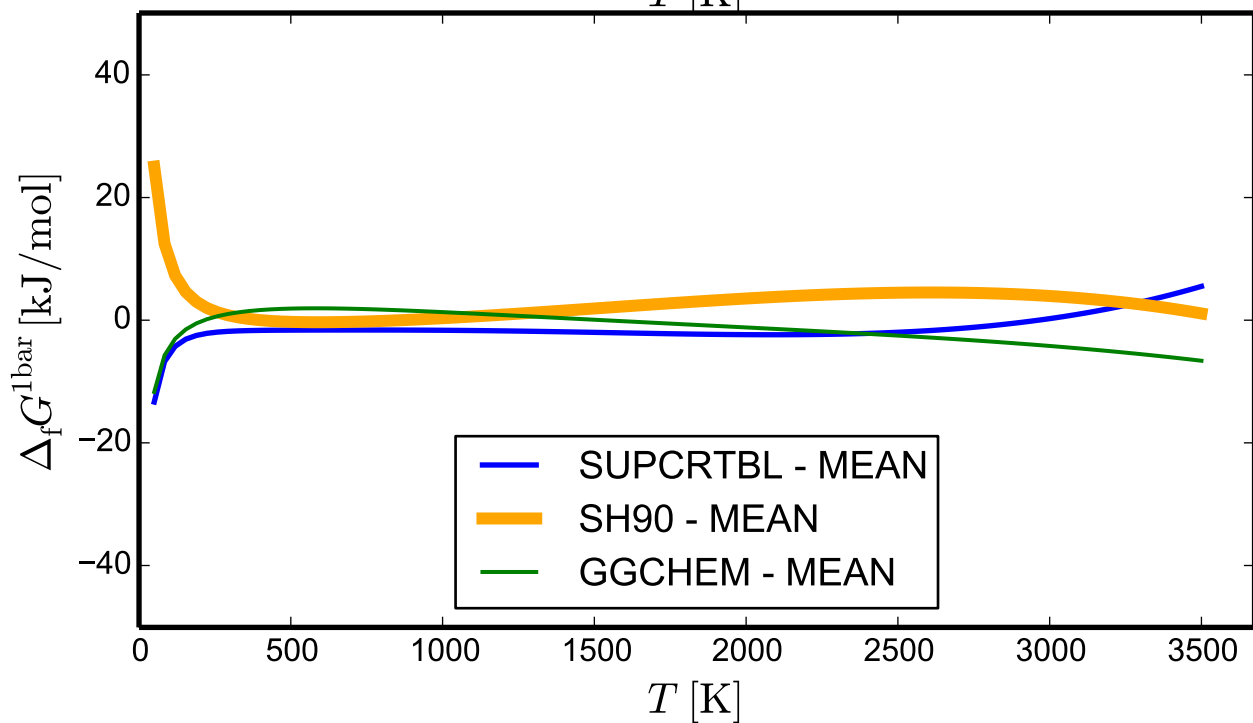
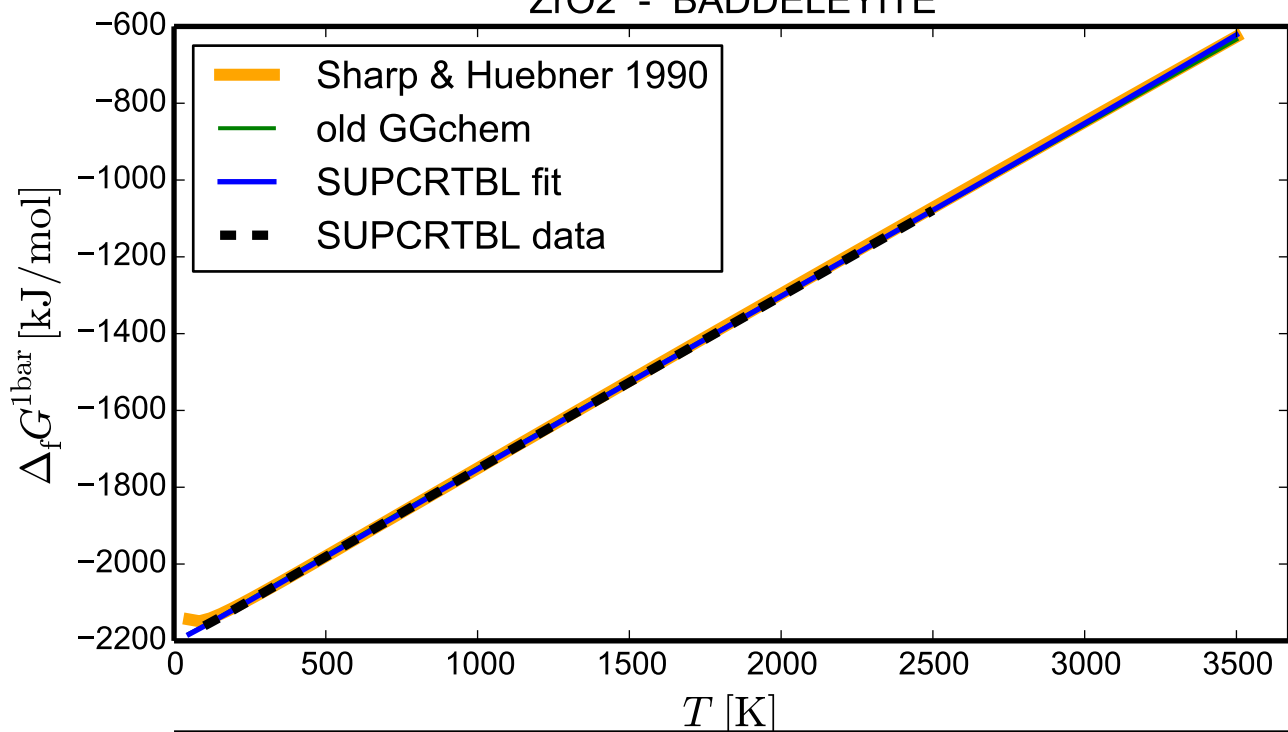
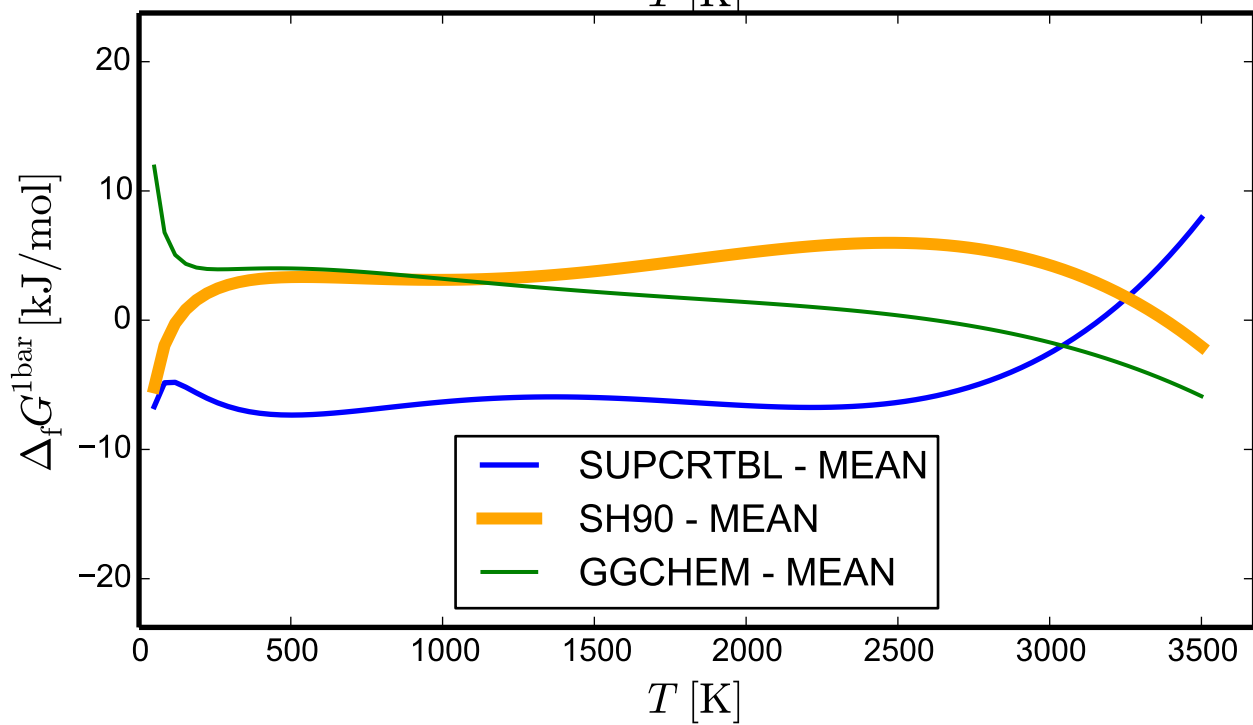
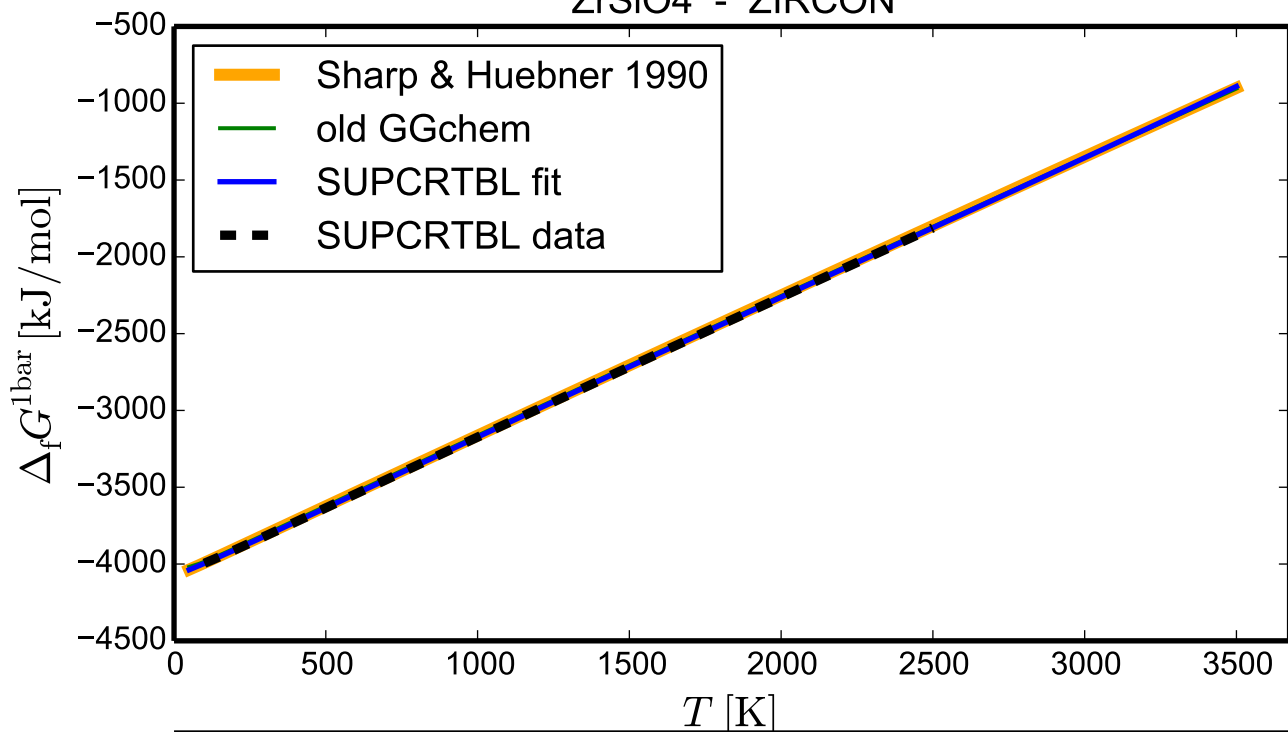


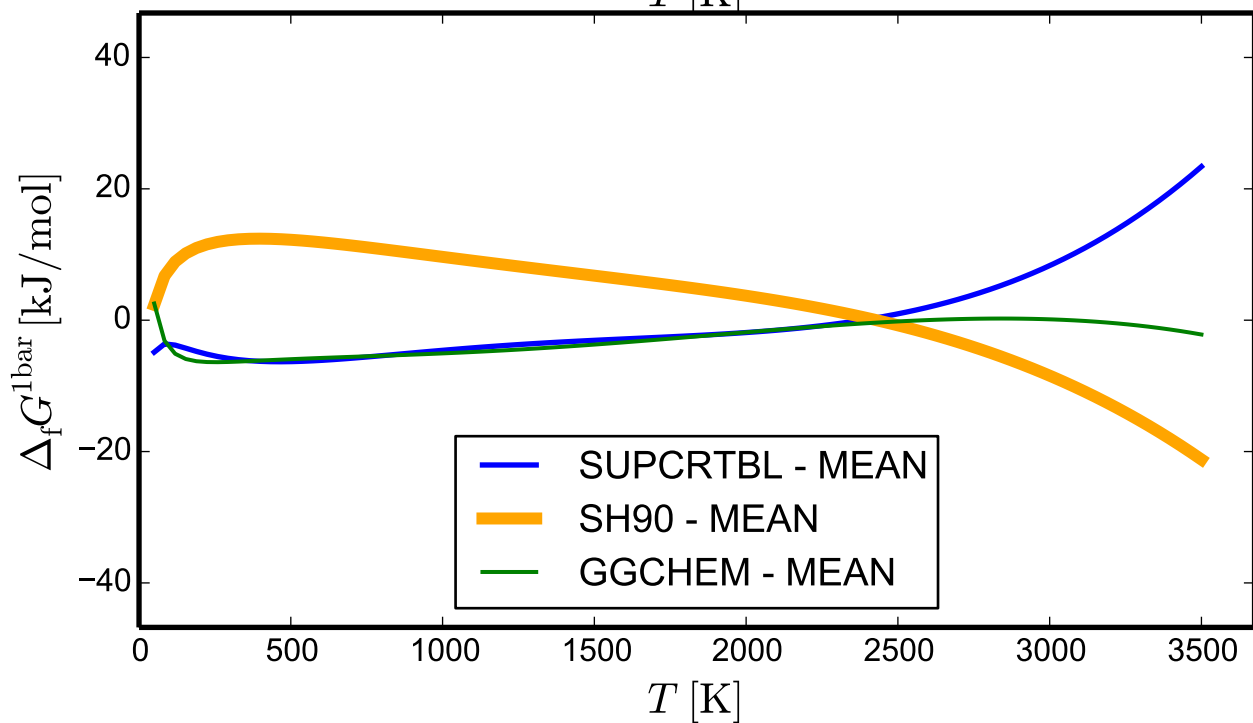
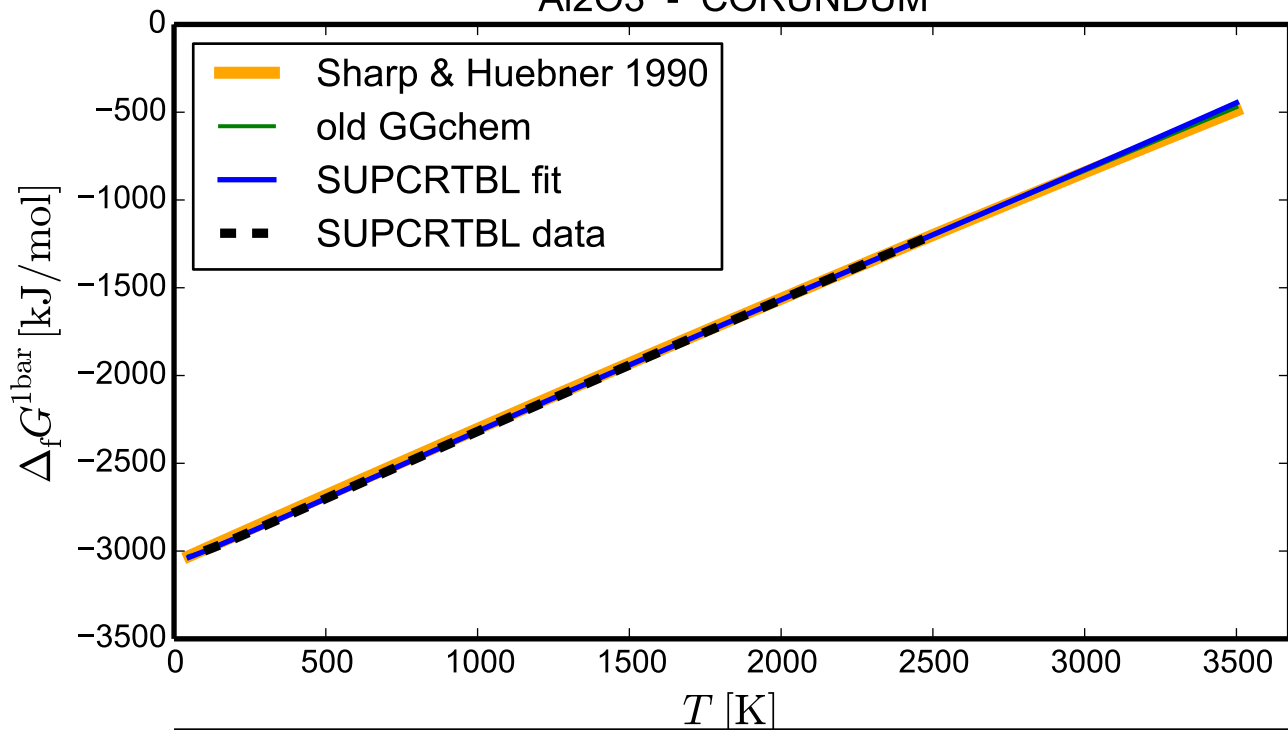
# ZrO2 - BADDELEYITE



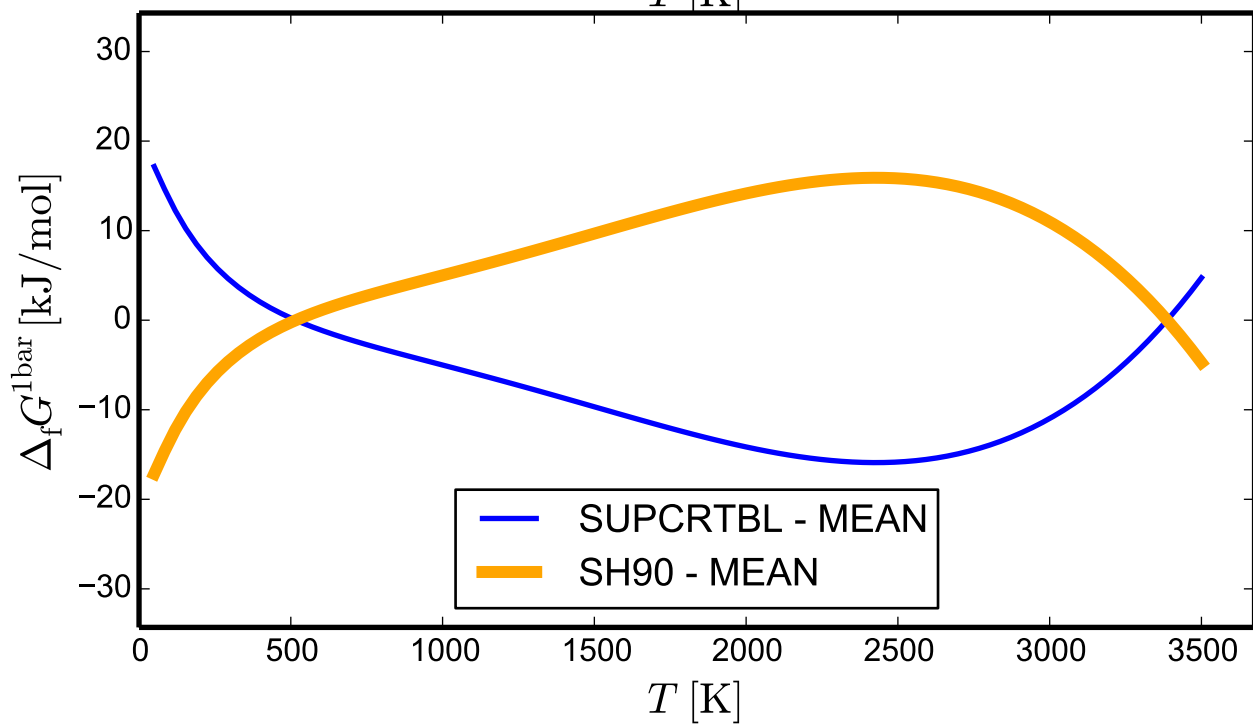
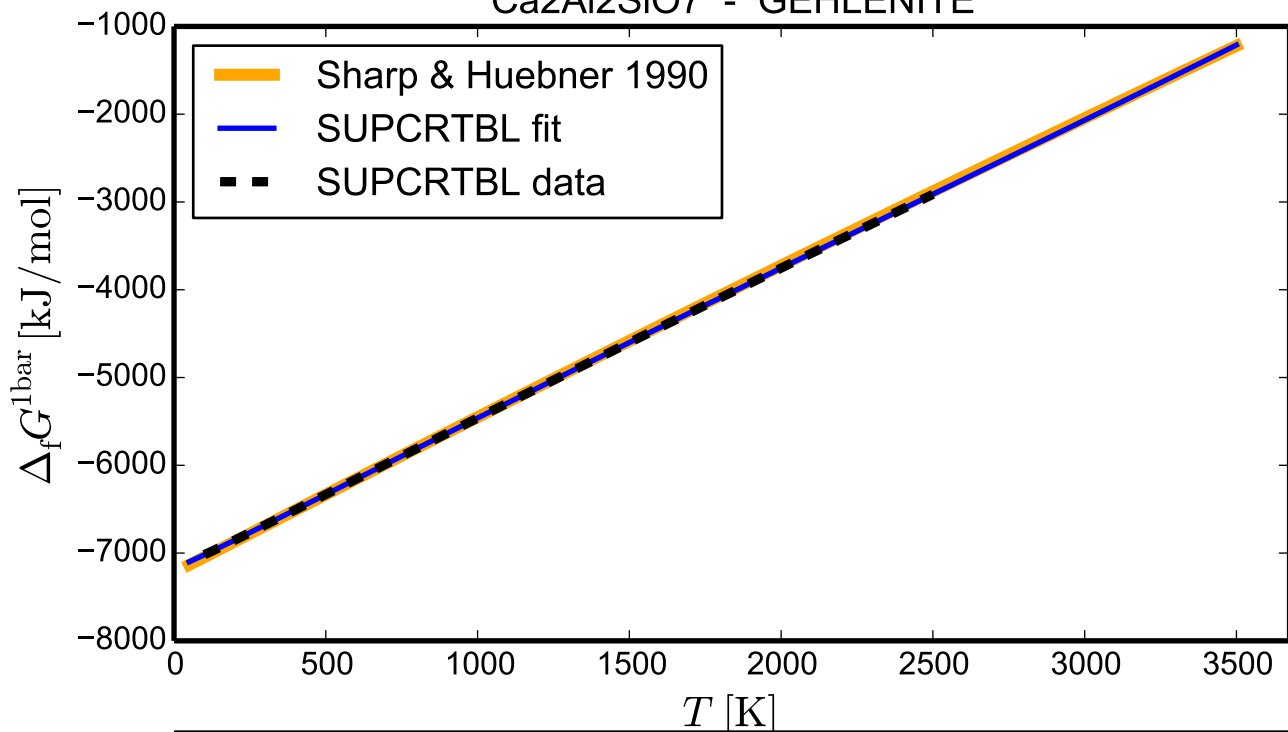
# ZrSiO4 - ZIRCON



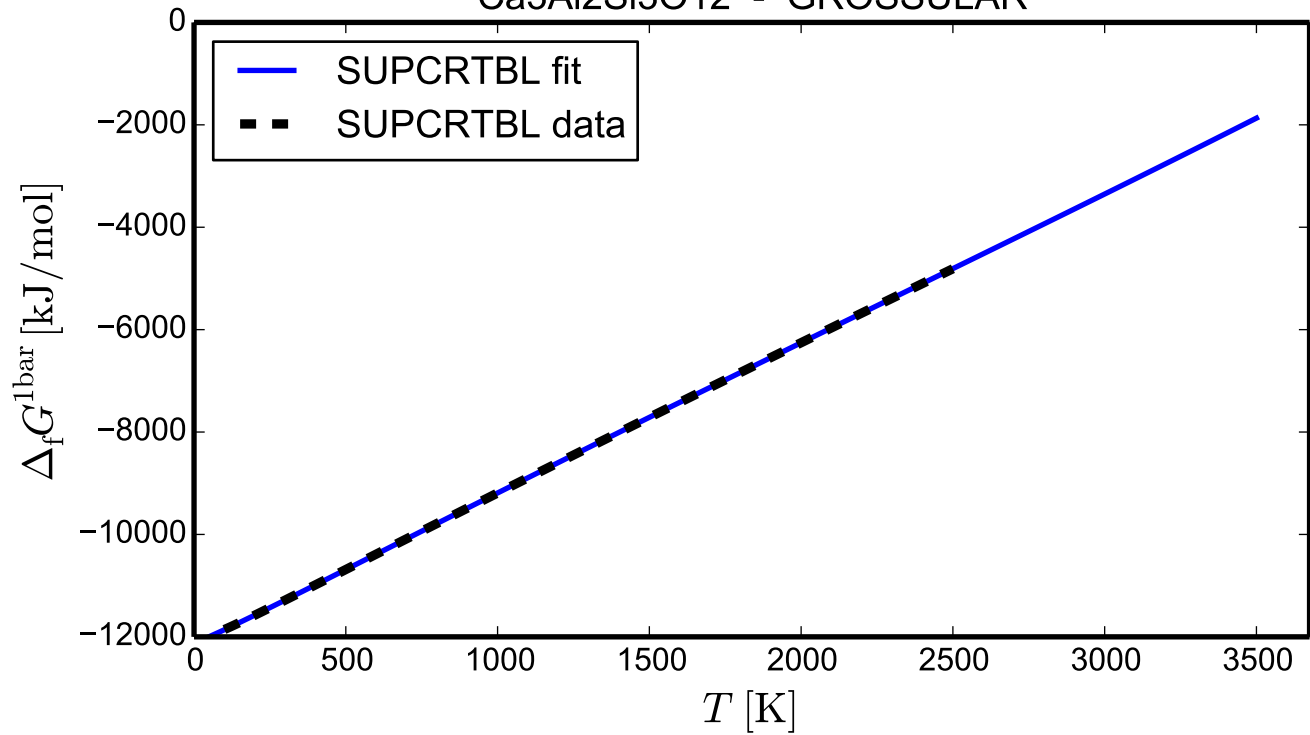
# Al2O3 - CORUNDUM



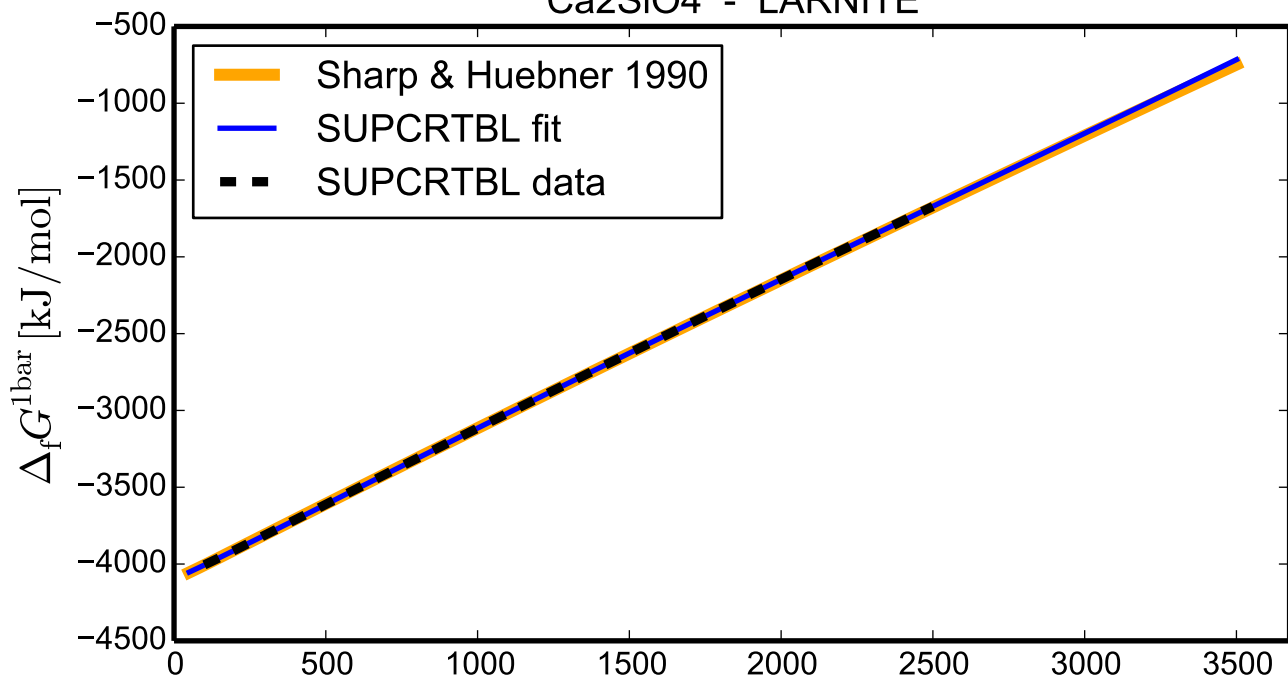
# Ca<sub>2</sub>Al<sub>2</sub>SiO<sub>7</sub> - GEHLENITE



