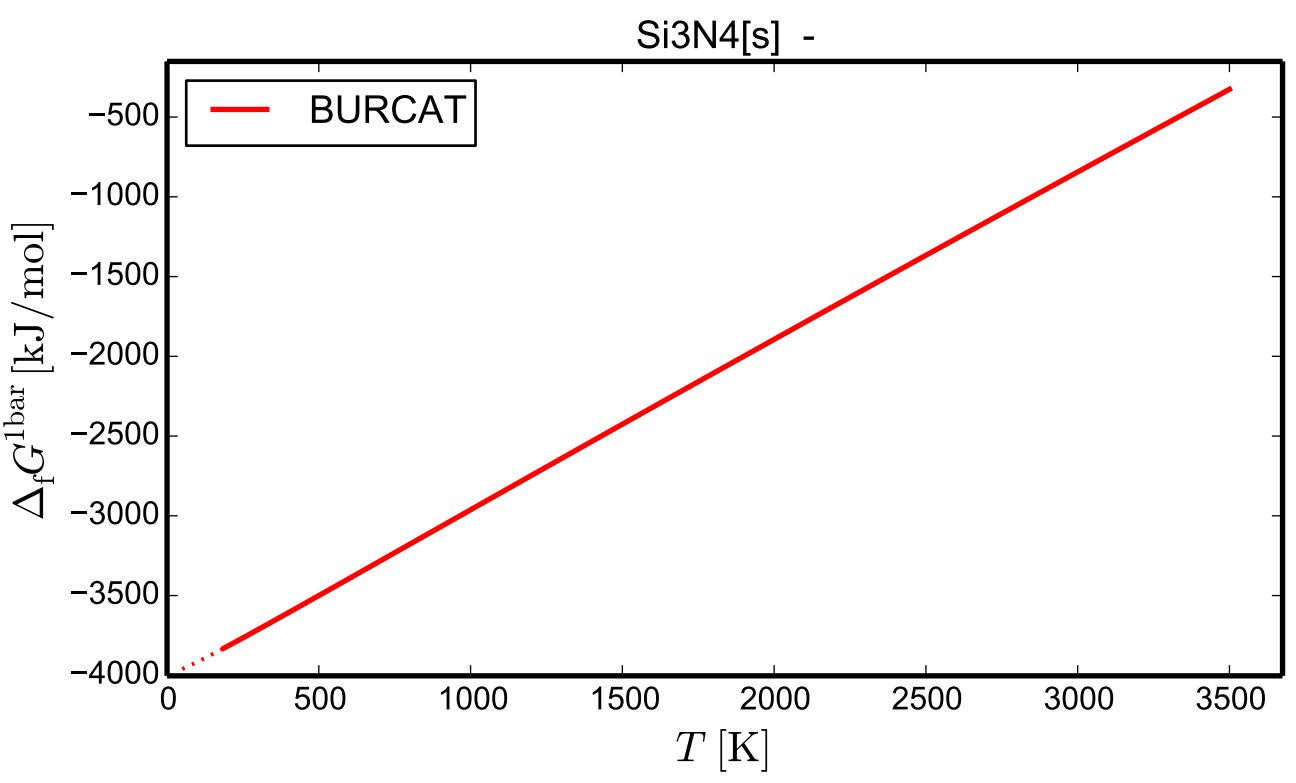

Ra[l] -
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
10
0
−10
−20
−30
−40
−50
−60
−70
0
500
1000
1500
2000
2500
3000
3500

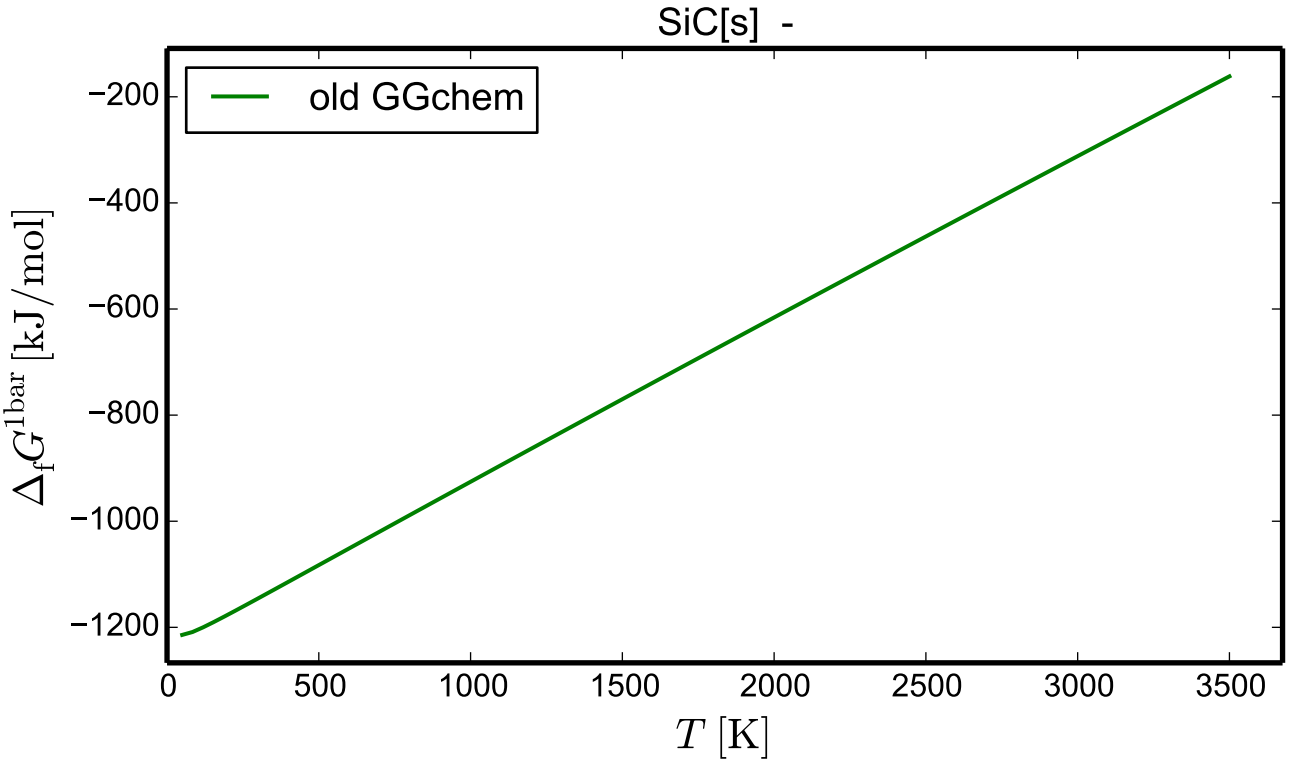

Ra[s] -
BURCAT
−50
−60
−70
−80
−90
−100
−110
−120
−130
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

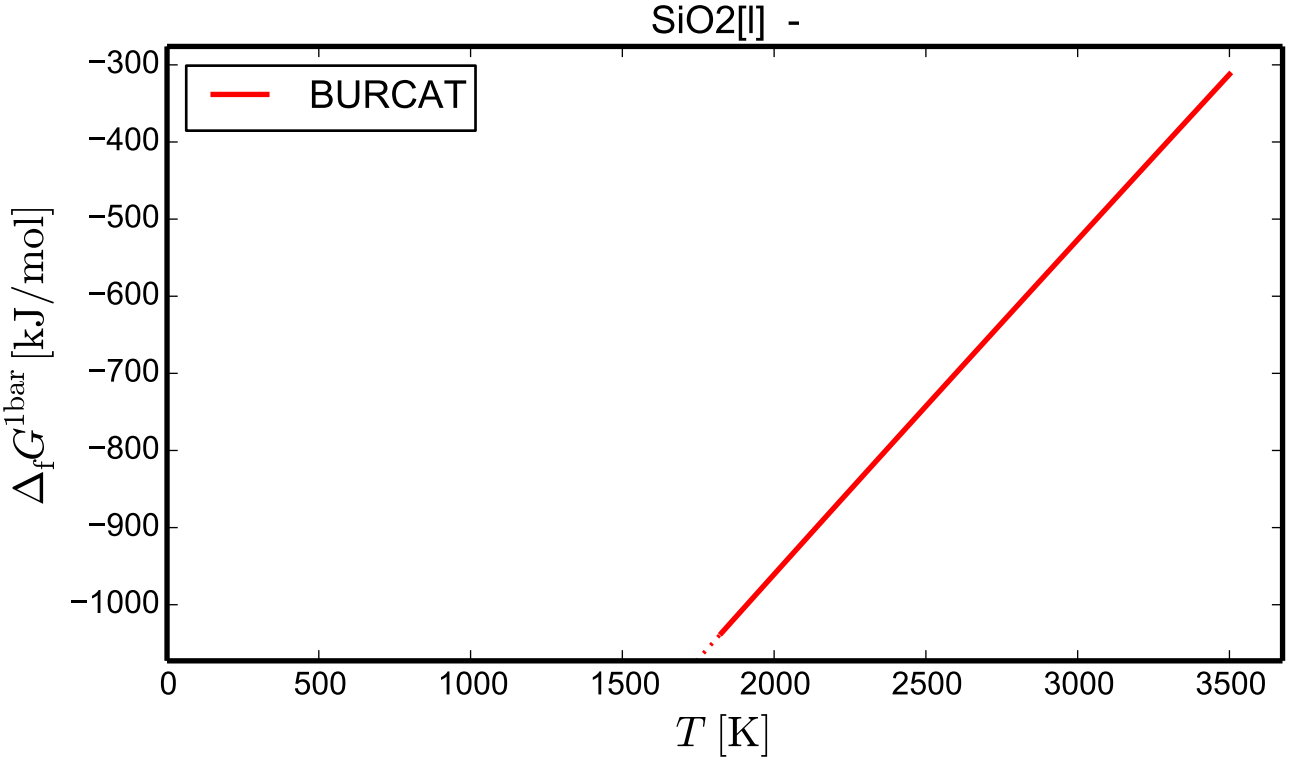

SB[l] -
BURCAT
100
50
0
−50
−100
−150
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

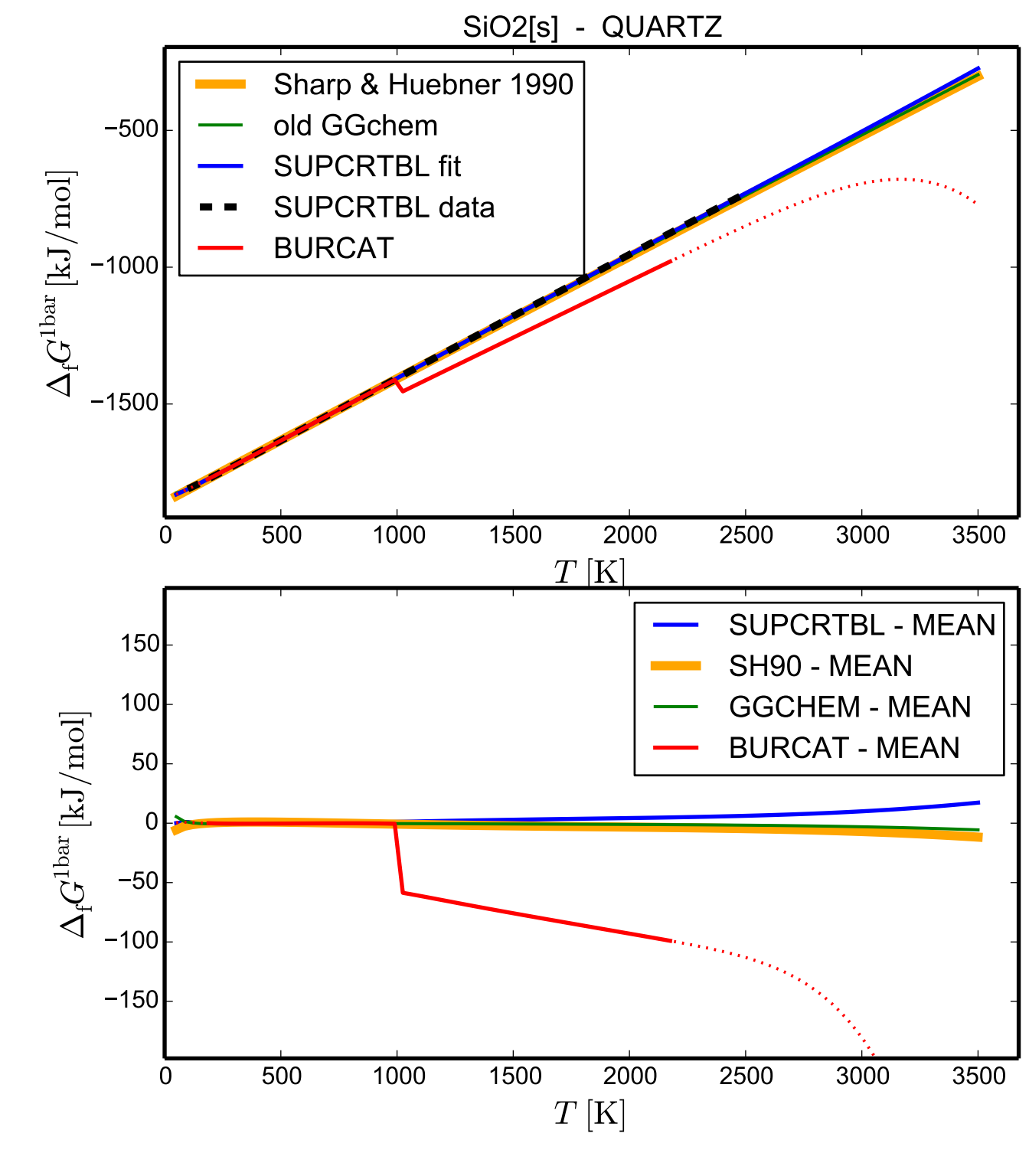

SB[s] -
BURCAT
−140
−160
−180
−200
−220
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

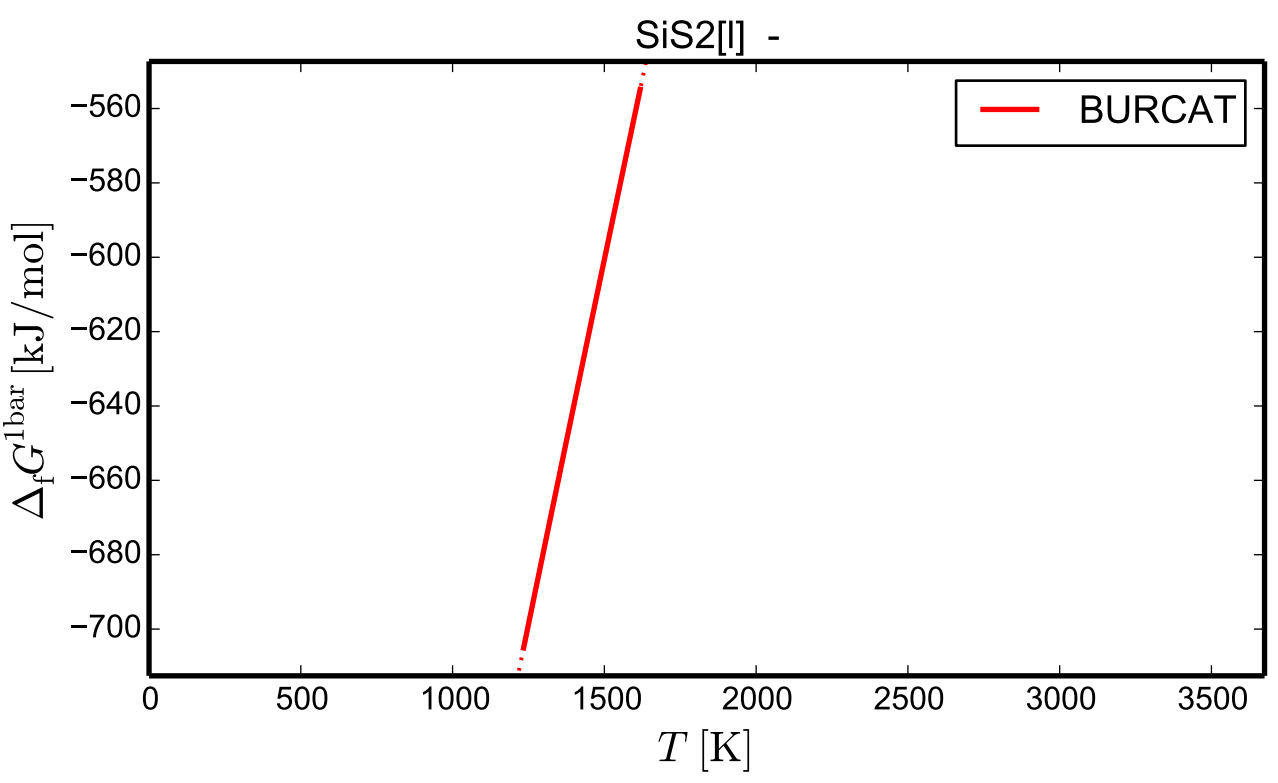

Si2N2O[s] -
BURCAT
−1000
−1500
−2000
−2500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

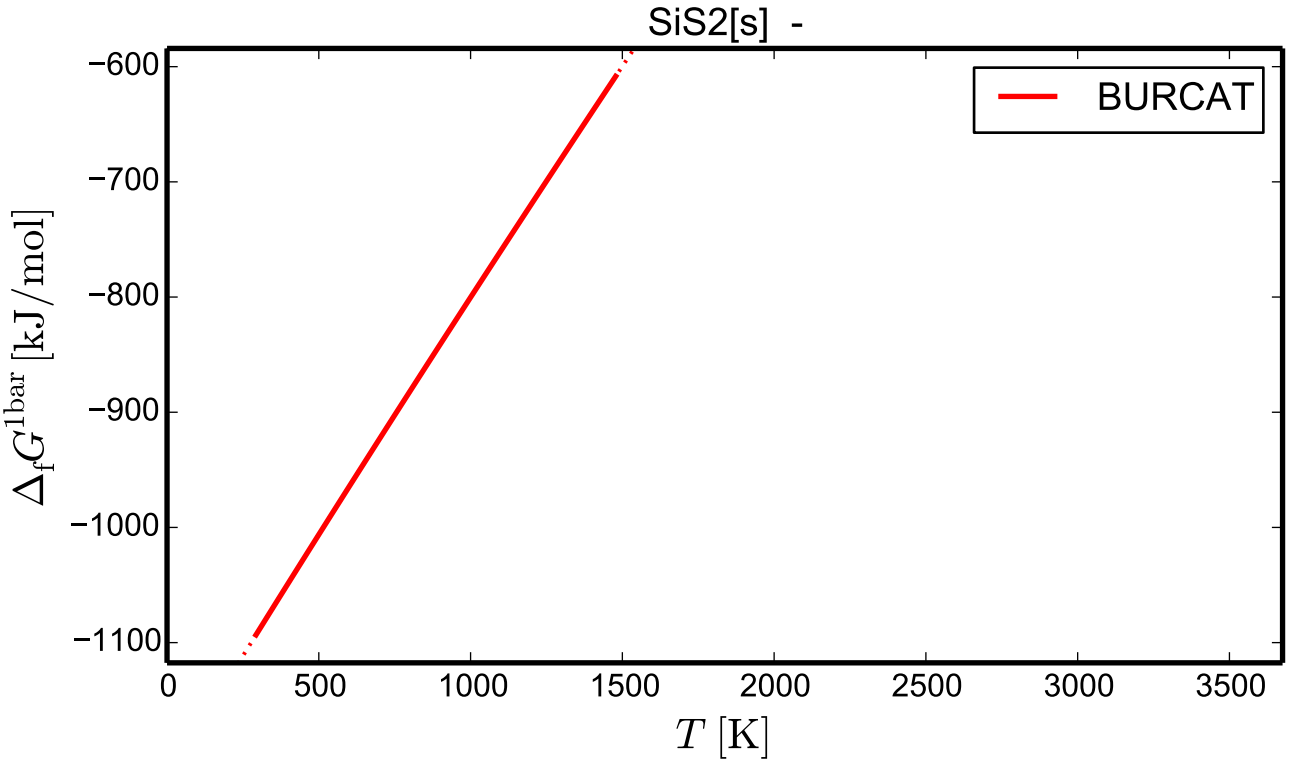

Si3N4[s] -
BURCAT
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

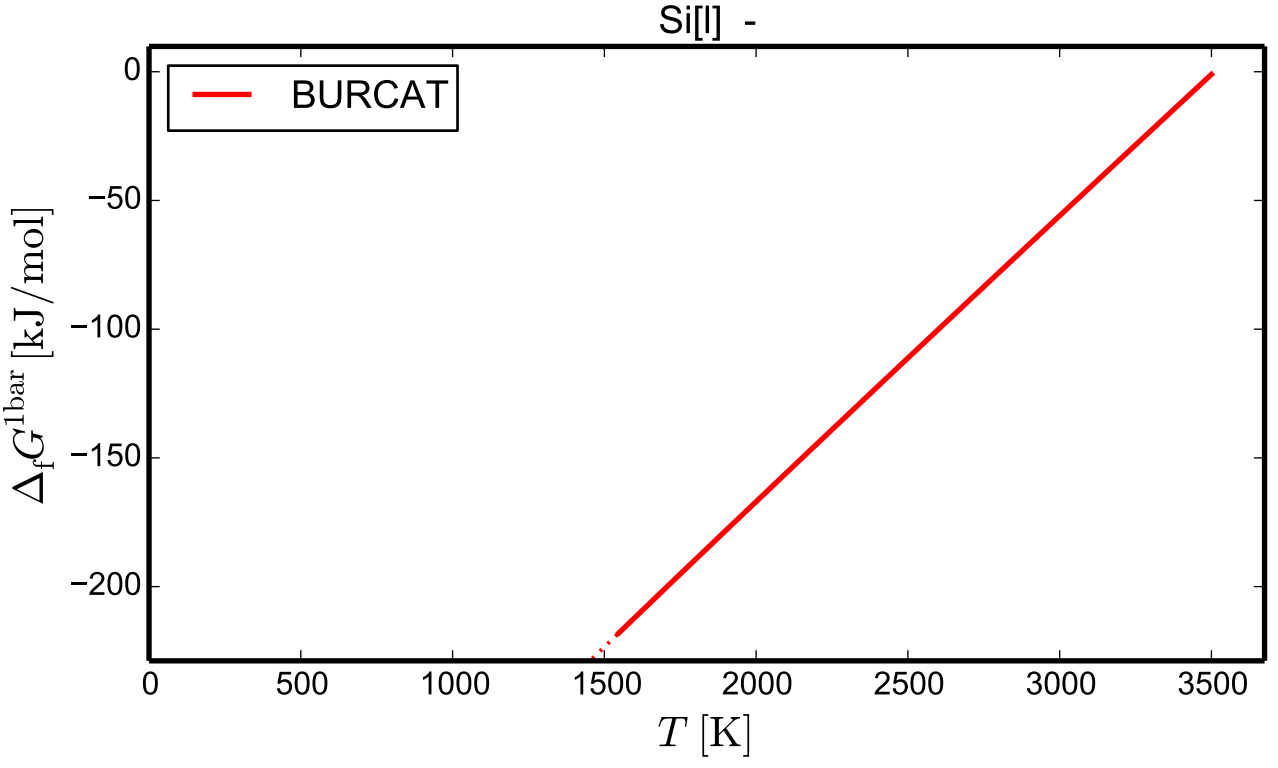

SiC[s] -
old GGchem
−200
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

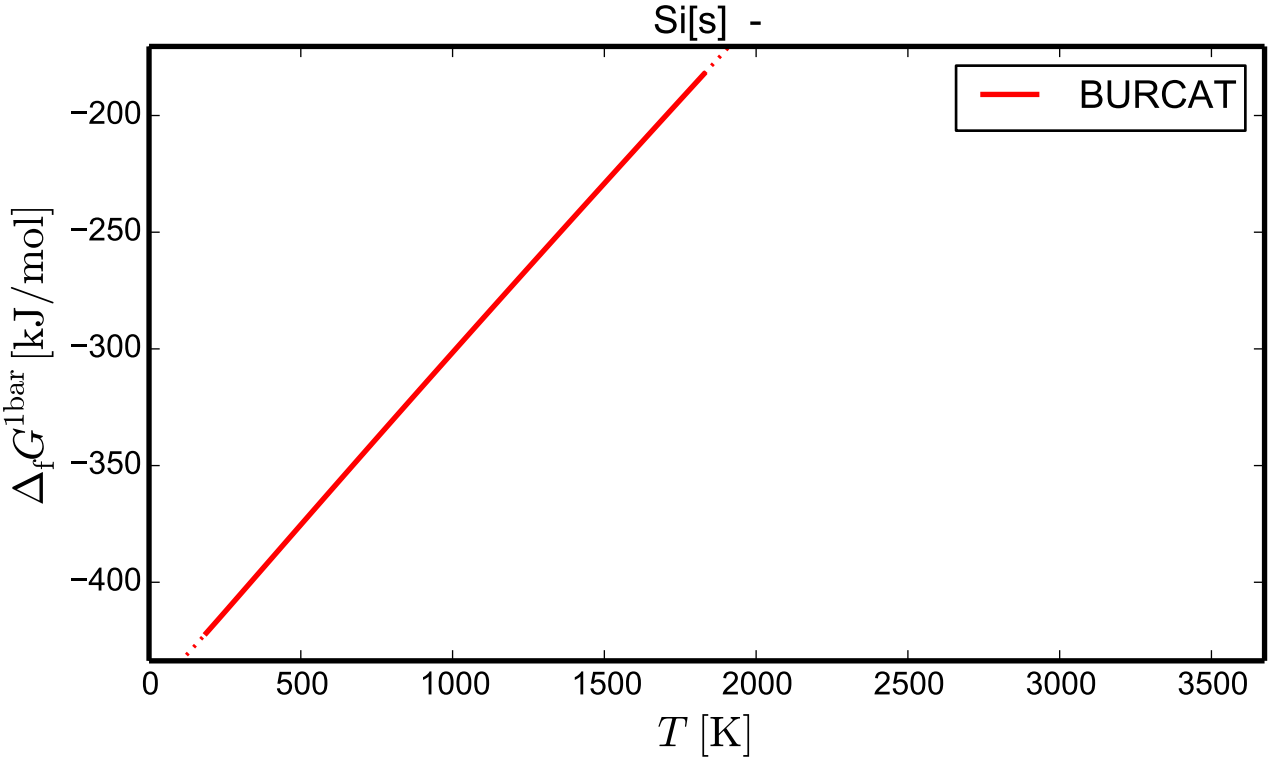

SiO2[l] -
BURCAT
−300
−400
−500
−600
−700
−800
−900
−1000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

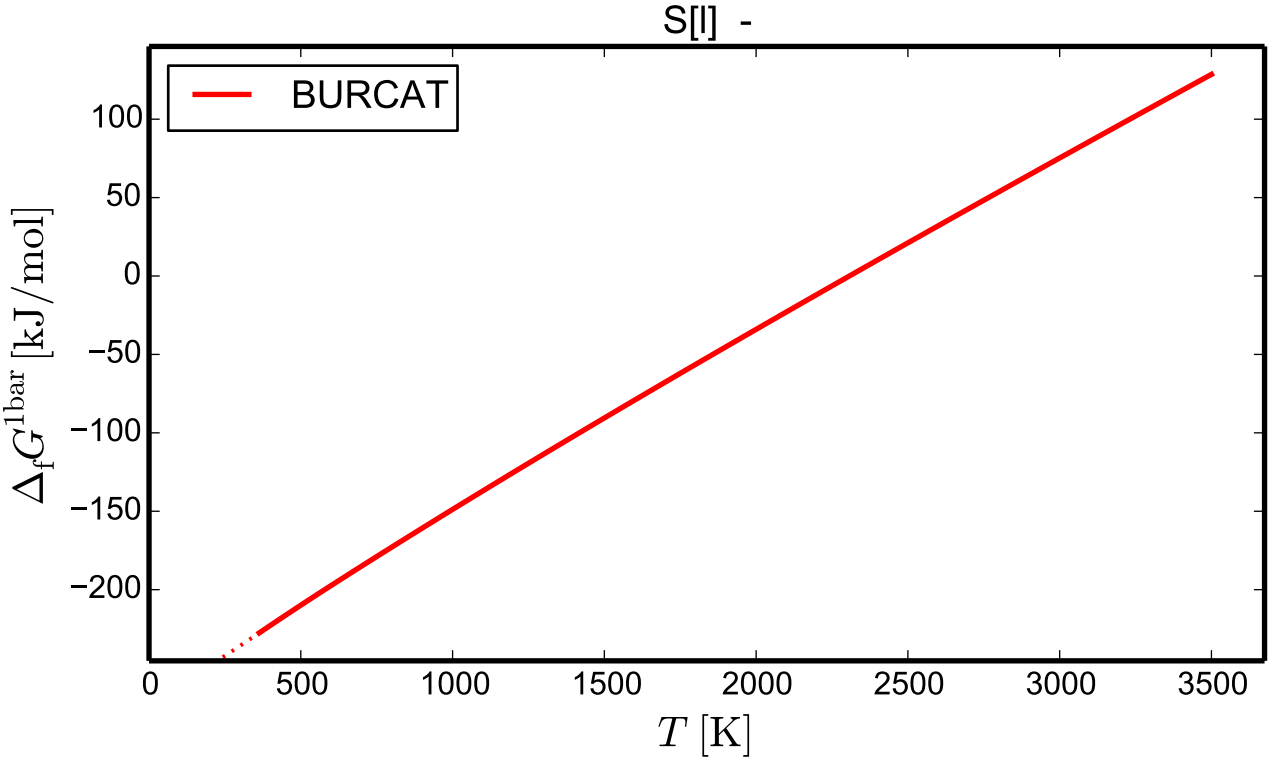

SiO2[s] - QUARTZ
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

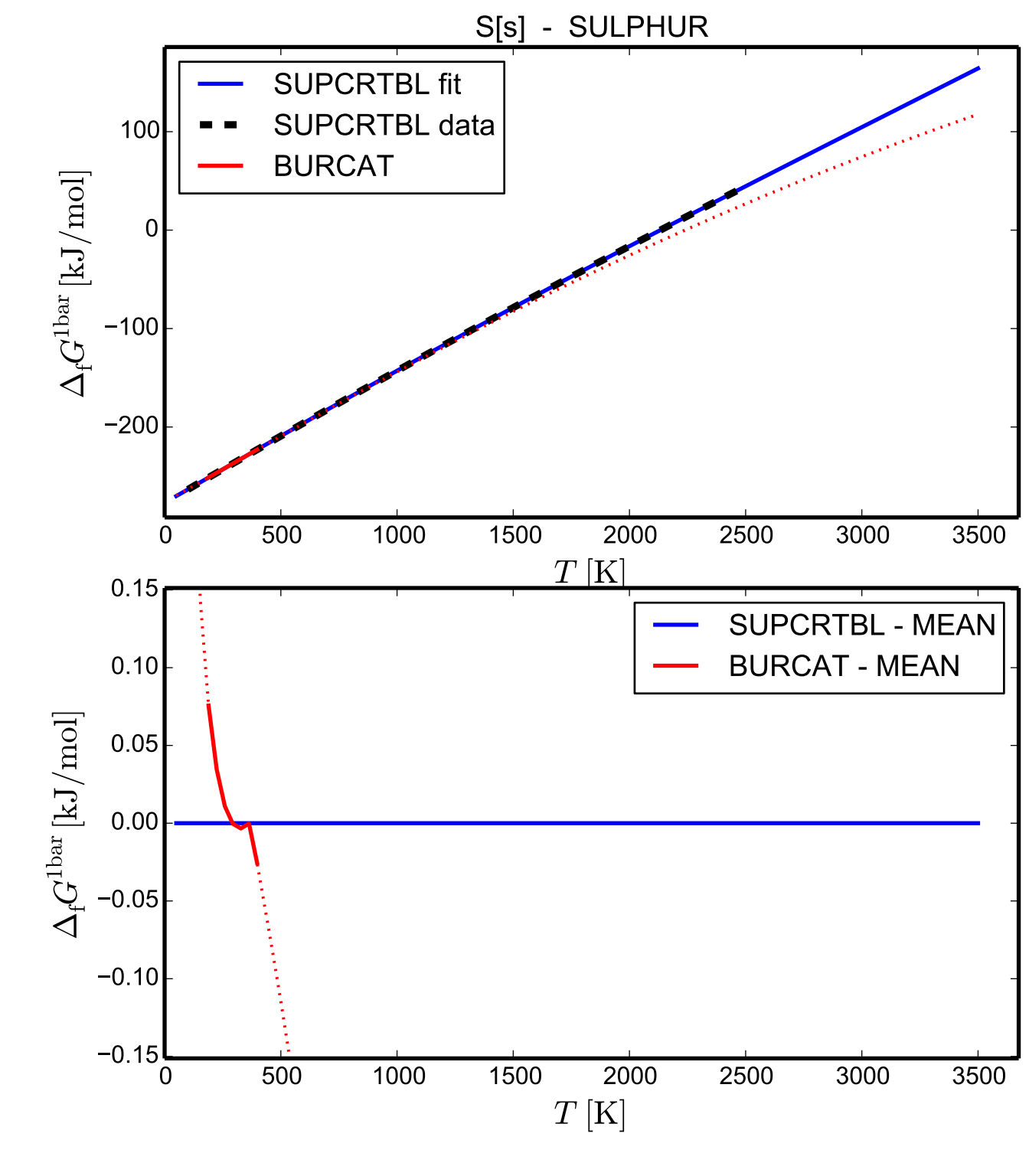

SiS2[l] -
BURCAT
−560
−580
−600
−620
−640
−660
−680
−700
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

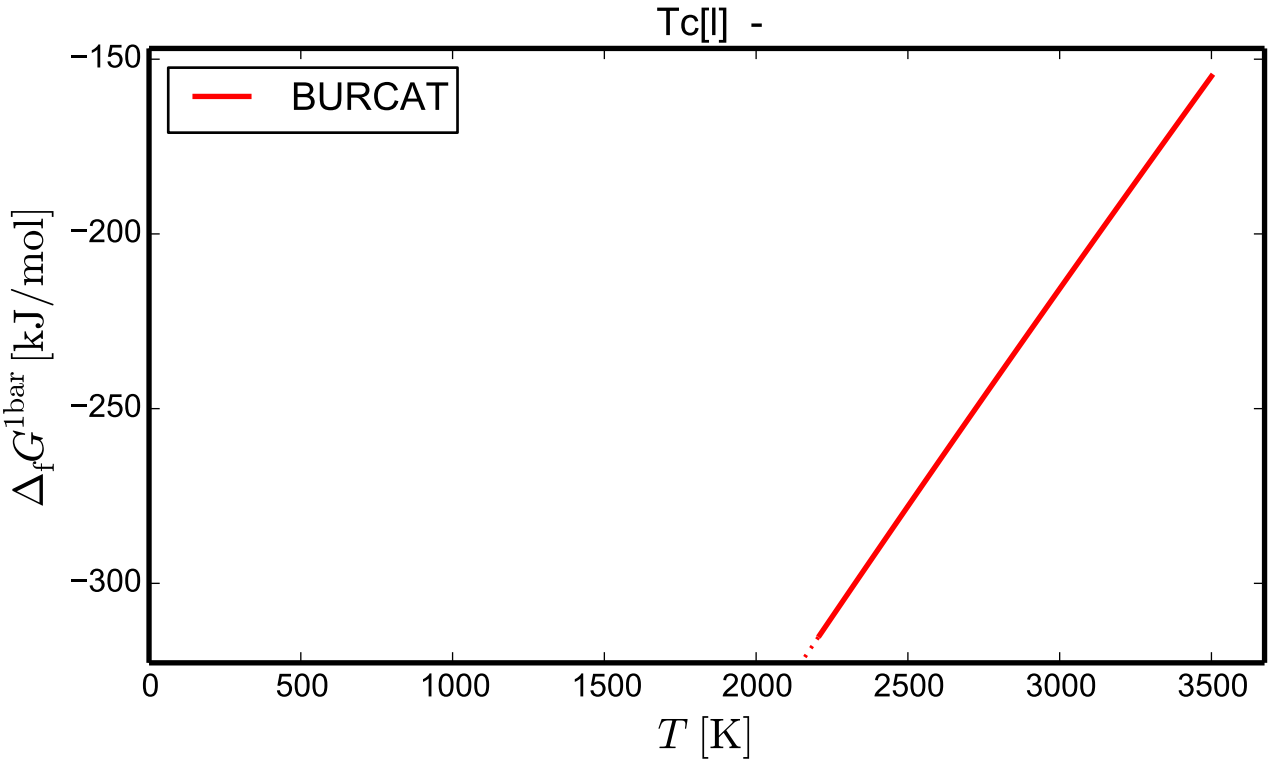

SiS2[s] -
BURCAT
−600
−700
−800
−900
−1000
−1100
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

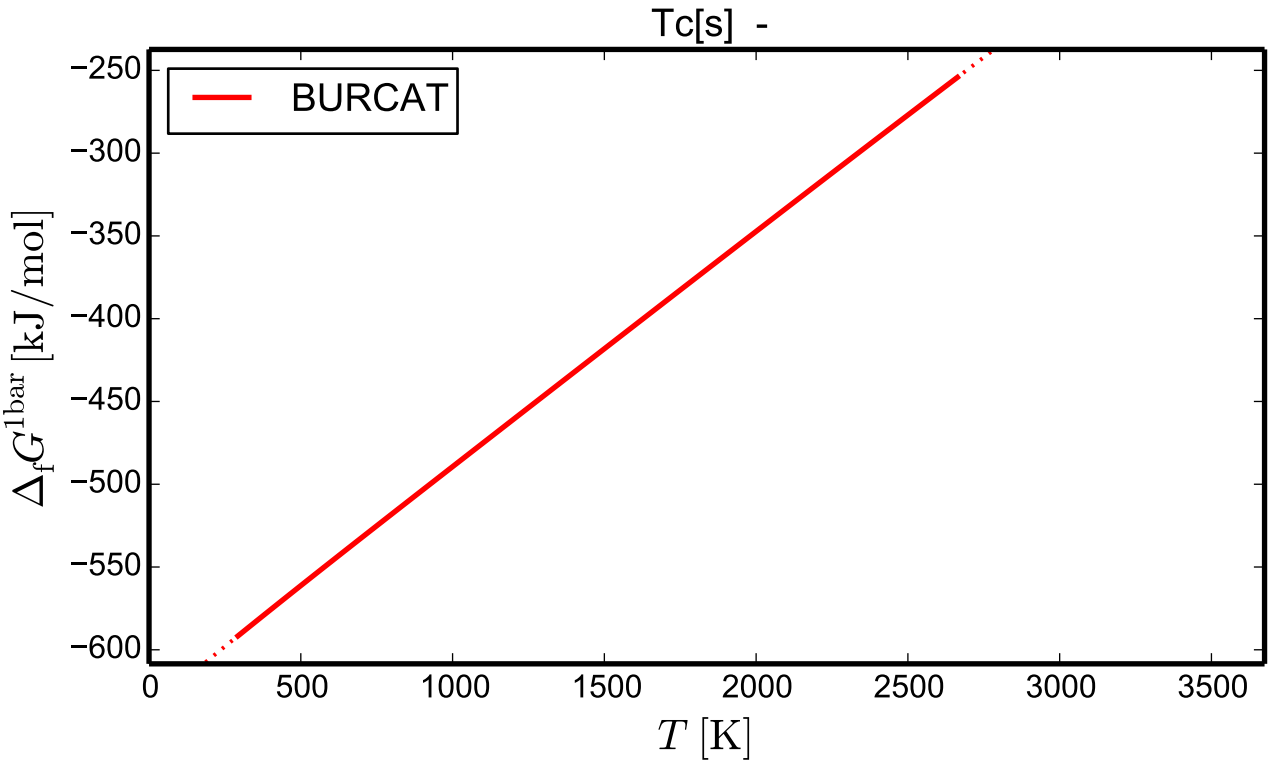

Si[l] -
BURCAT
0
−50
−100
−150
−200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

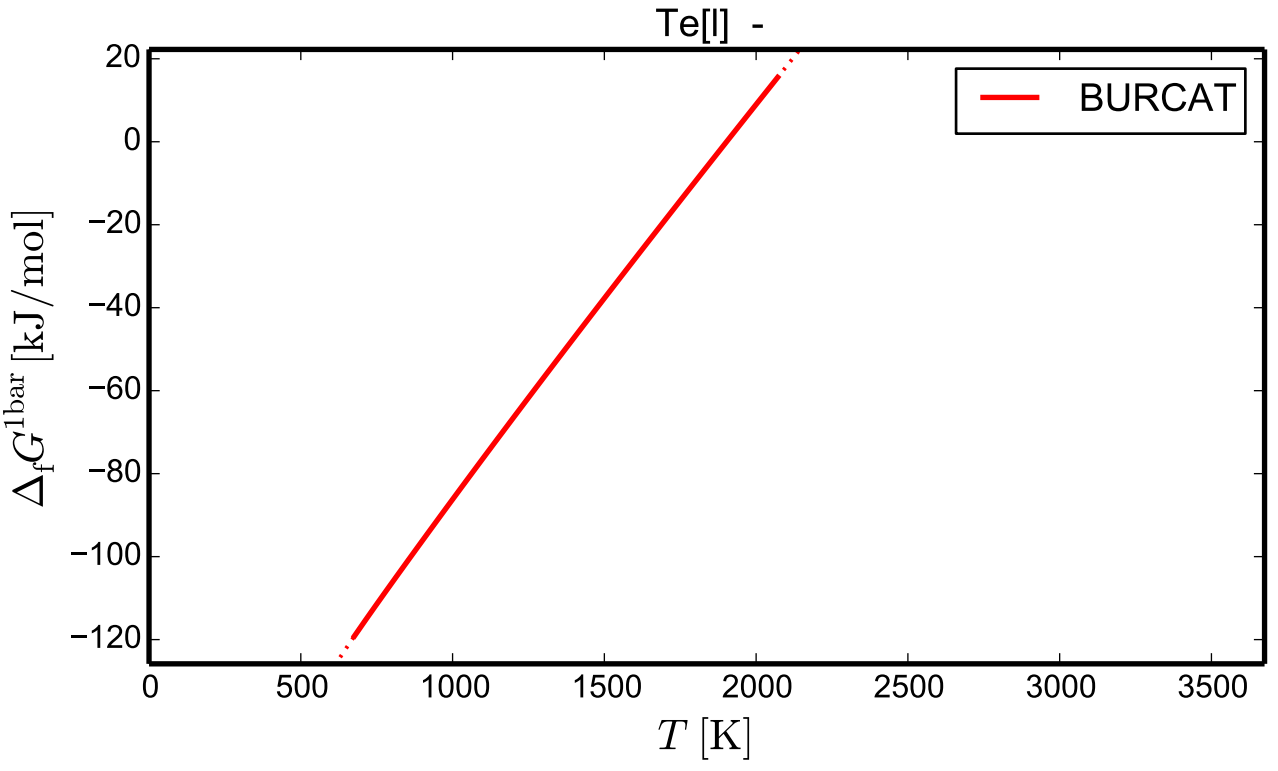

Si[s] -
BURCAT
−200
−250
−300
−350
−400
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

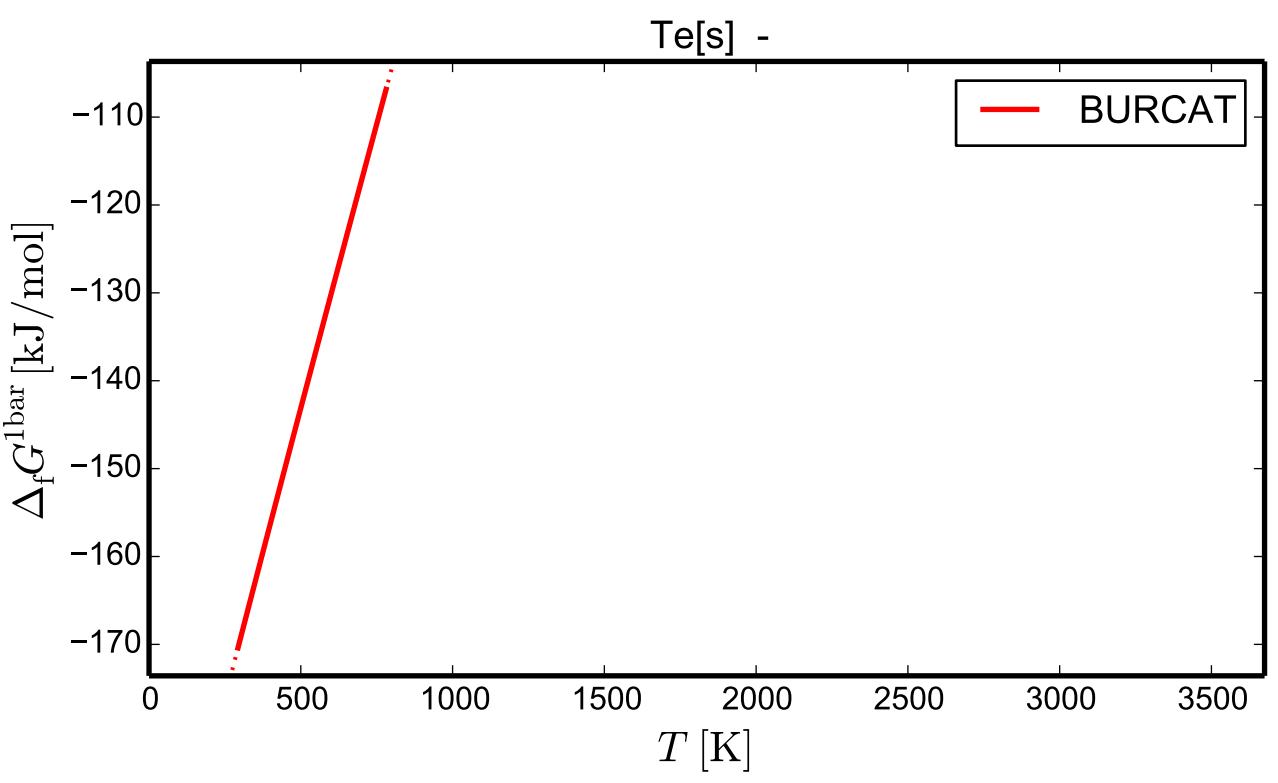

S[l] -
BURCAT
100
50
0
−50
−100
−150
−200
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

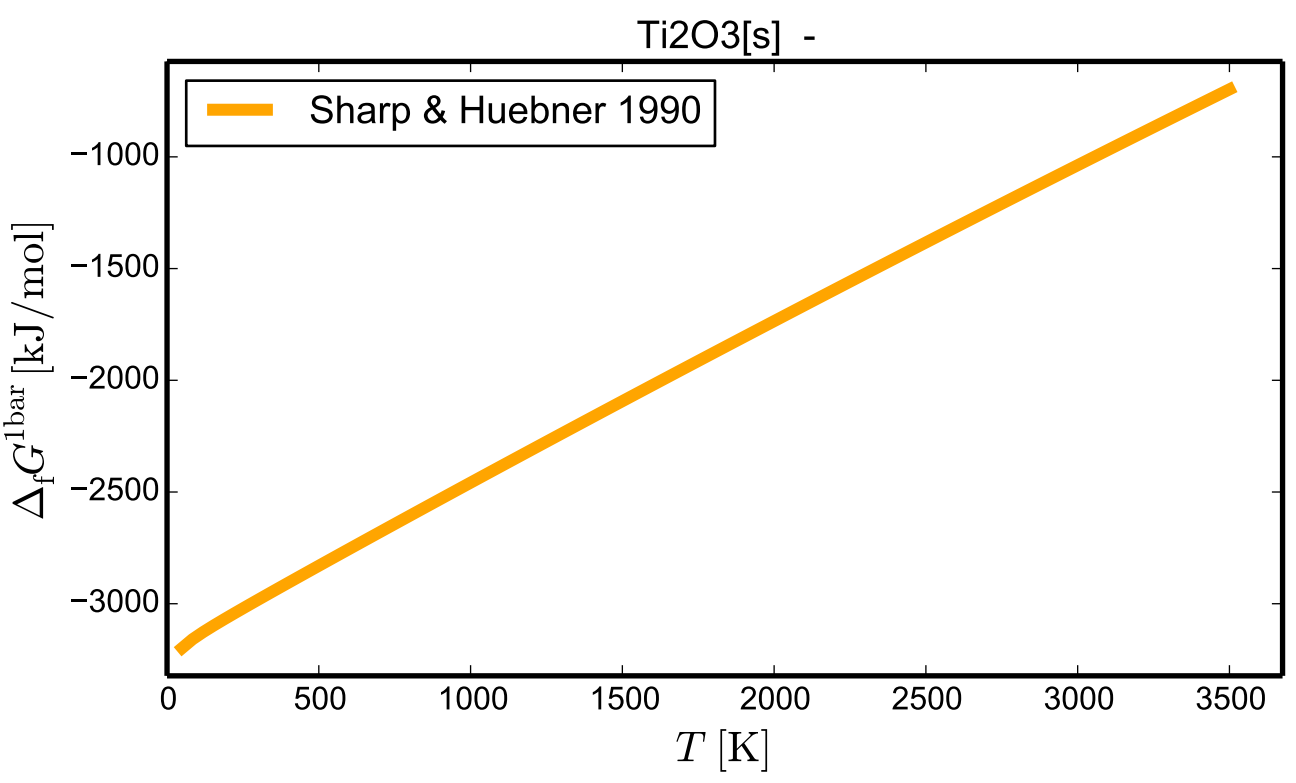

S[s] - SULPHUR
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
BURCAT - MEAN
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