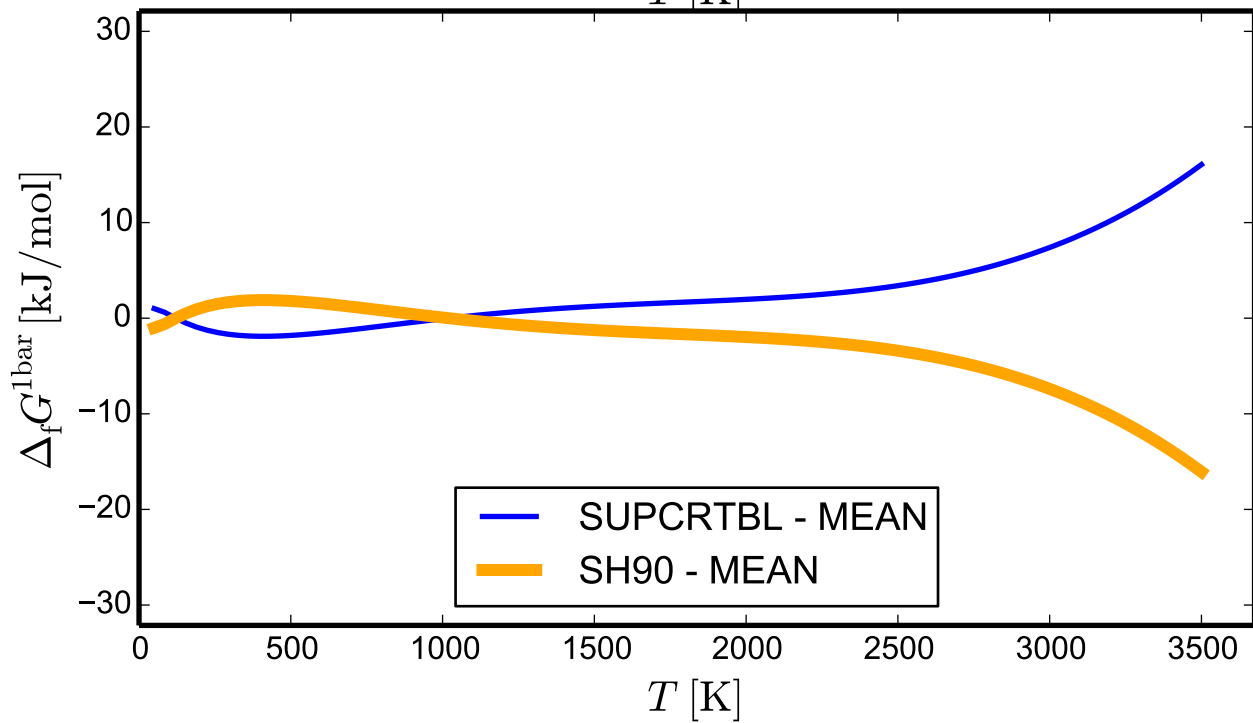
# Ca<sub>3</sub>Al<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> - GROSSULAR



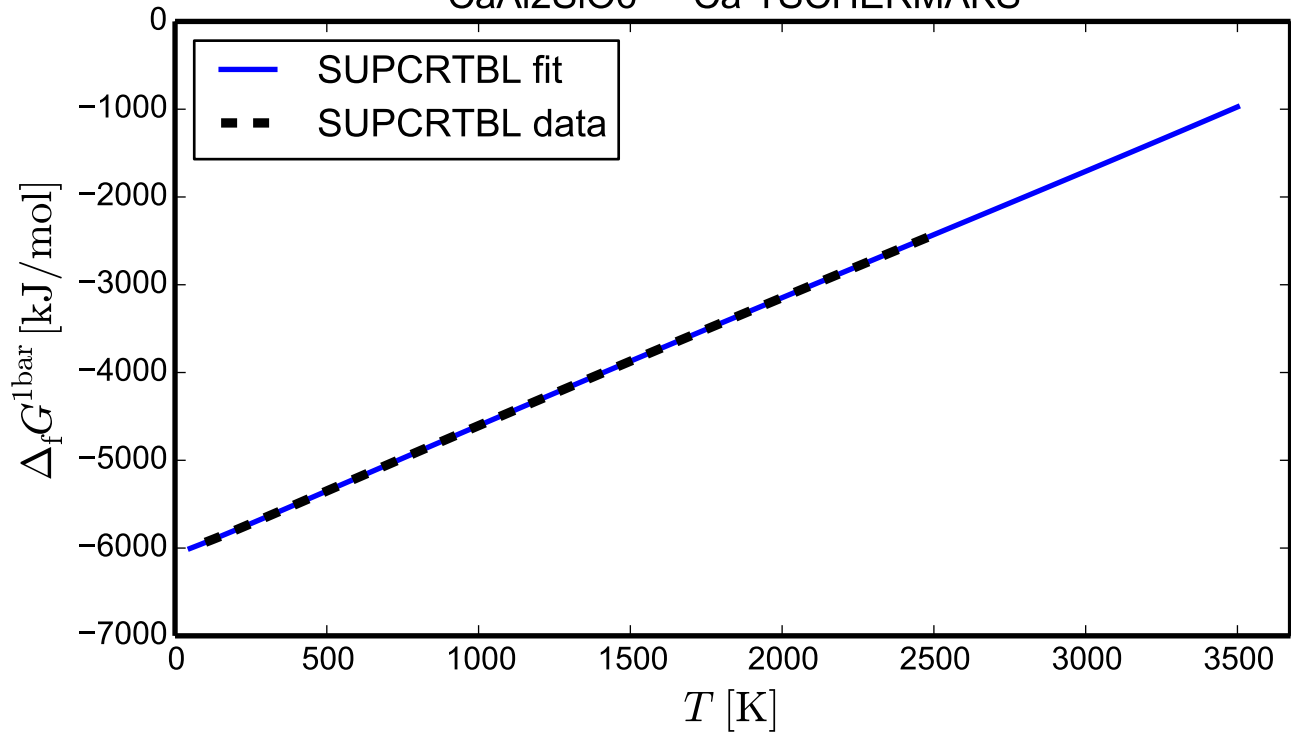
# Ca<sub>2</sub>SiO<sub>4</sub> - LARNITE



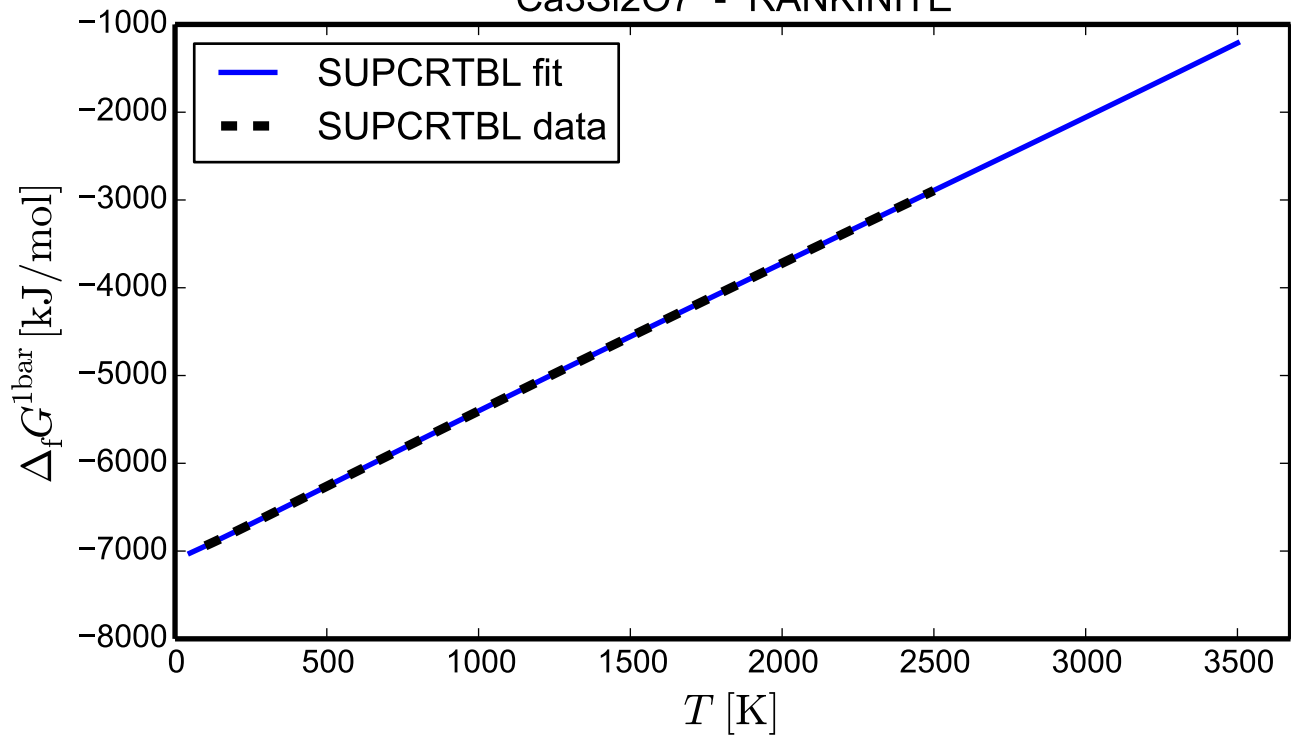
$T$  [K]



$T$  [K]

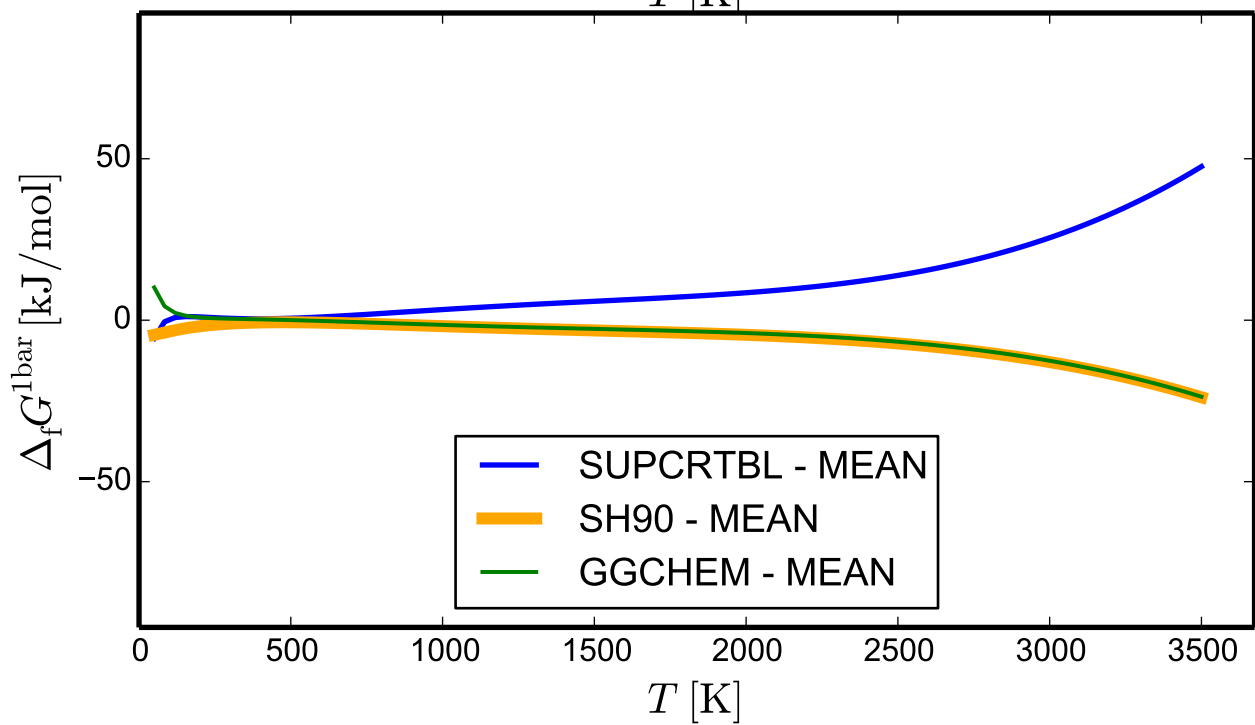
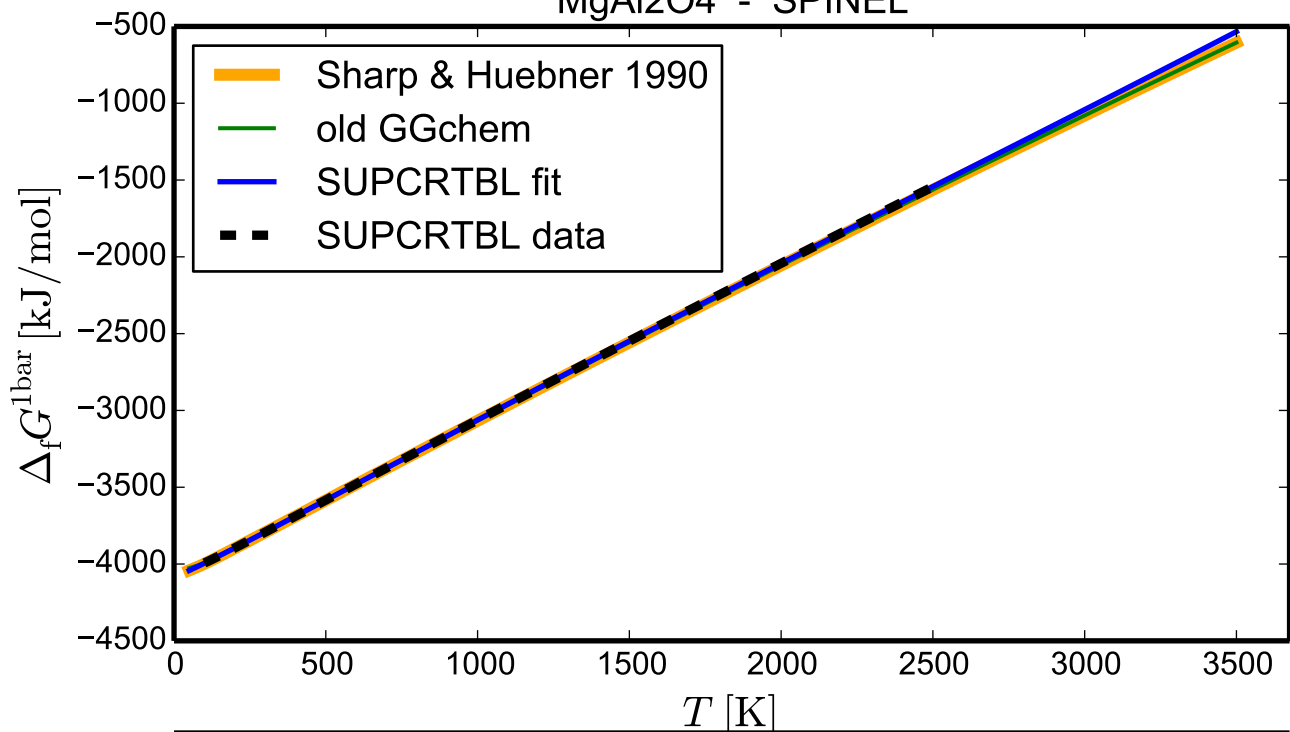
CaAl<sub>2</sub>SiO<sub>6</sub> - Ca-TSCHERMAKS

# Ca<sub>3</sub>Si<sub>2</sub>O<sub>7</sub> - RANKINITE

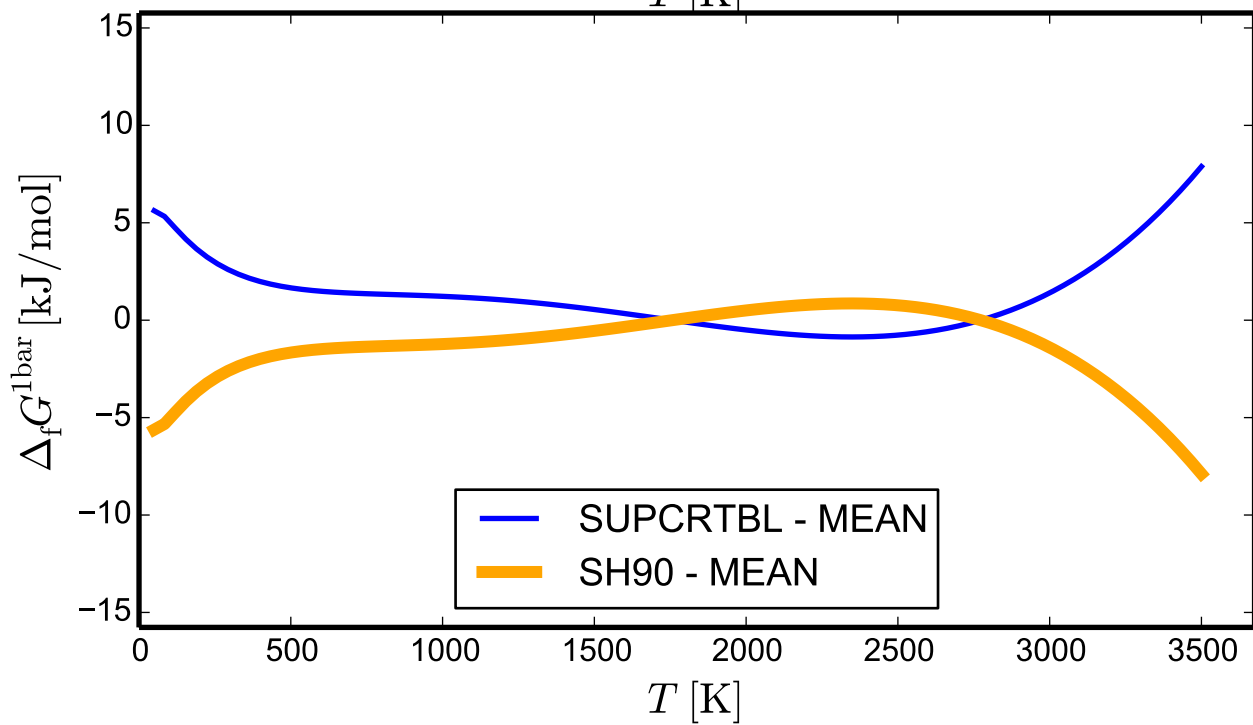
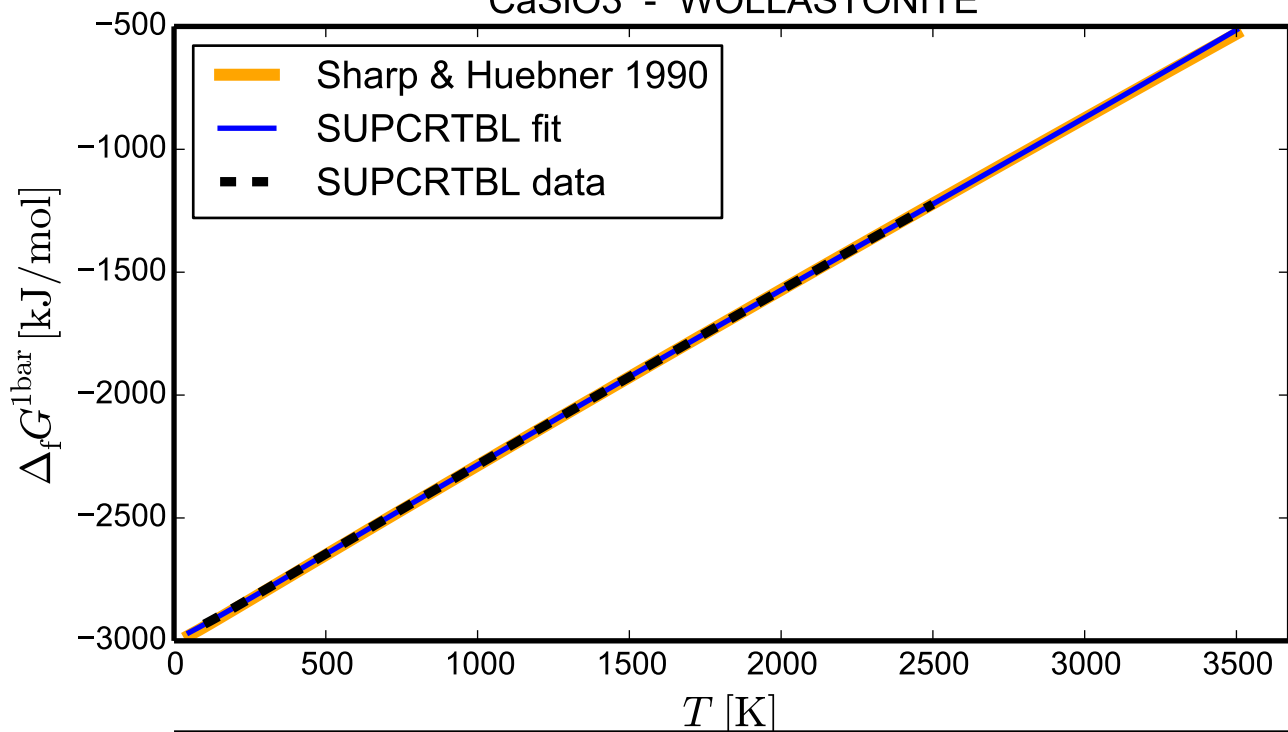




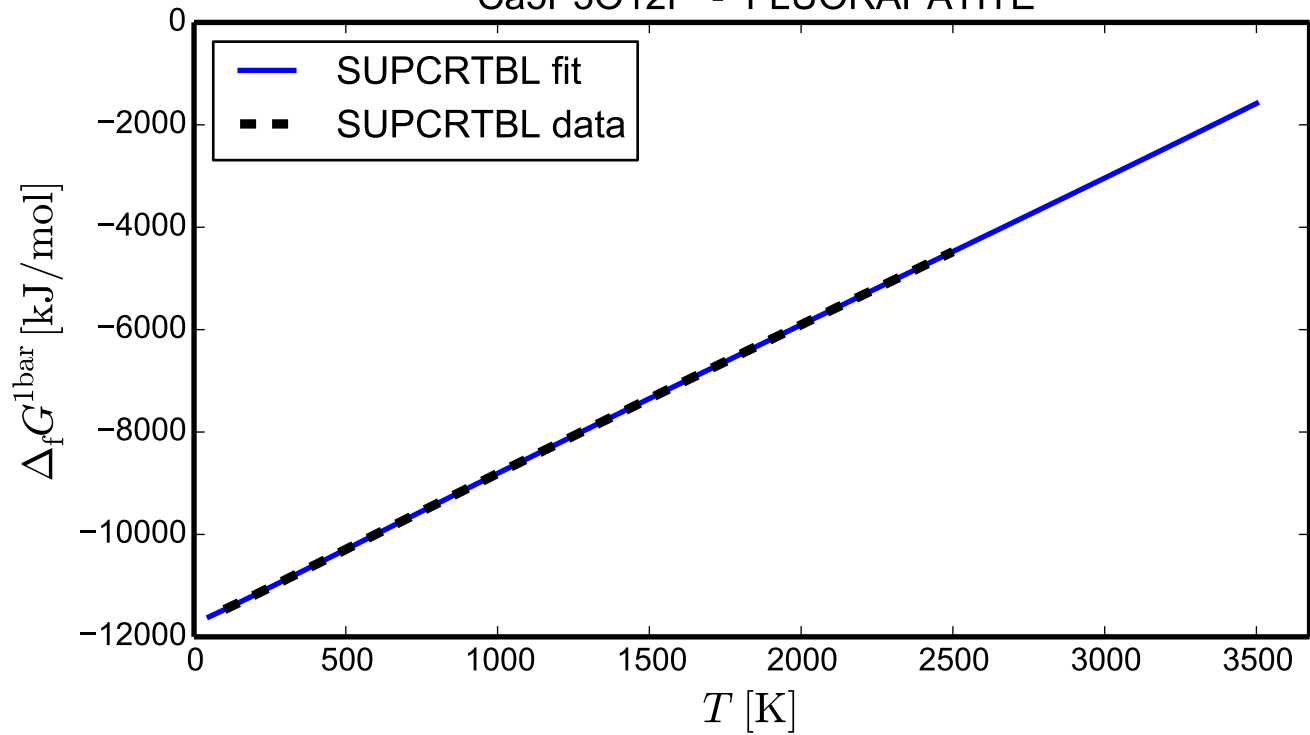
# MgAl<sub>2</sub>O<sub>4</sub> - SPINEL



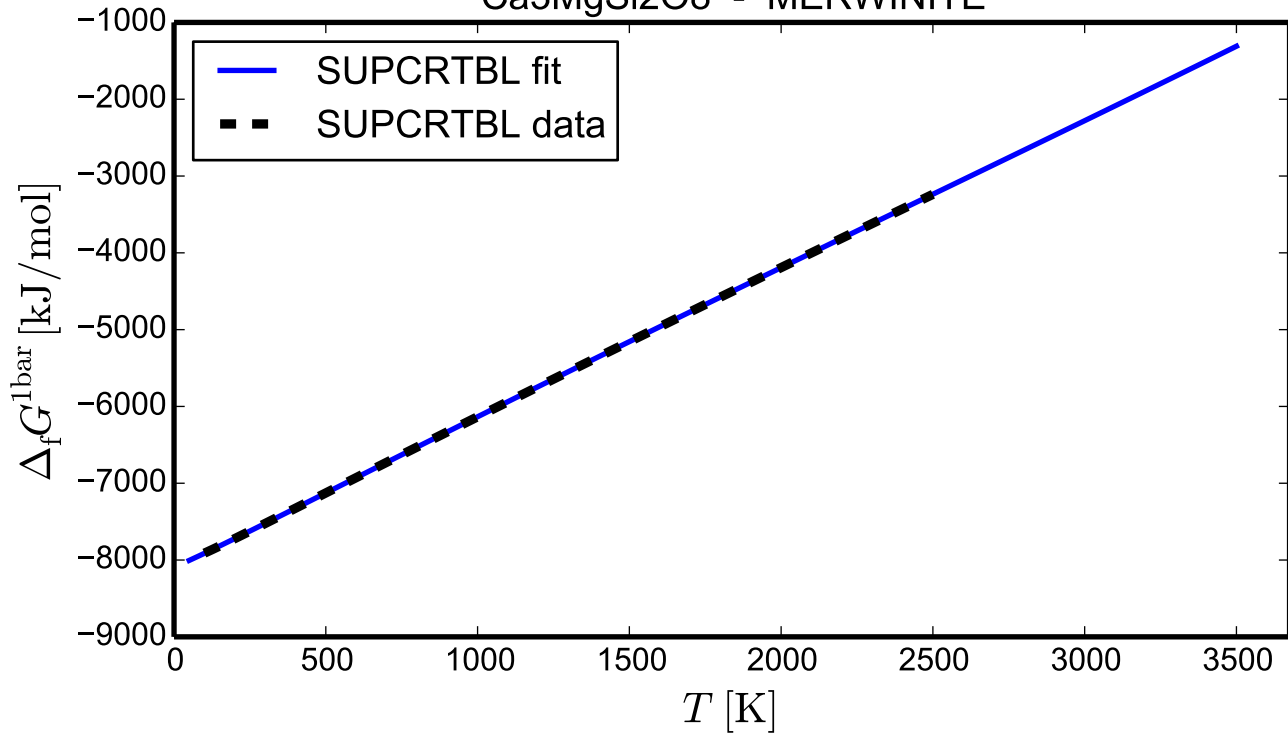
# CaSiO<sub>3</sub> - WOLLASTONITE



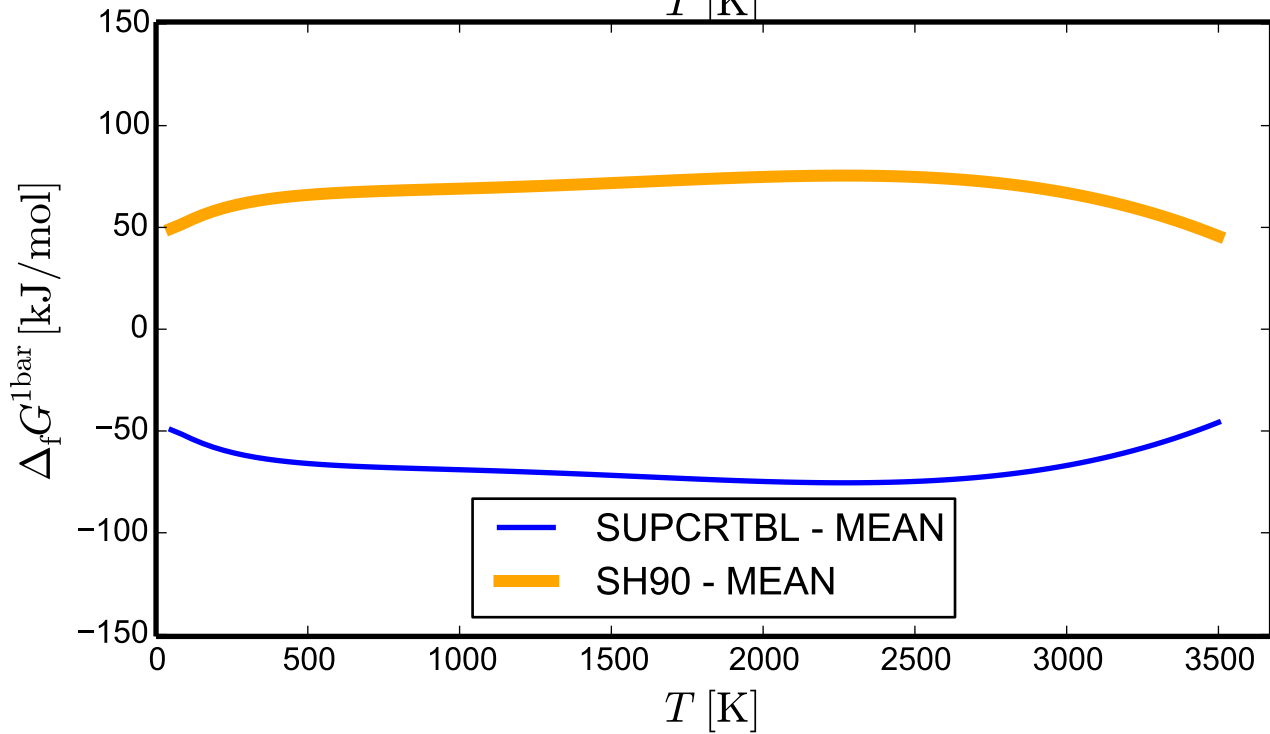
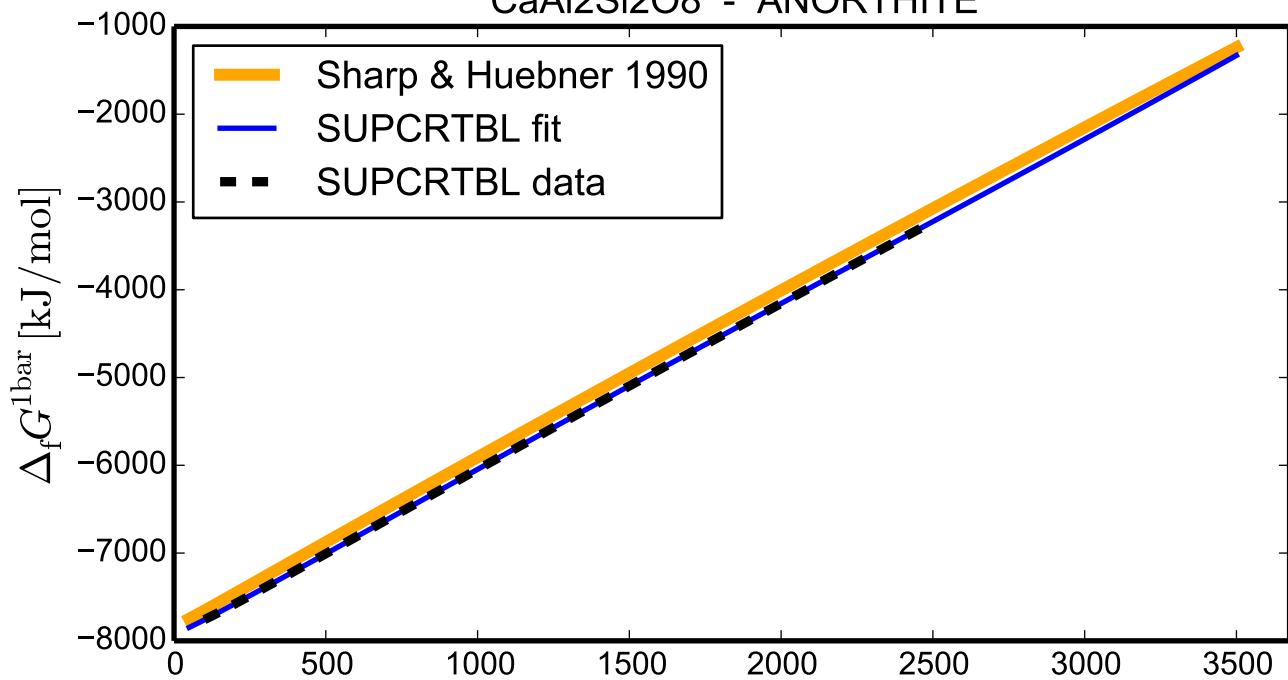
## Ca5P3O12F - FLUORAPATITE



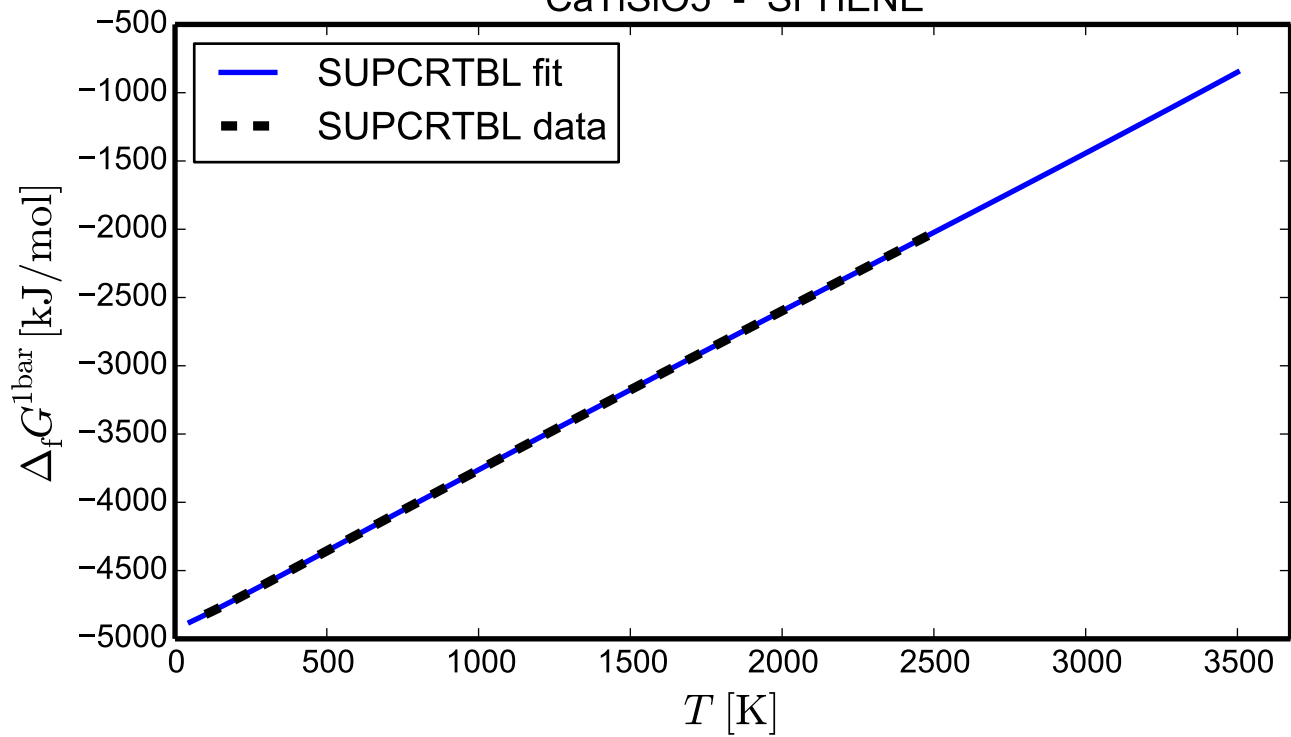
## Ca3MgSi2O8 - MERWINITE



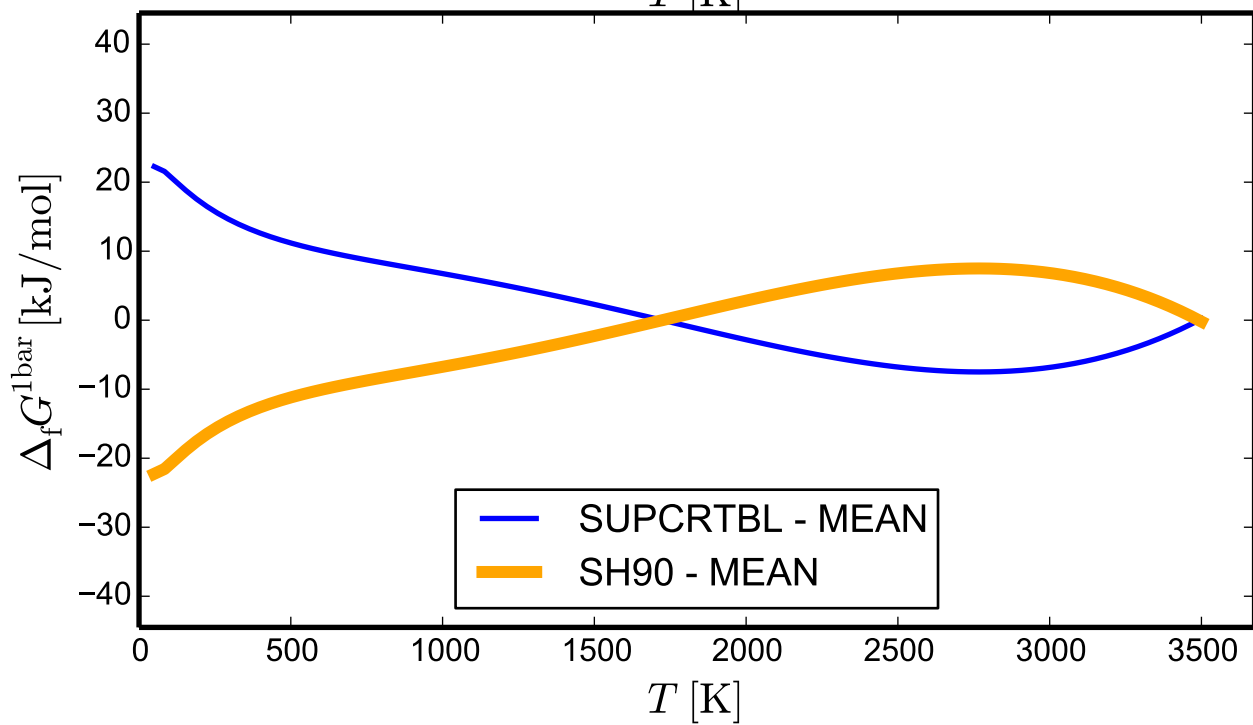
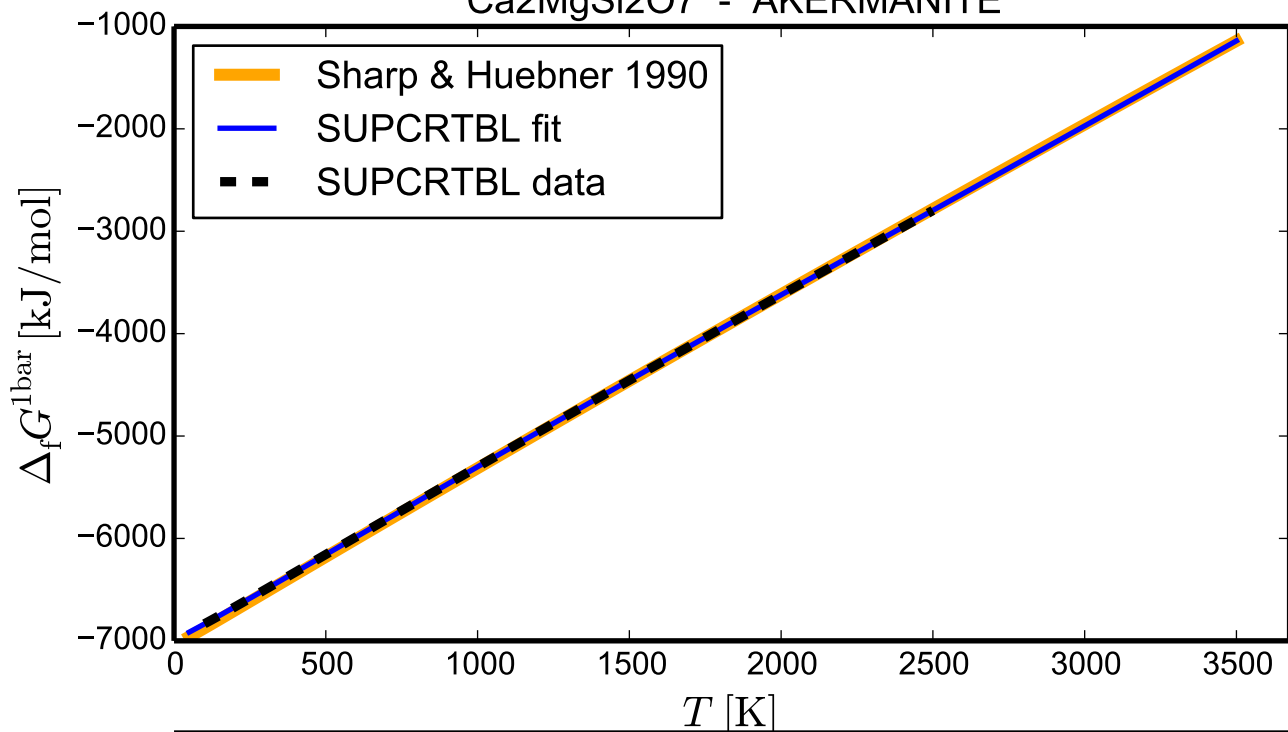
# CaAl<sub>2</sub>Si<sub>2</sub>O<sub>8</sub> - ANORTHITE

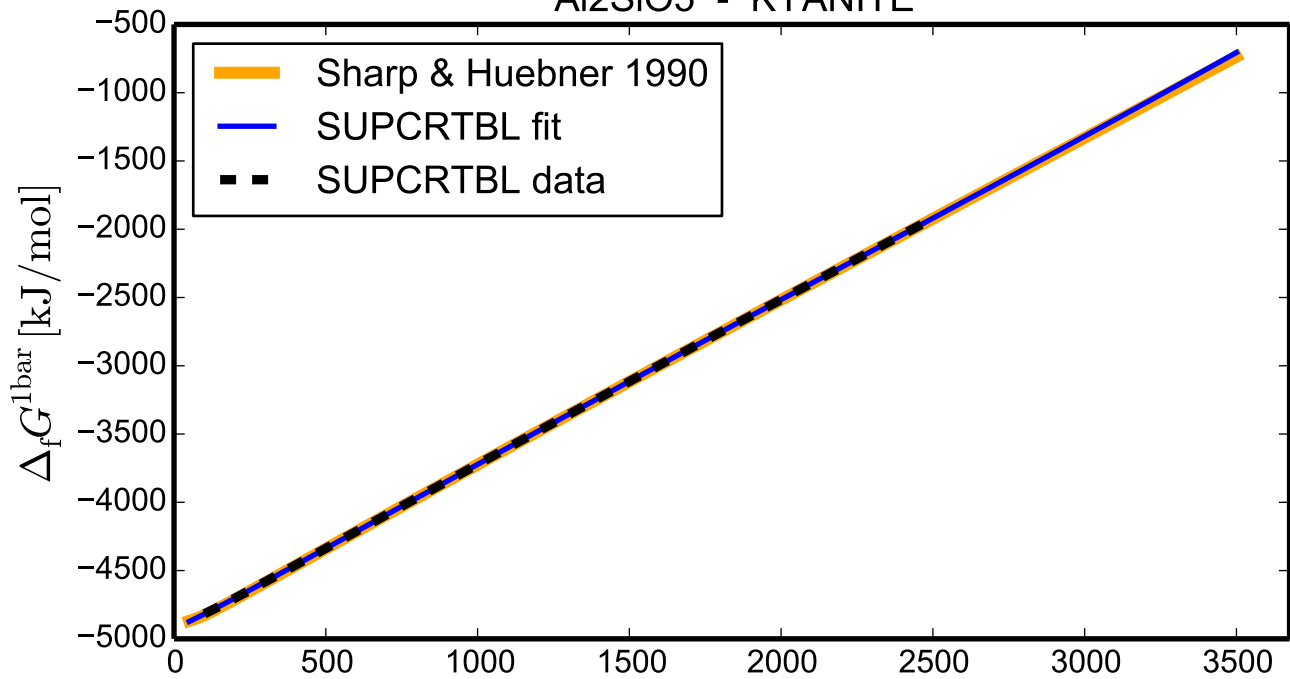
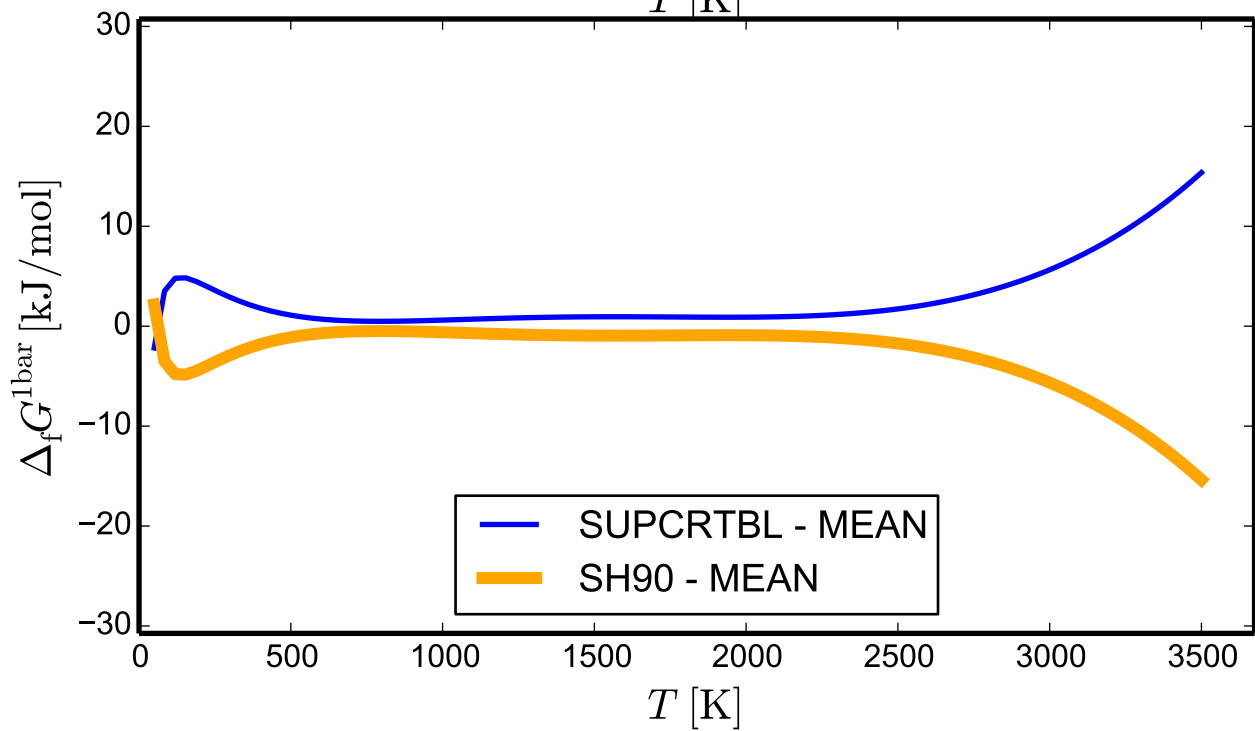


## CaTiSiO5 - SPHENE

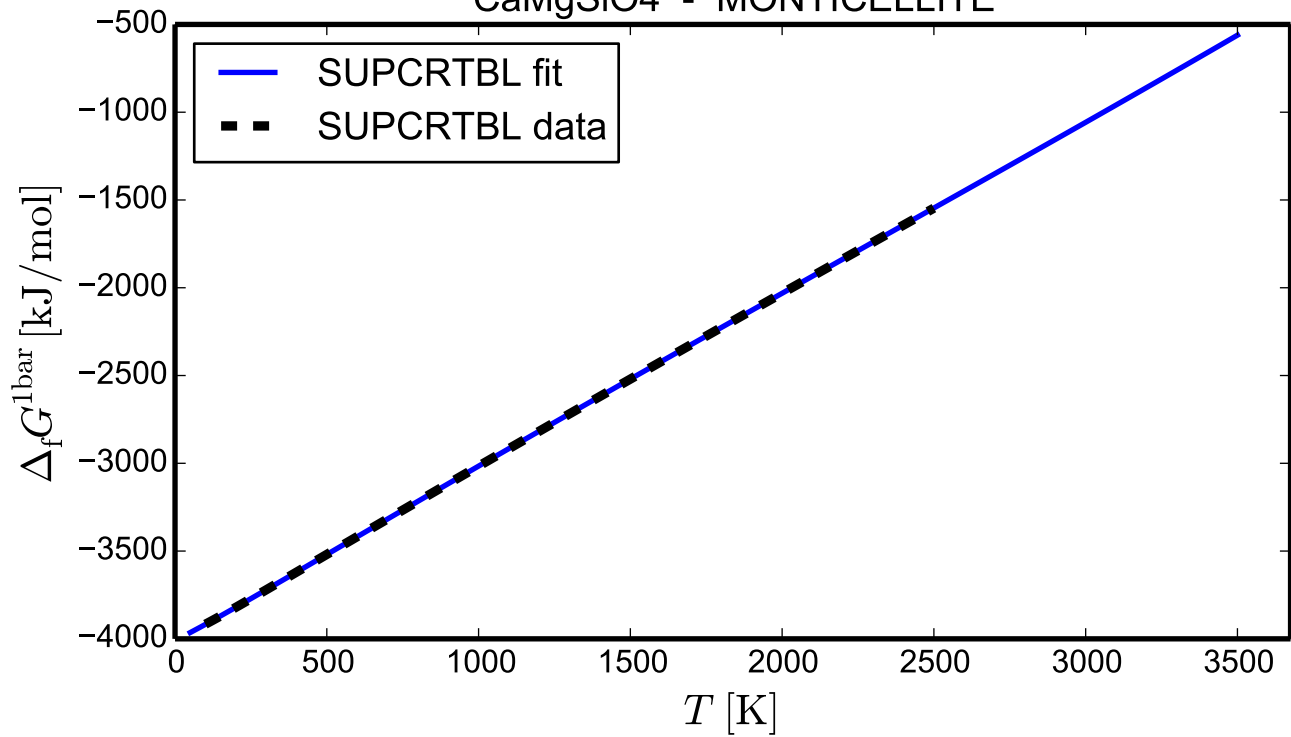


# Ca<sub>2</sub>MgSi<sub>2</sub>O<sub>7</sub> - AKERMANITE

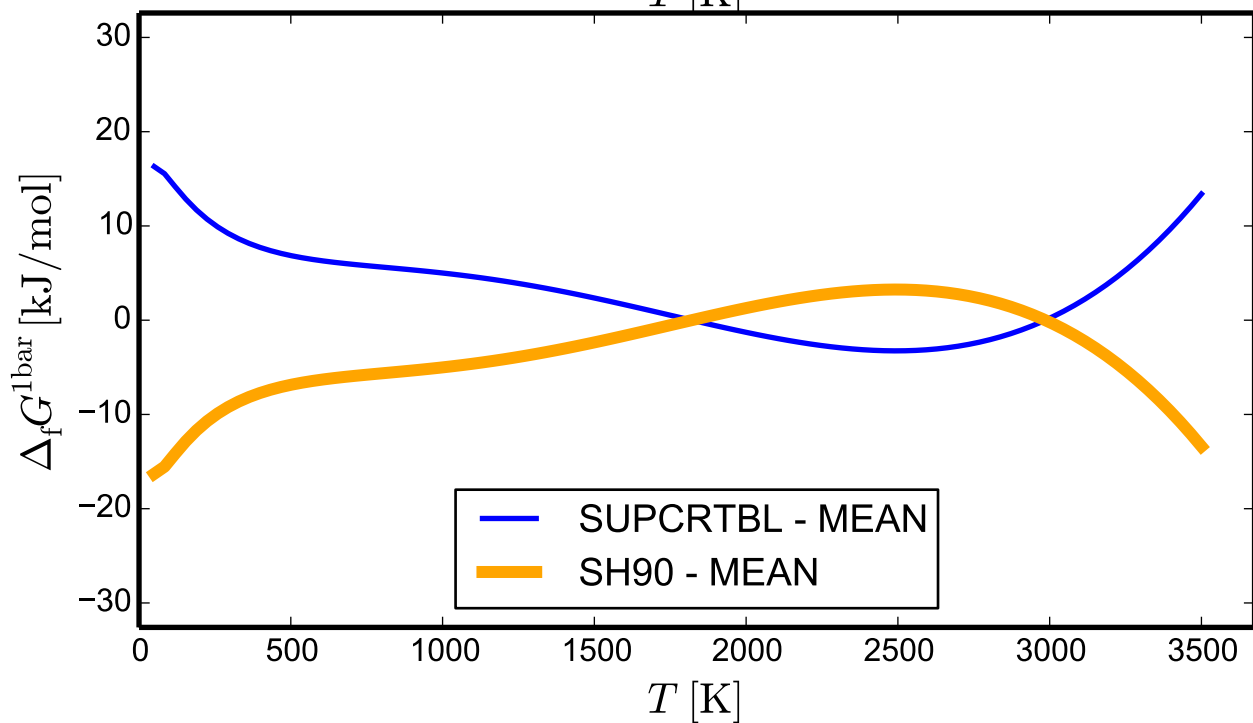
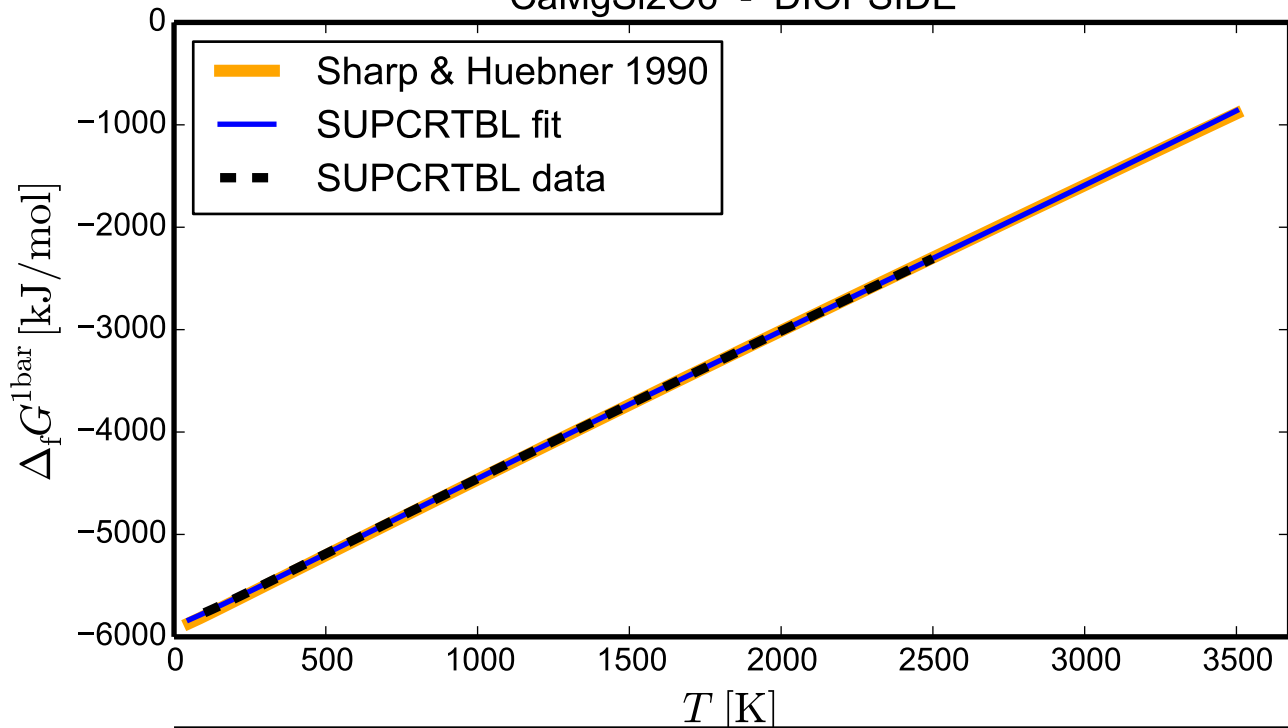


Al<sub>2</sub>SiO<sub>5</sub> - KYANITE $T$  [K] $\Delta_f G^{1\text{bar}}$  [kJ/mol] $T$  [K]