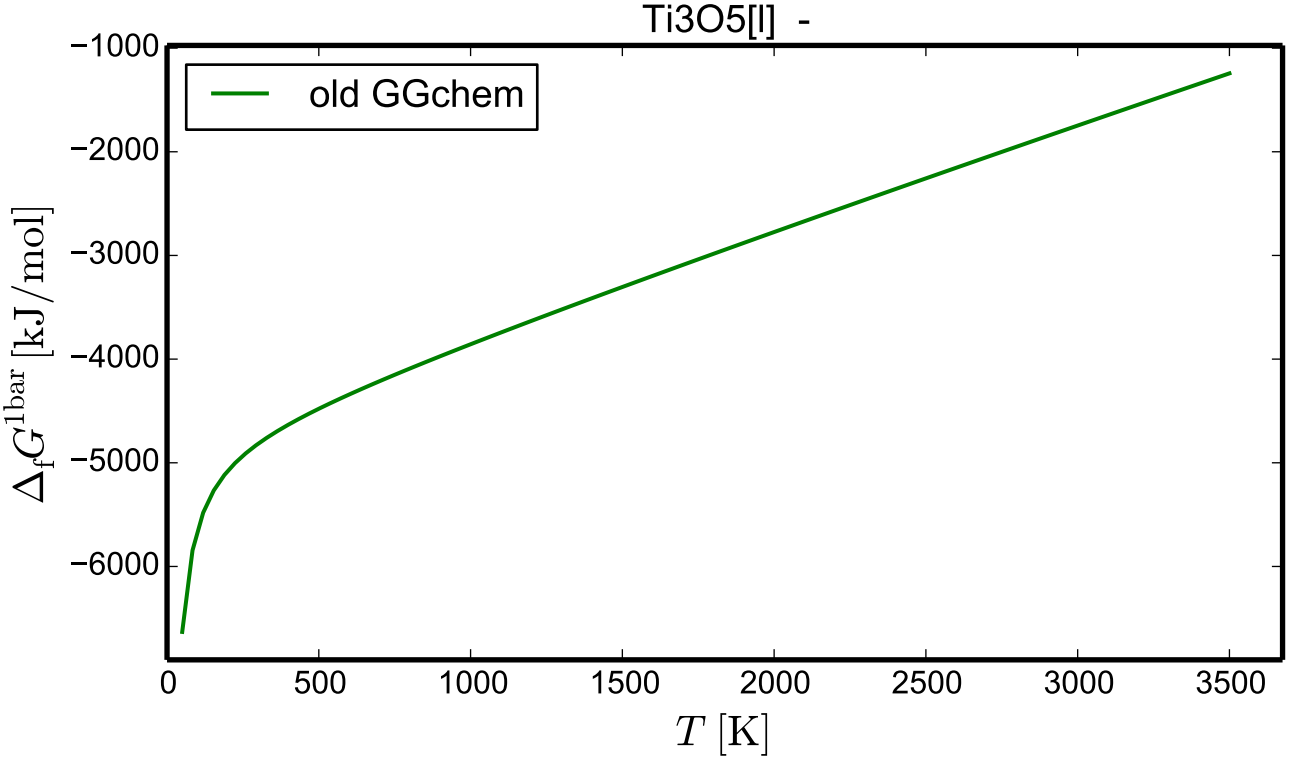

Tc[l] -
BURCAT
−150
−200
−250
−300
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

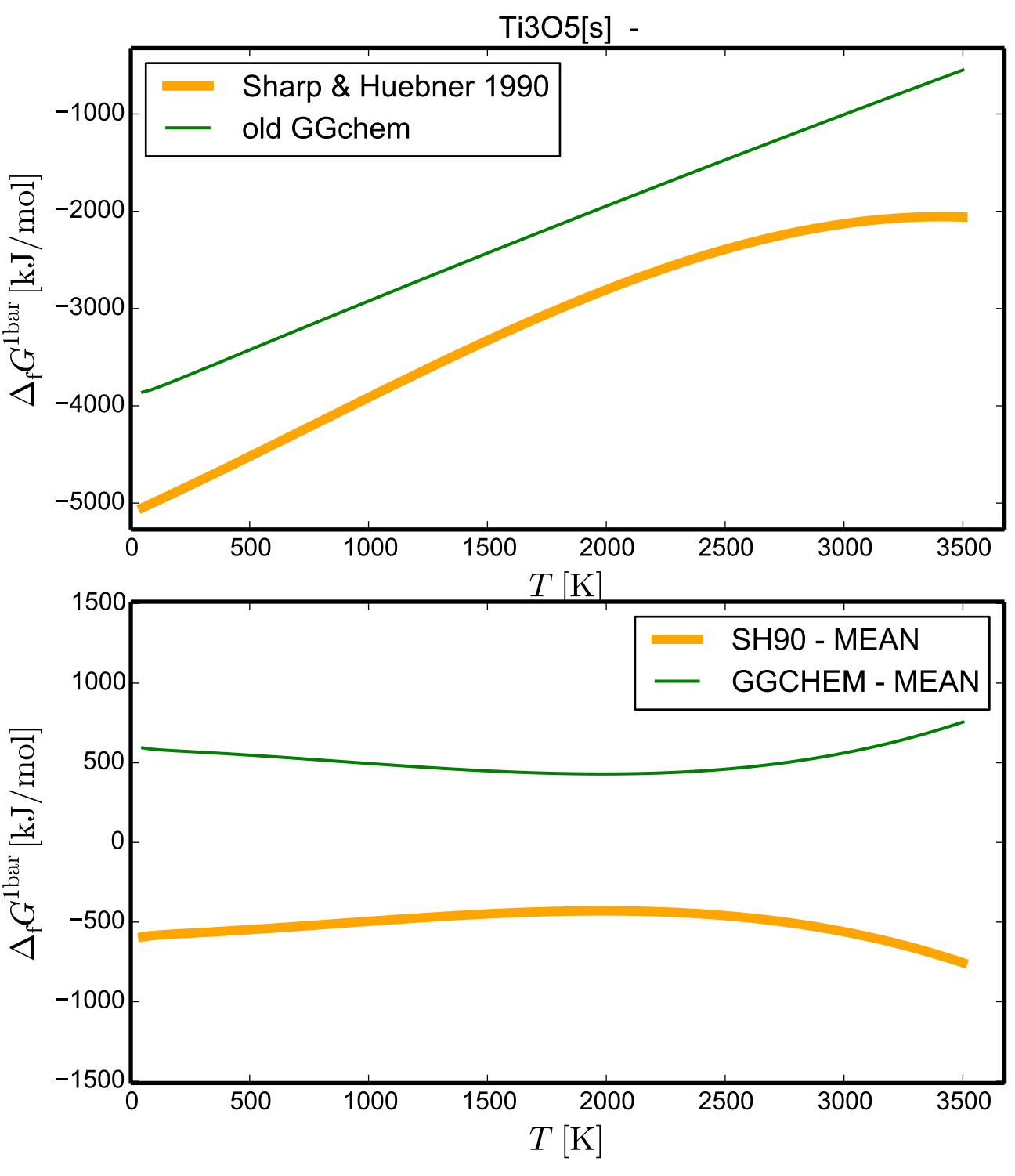

Tc[s] -
BURCAT
−250
−300
−350
−400
−450
−500
−550
−600
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

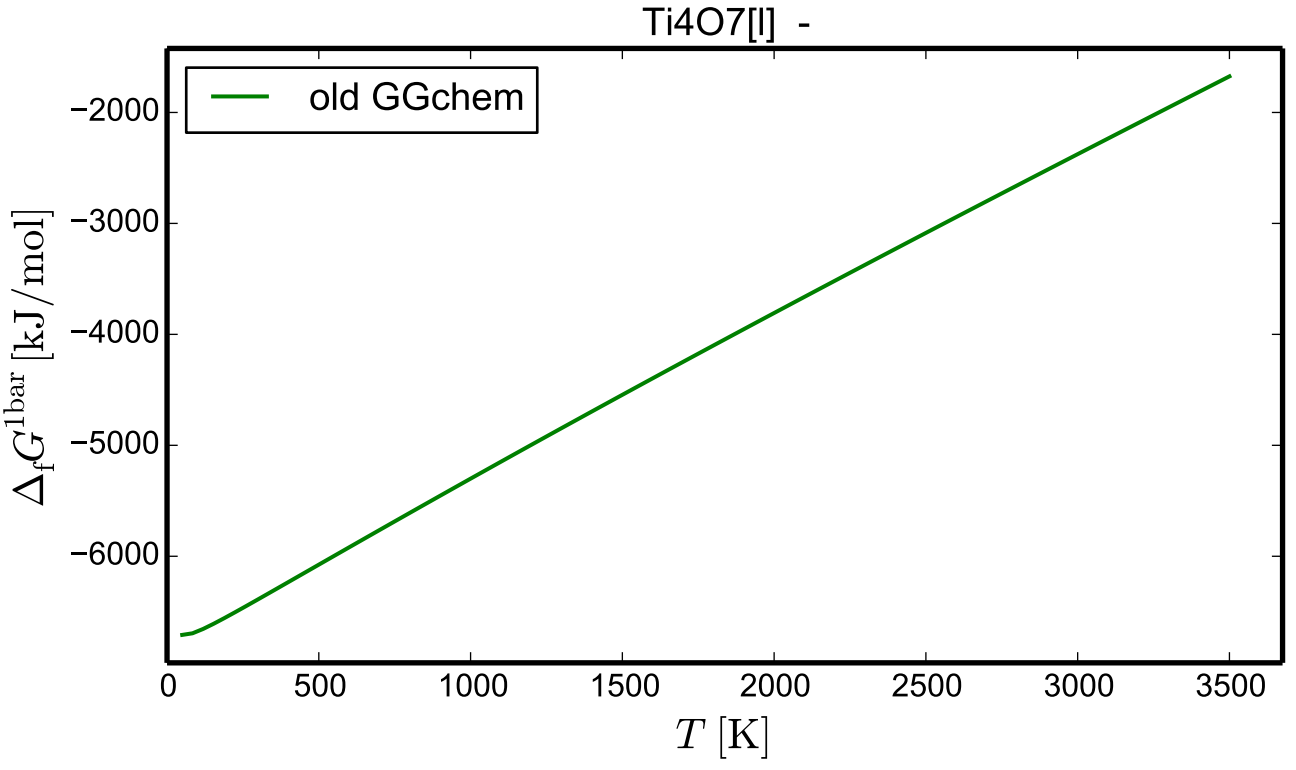

Te[l] -
BURCAT
20
0
−20
−40
−60
−80
−100
−120
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

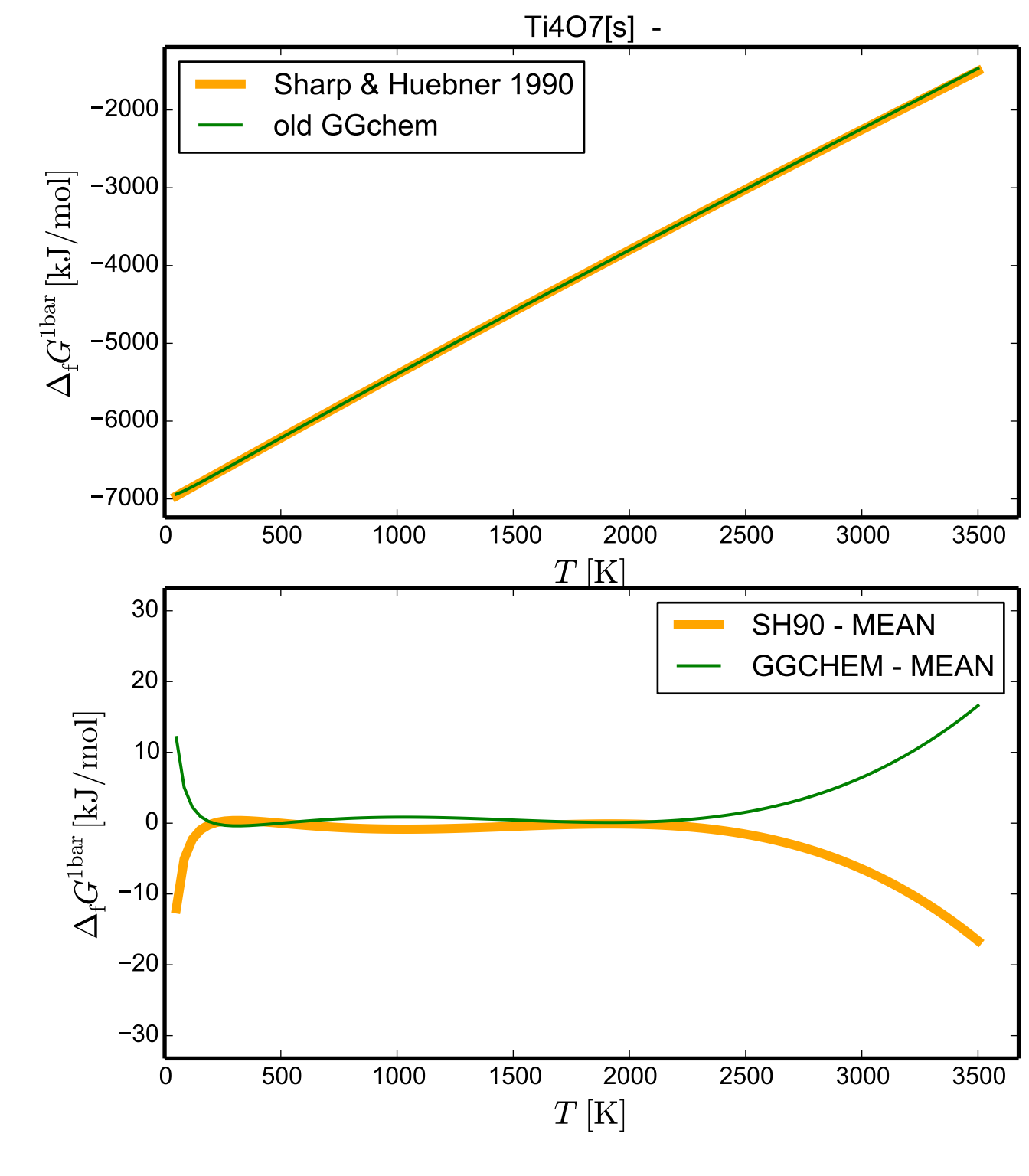

Te[s] -
BURCAT
−110
−120
−130
−140
−150
−160
−170
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

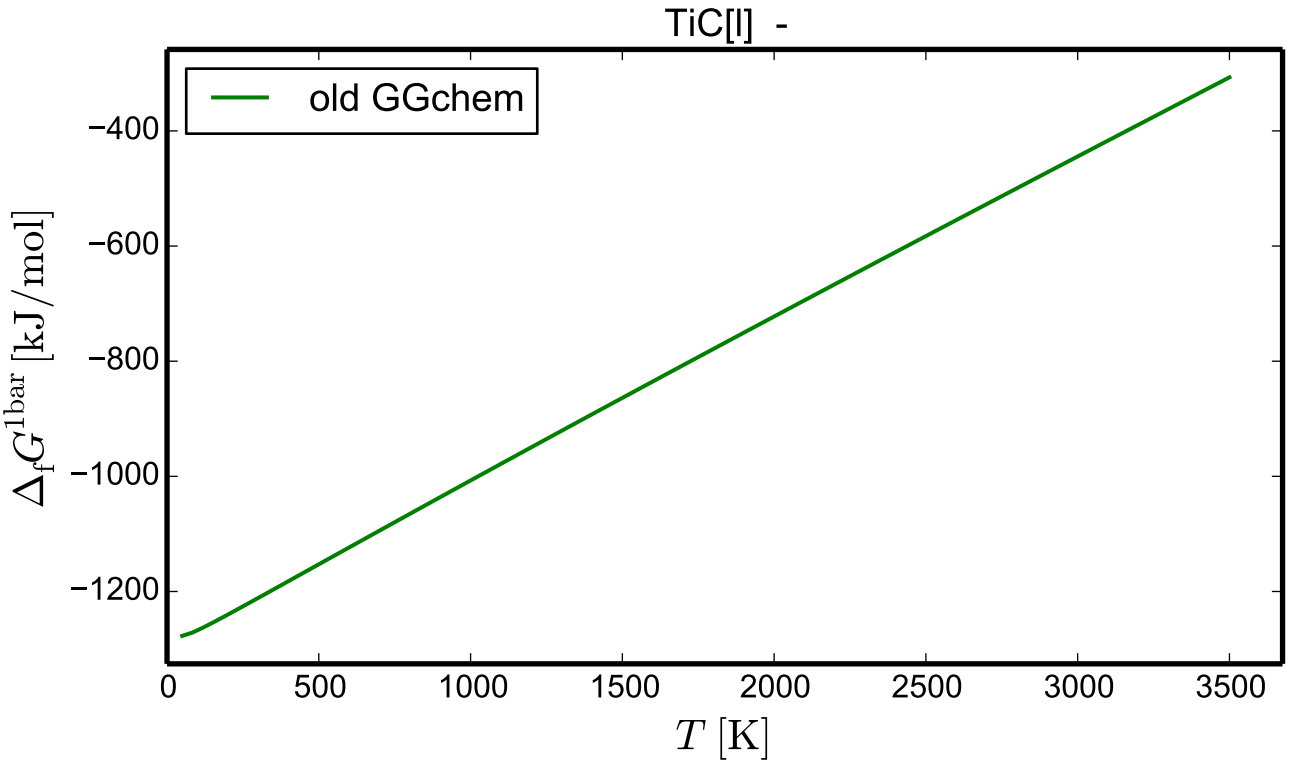

Ti2O3[s] -
Sharp & Huebner 1990
−1000
−1500
−2000
−2500
−3000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

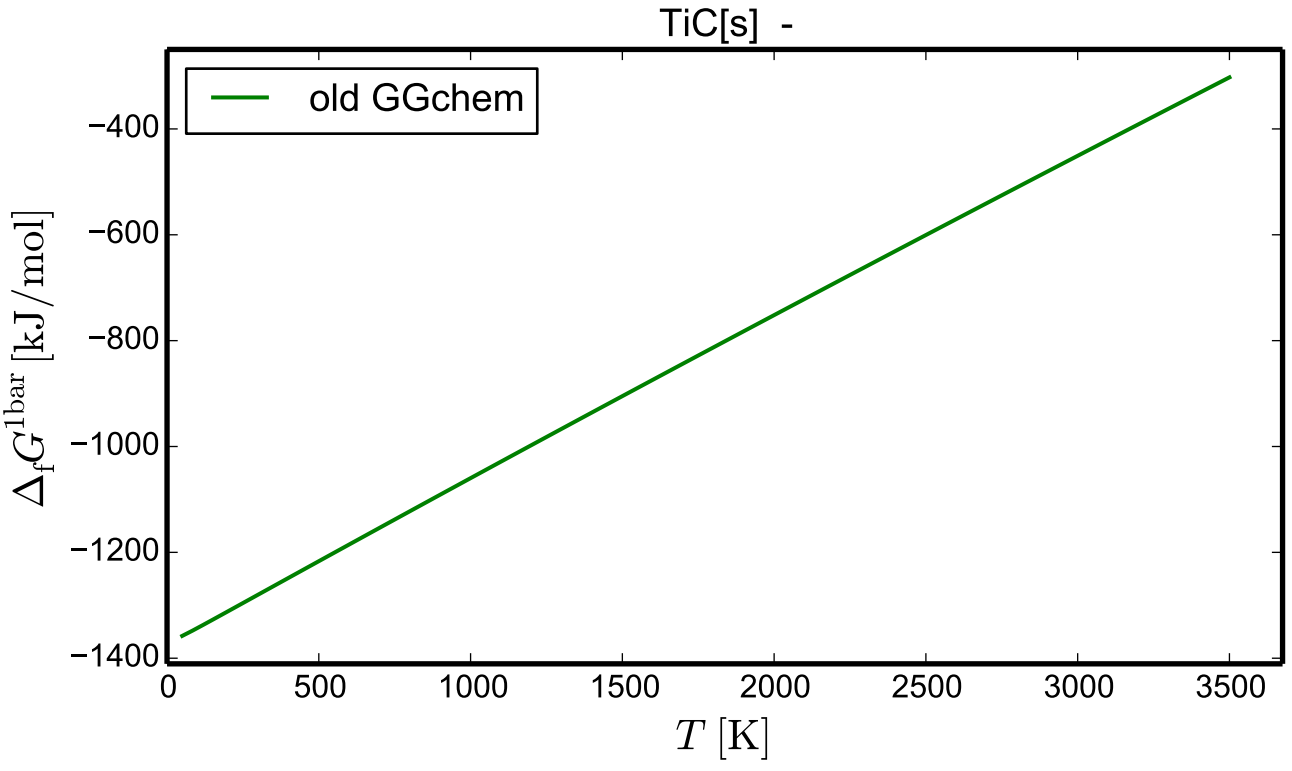

Ti3O5[l] -
old GGchem
−1000
−2000
−3000
−4000
−5000
−6000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

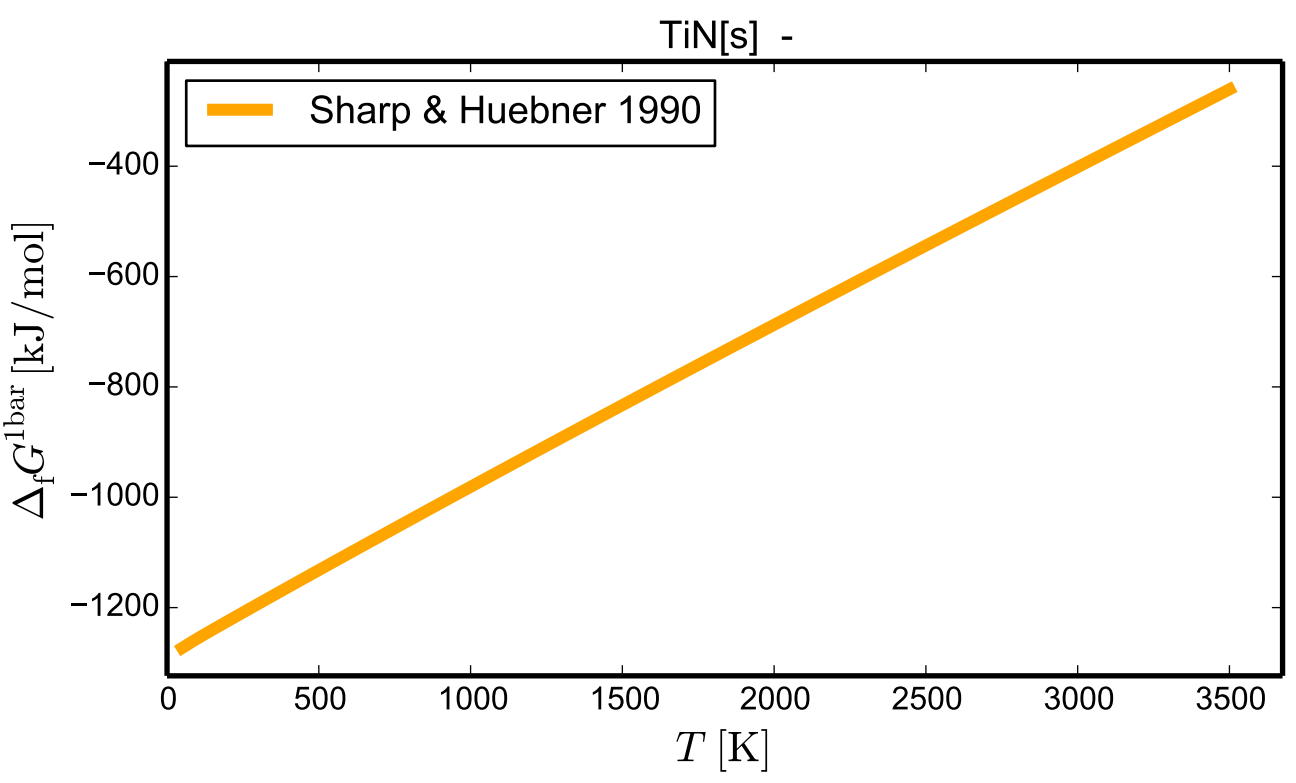

Ti3O5[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
−1000
−2000
−3000
−4000
−5000
0
500
1000
1500
2000
2500
3000
3500
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
1500
1000
500
0
−500
−1000
−1500
0
500
1000
1500
2000
2500
3000
3500
T [K]

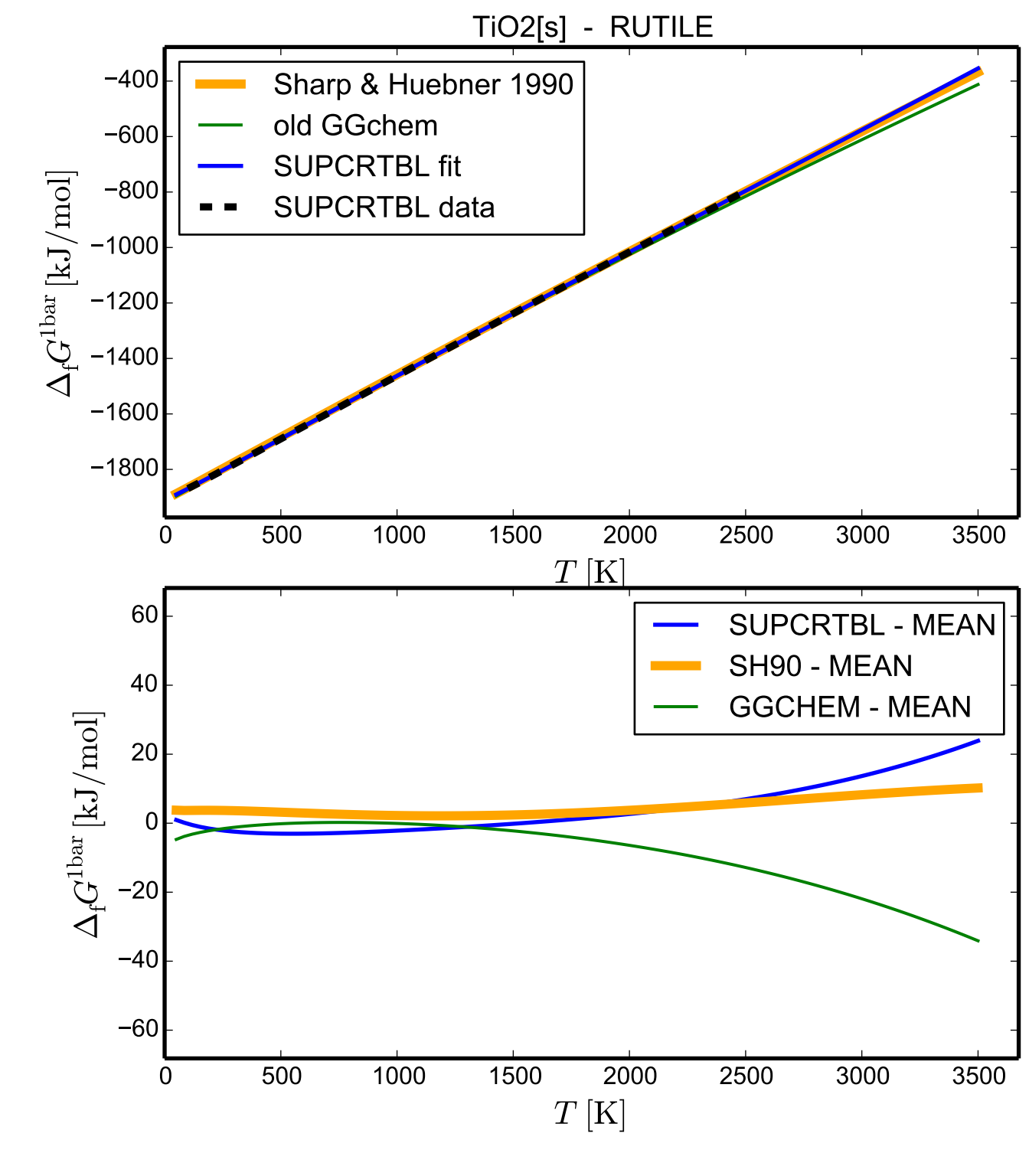

Ti4O7[l] -
old GGchem
−2000
−3000
−4000
−5000
−6000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

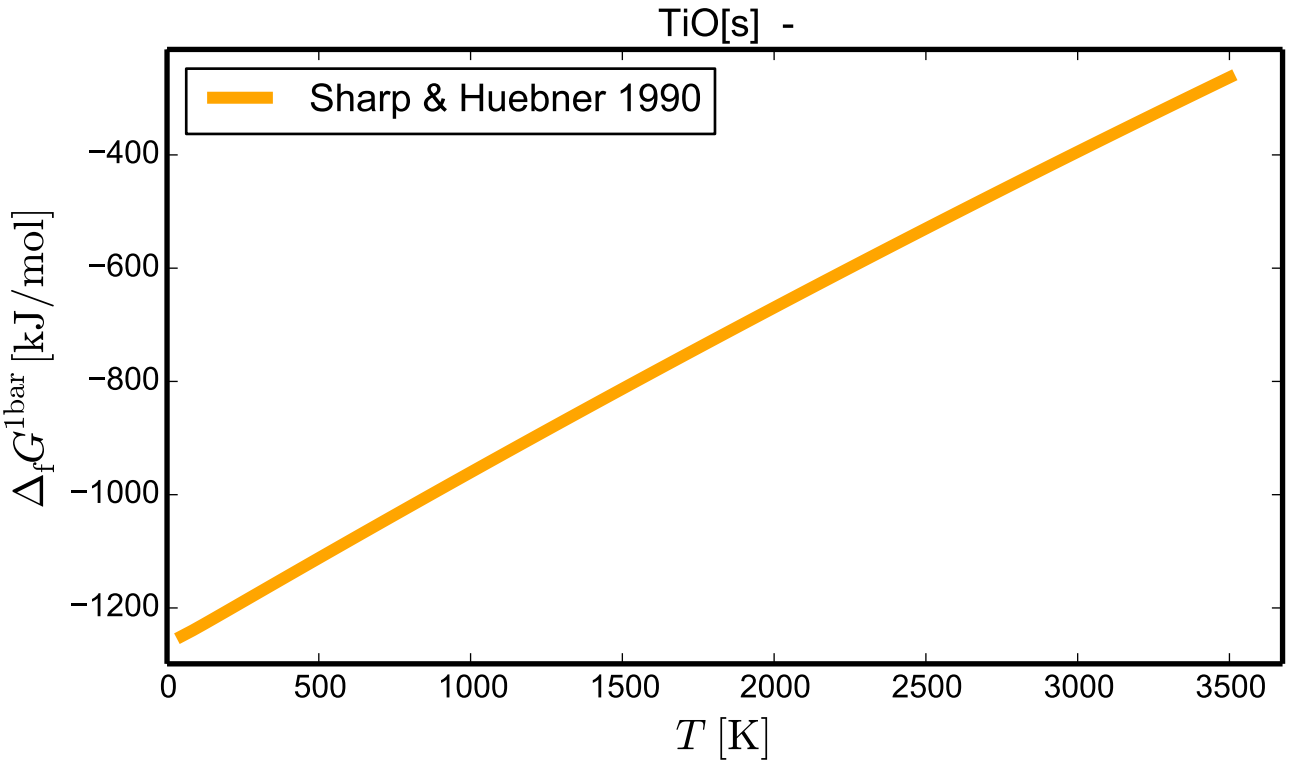

Ti4O7[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
−2000
−3000
−4000
−5000
−6000
−7000
0
500
1000
1500
2000
2500
3000
3500
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
30
20
10
0
−10
−20
−30
0
500
1000
1500
2000
2500
3000
3500
T [K]

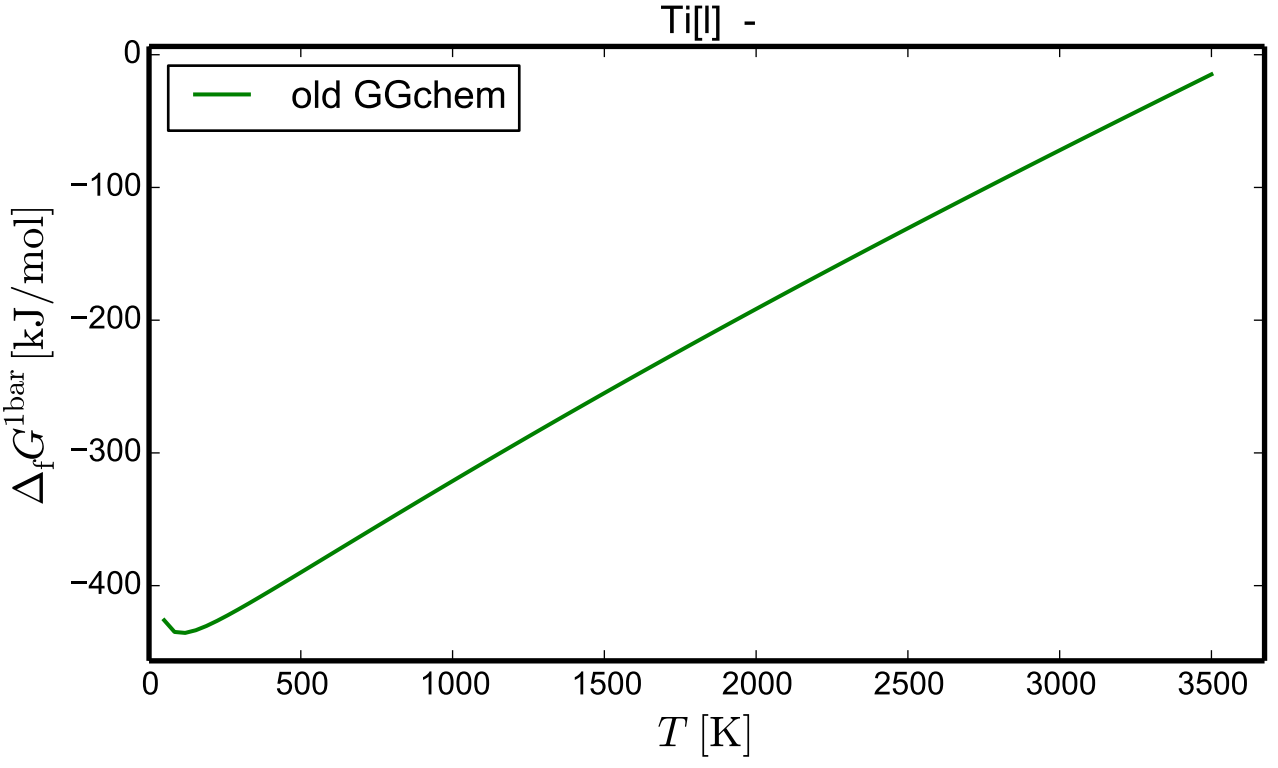

TiC[l] -
old GGchem
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

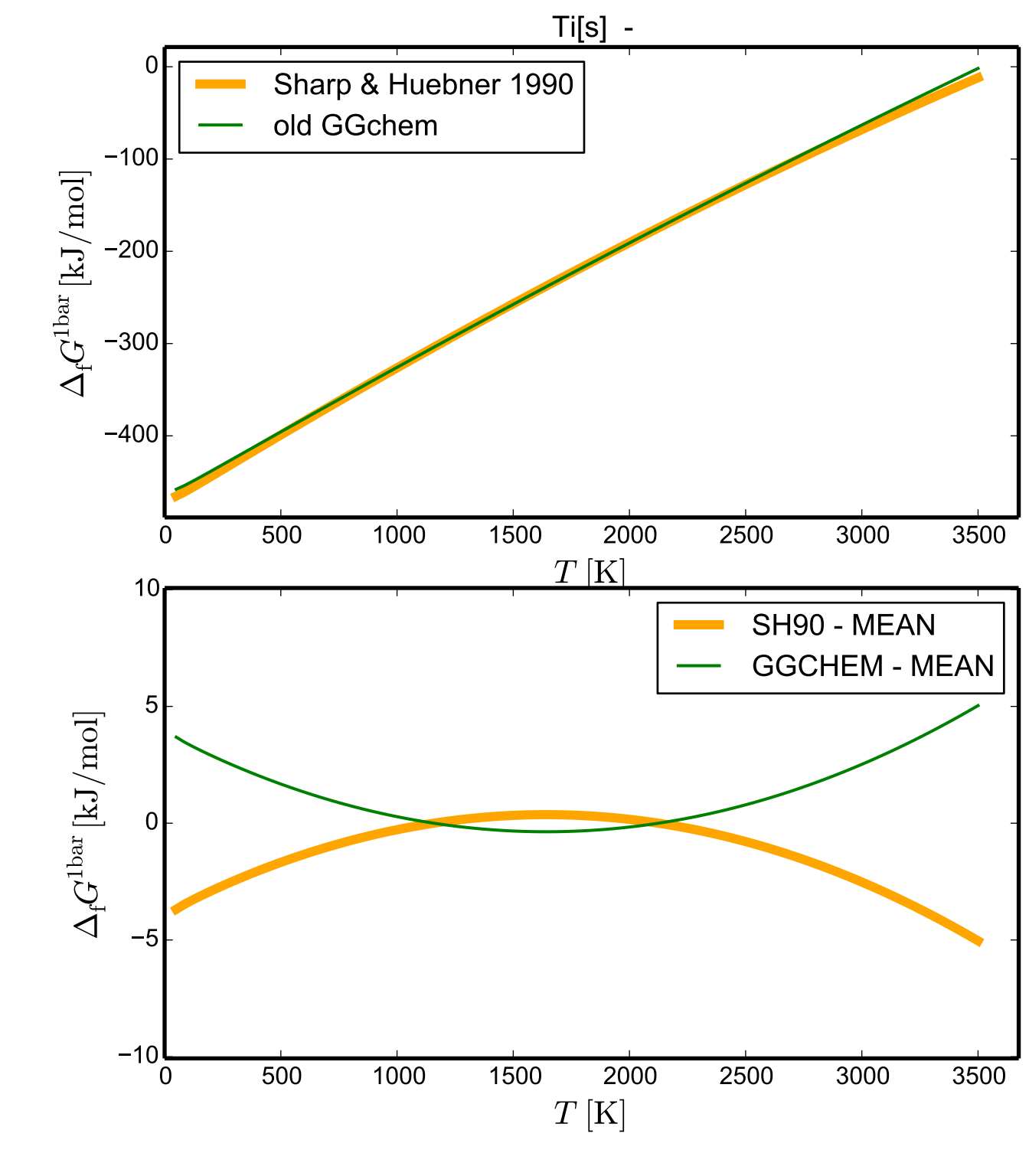

TiC[s] -
old GGchem
−400
−600
−800
−1000
−1200
−1400
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

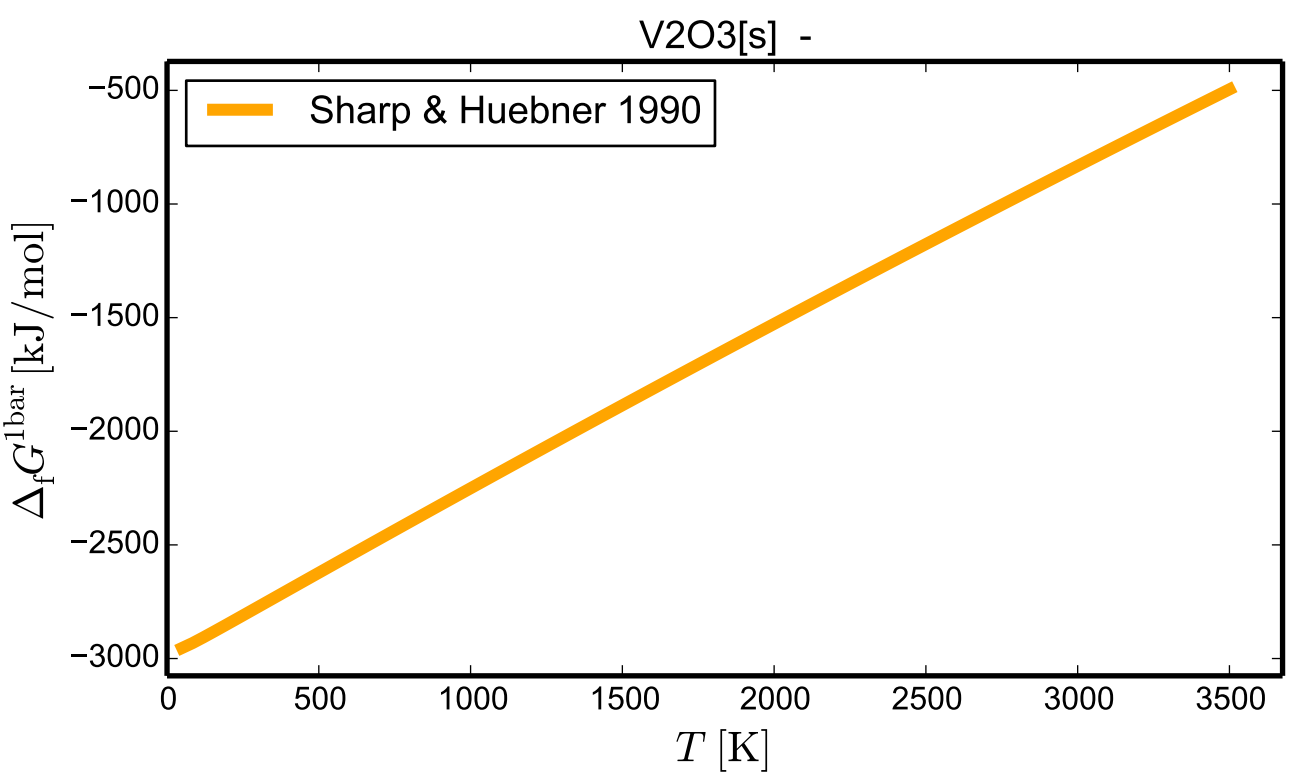

TiN[s] -
Sharp & Huebner 1990
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

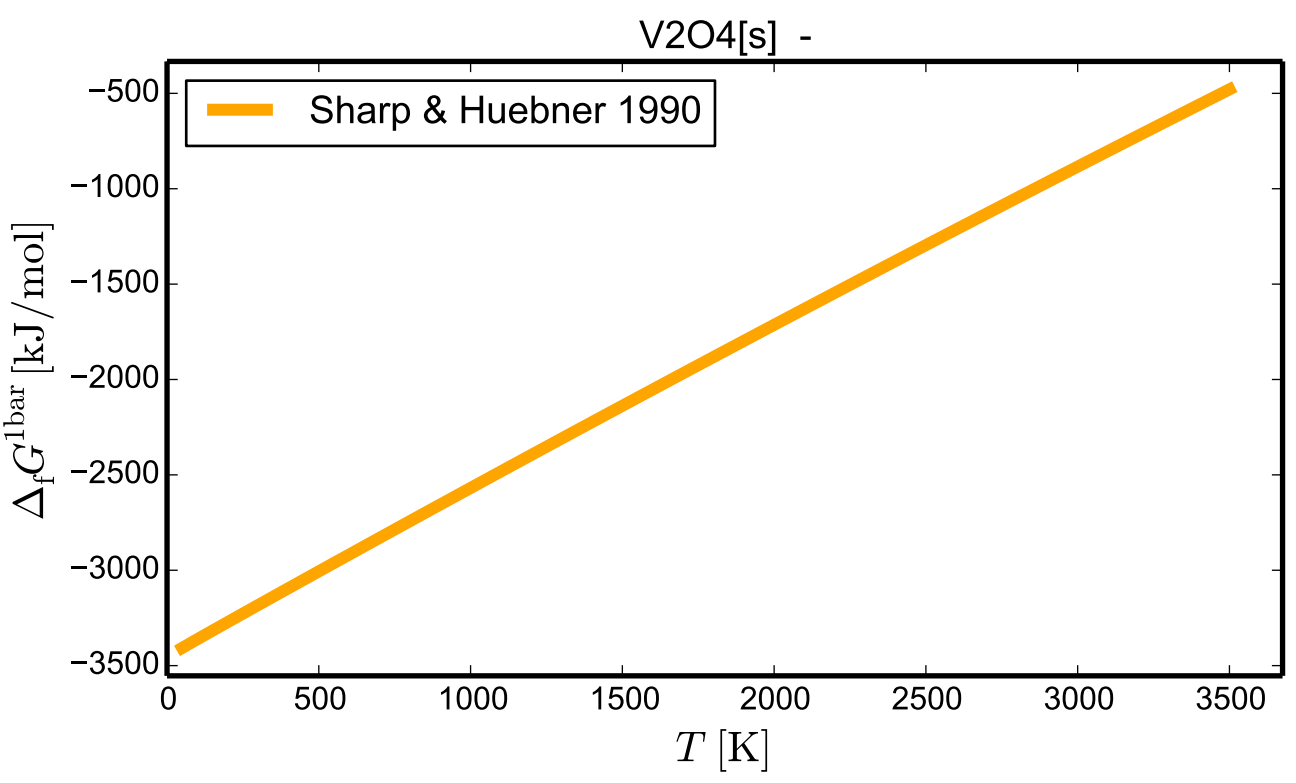

TiO2[s] - RUTILE
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

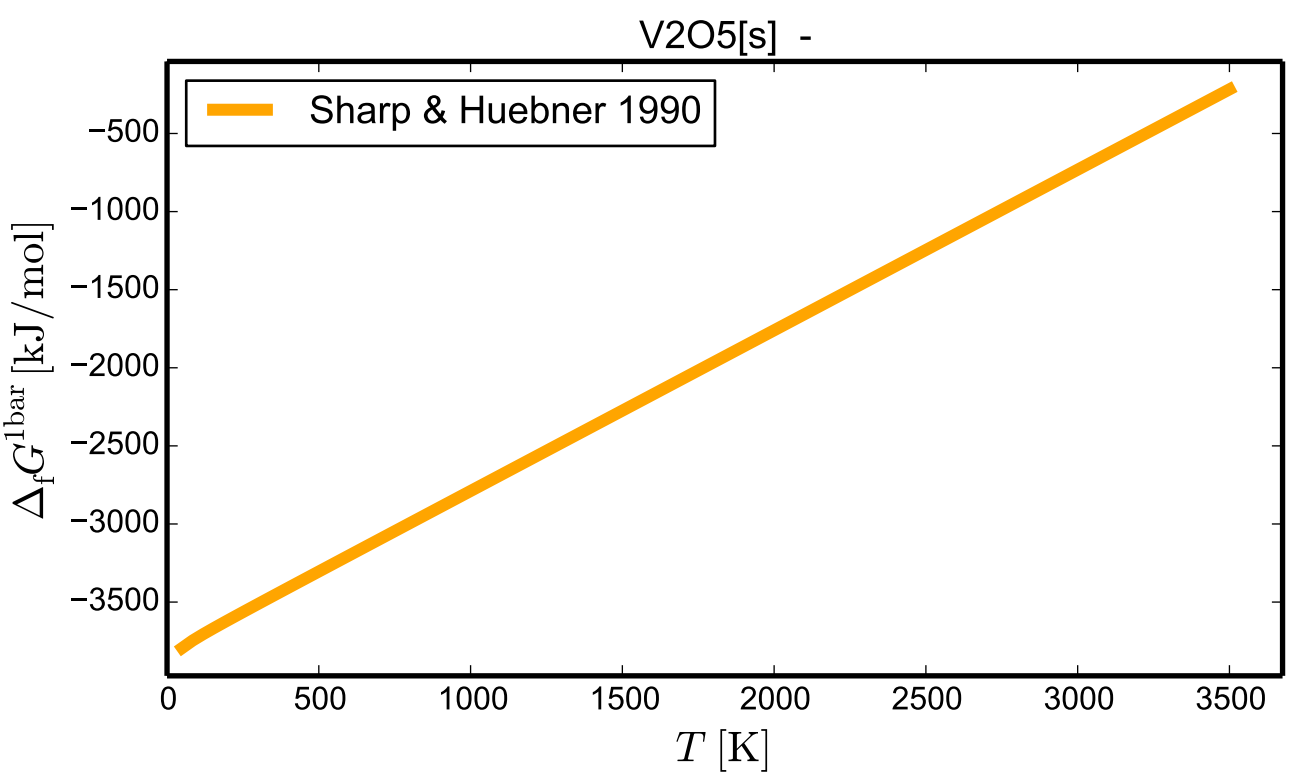

TiO[s] -
Sharp & Huebner 1990
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