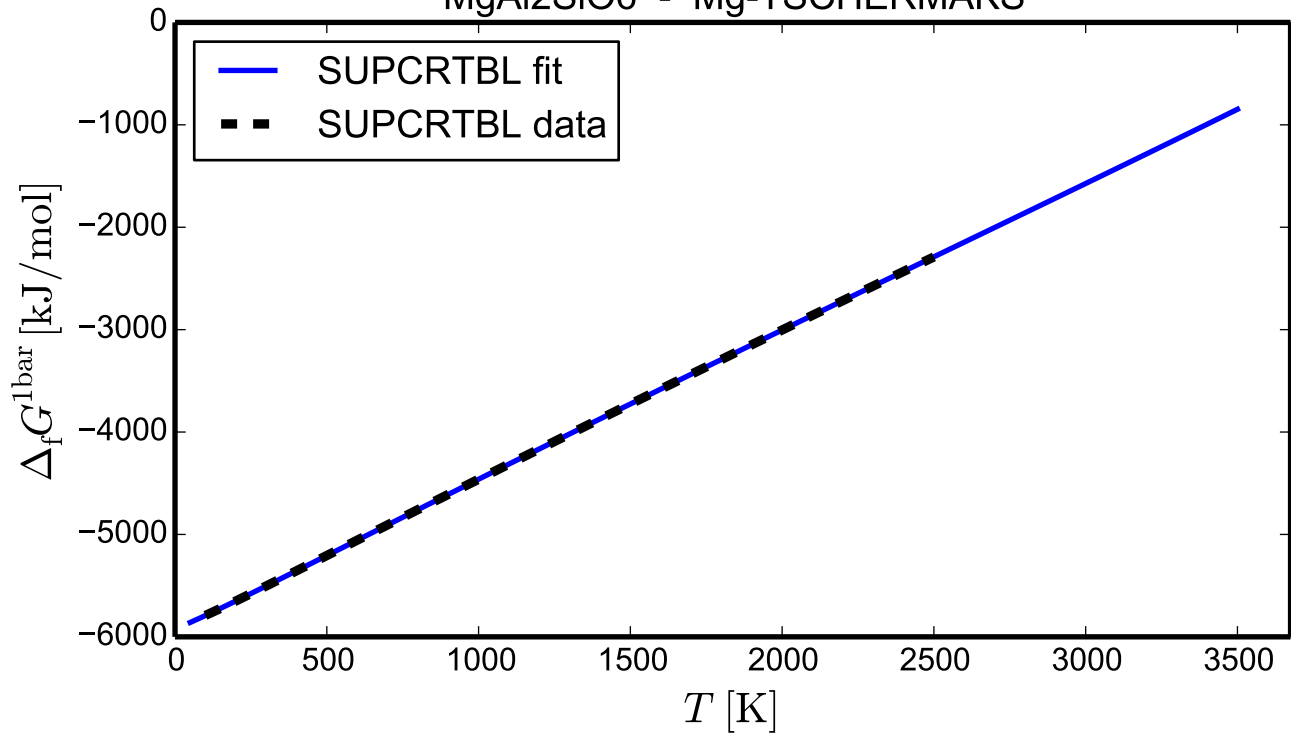


CaMgSiO<sub>4</sub> - MONTICELLITE

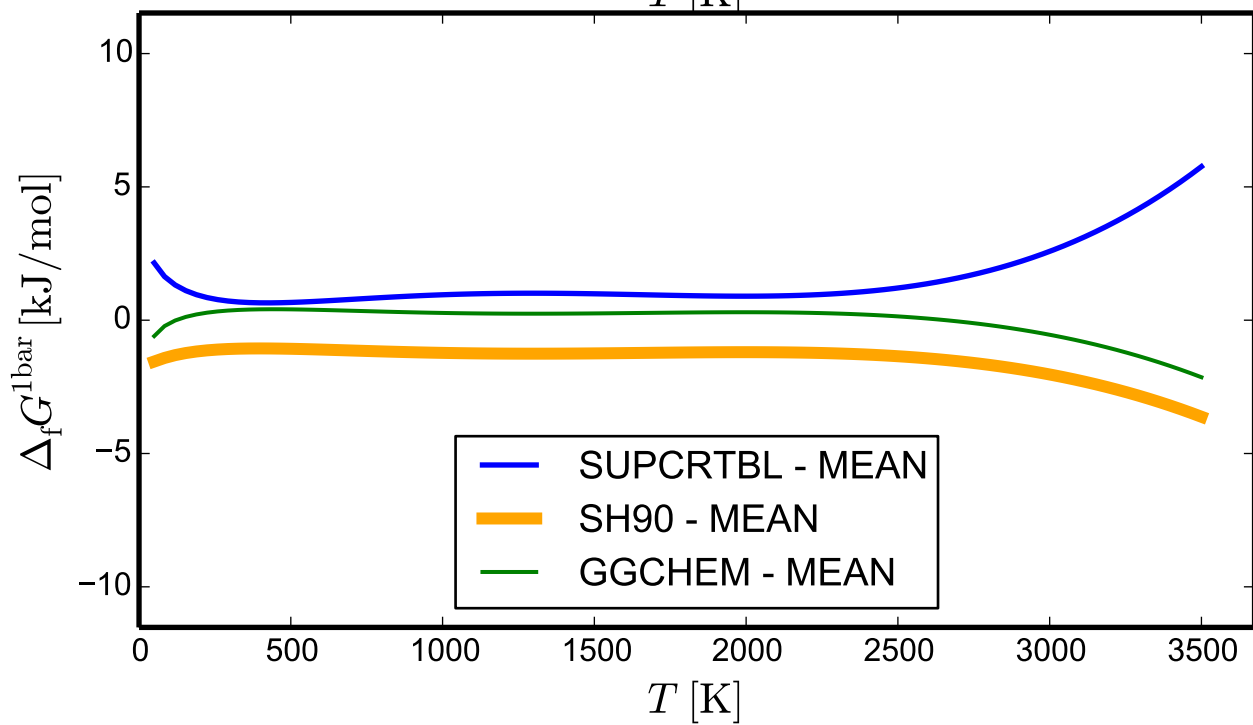
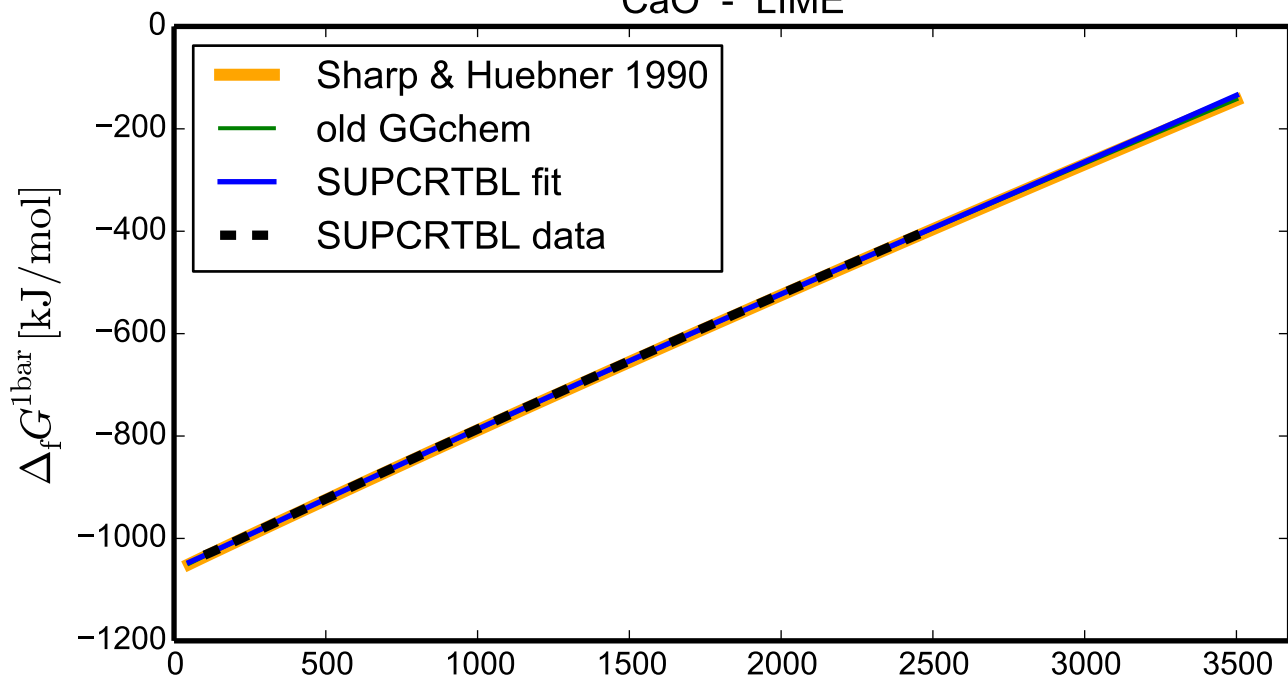
# CaMgSi<sub>2</sub>O<sub>6</sub> - DIOPSIDE



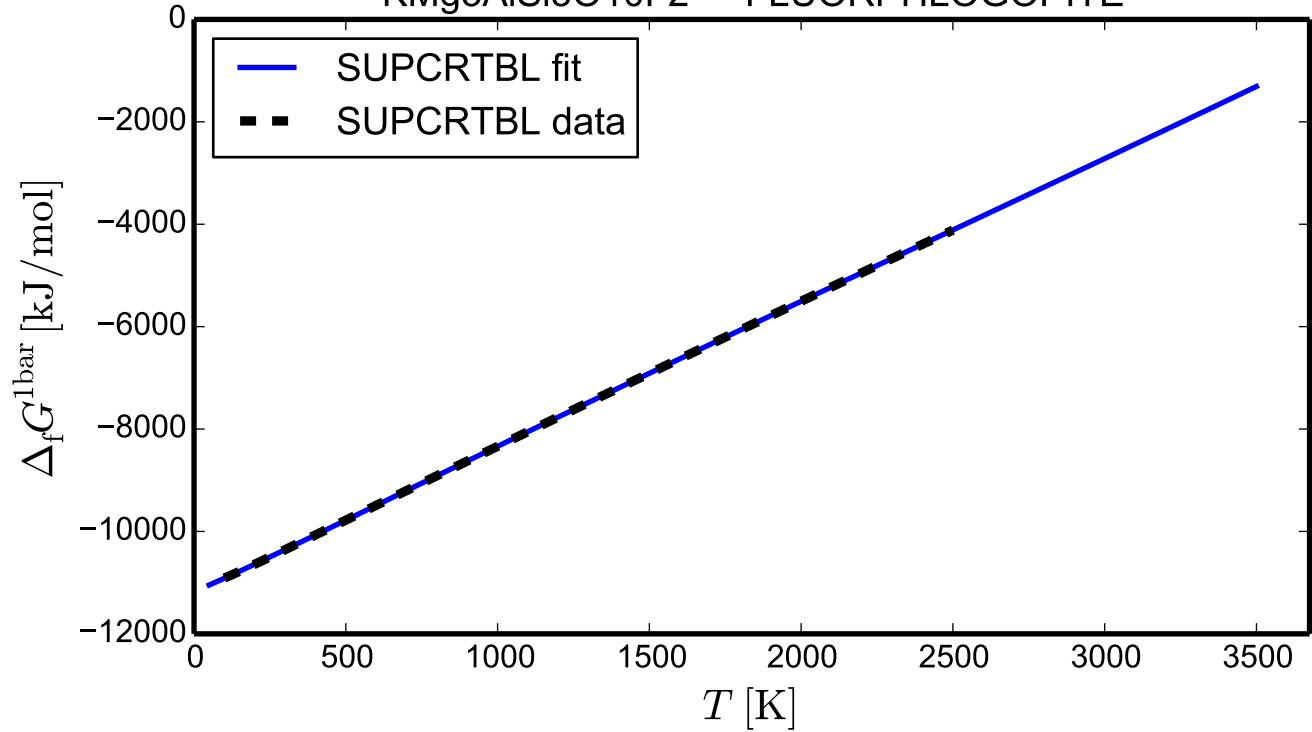
# MgAl<sub>2</sub>SiO<sub>6</sub> - Mg-TSCHERMAKS

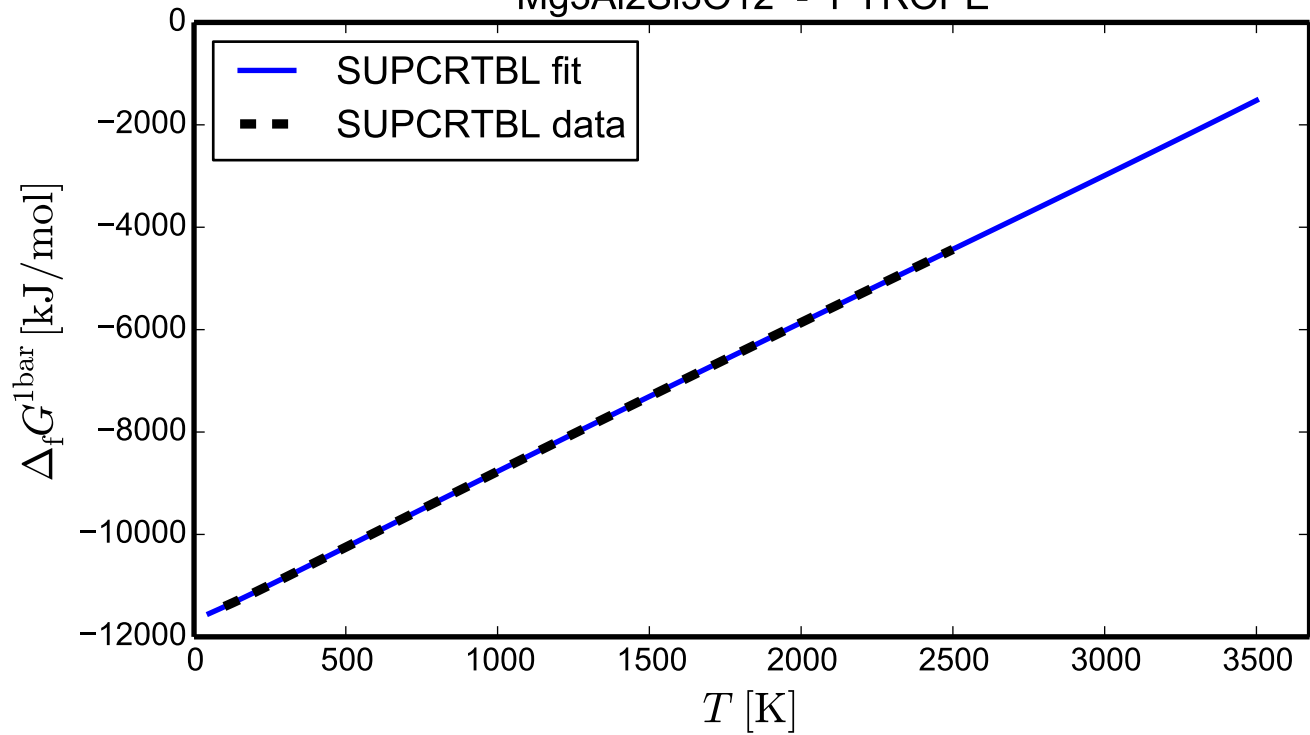


# CaO - LIME

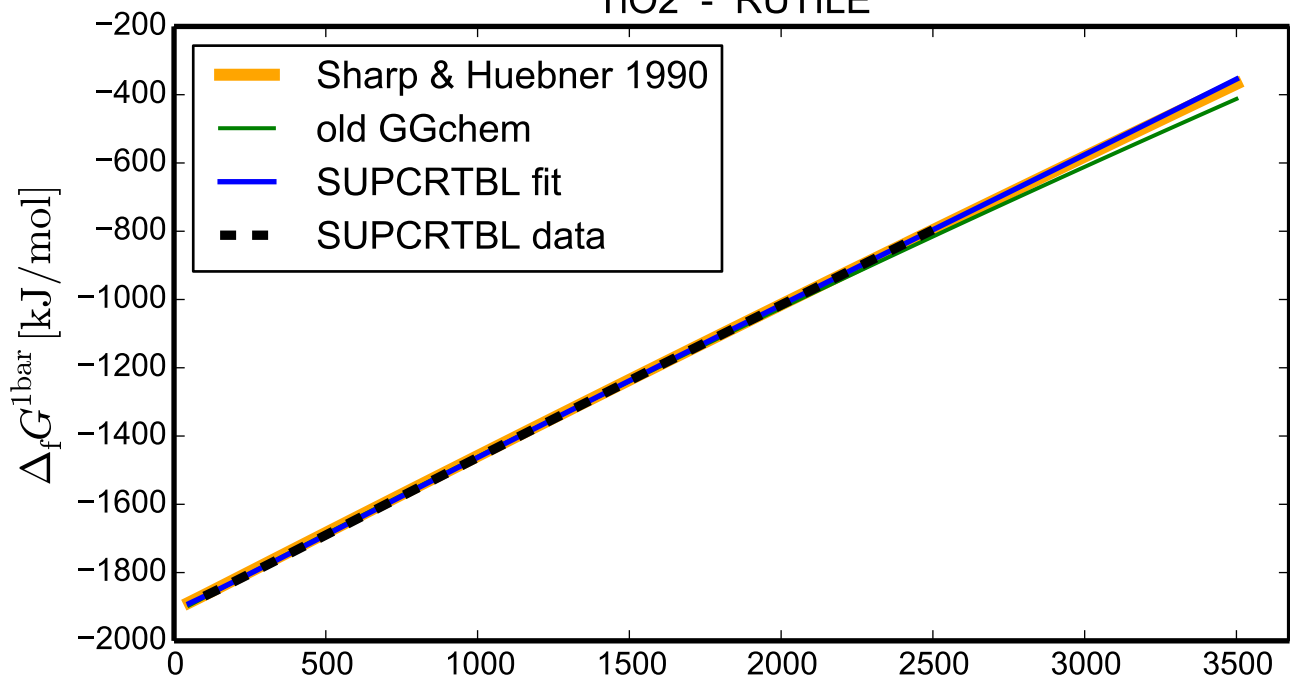


## KMg3AlSi3O10F2 - FLUORPHLOGOPITE

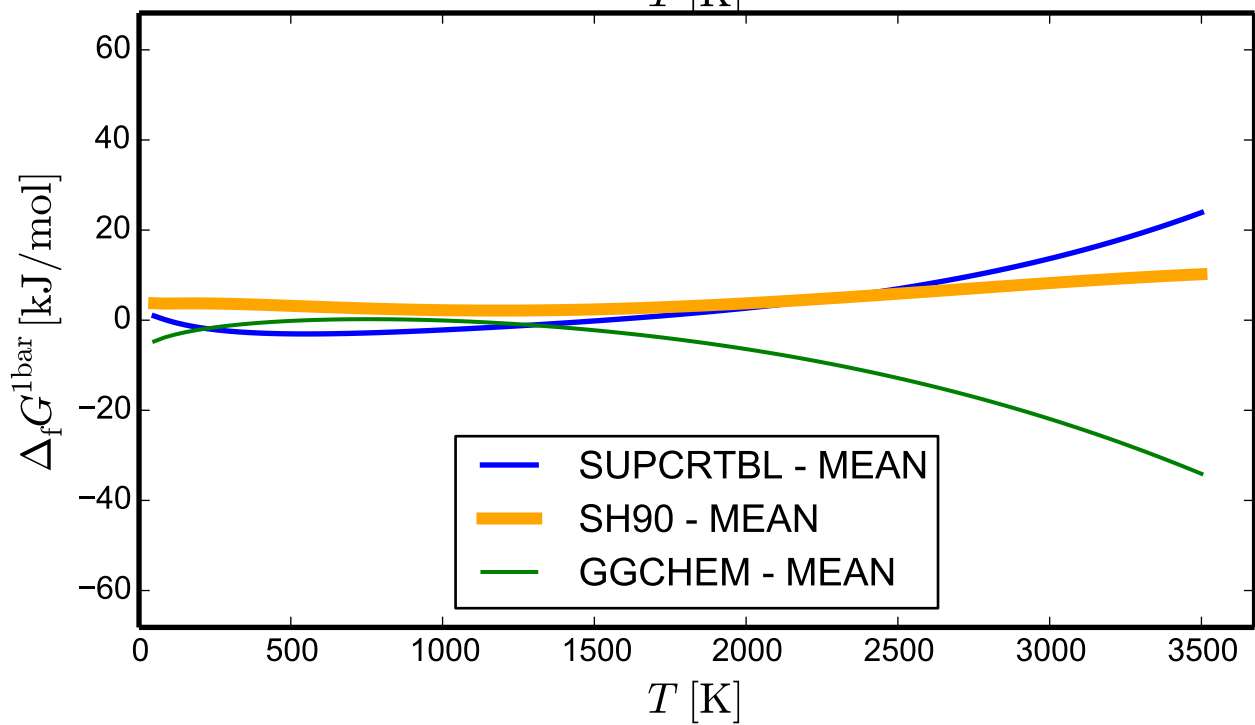


Mg<sub>3</sub>Al<sub>2</sub>Si<sub>3</sub>O<sub>12</sub> - PYROPE

# TiO2 - RUTILE

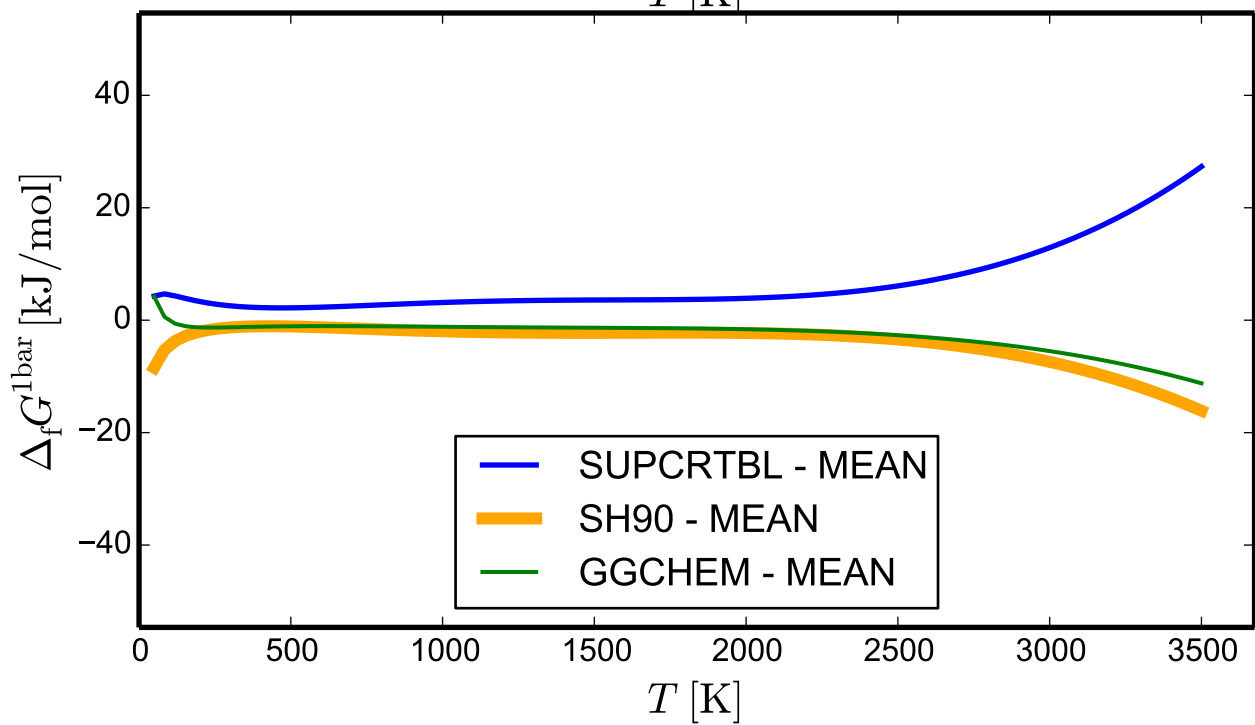
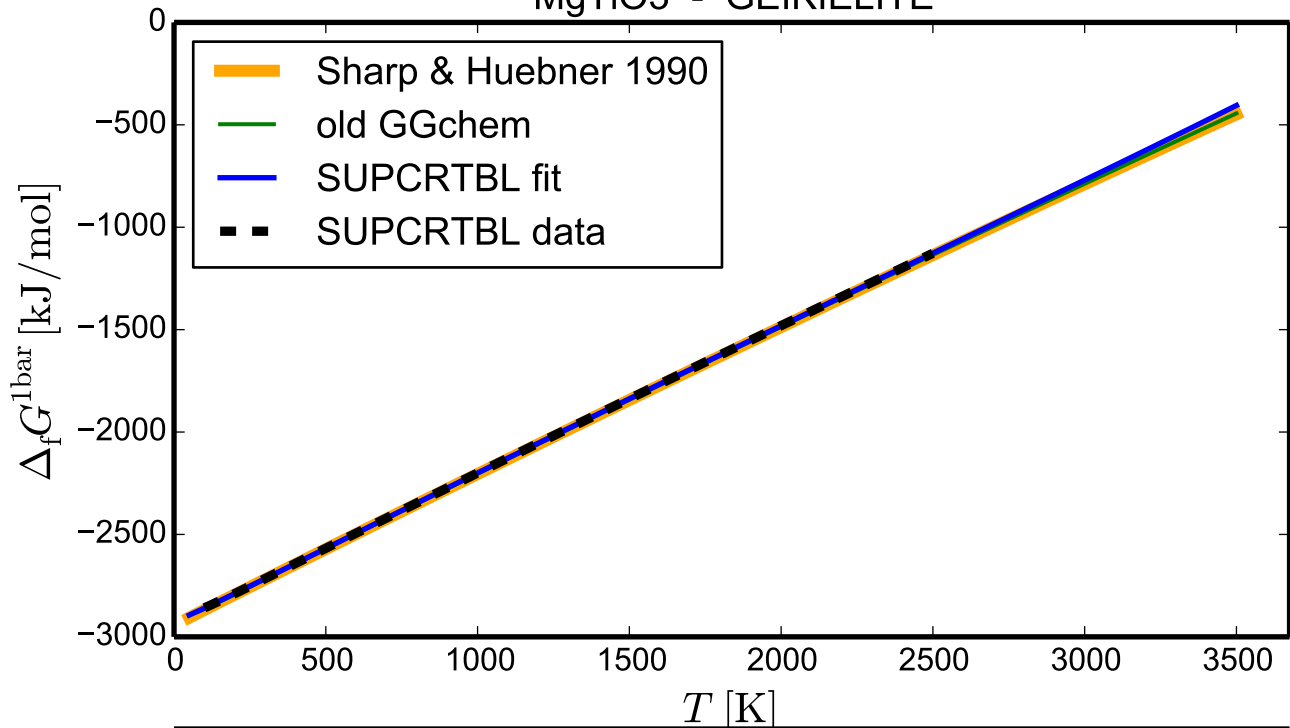


$T$  [K]

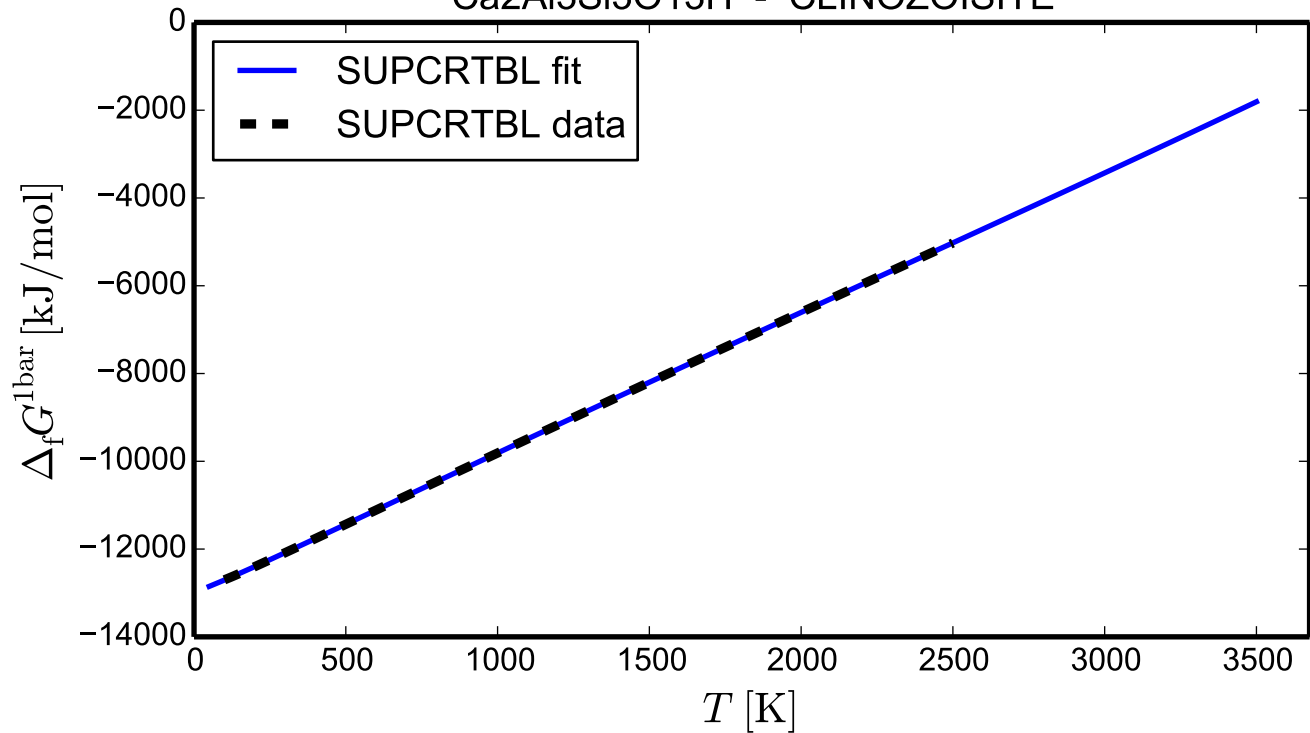


$T$  [K]

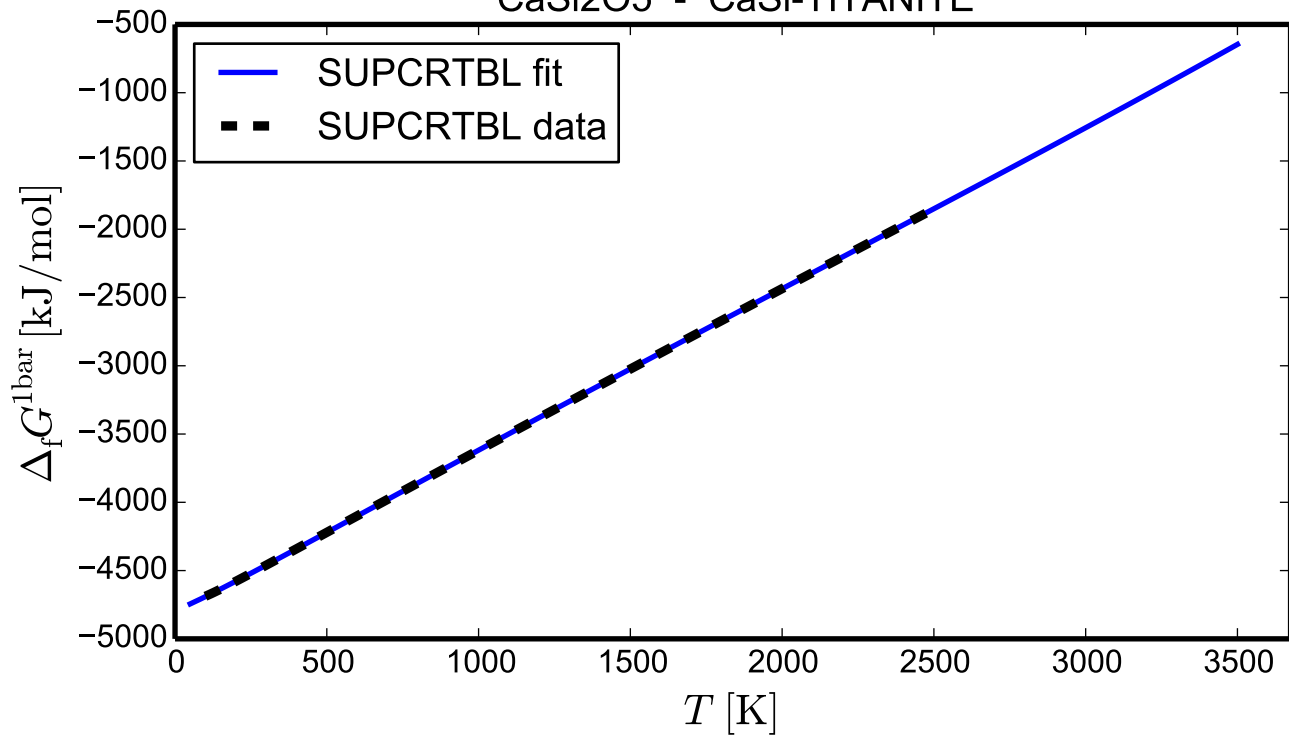
## MgTiO3 - GEIKIELITE



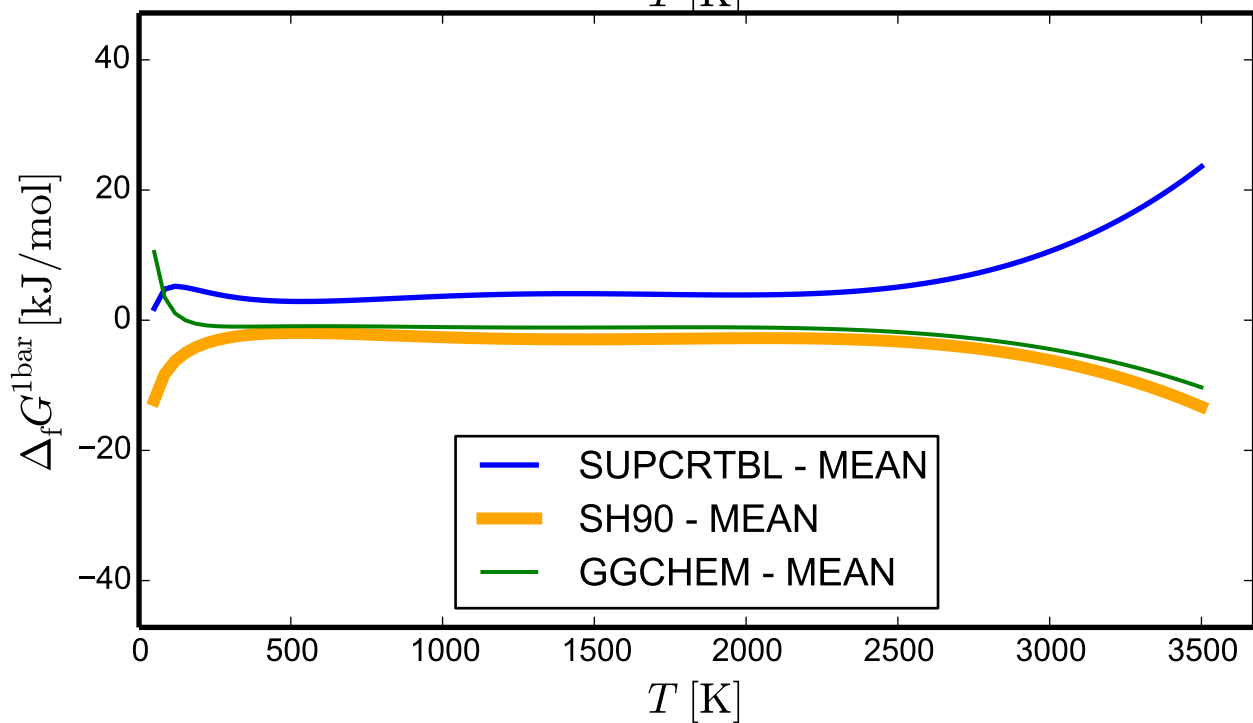
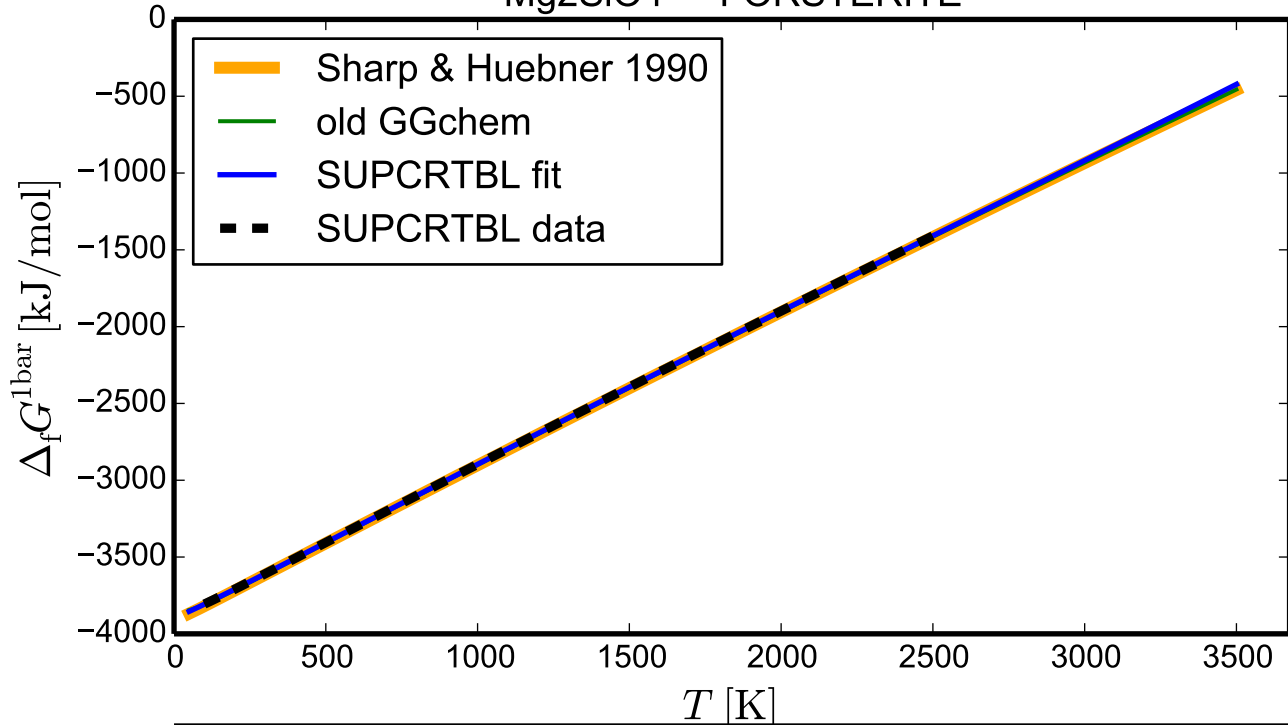


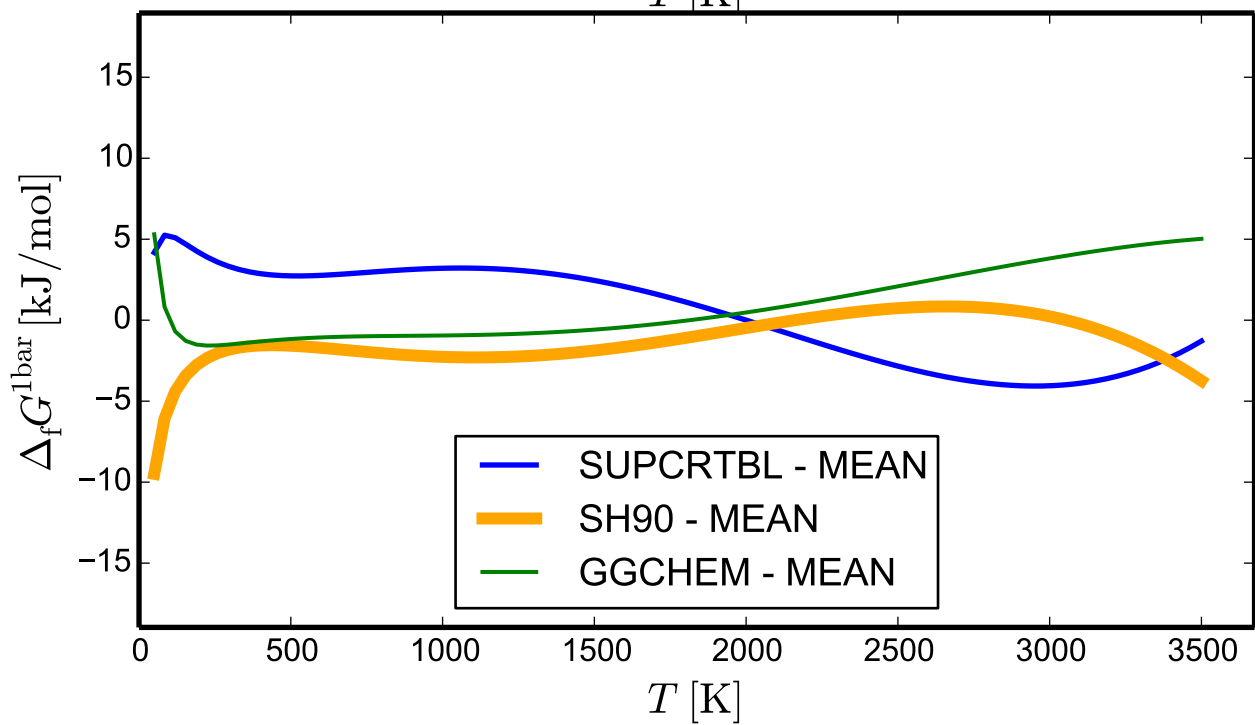
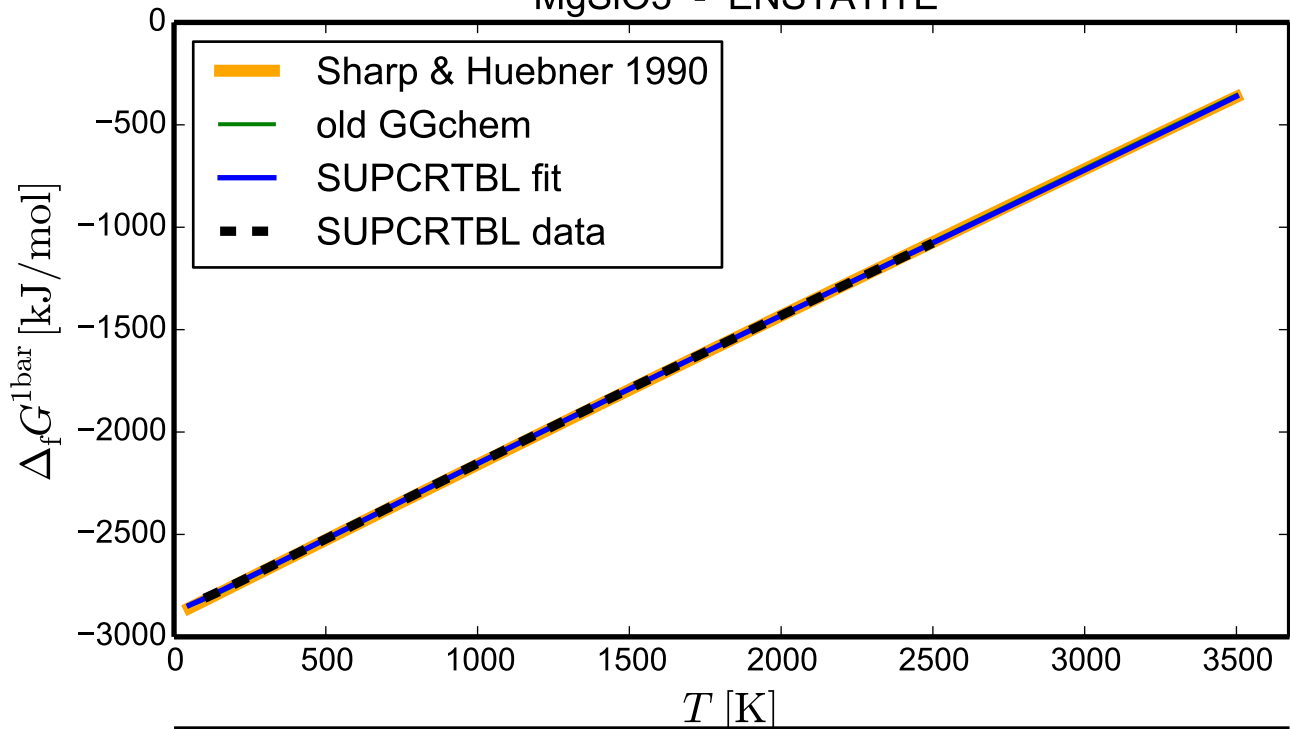
Ca<sub>2</sub>Al<sub>3</sub>Si<sub>3</sub>O<sub>13</sub>H - CLINOZOISITE

## CaSi2O5 - CaSi-TITANITE

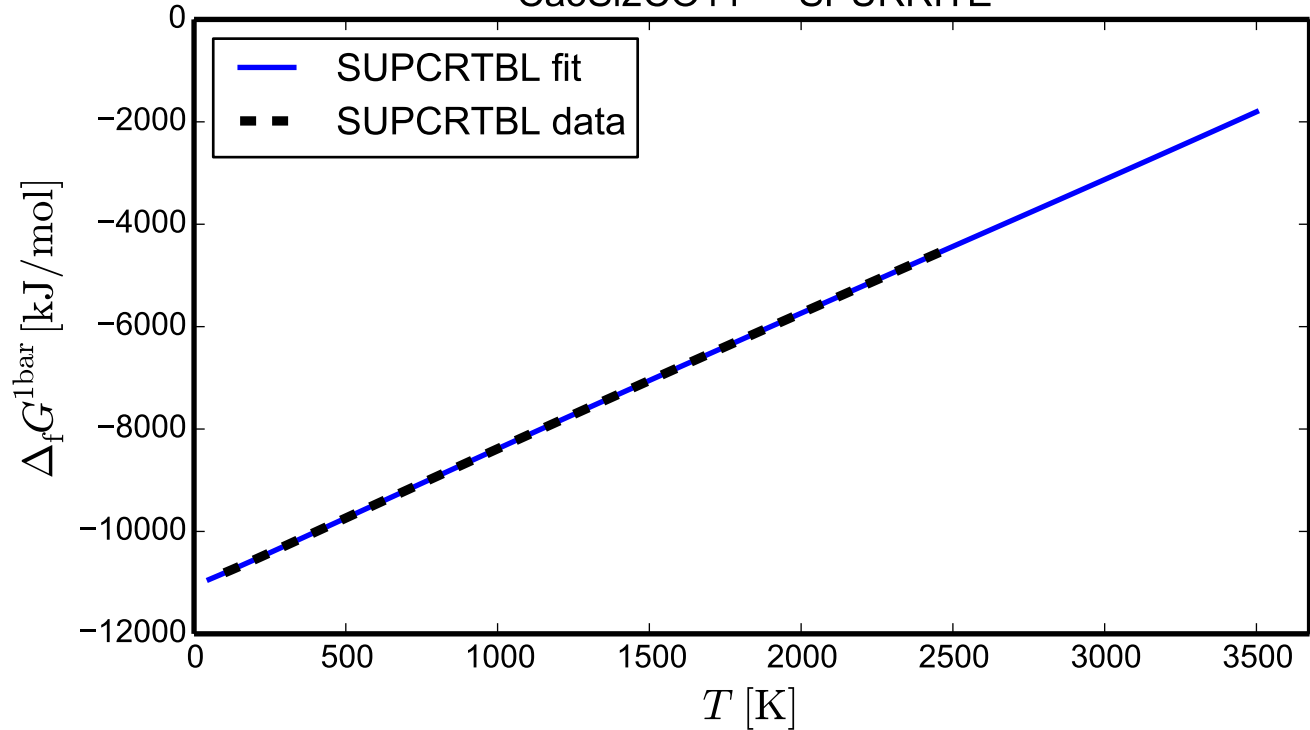


# Mg<sub>2</sub>SiO<sub>4</sub> - FORSTERITE

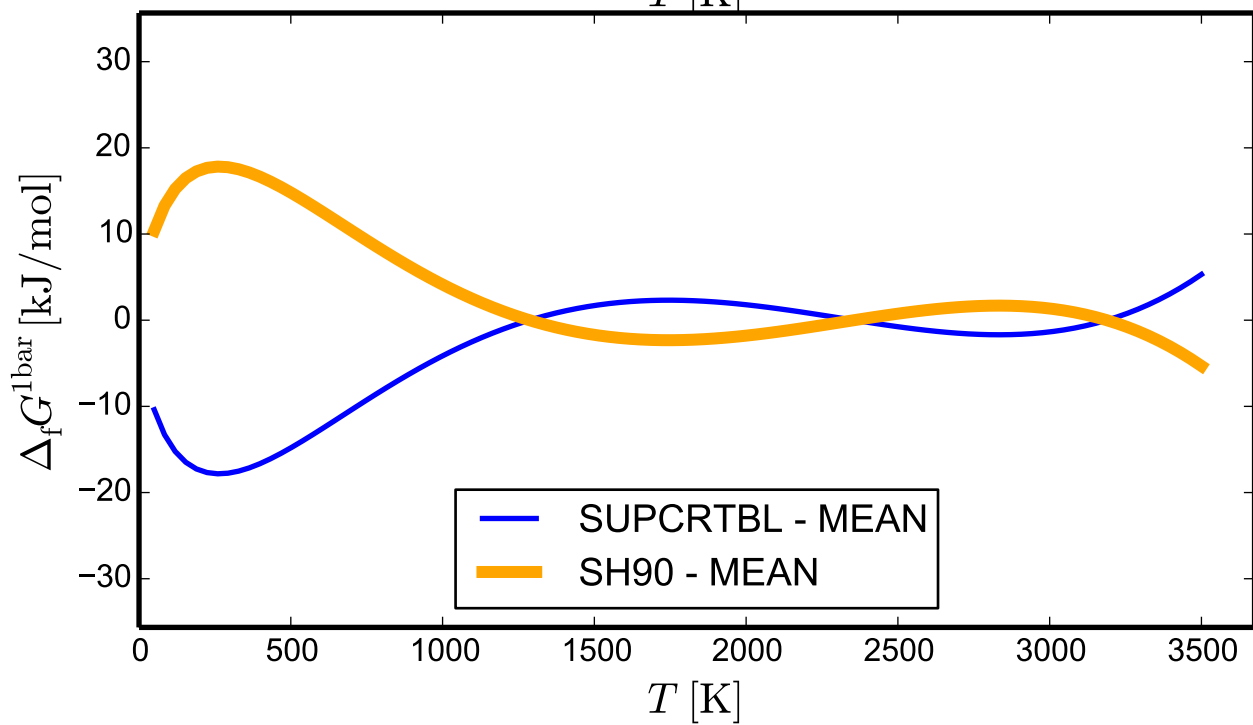
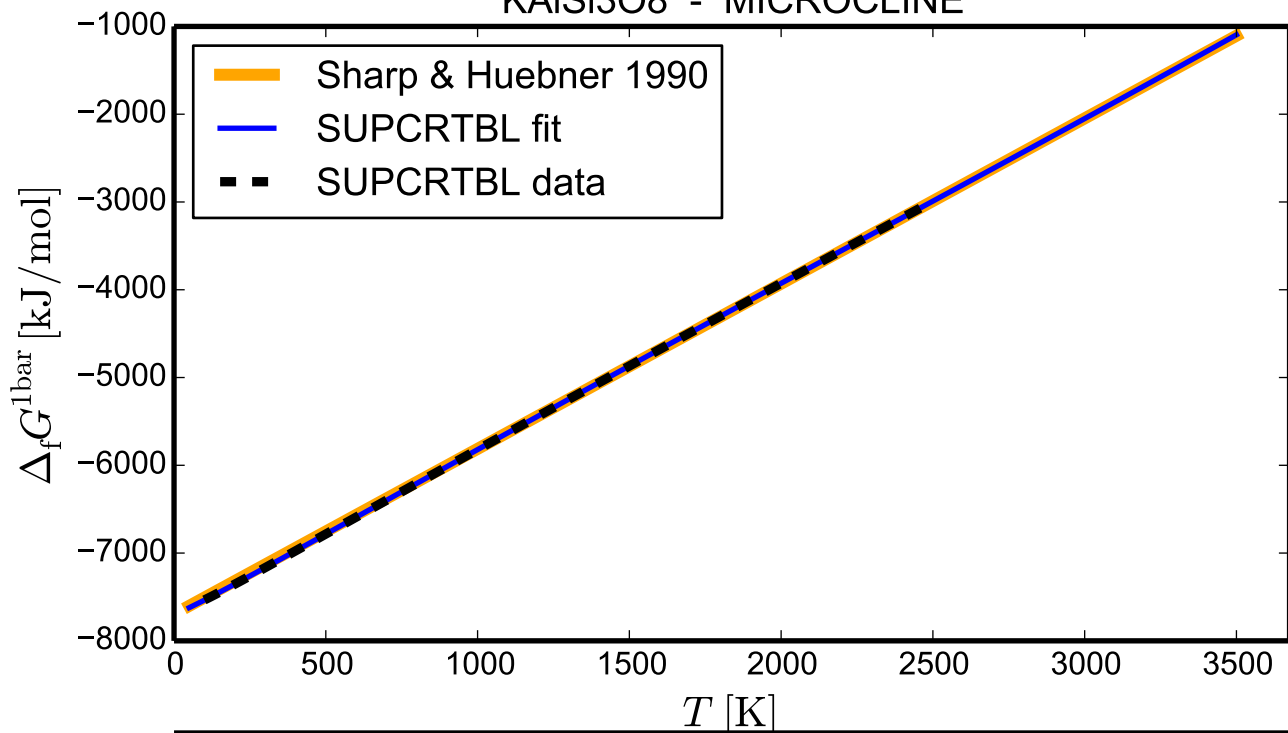