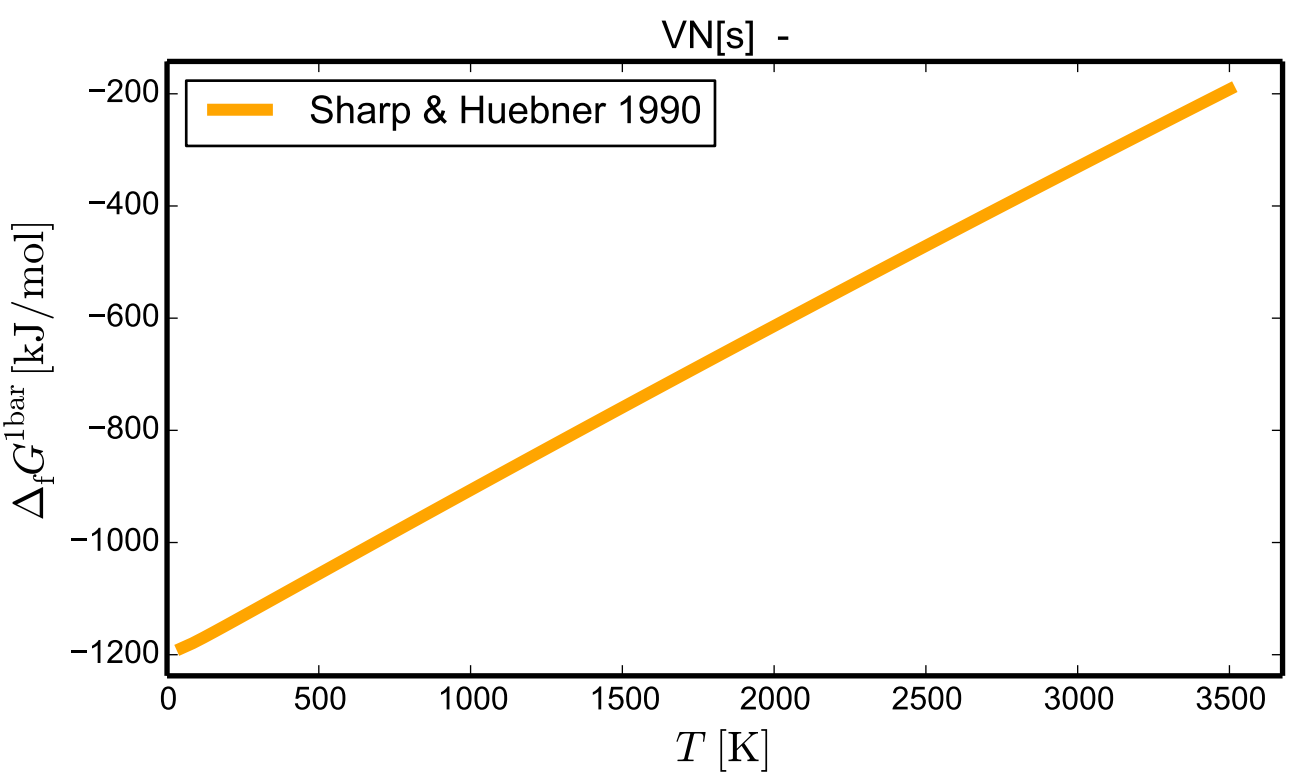

Ti[l] -
old GGchem
0
−100
−200
−300
−400
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

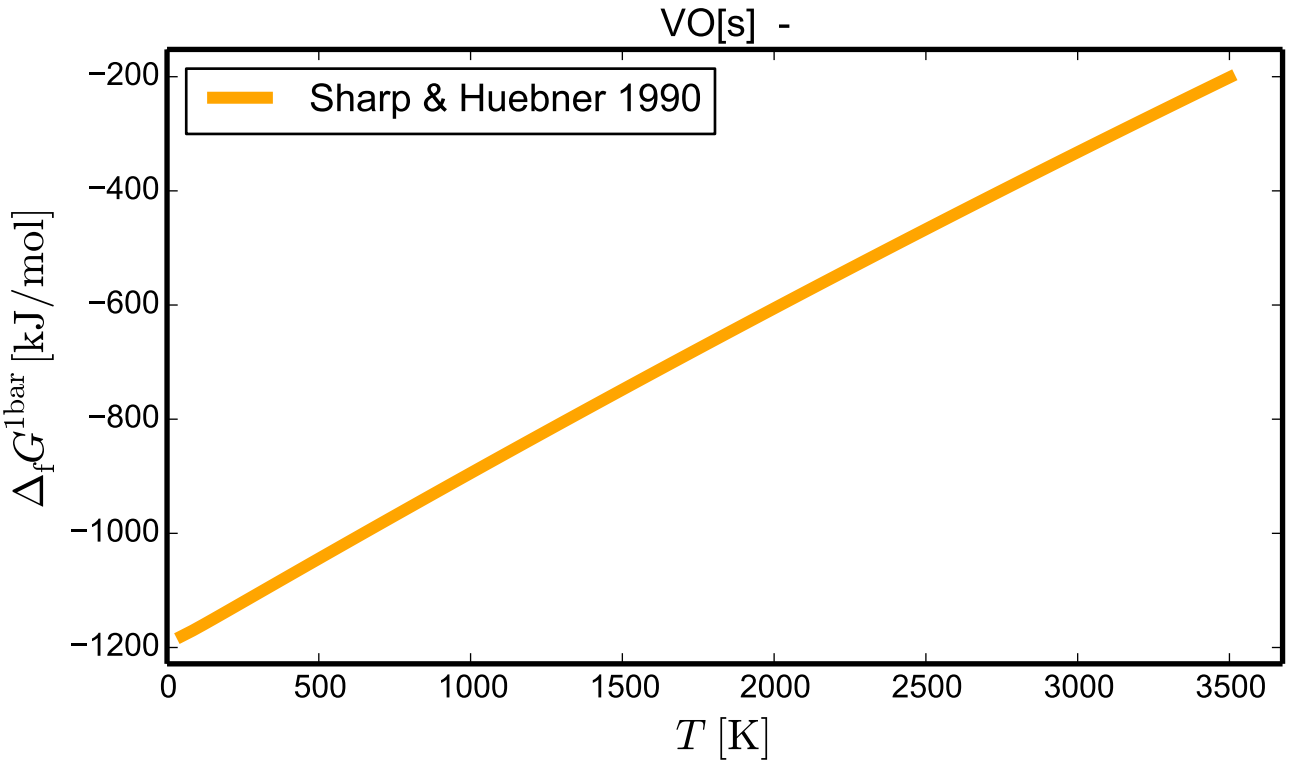

Ti[s] -
Sharp & Huebner 1990
old GGchem
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

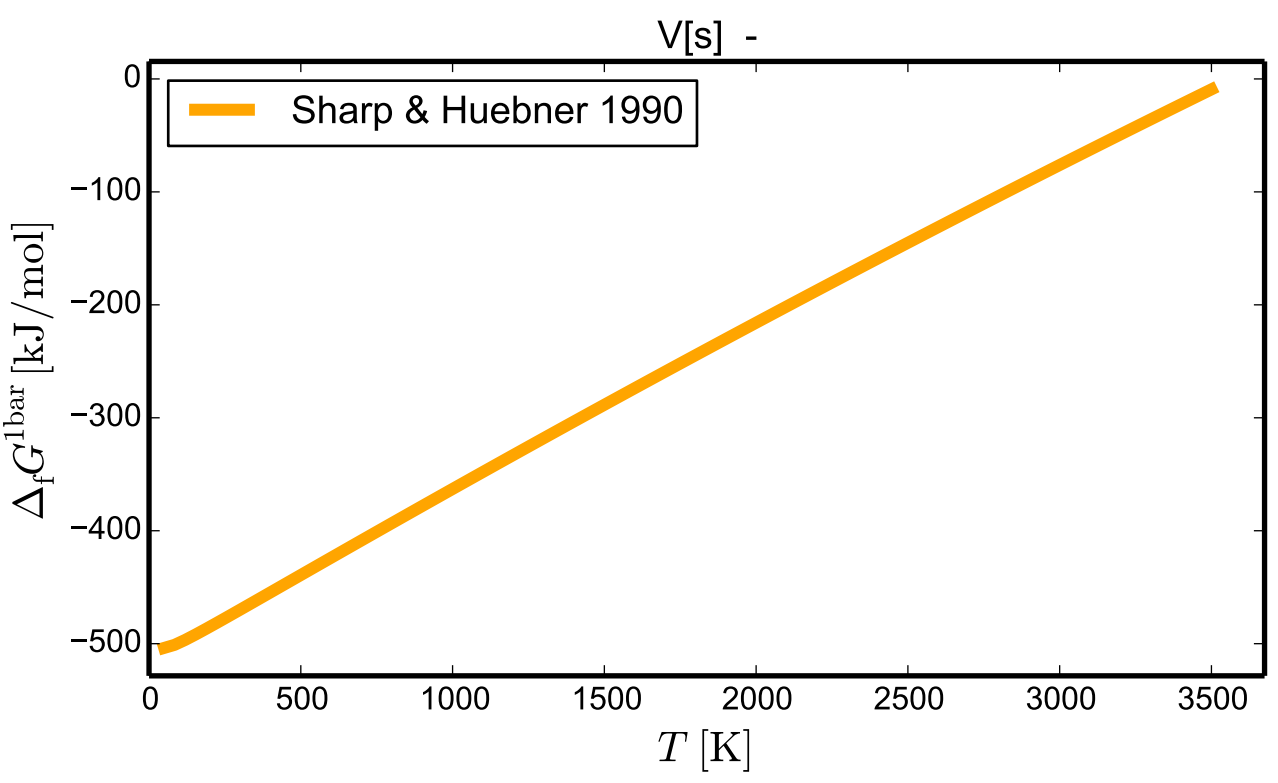

V2O3[s] -
Sharp & Huebner 1990
−500
−1000
−1500
−2000
−2500
−3000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

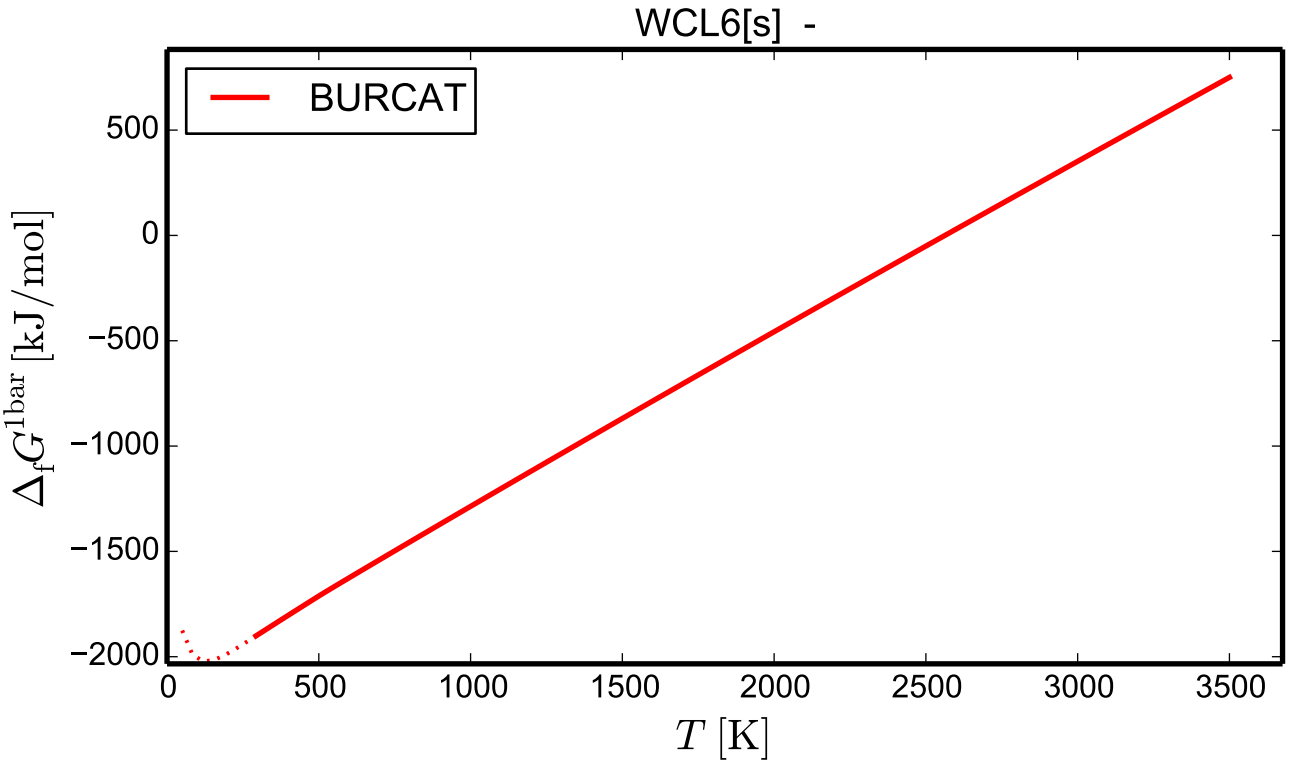

V2O4[s] -
Sharp & Huebner 1990
−500
−1000
−1500
−2000
−2500
−3000
−3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

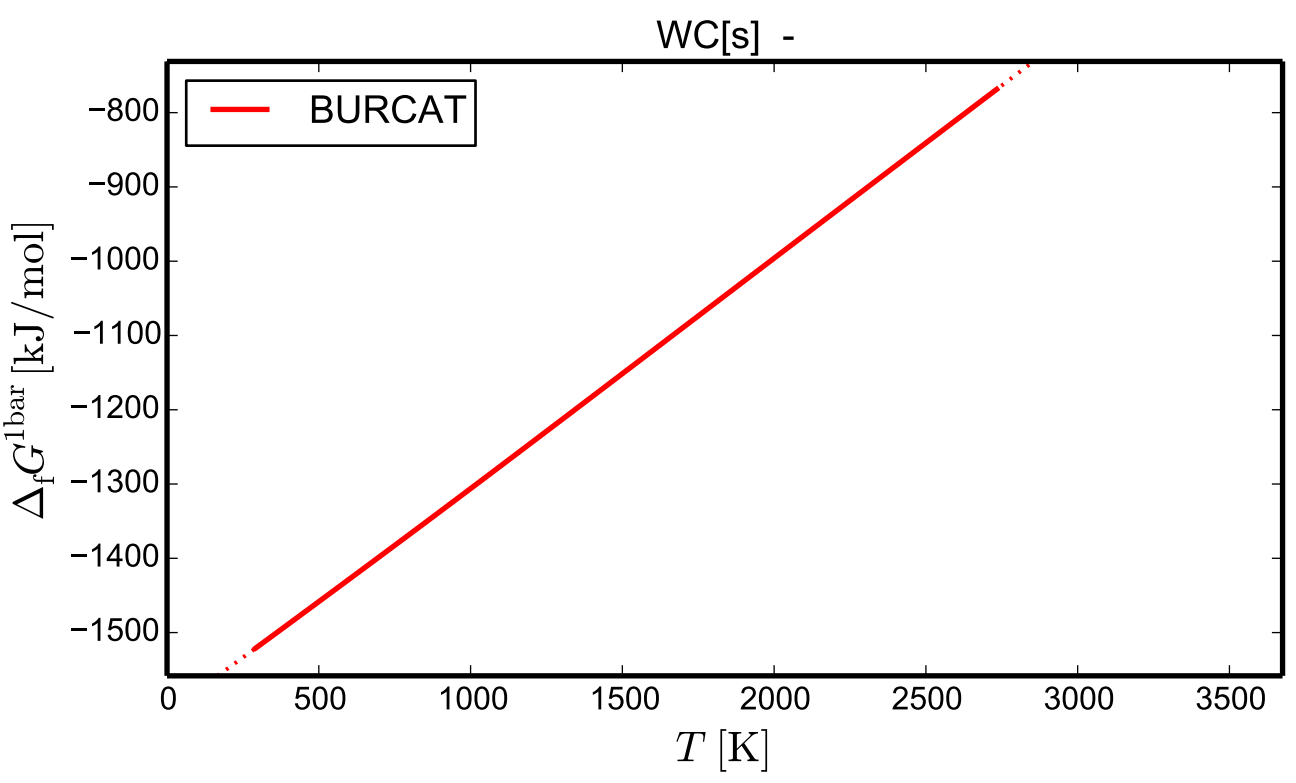

V2O5[s] -
Sharp & Huebner 1990
−500
−1000
−1500
−2000
−2500
−3000
−3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

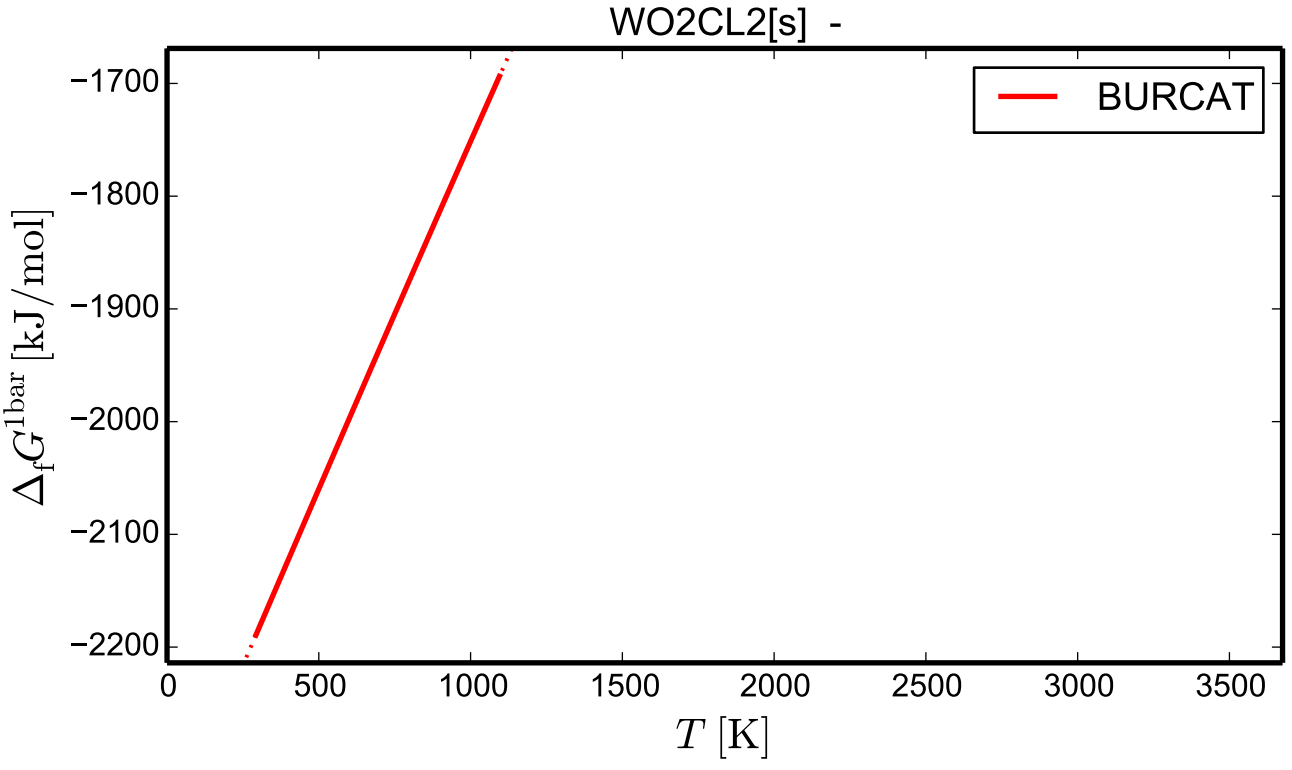

VN[s] -
Sharp & Huebner 1990
−200
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

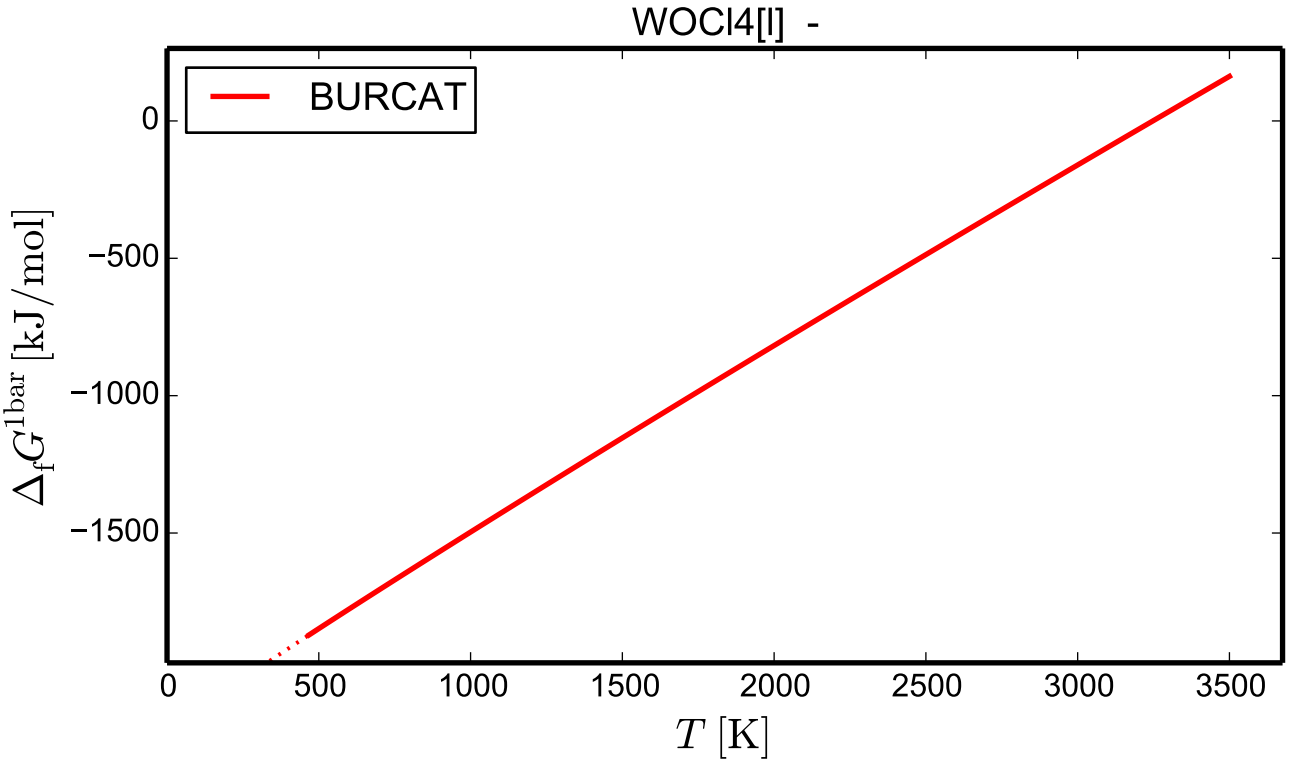

VO[s] -
Sharp & Huebner 1990
−200
−400
−600
−800
−1000
−1200
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