MgSiO<sub>3</sub> - ENSTATITE

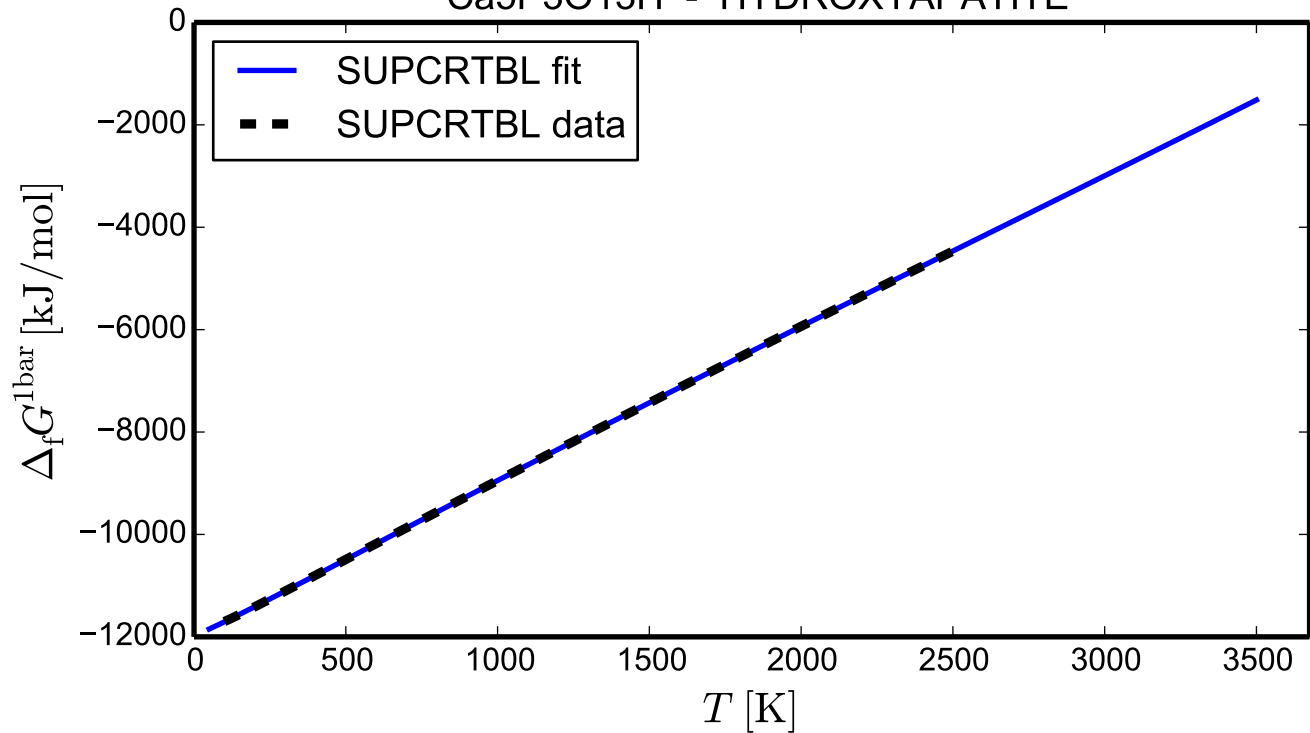
## Ca5Si2CO11 - SPURRITE



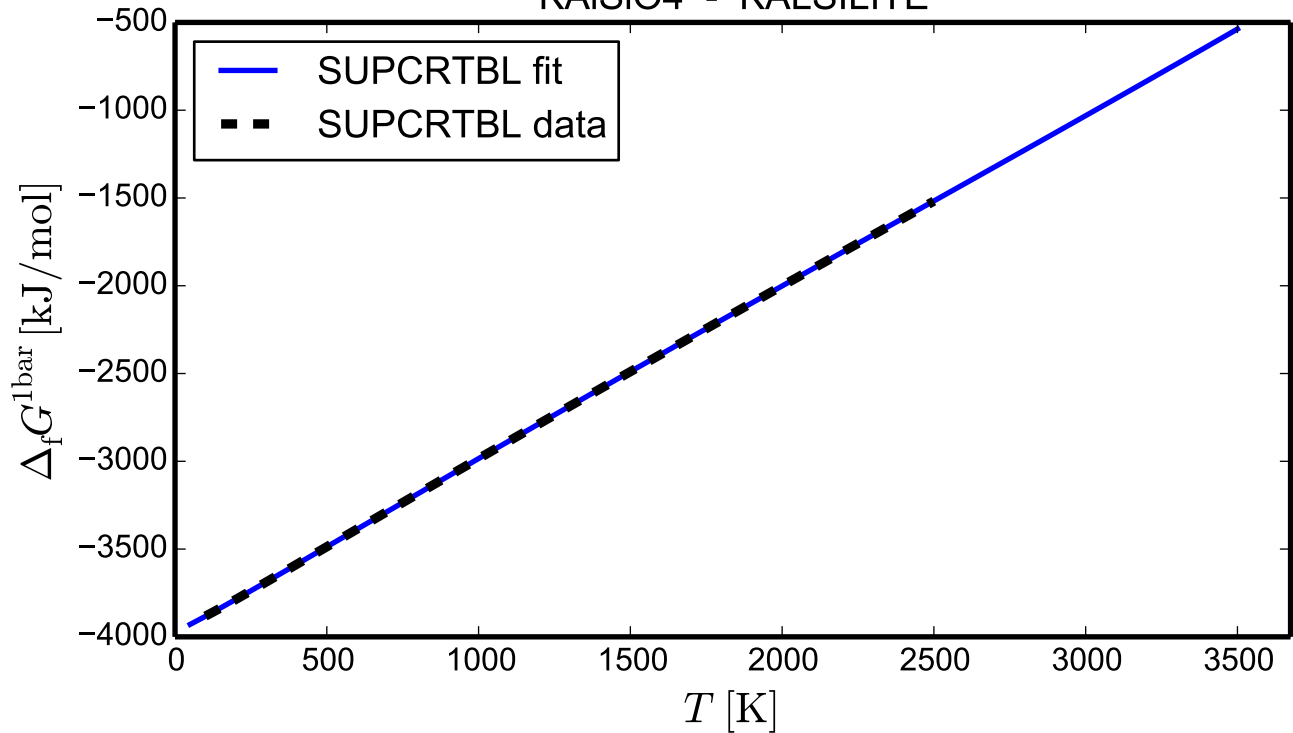
# KAISi3O8 - MICROCLINE



## Ca5P3O13H - HYDROXYAPATITE

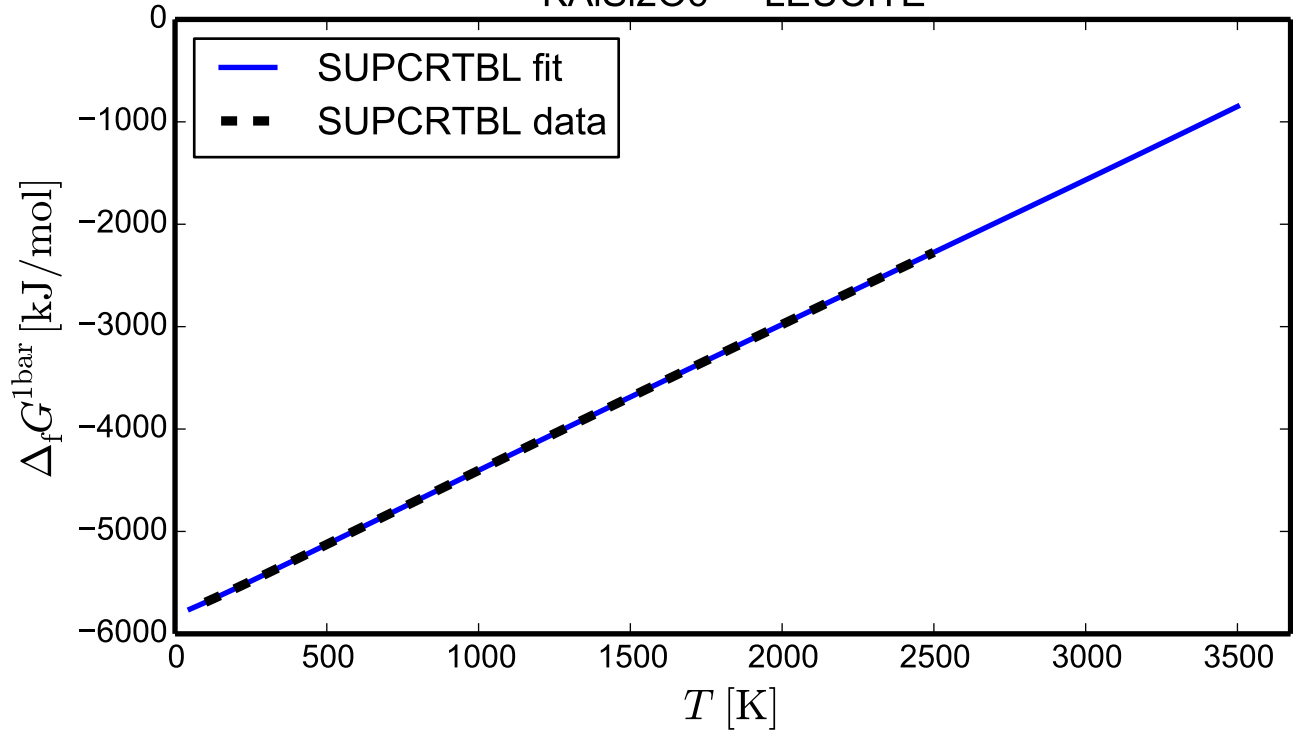


# KAISiO4 - KALSILITE

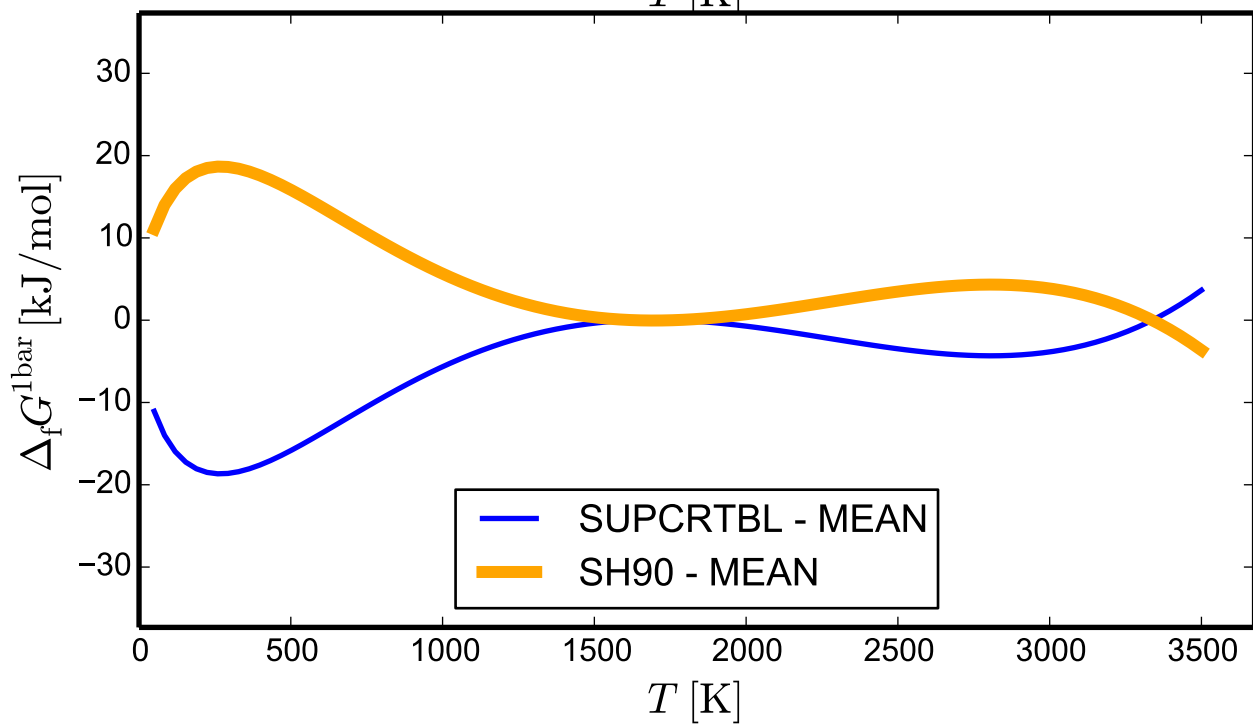
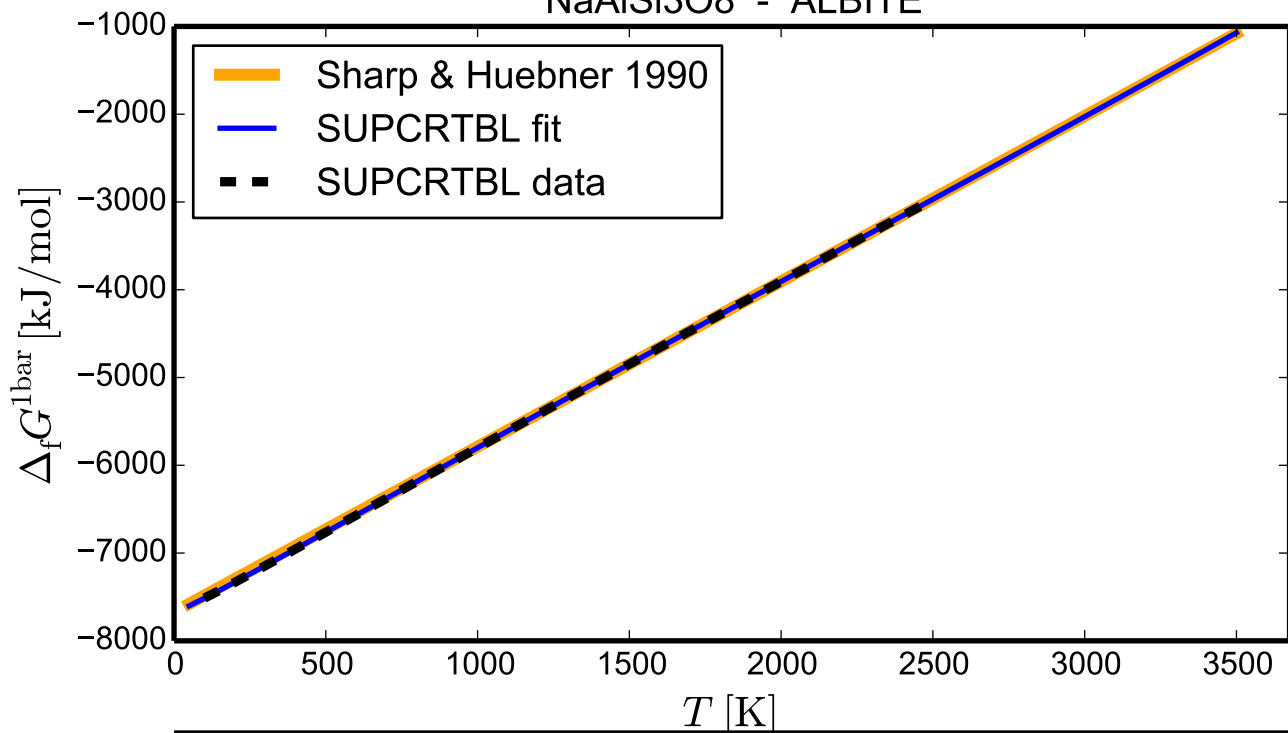


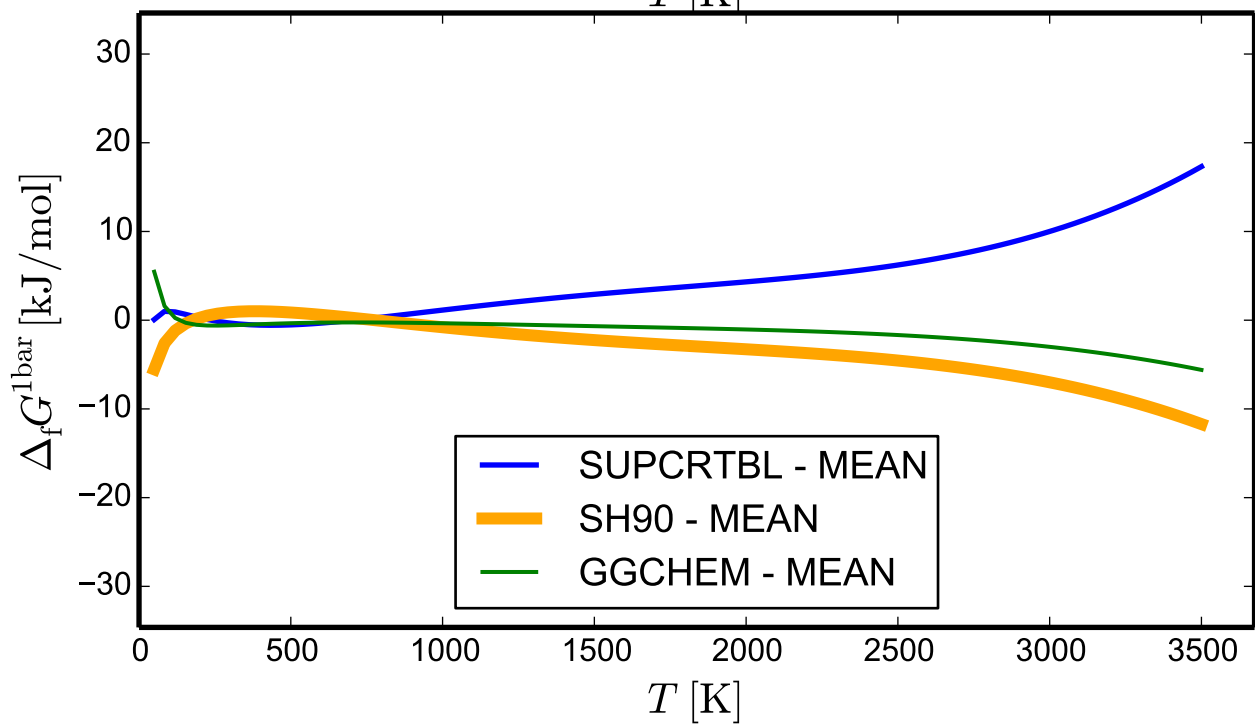
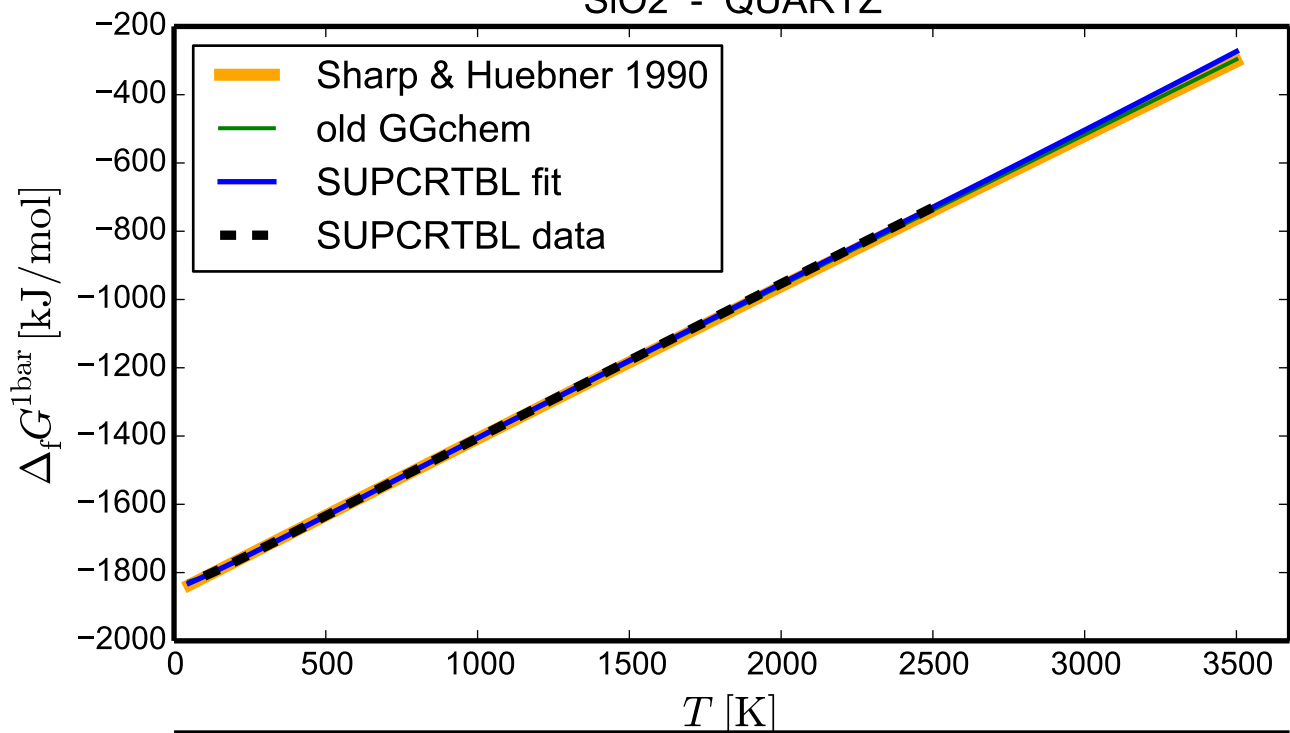


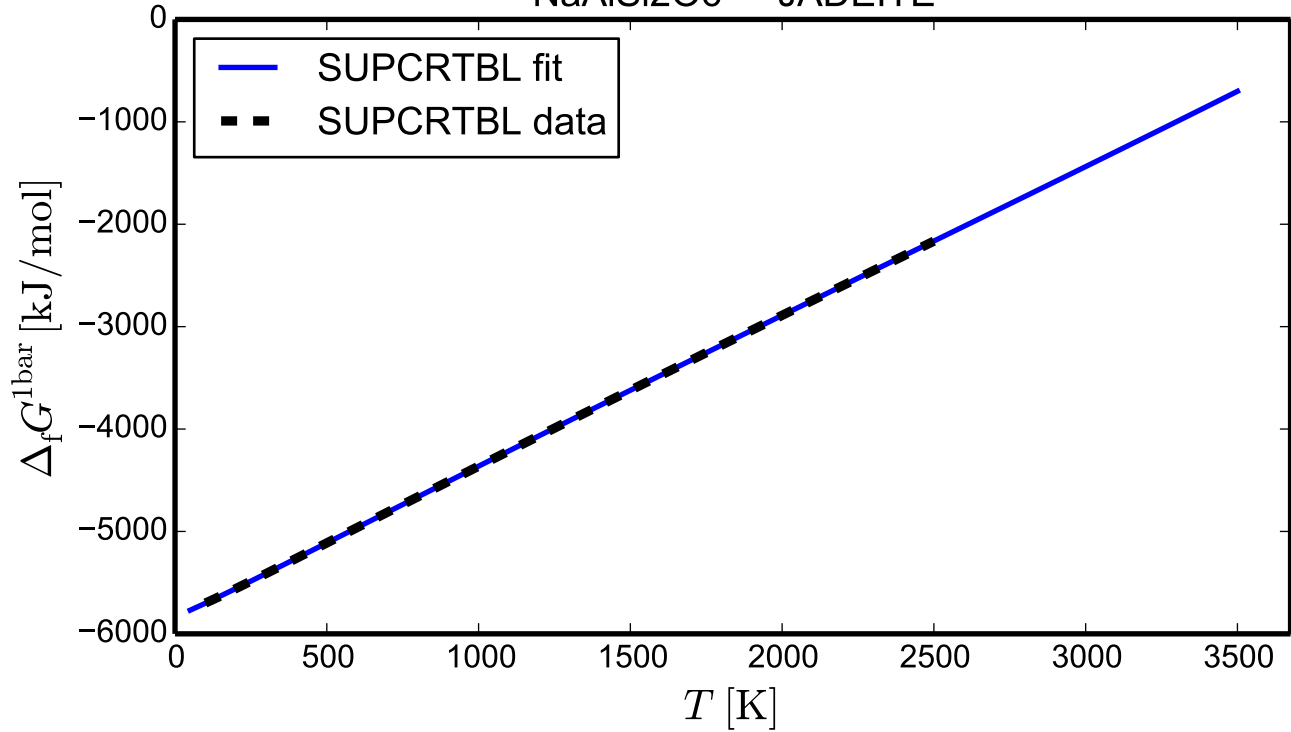
# KAISi2O6 - LEUCITE



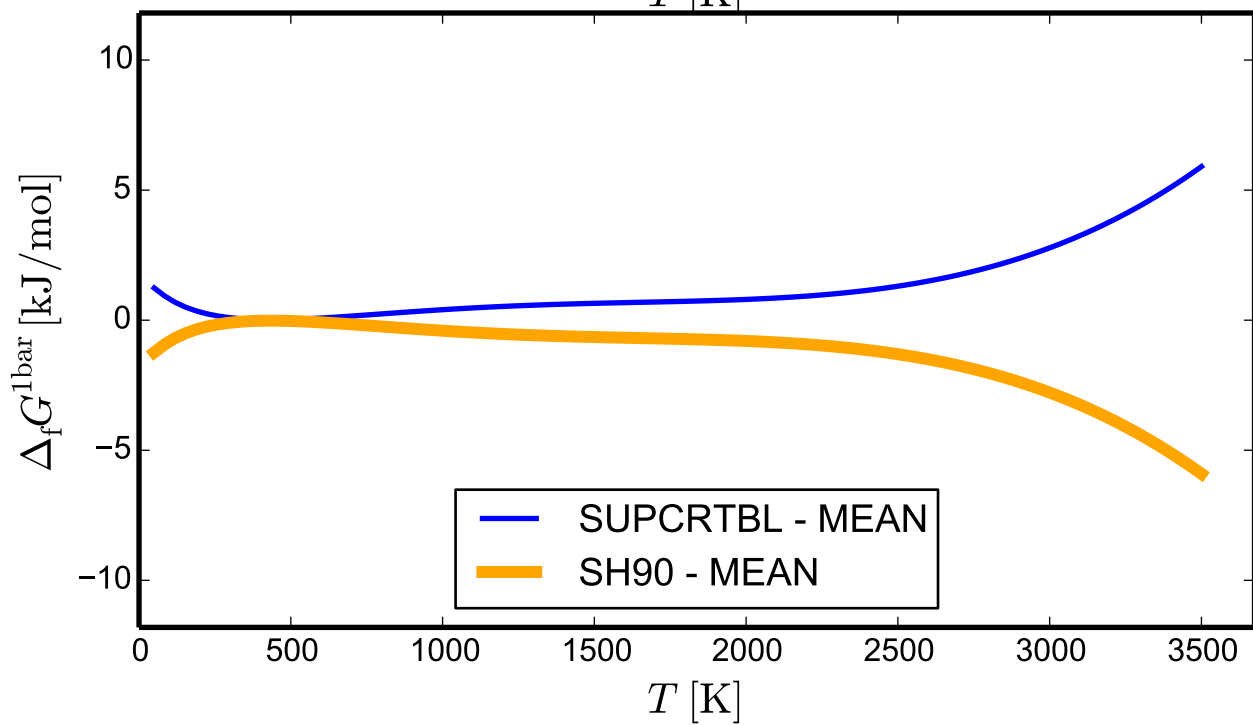
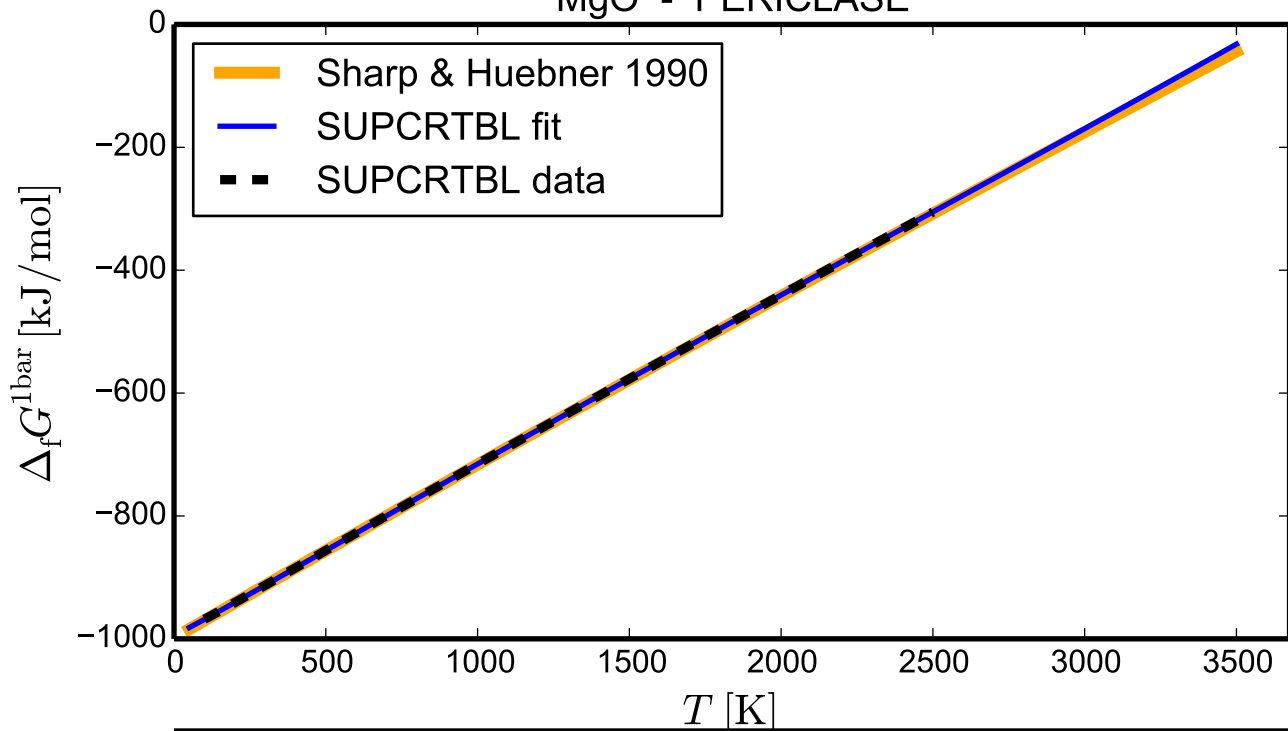
# NaAlSi3O8 - ALBITE

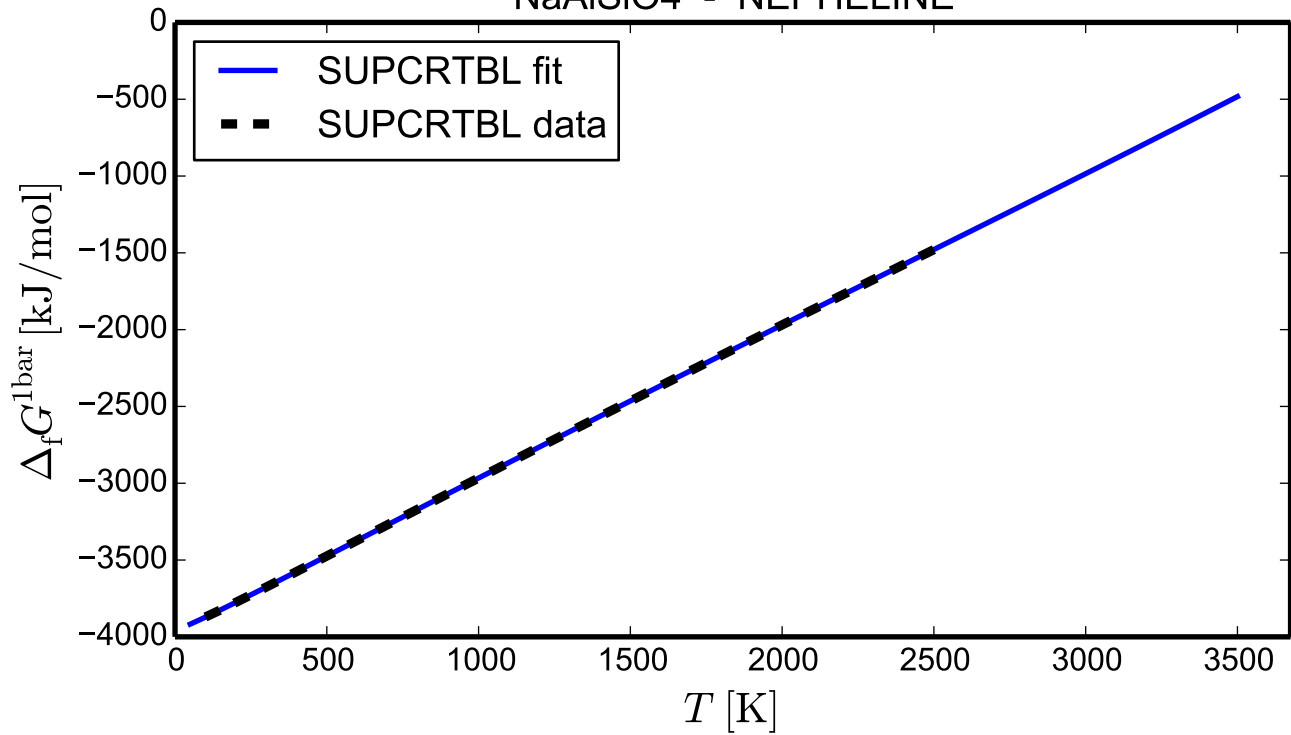


SiO<sub>2</sub> - QUARTZ

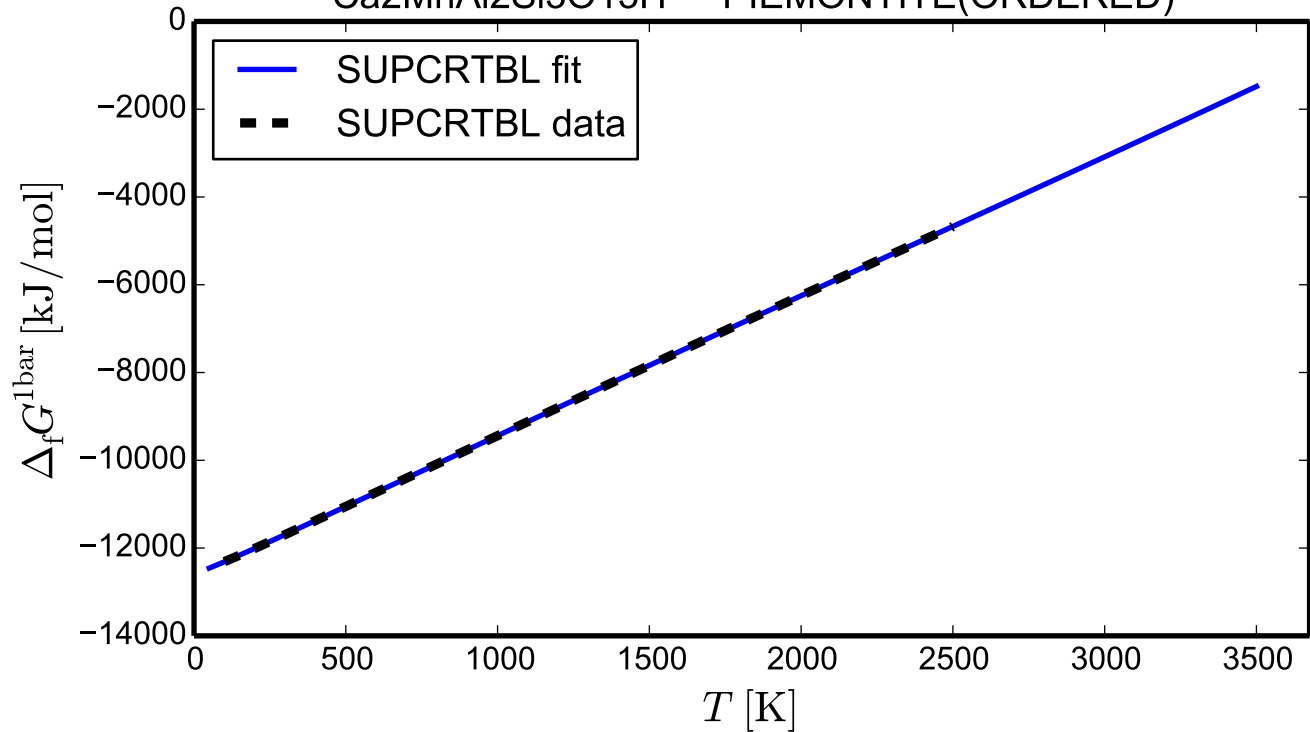
NaAlSi<sub>2</sub>O<sub>6</sub> - JADEITE