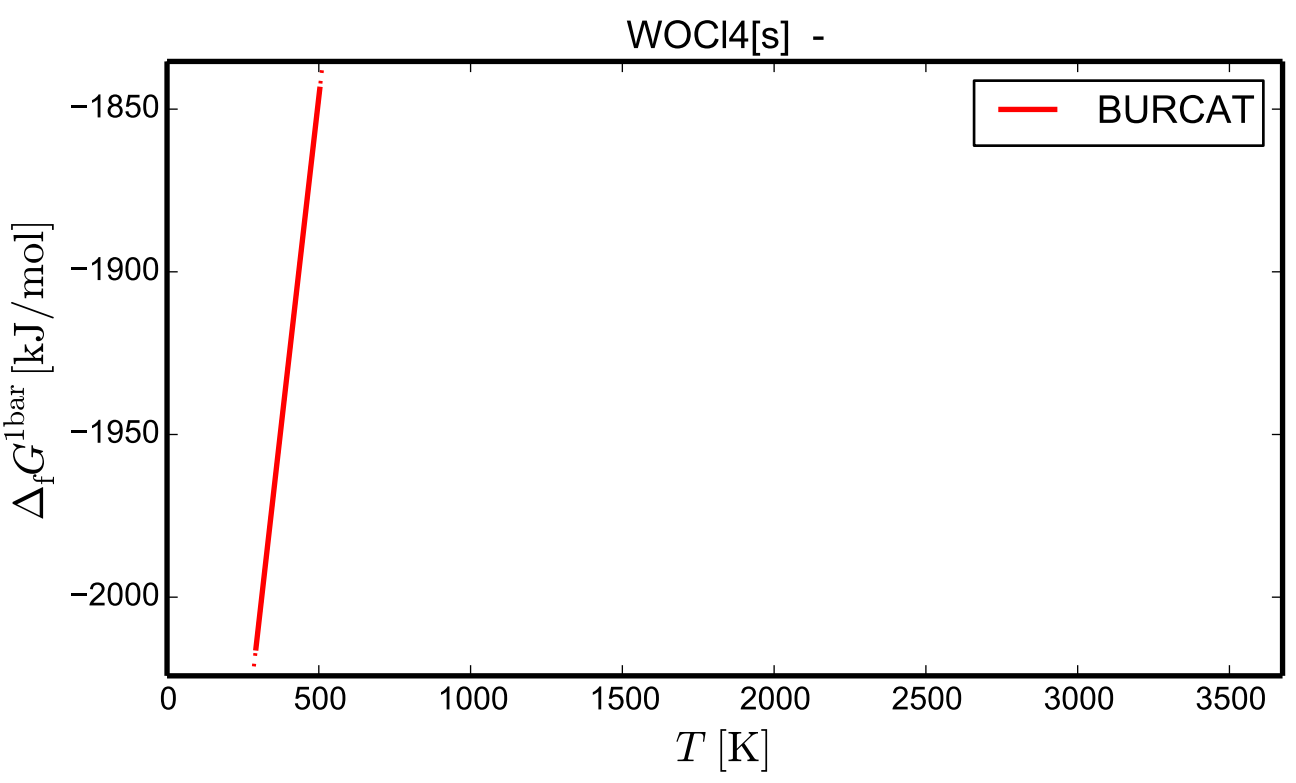

V[s] -
Sharp & Huebner 1990
0
−100
−200
−300
−400
−500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

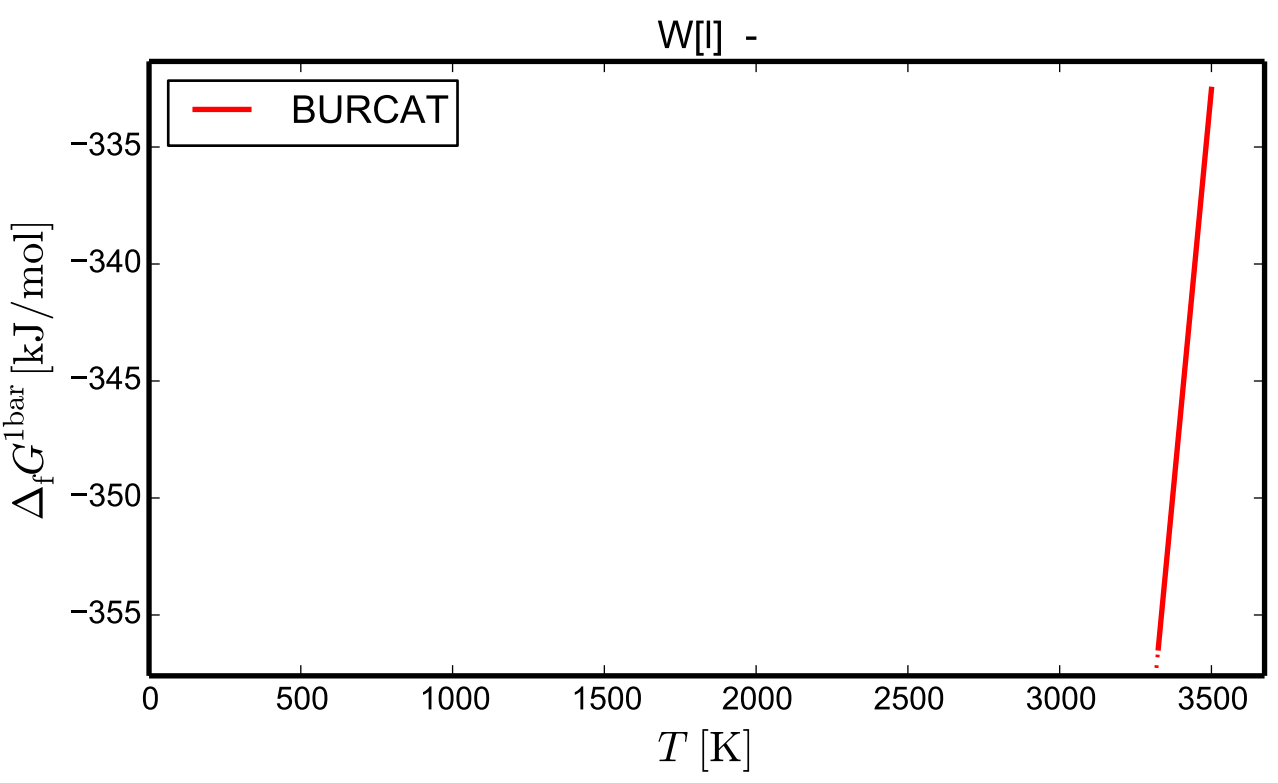

WCL6[s] -
BURCAT
500
0
−500
−1000
−1500
−2000
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

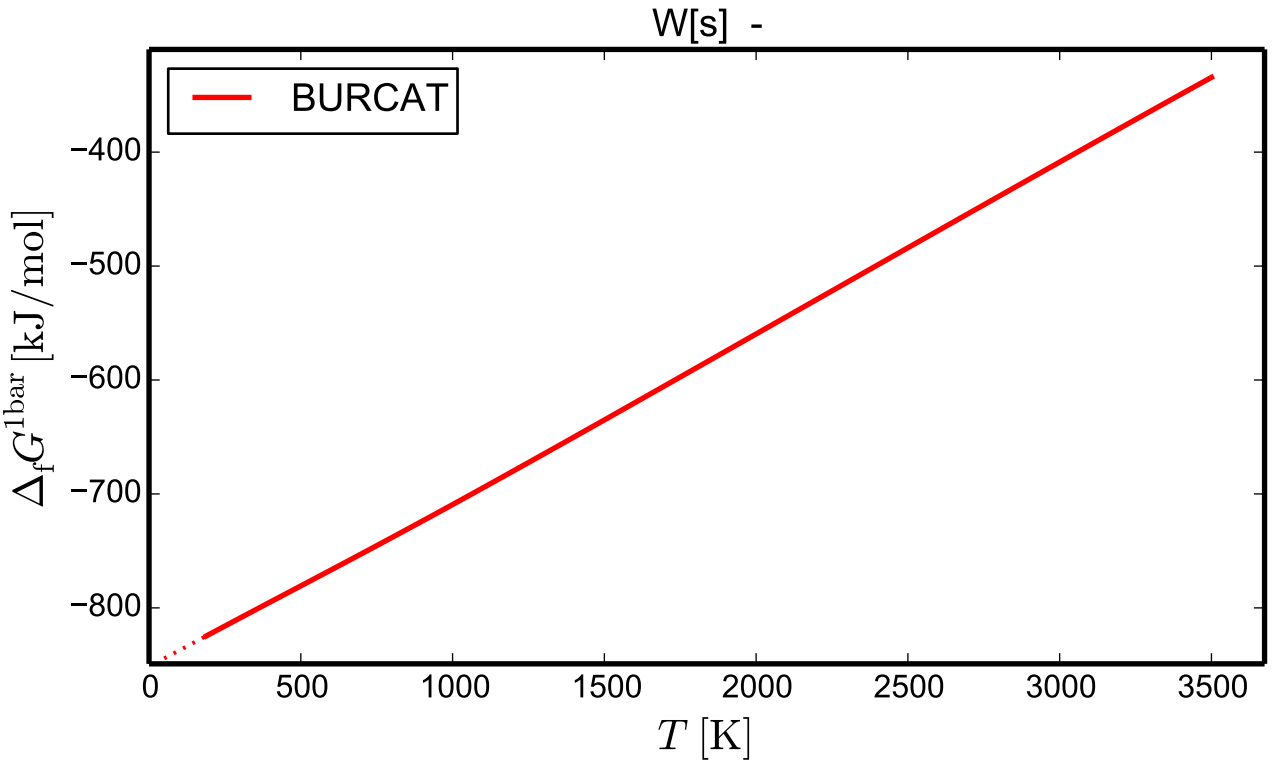

WC[s] -
BURCAT
−800
−900
−1000
−1100
−1200
−1300
−1400
−1500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

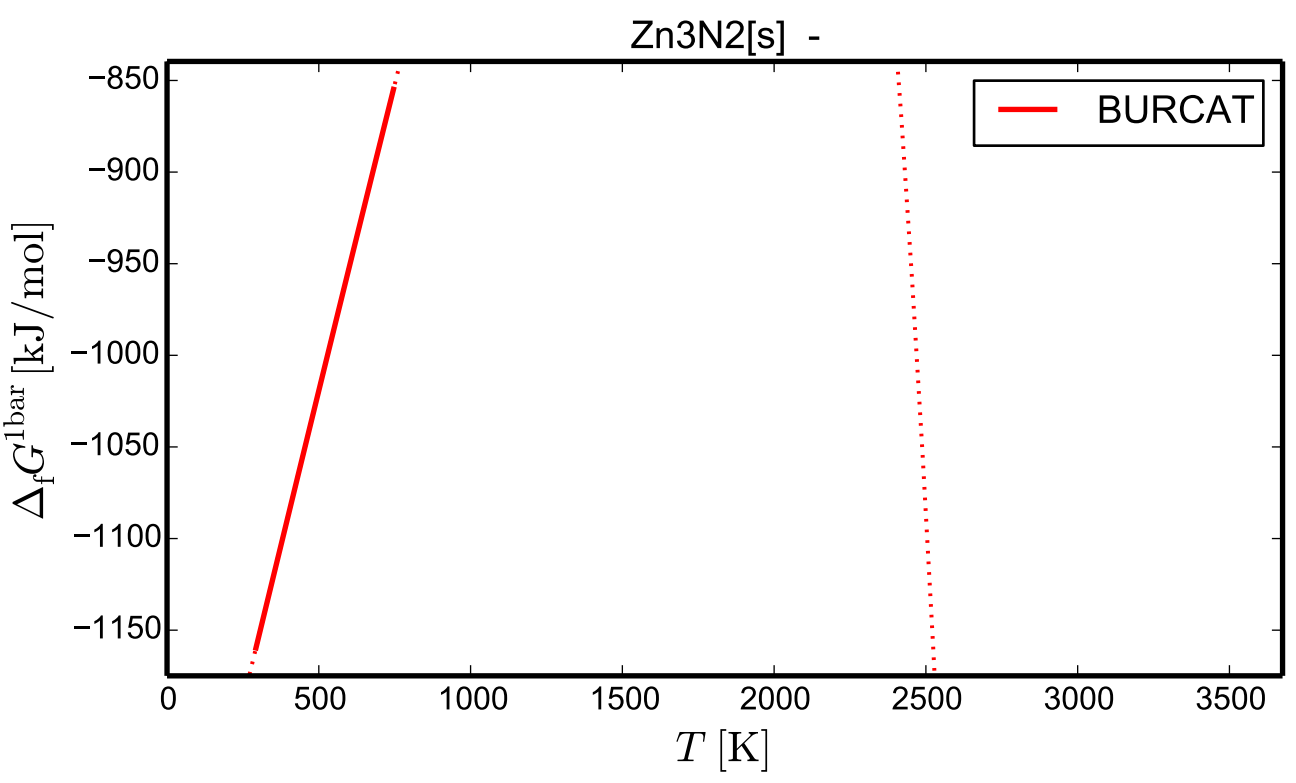

WO2CL2[s] -
BURCAT
−1700
−1800
−1900
−2000
−2100
−2200
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

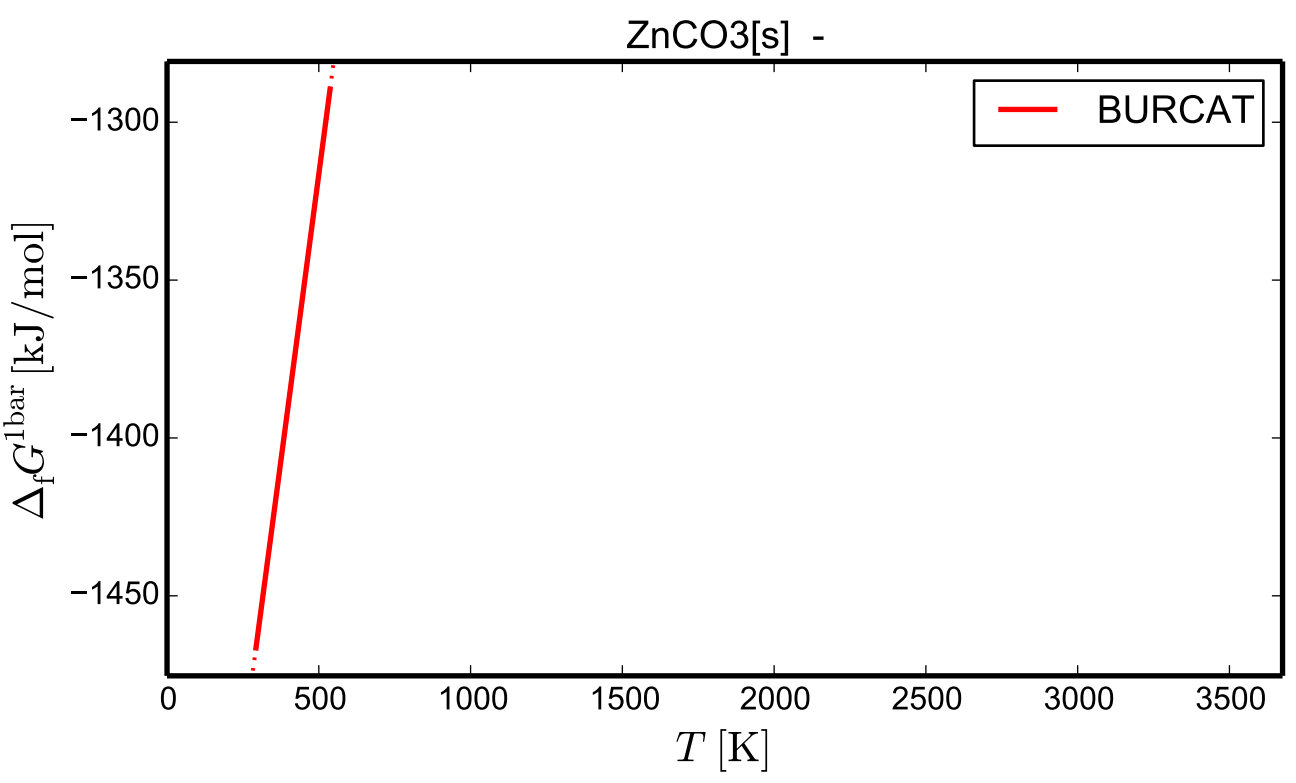

WOCl4[l] -
BURCAT
0
−500
−1000
−1500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

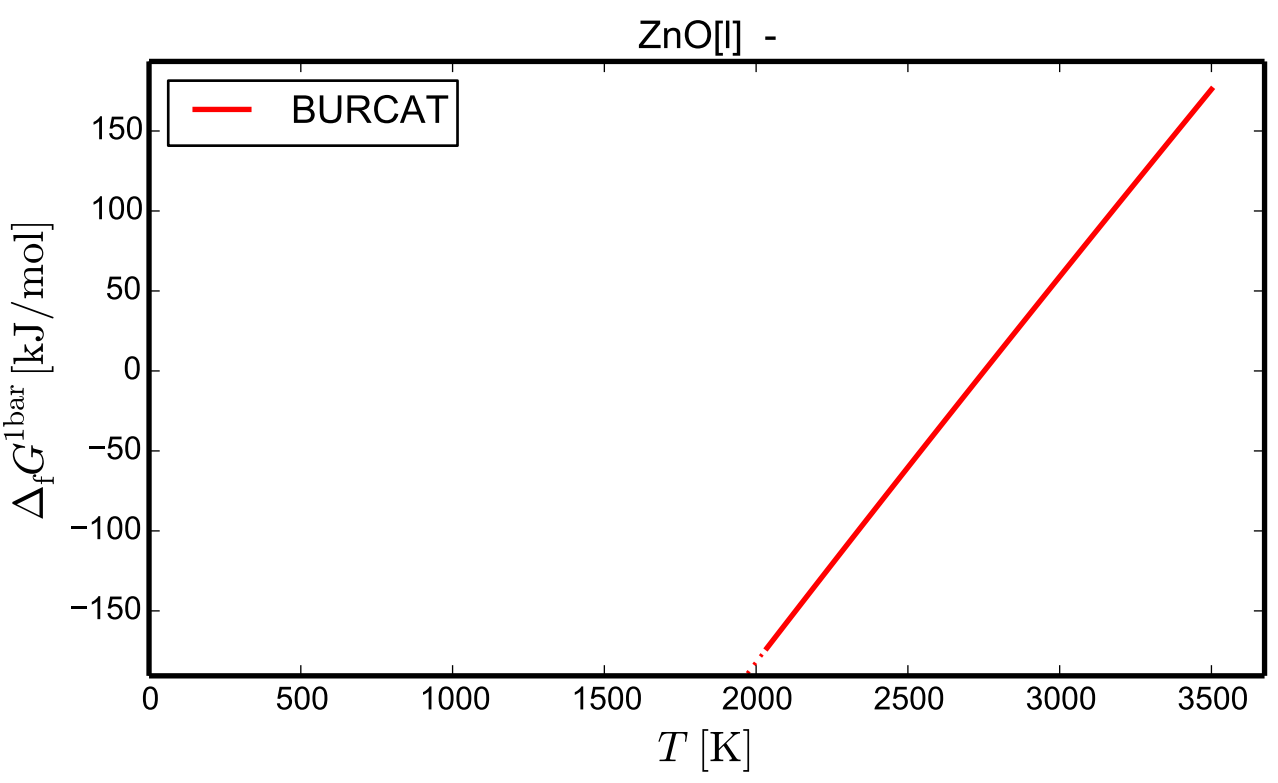

WOCl4[s] -
BURCAT
−1850
−1900
−1950
−2000
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

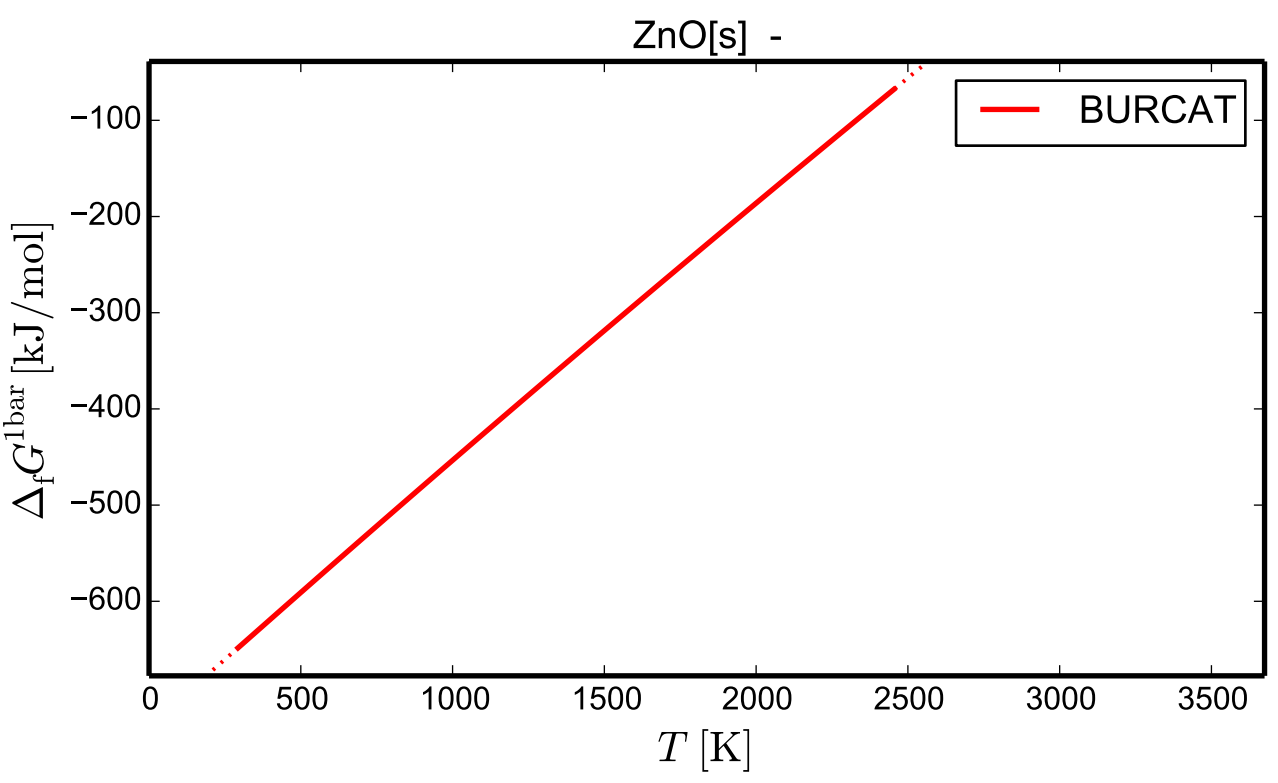

W[l] -
BURCAT
−335
−340
−345
−350
−355
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

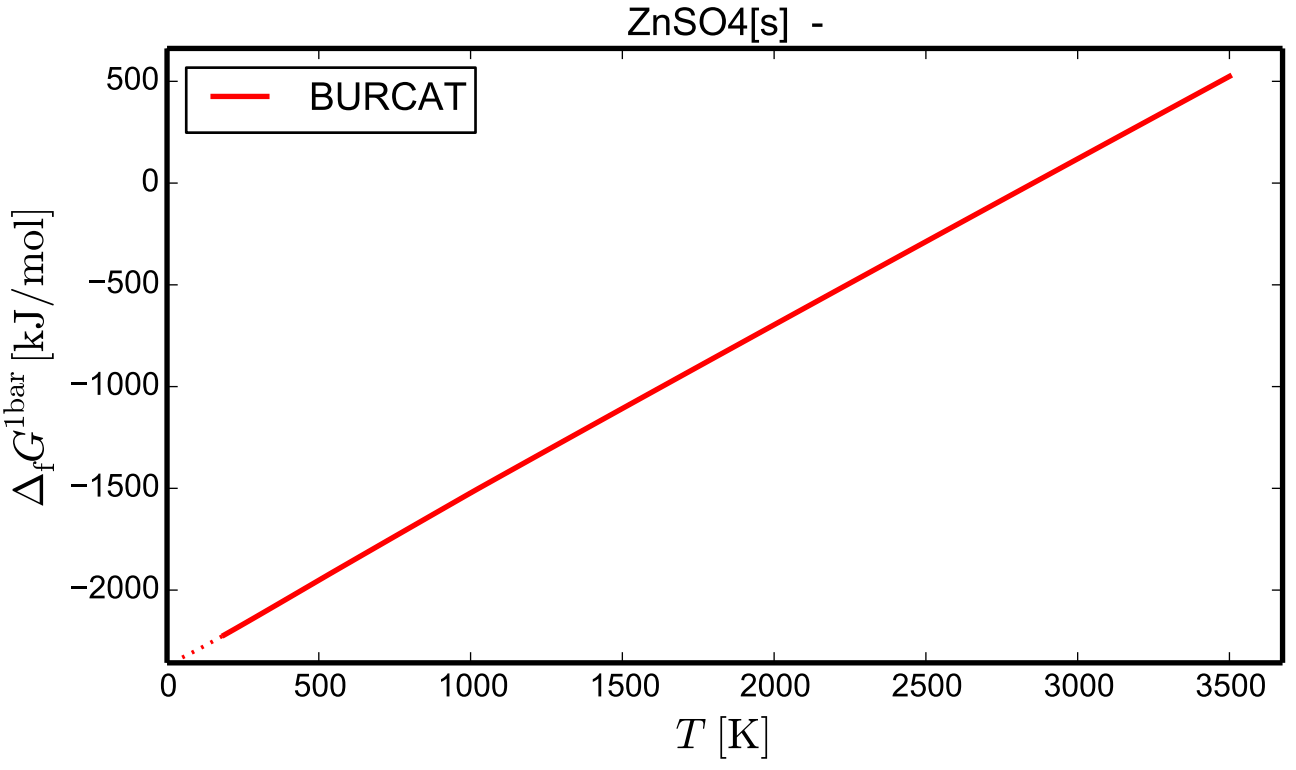

W[s] -
BURCAT
−400
−500
−600
−700
−800
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