## MgO - PERICLASE

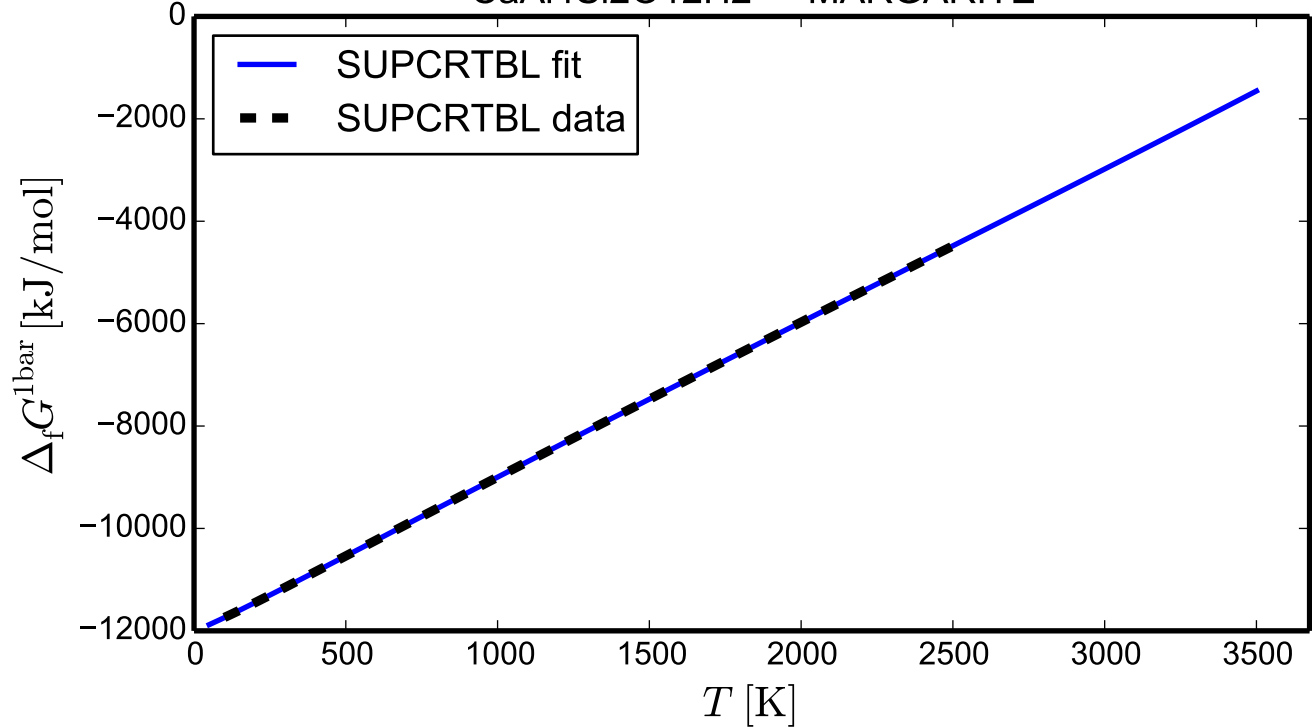


NaAlSiO<sub>4</sub> - NEPHELINE

## Ca2MnAl2Si3O13H - PIEMONTITE(ORDERED)

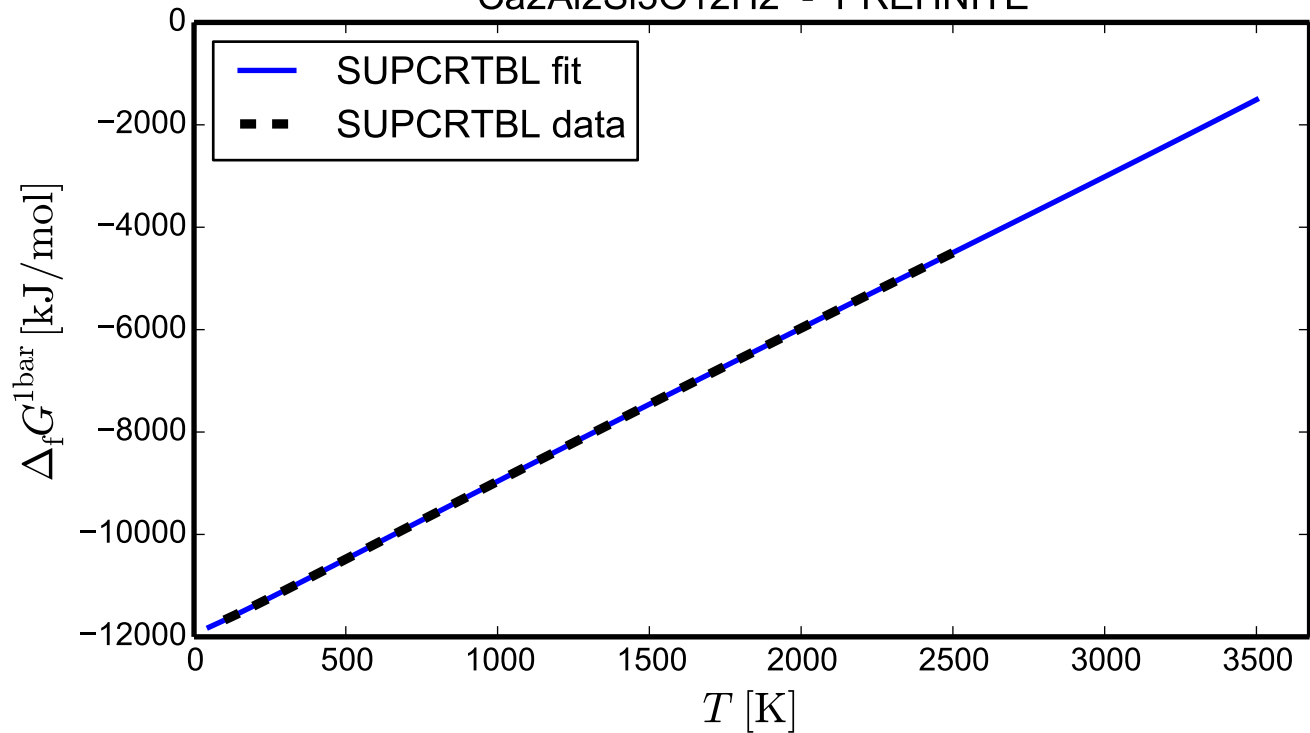


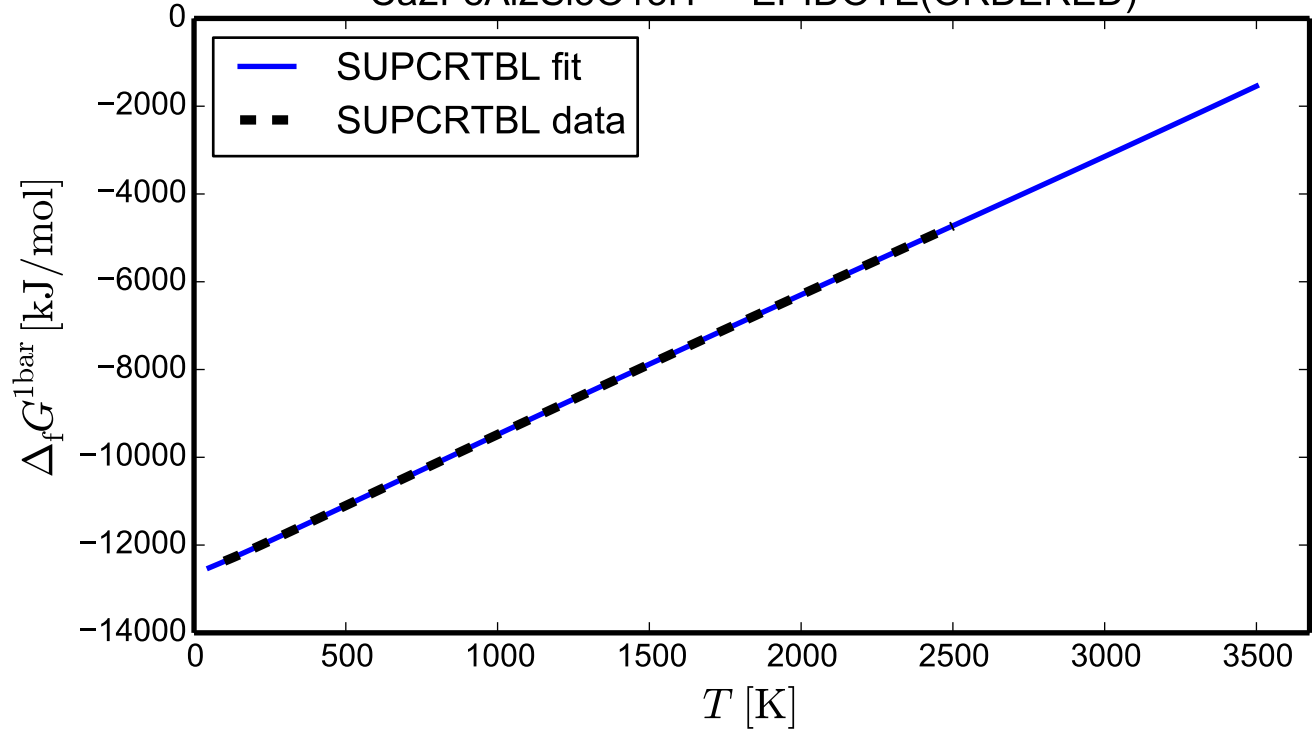
## CaAl4Si2O12H2 - MARGARITE



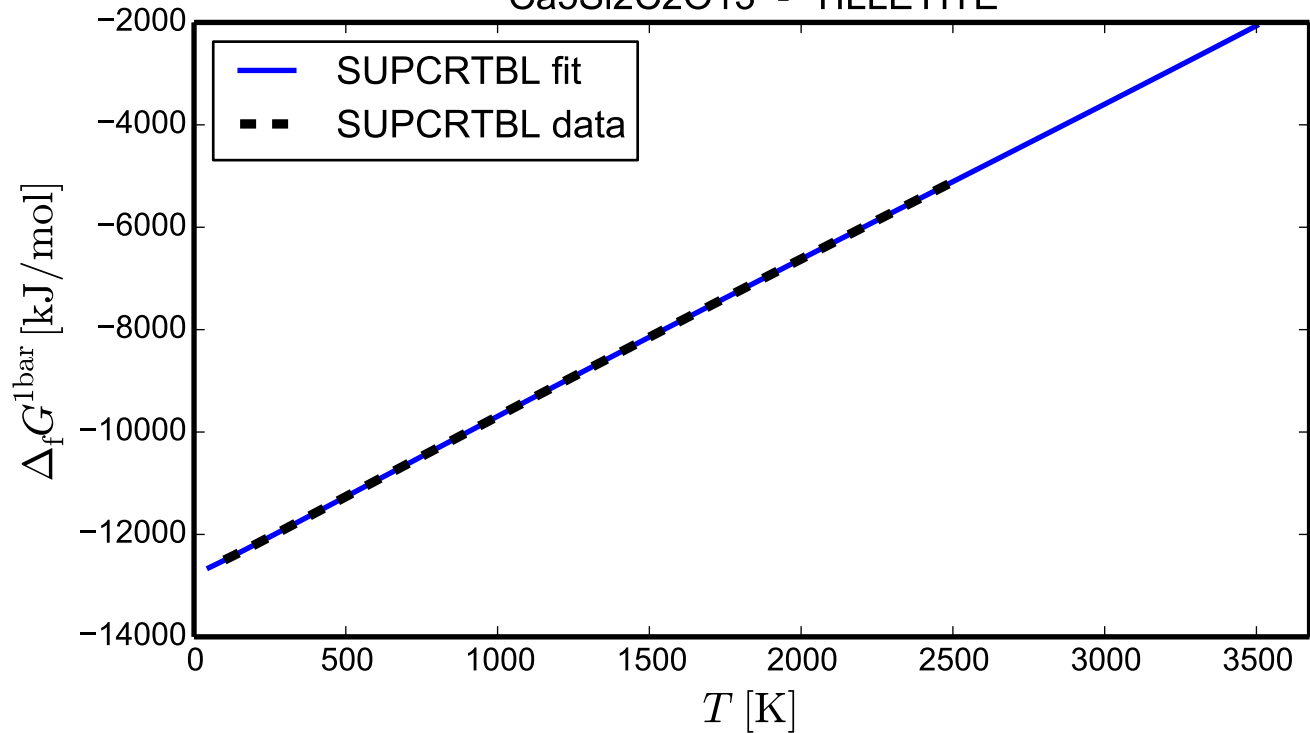


# Ca2Al2Si3O12H2 - PREHNITE

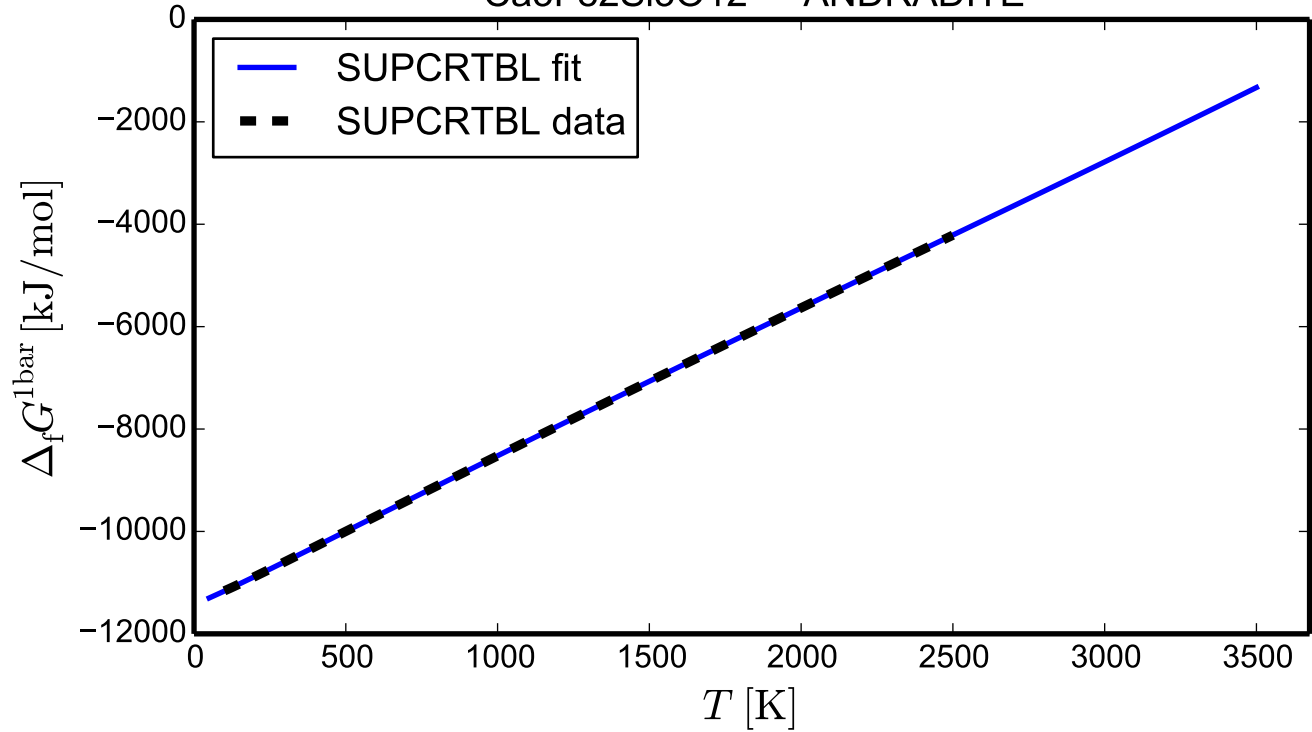


Ca<sub>2</sub>FeAl<sub>2</sub>Si<sub>3</sub>O<sub>13</sub>H - EPIDOTE(ORDERED)