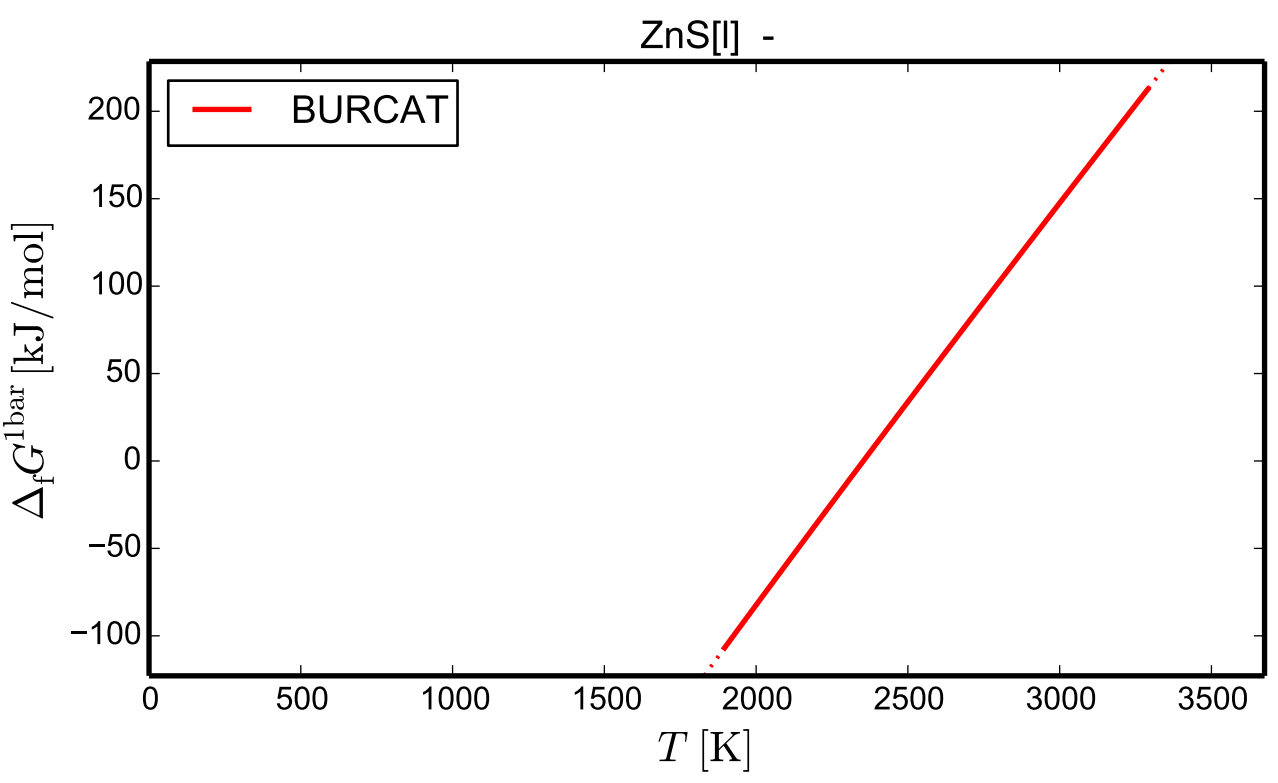

Zn3N2[s] -
BURCAT
−850
−900
−950
−1000
−1050
−1100
−1150
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

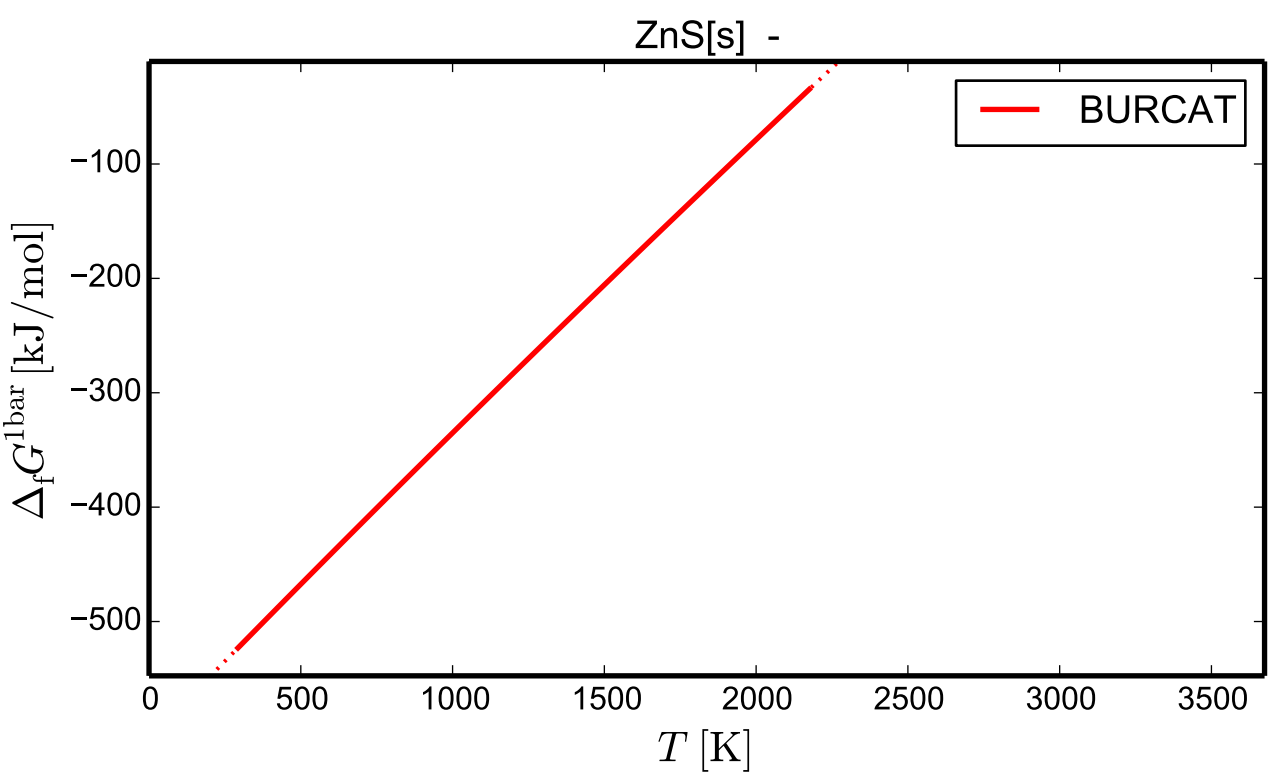

ZnCO3[s] -
BURCAT
−1300
−1350
−1400
−1450
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

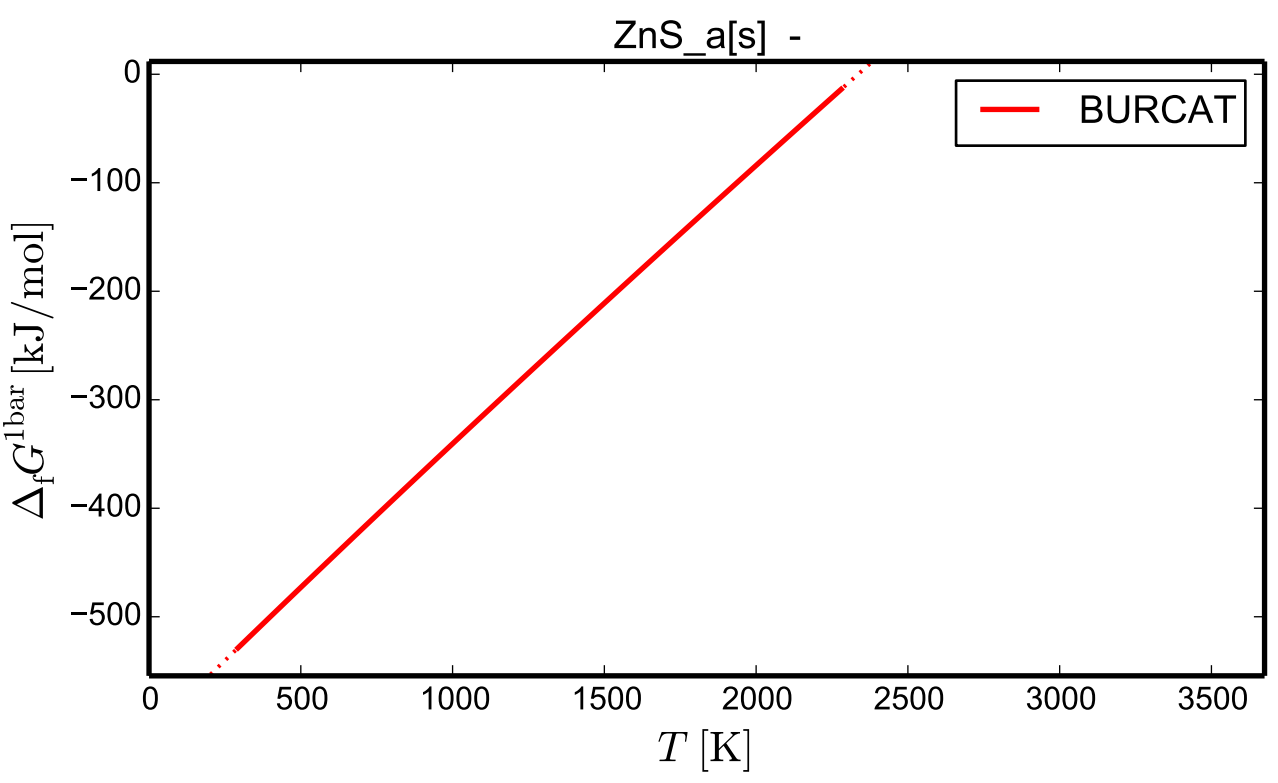

ZnO[l] -
BURCAT
150
100
50
0
−50
−100
−150
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

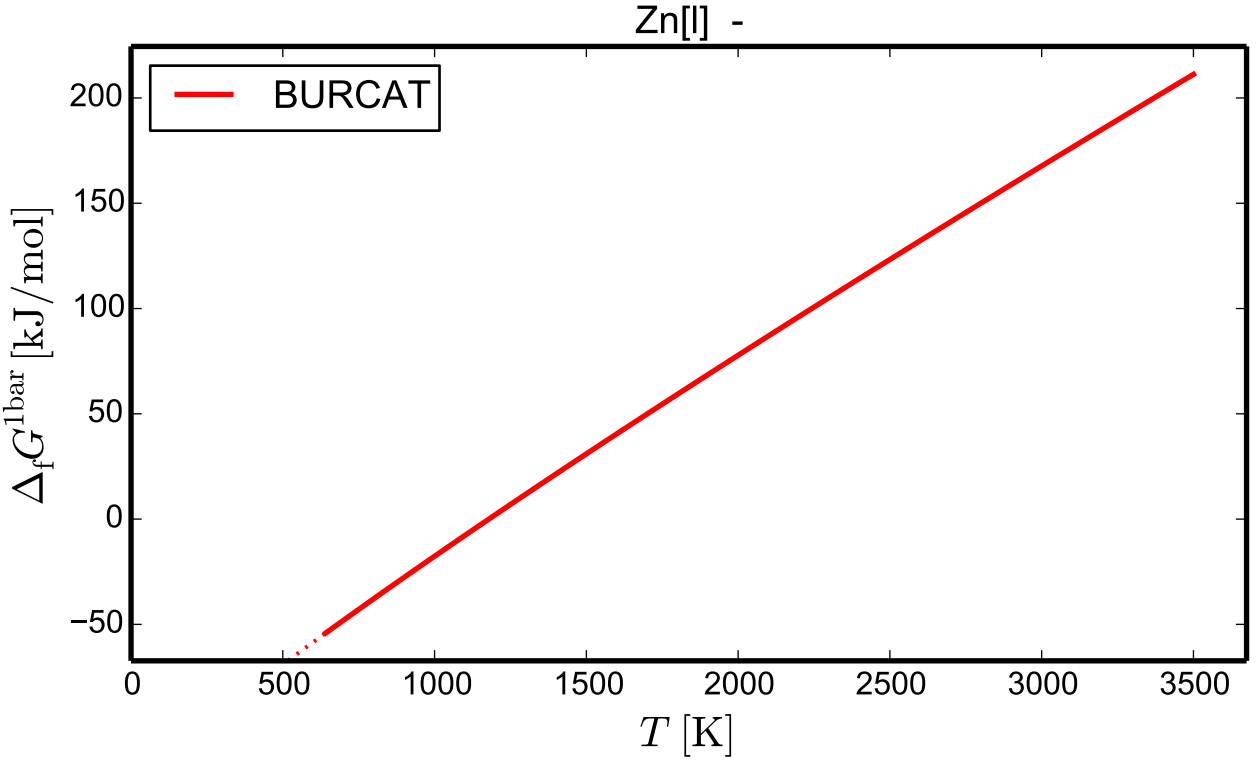

ZnO[s] -
BURCAT
−100
−200
−300
−400
−500
−600
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

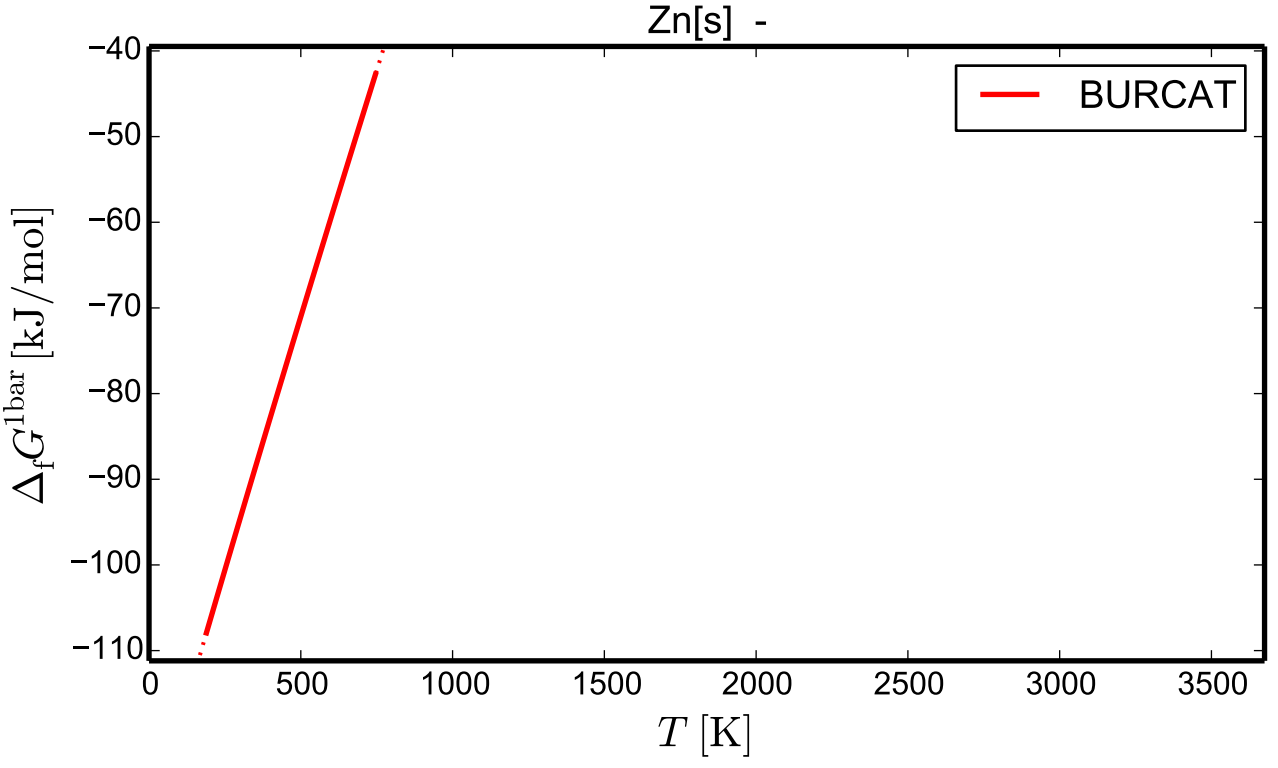

ZnSO4[s] -
BURCAT
500
0
−500
−1000
−1500
−2000
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

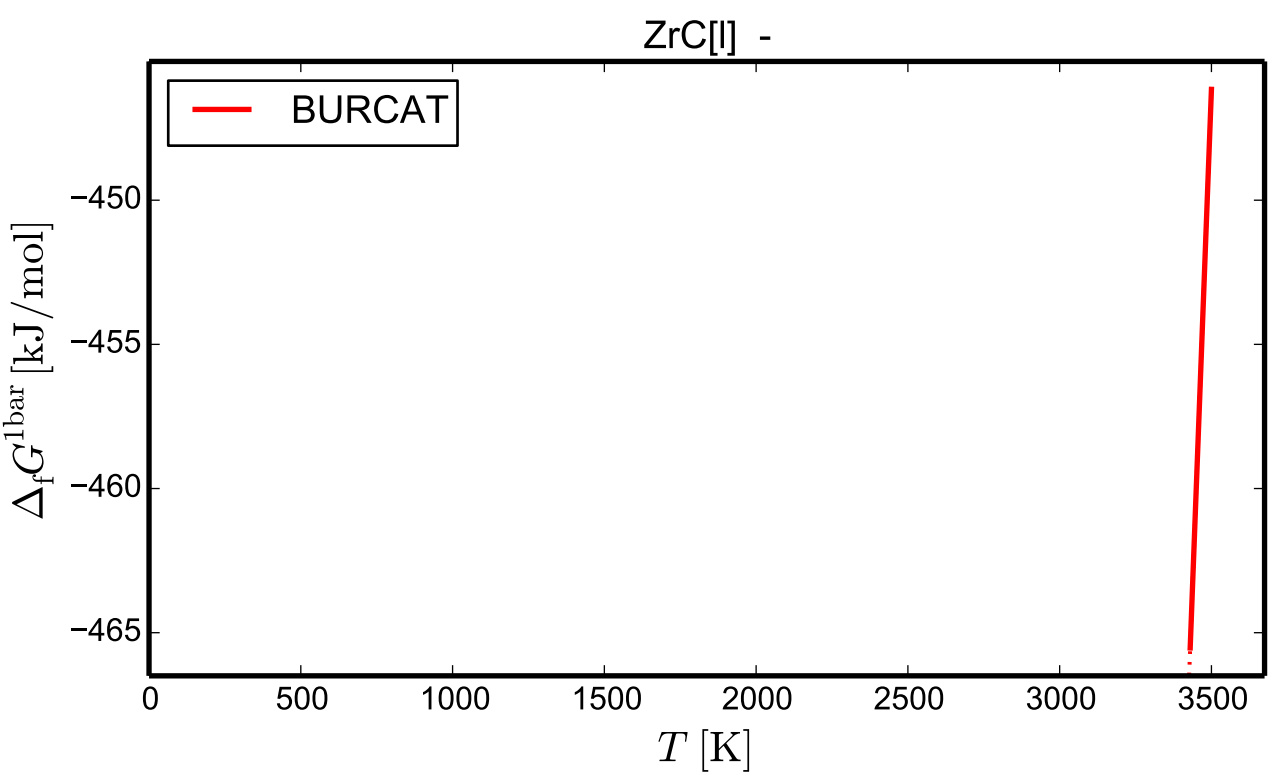

ZnS[l] -
BURCAT
200
150
100
50
0
−50
−100
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

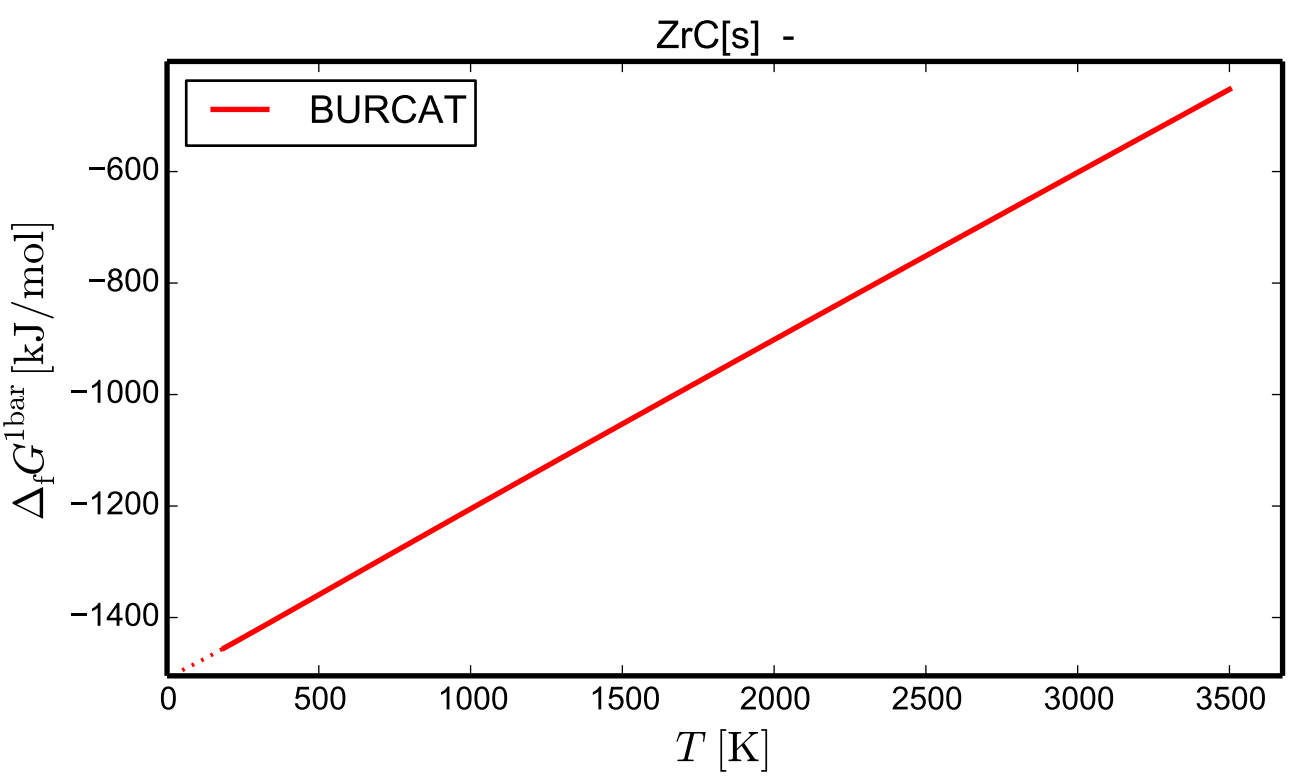

ZnS[s] -
BURCAT
−100
−200
−300
−400
−500
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

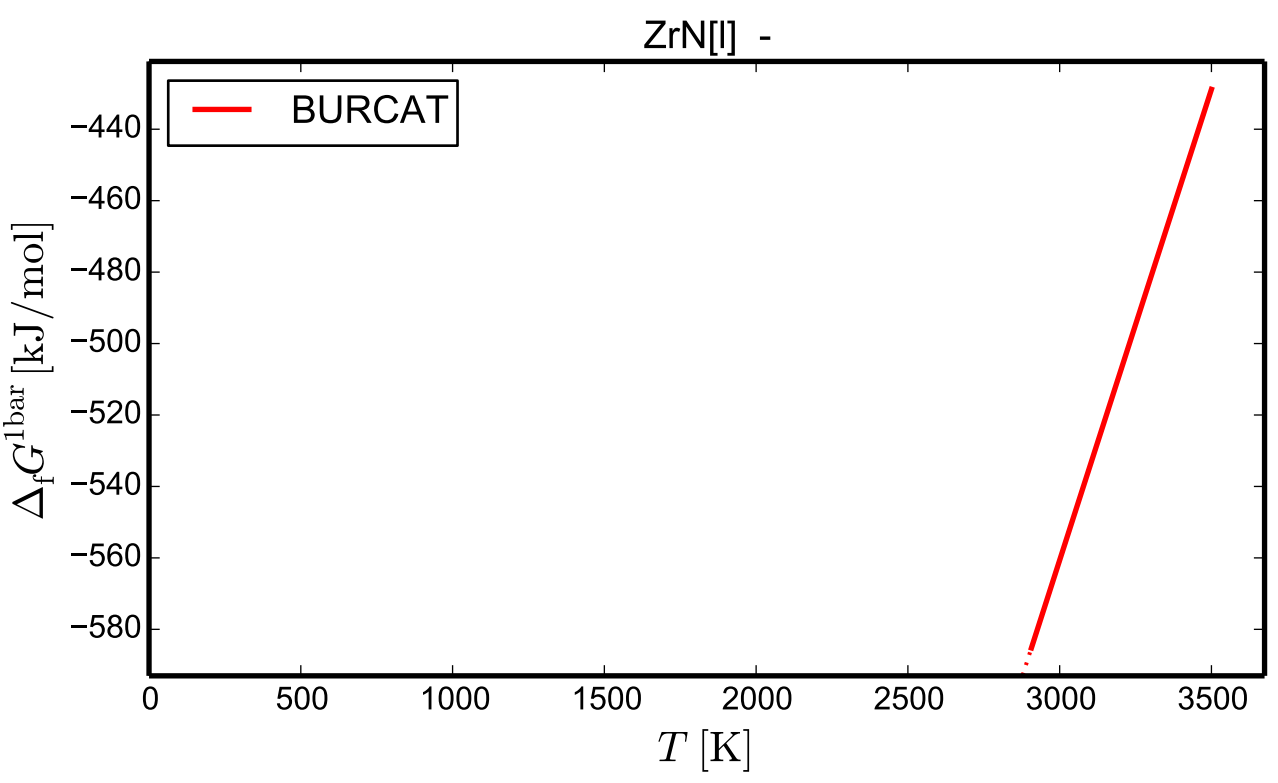

ZnS_a[s] -
BURCAT
0
−100
−200
−300
−400
−500
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
T [K]

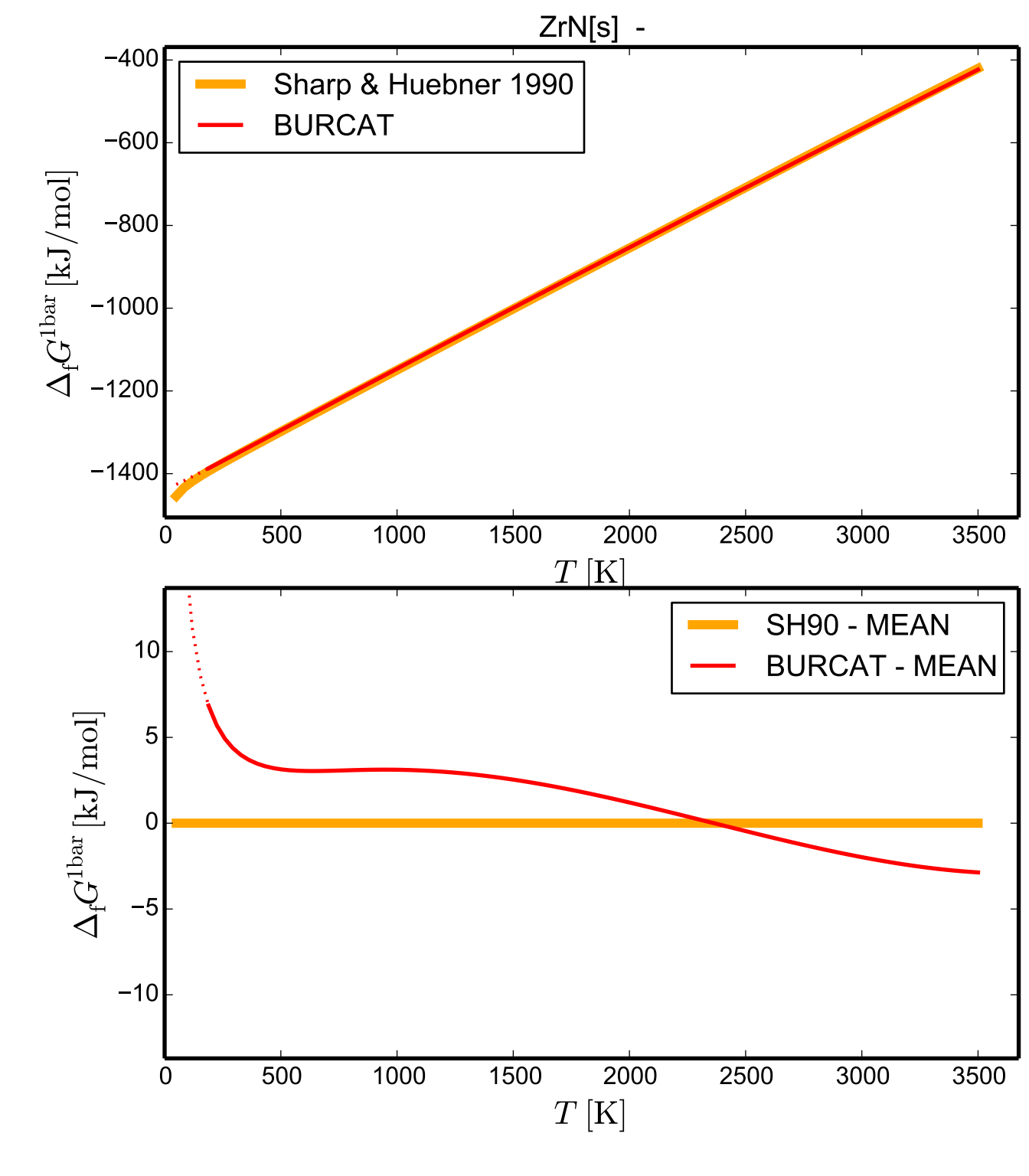

Zn[l] -
BURCAT
200
150
100
50
0
−50
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]

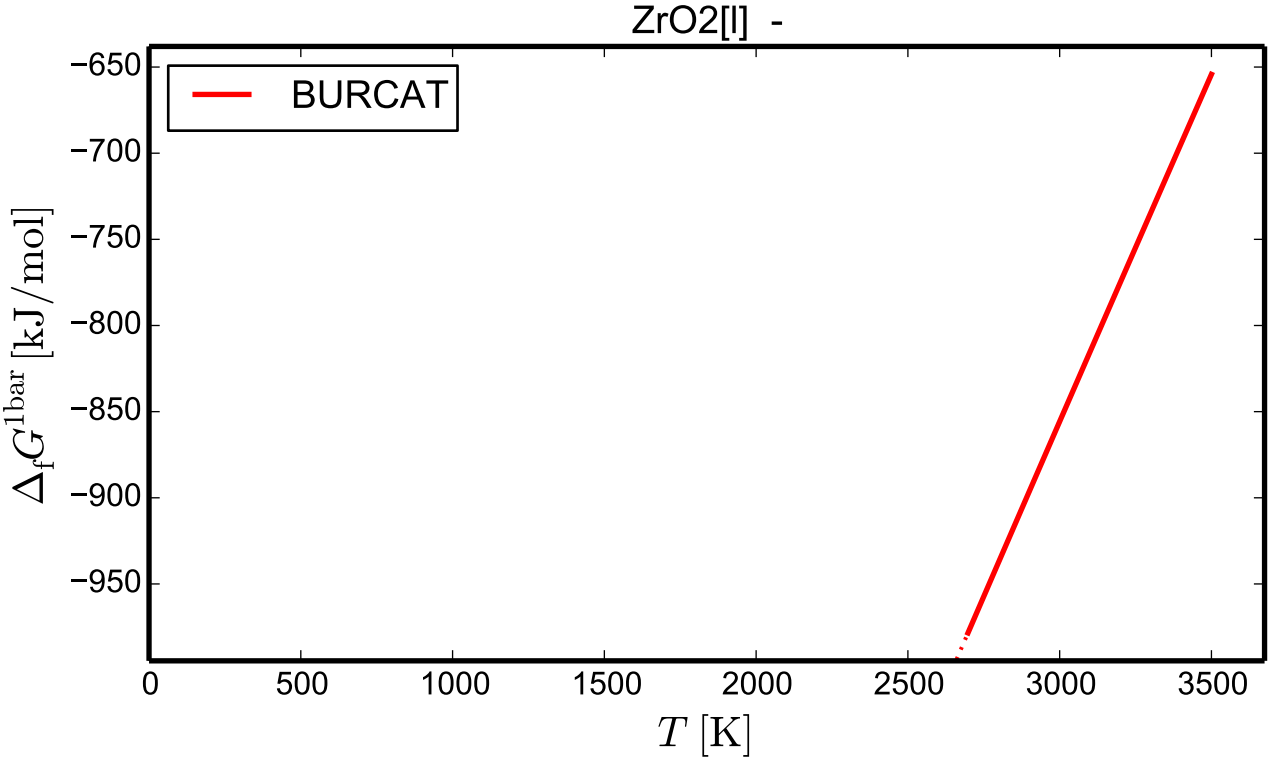

Zn[s] -
BURCAT
−40
−50
−60
−70
−80
−90
−100
−110
0
500
1000
1500
2000
2500
3000
3500
$\Delta_f G^{1\text{bar}}$ [kJ/mol]
T [K]

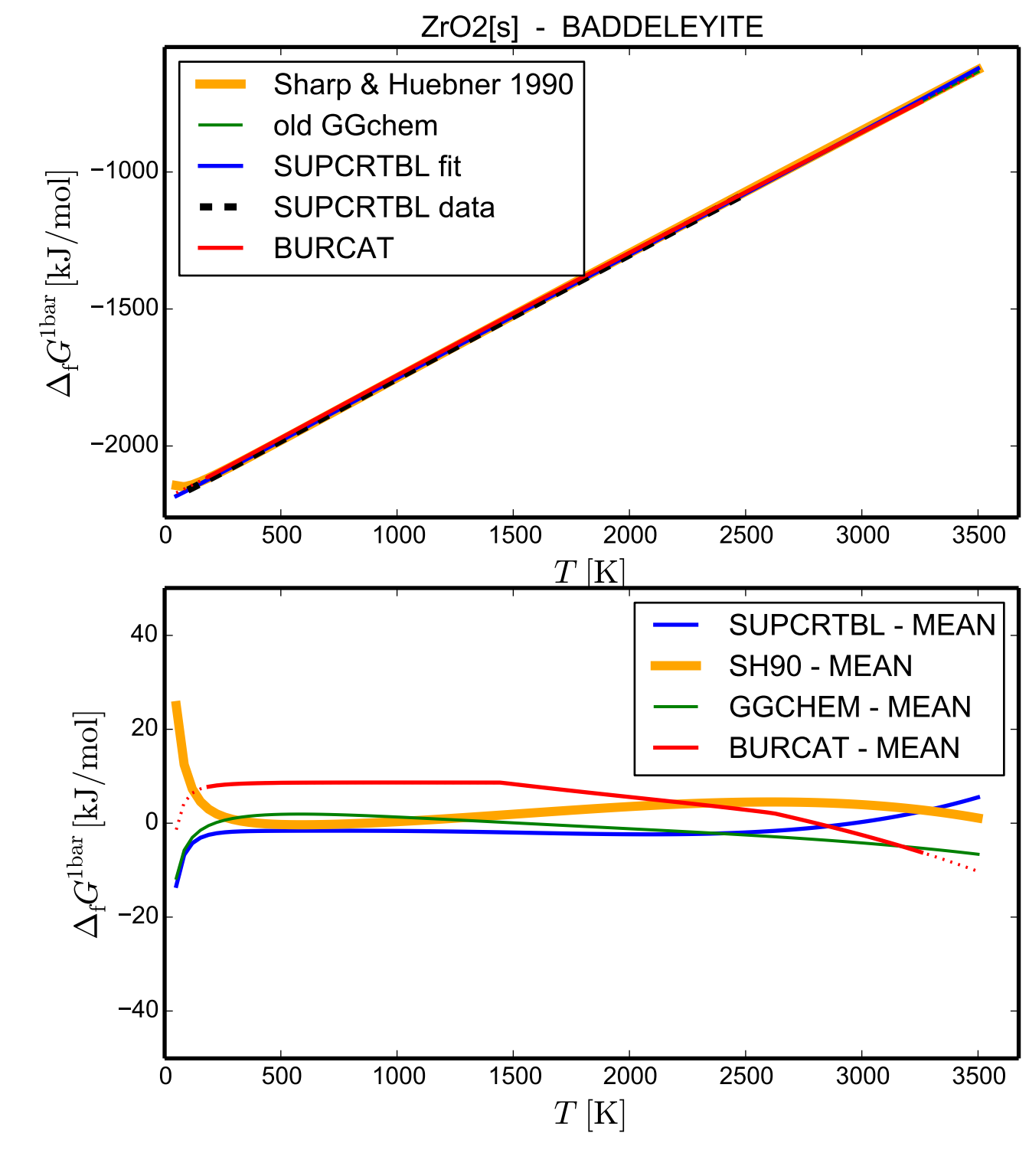

ZrC[l] -
BURCAT
−450
−455
−460
−465
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

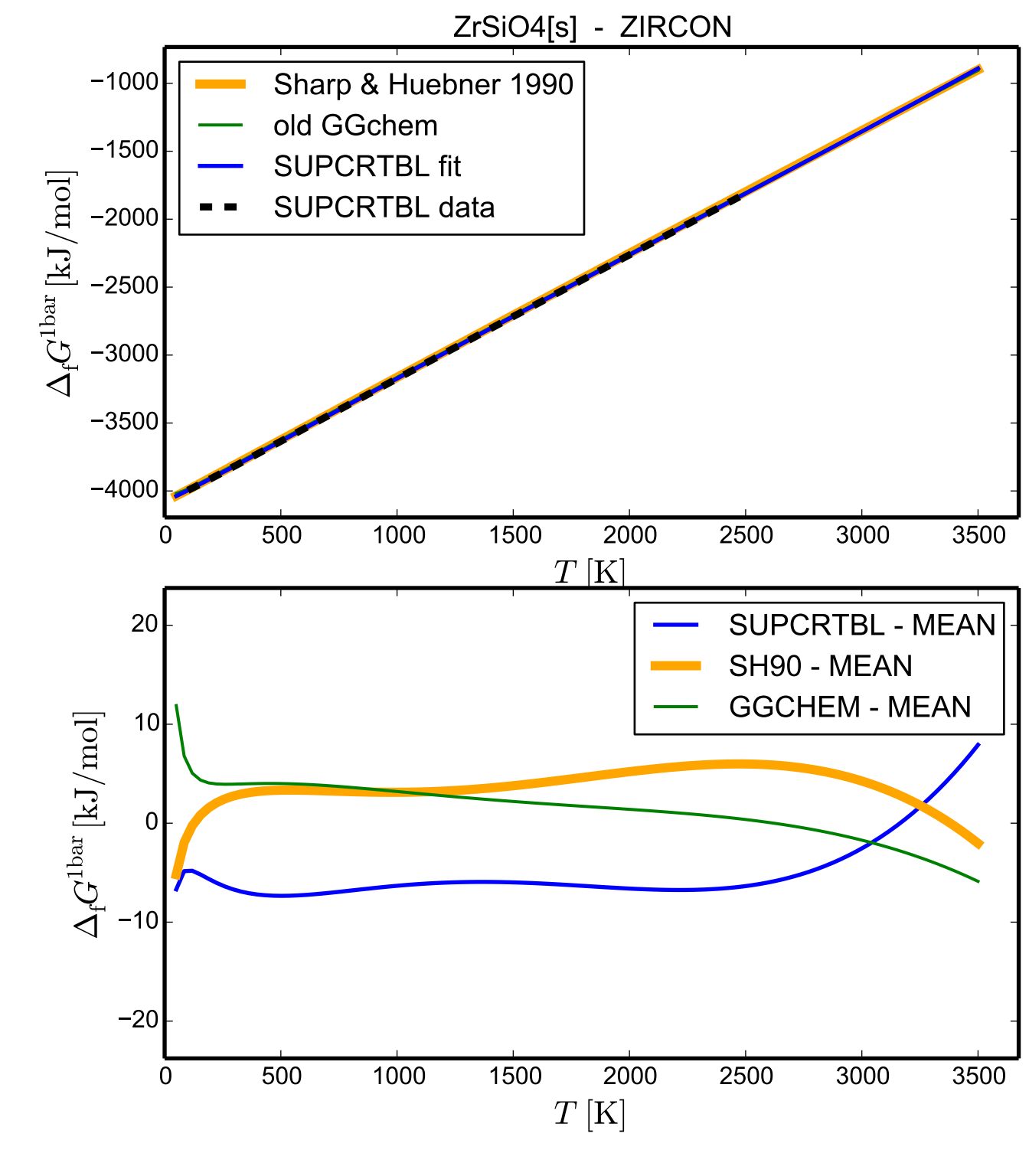

ZrC[s] -
BURCAT
−600
−800
−1000
−1200
−1400
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

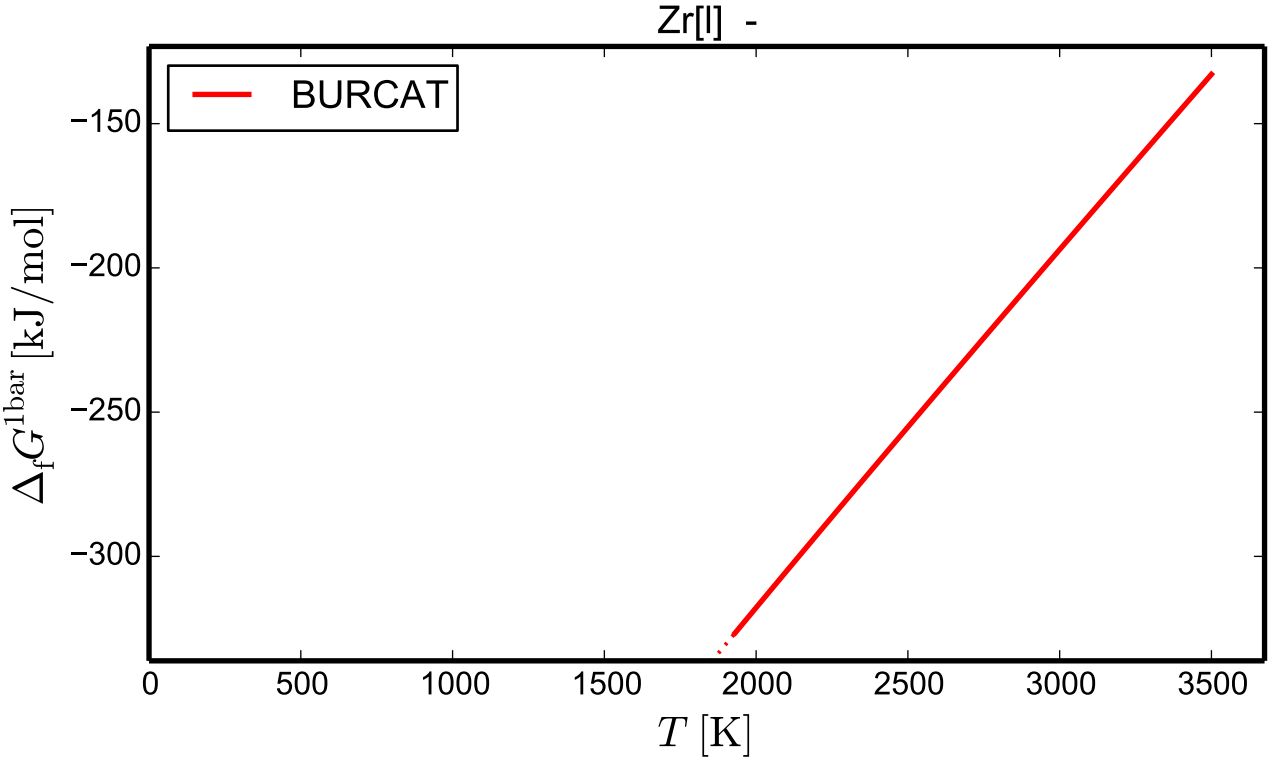

ZrN[l] -
BURCAT
−440
−460
−480
−500
−520
−540
−560
−580
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]

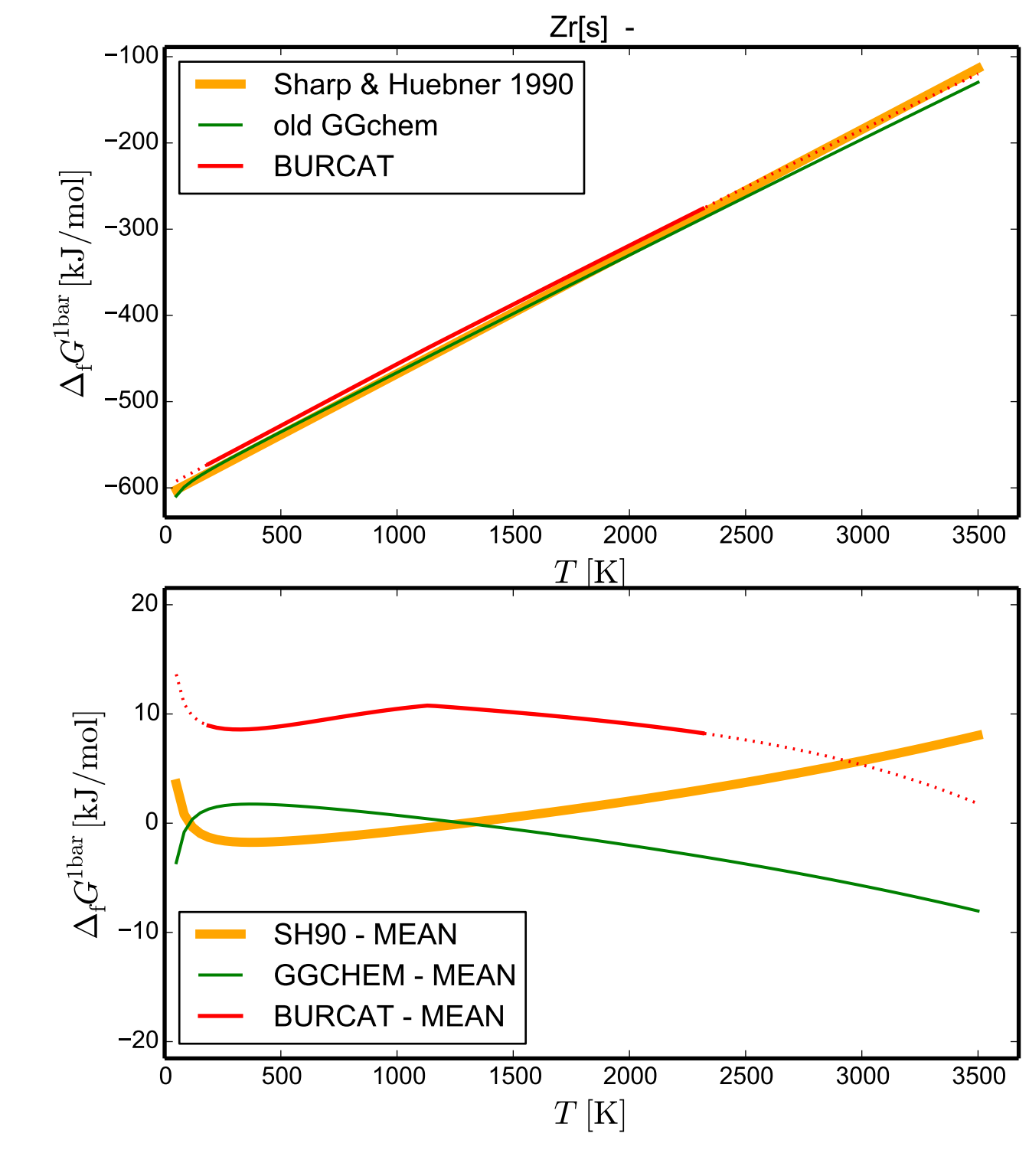

ZrN[s] -
Sharp & Huebner 1990
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]


ZrO2[l] -
BURCAT
−650
−700
−750
−800
−850
−900
−950
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]


ZrO2[s] - BADDELEYITE
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
−1000
−1500
−2000
0
500
1000
1500
2000
2500
3000
3500
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
40
20
0
−20
−40
0
500
1000
1500
2000
2500
3000
3500
T [K]


ZrSiO4[s] - ZIRCON
Sharp & Huebner 1990
old GGchem
SUPCRTBL fit
SUPCRTBL data
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SUPCRTBL - MEAN
SH90 - MEAN
GGCHEM - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]


Zr[l] -
BURCAT
−150
−200
−250
−300
$\Delta_f G^{1\mathrm{bar}}$ [kJ/mol]
0
500
1000
1500
2000
2500
3000
3500
T [K]


Zr[s] -
Sharp & Huebner 1990
old GGchem
BURCAT
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]
SH90 - MEAN
GGCHEM - MEAN
BURCAT - MEAN
$\Delta_f G^{1bar}$ [kJ/mol]
T [K]