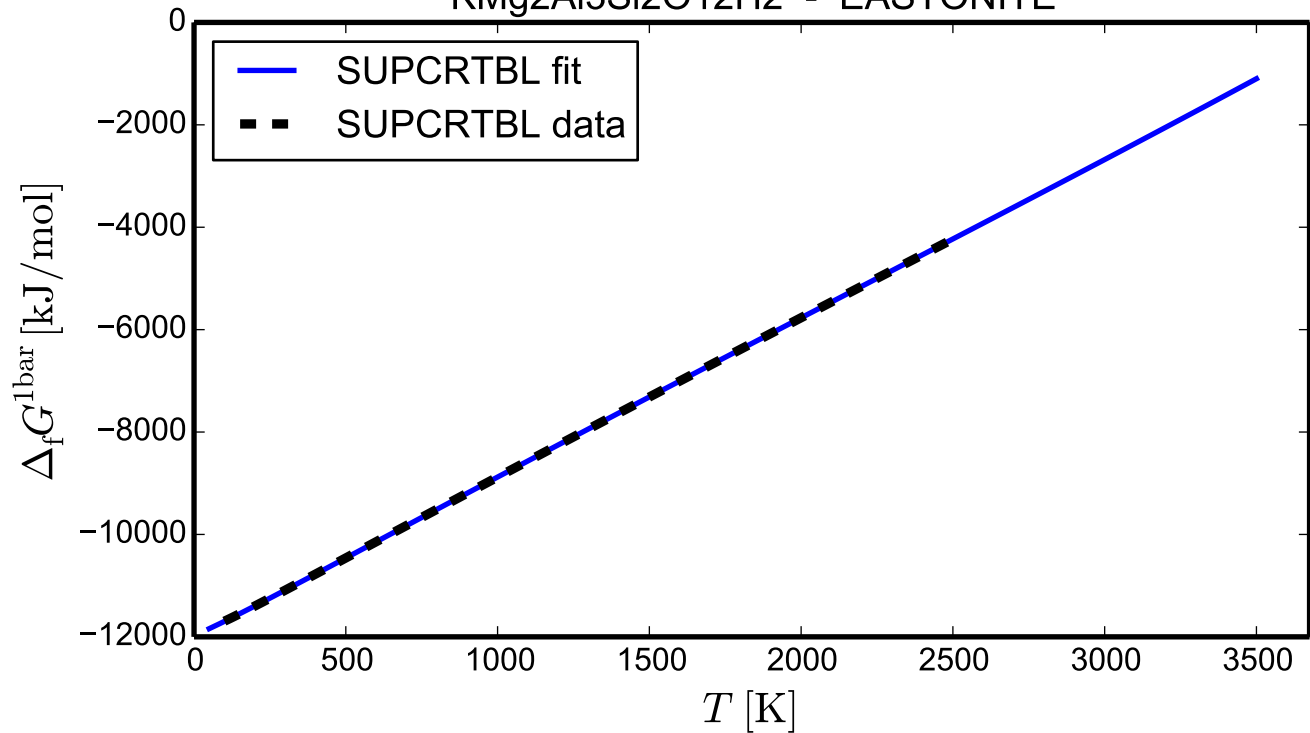
## Ca5Si2C2O13 - TILLEYITE



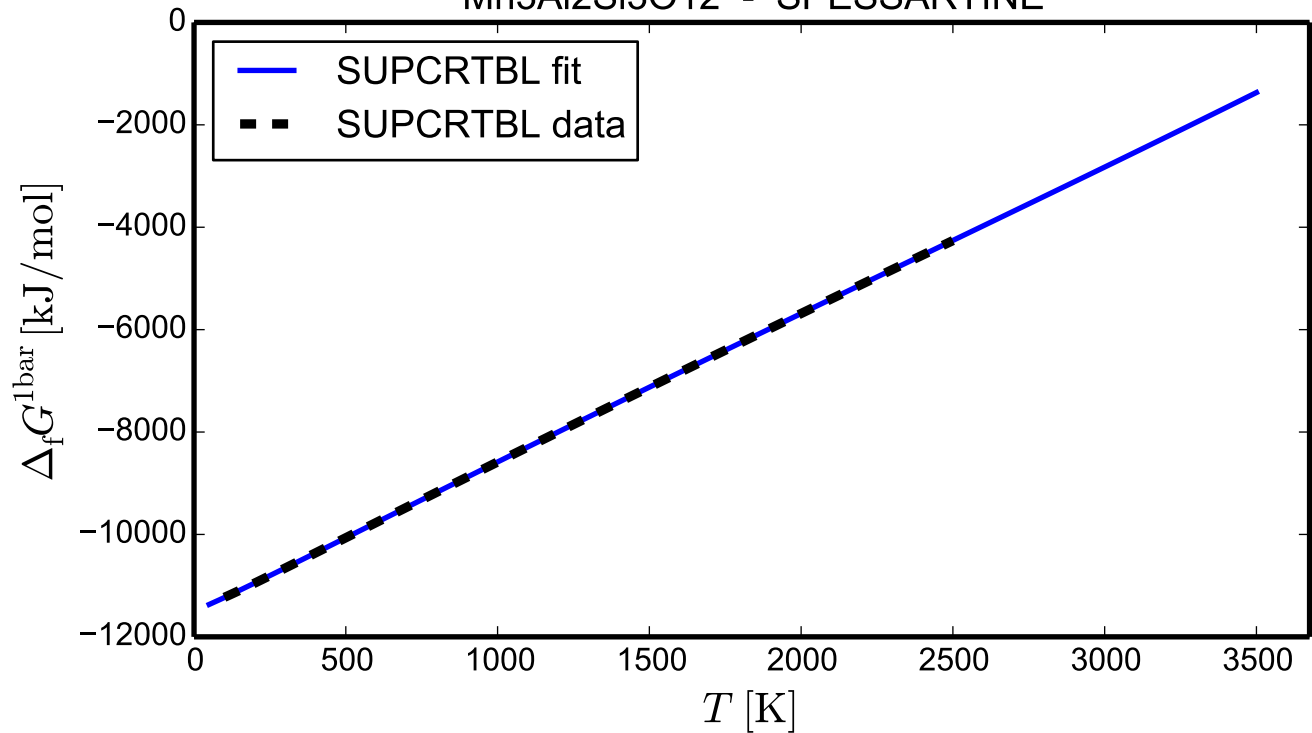
# Ca3Fe2Si3O12 - ANDRADITE



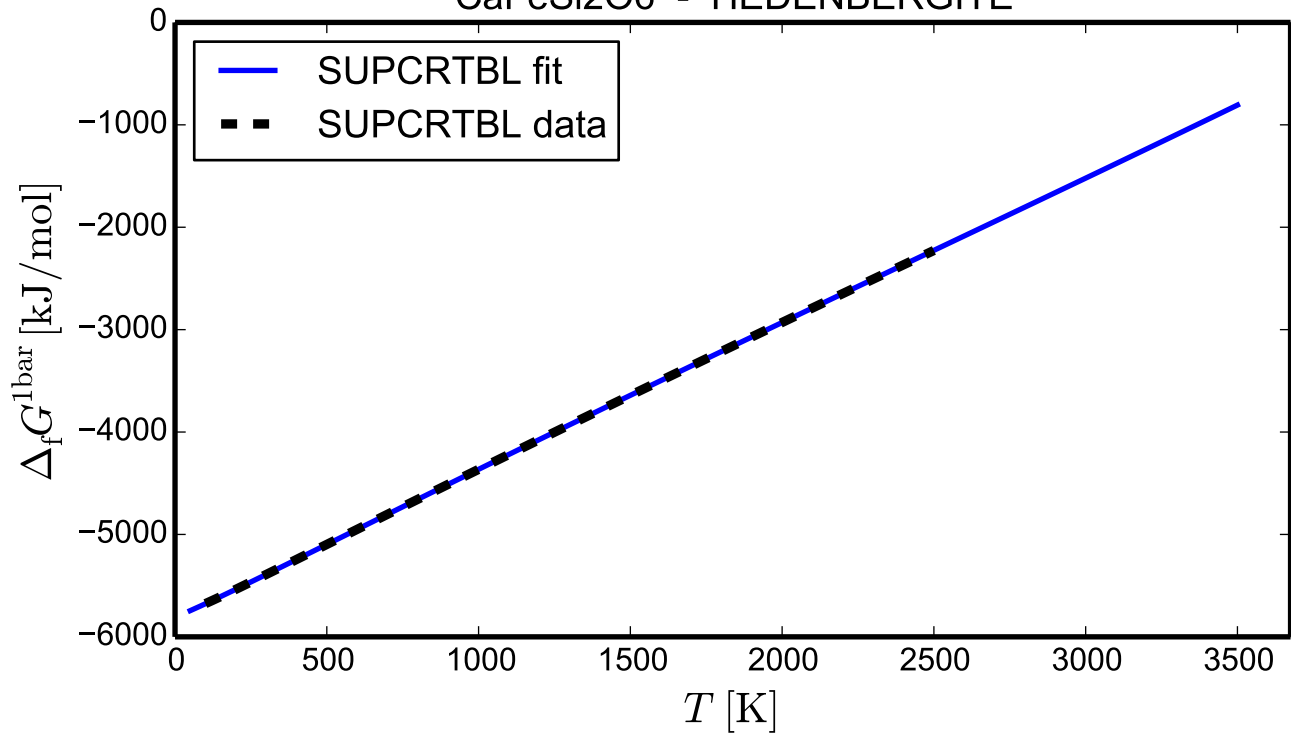
## KMg2Al3Si2O12H2 - EASTONITE



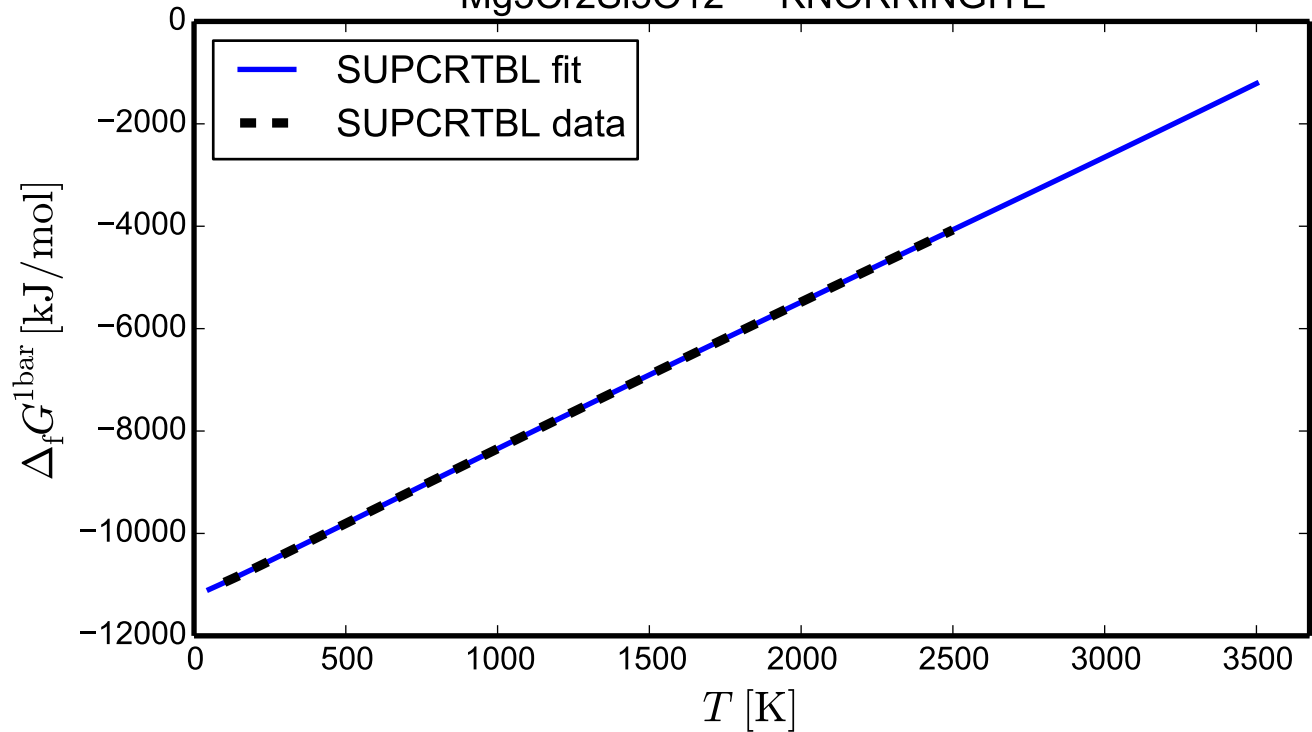
# Mn3Al2Si3O12 - SPESSARTINE



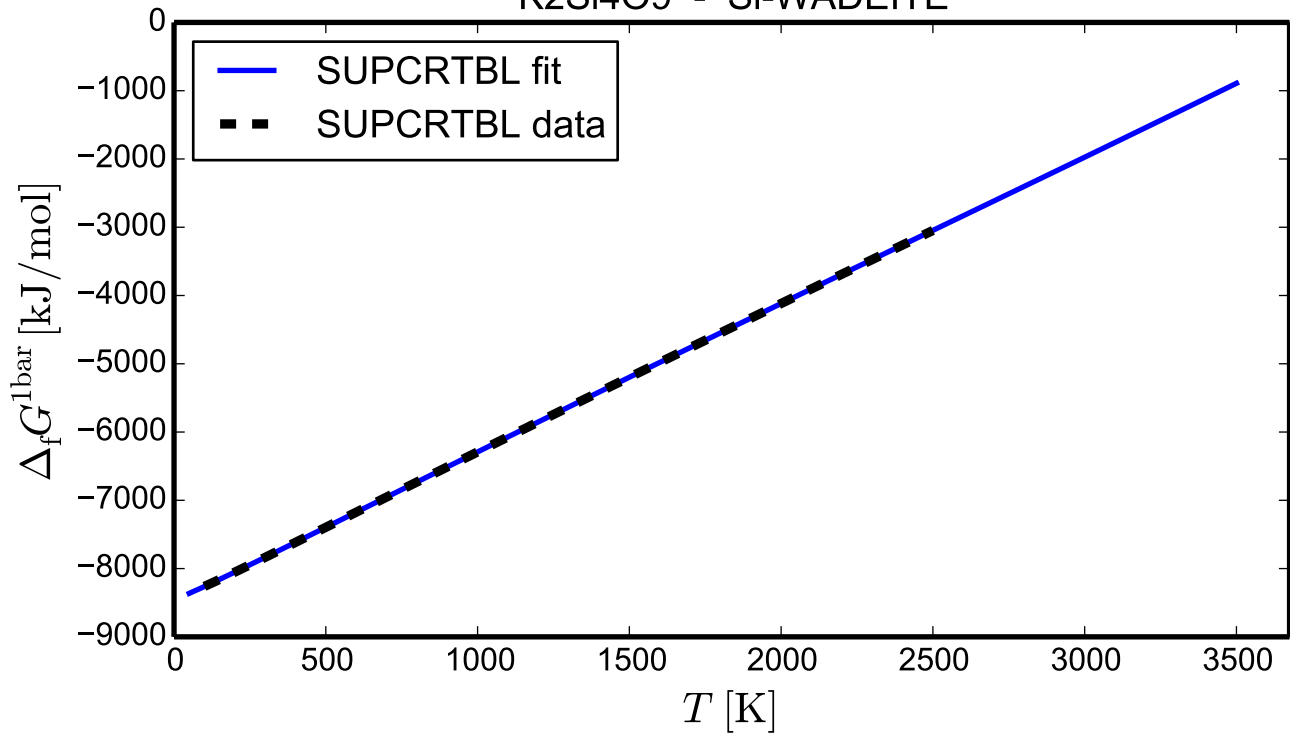
## CaFeSi2O6 - HEDENBERGITE



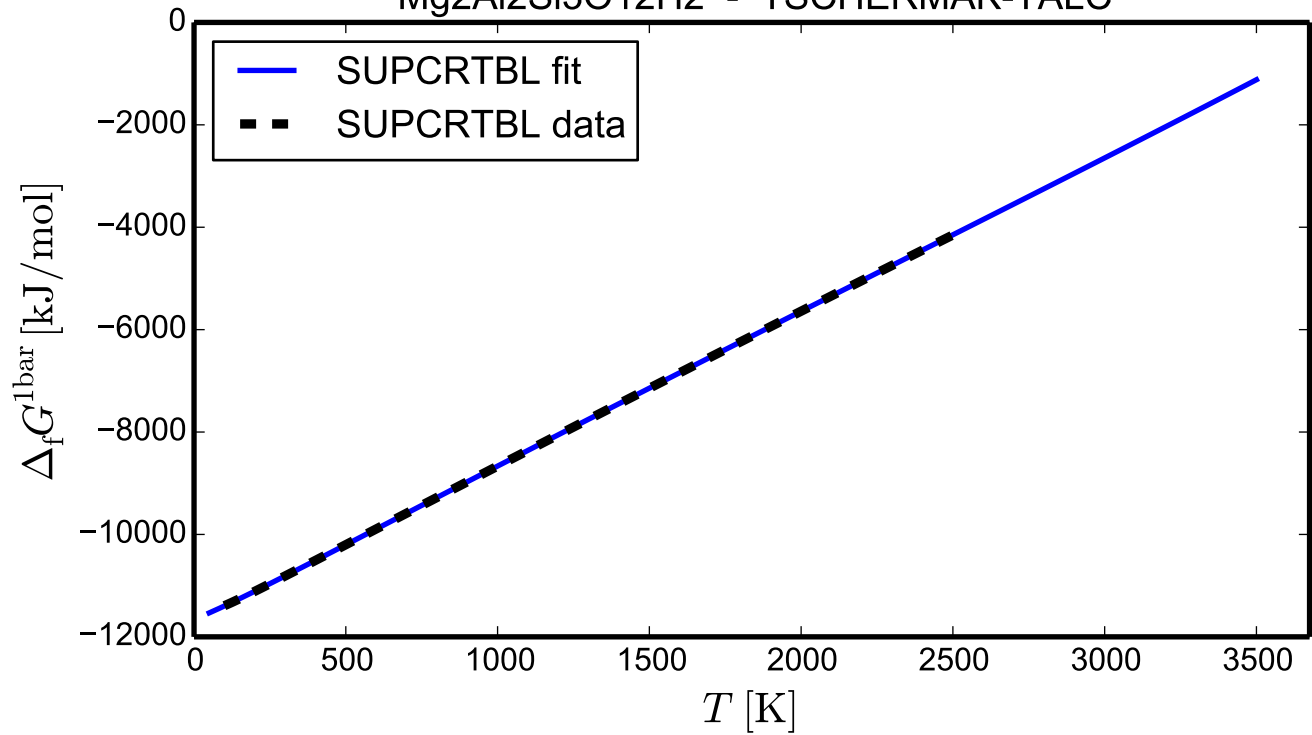
# Mg3Cr2Si3O12 - KNORRINGITE



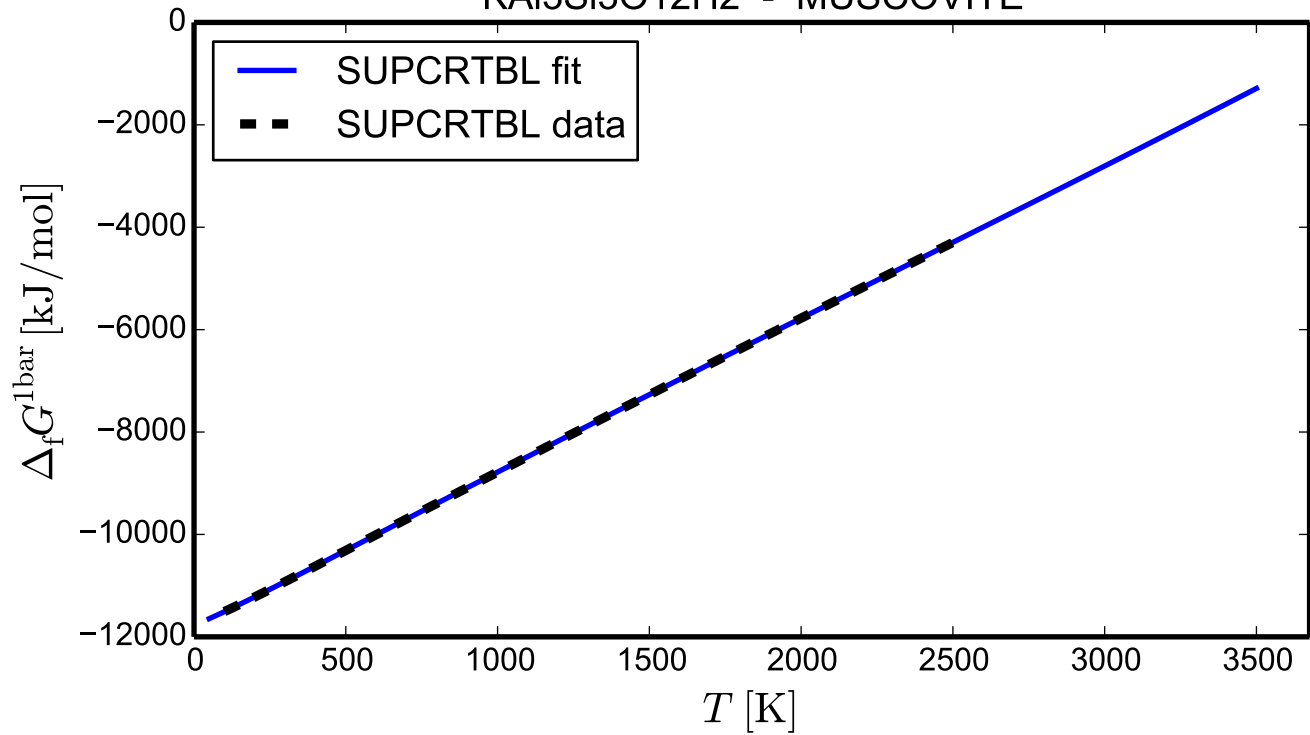


K<sub>2</sub>Si<sub>4</sub>O<sub>9</sub> - Si-WADEITE

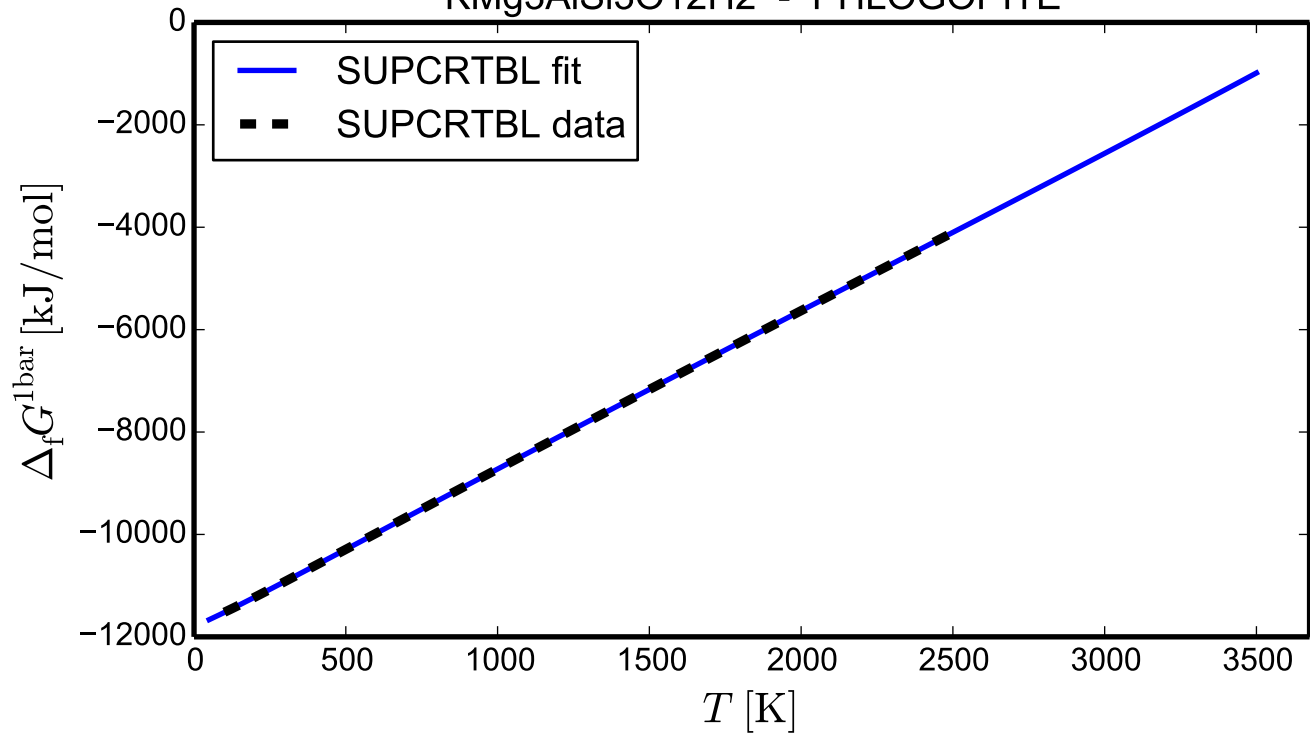
Mg<sub>2</sub>Al<sub>2</sub>Si<sub>3</sub>O<sub>12</sub>H<sub>2</sub> - TSCHERMAK-TALC

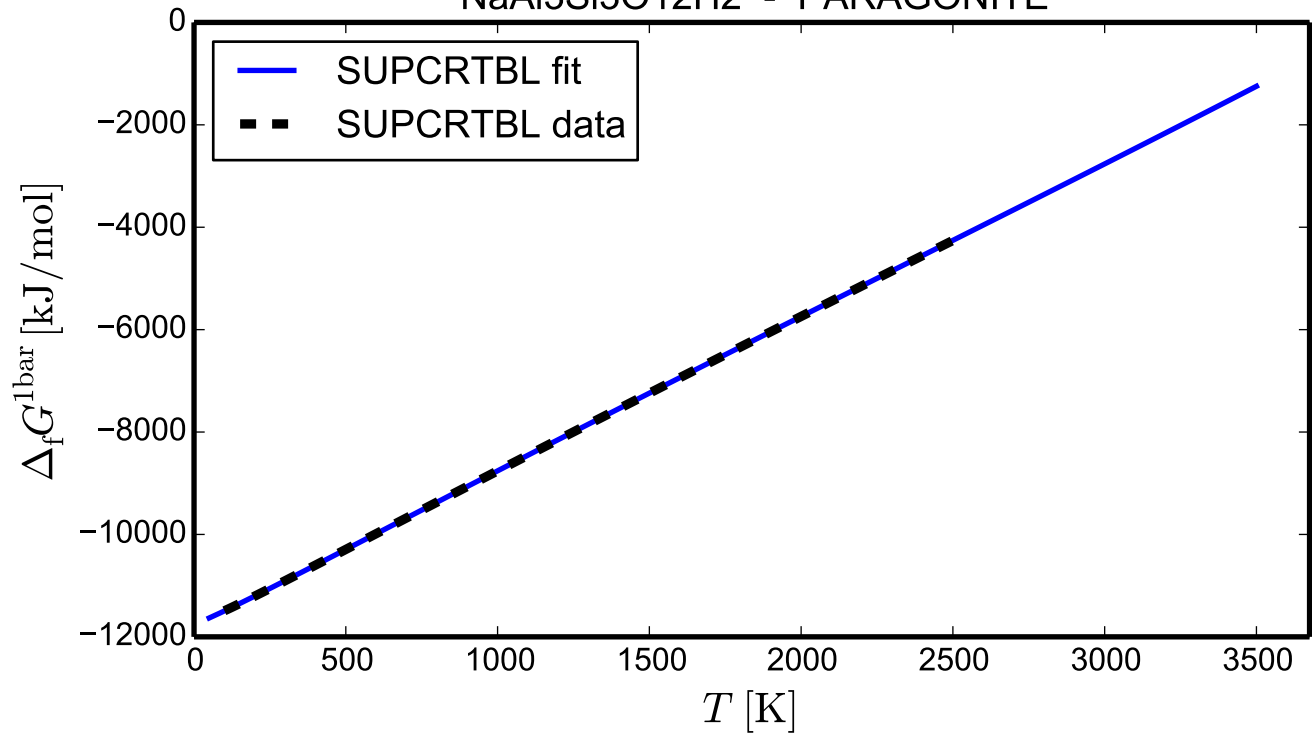


## KAl3Si3O12H2 - MUSCOVITE

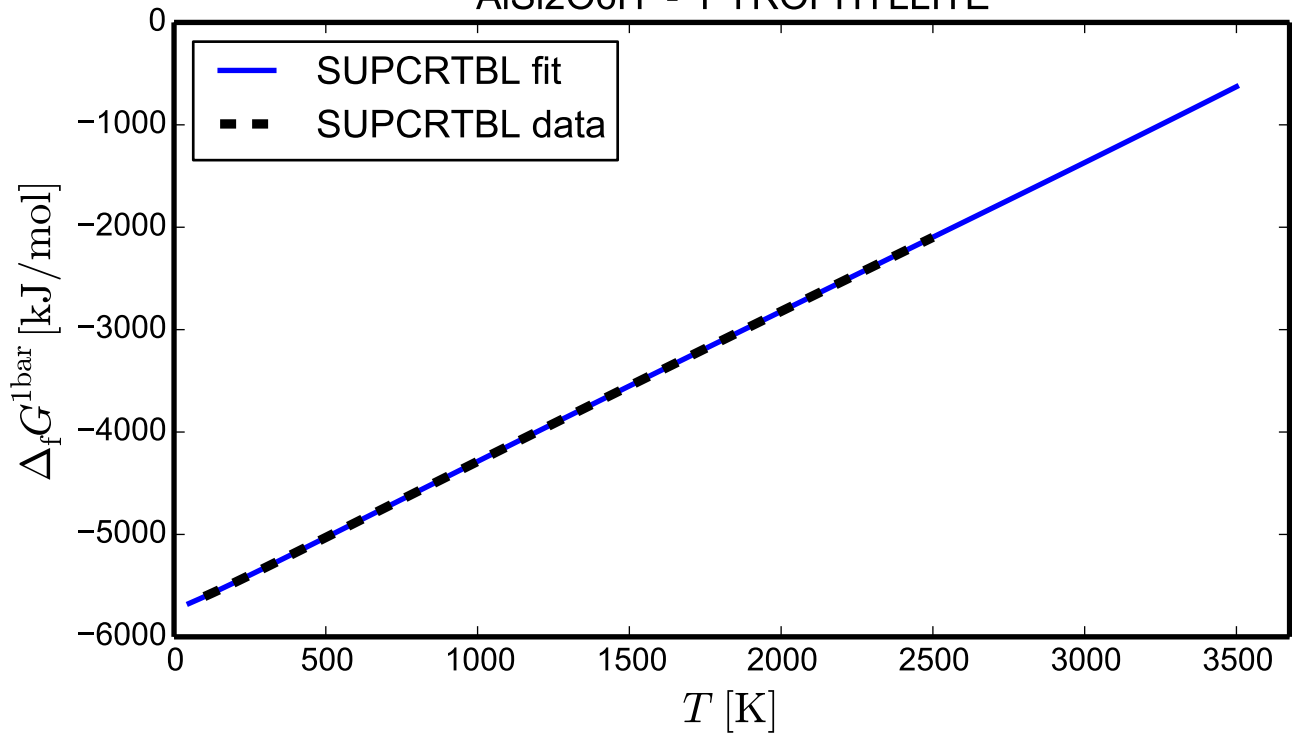


## KMg3AlSi3O12H2 - PHLOGOPITE

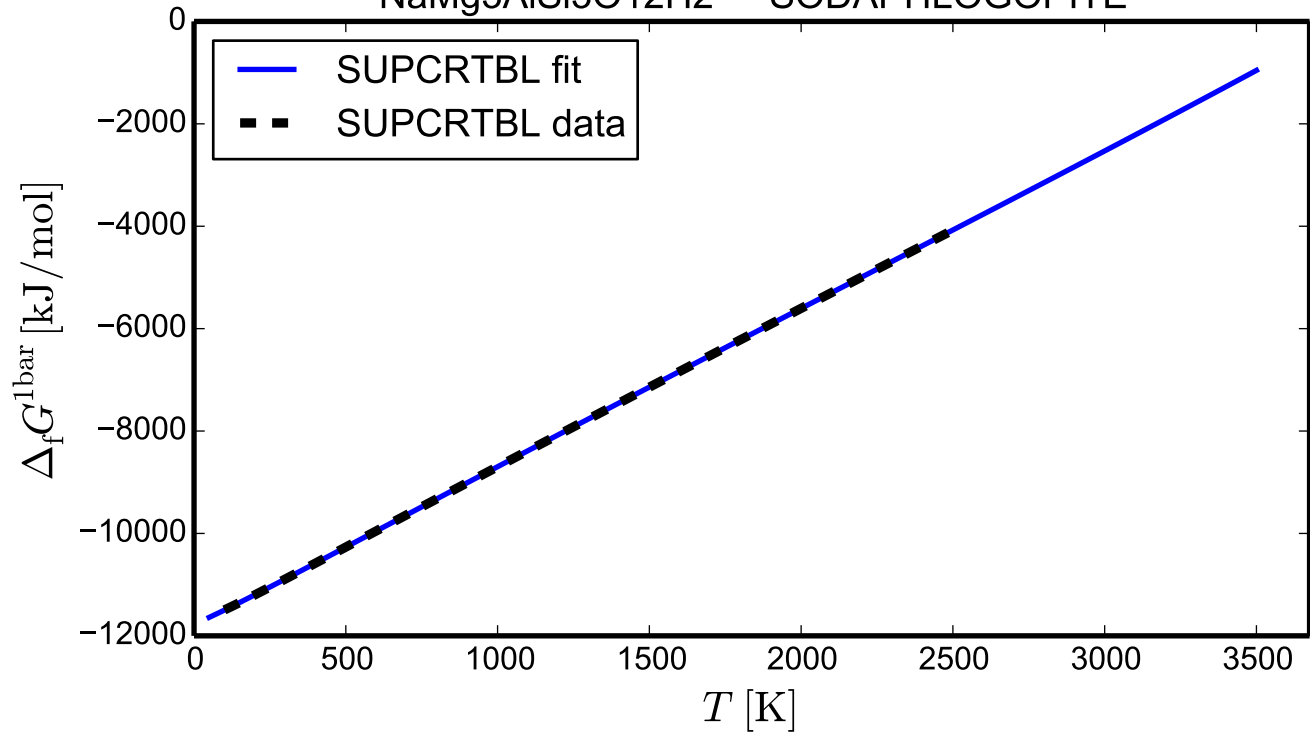


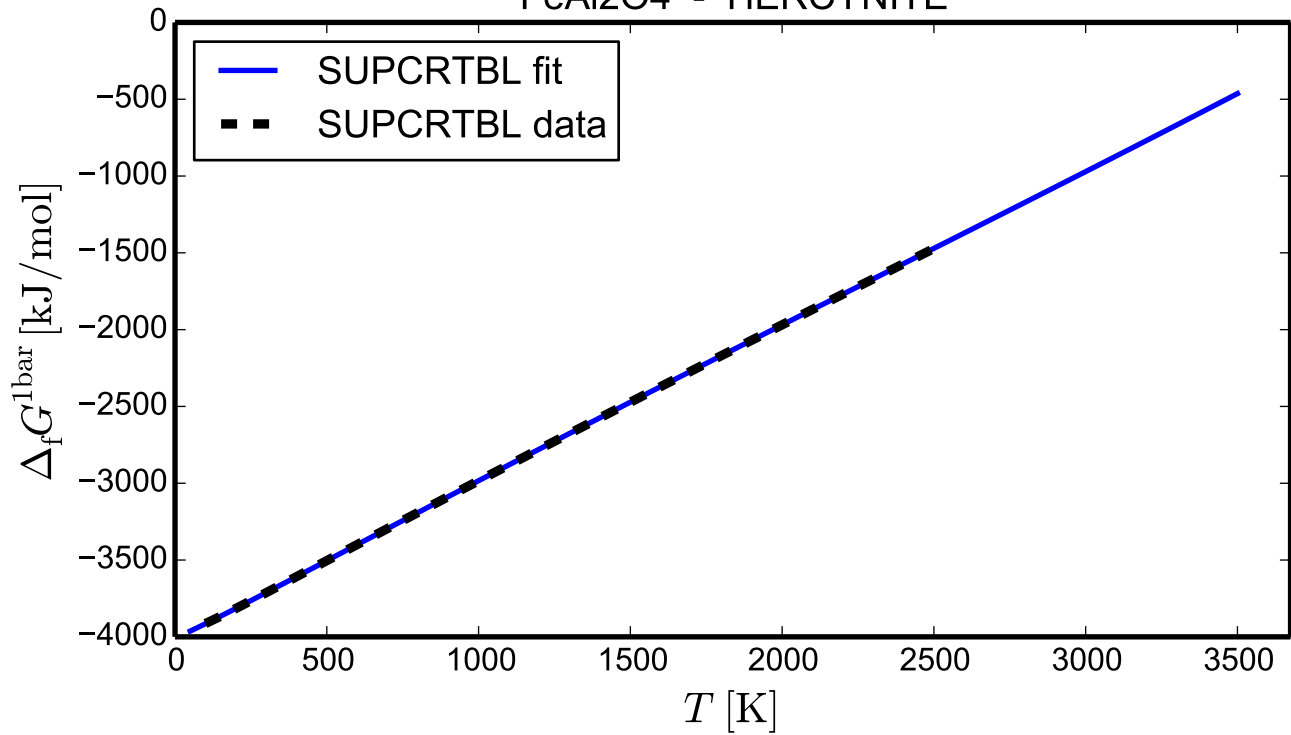
NaAl<sub>3</sub>Si<sub>3</sub>O<sub>12</sub>H<sub>2</sub> - PARAGONITE

# AlSi2O6H - PYROPHYLLITE



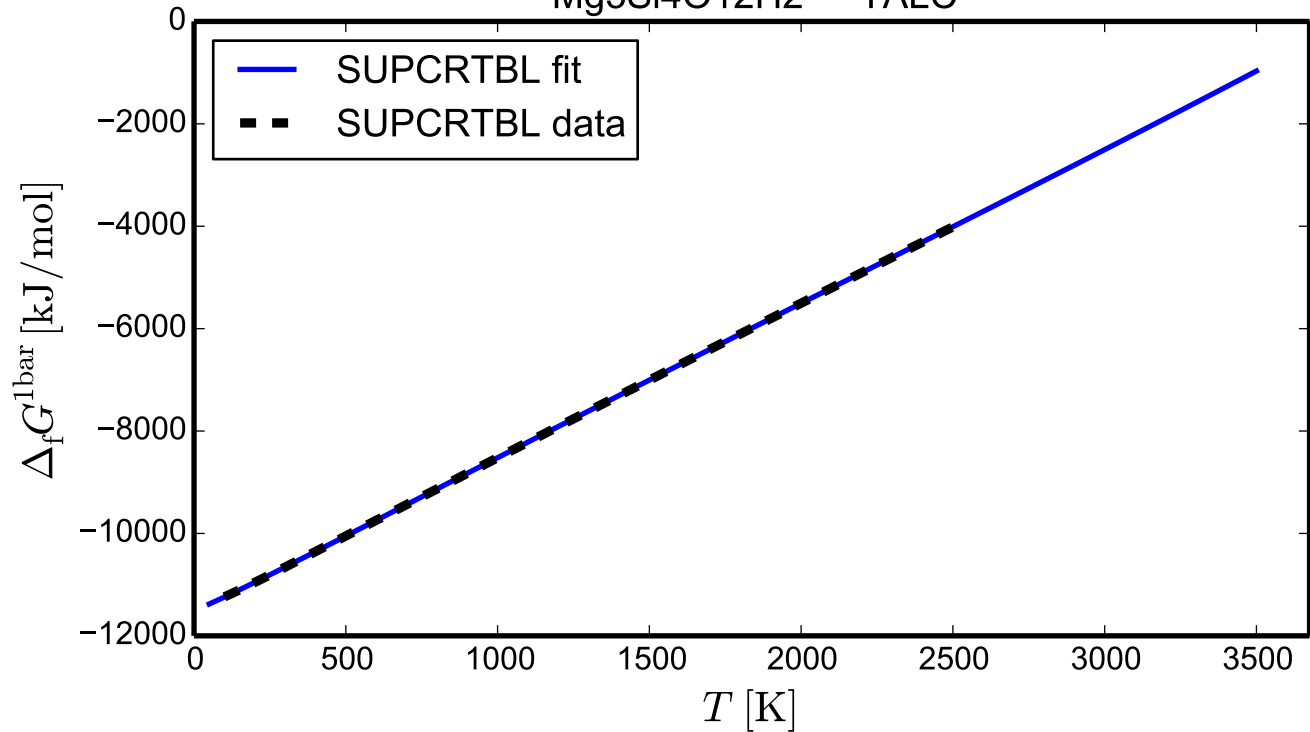
## NaMg3AlSi3O12H2 - SODAPHLOGOPITE



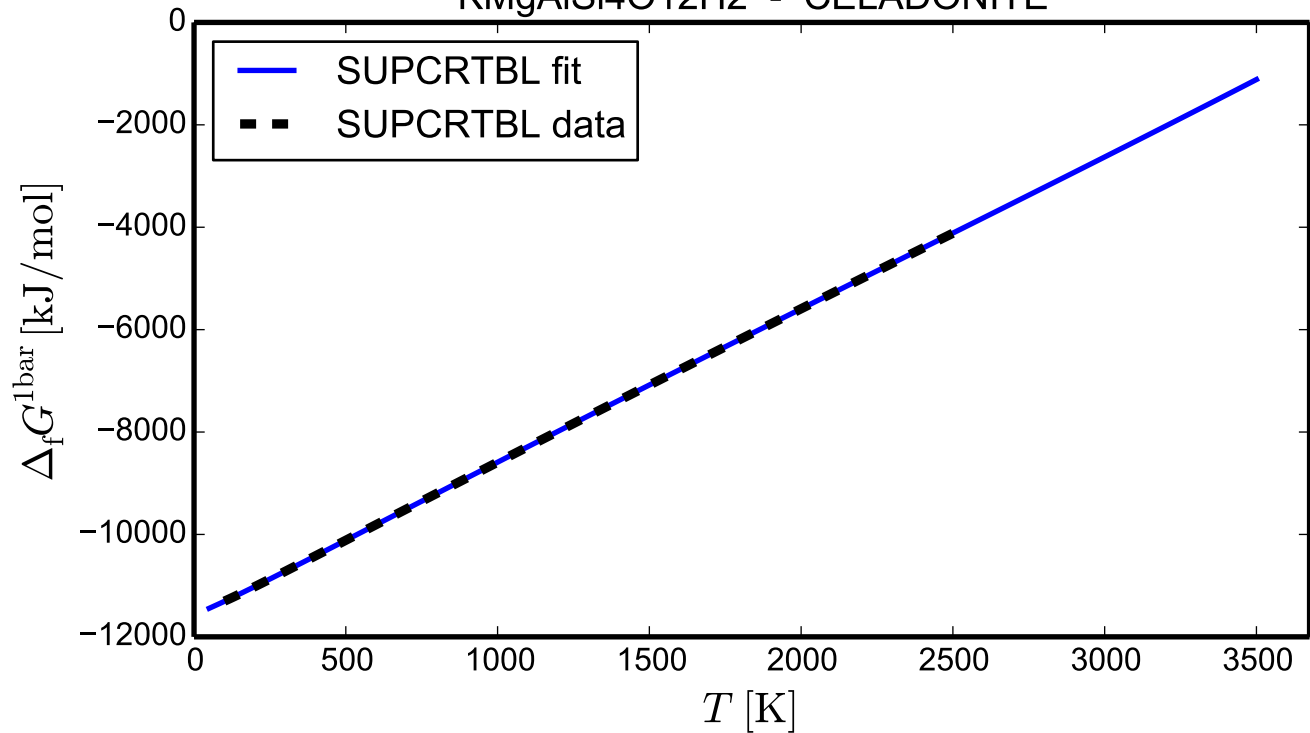
FeAl<sub>2</sub>O<sub>4</sub> - HERCYNITE



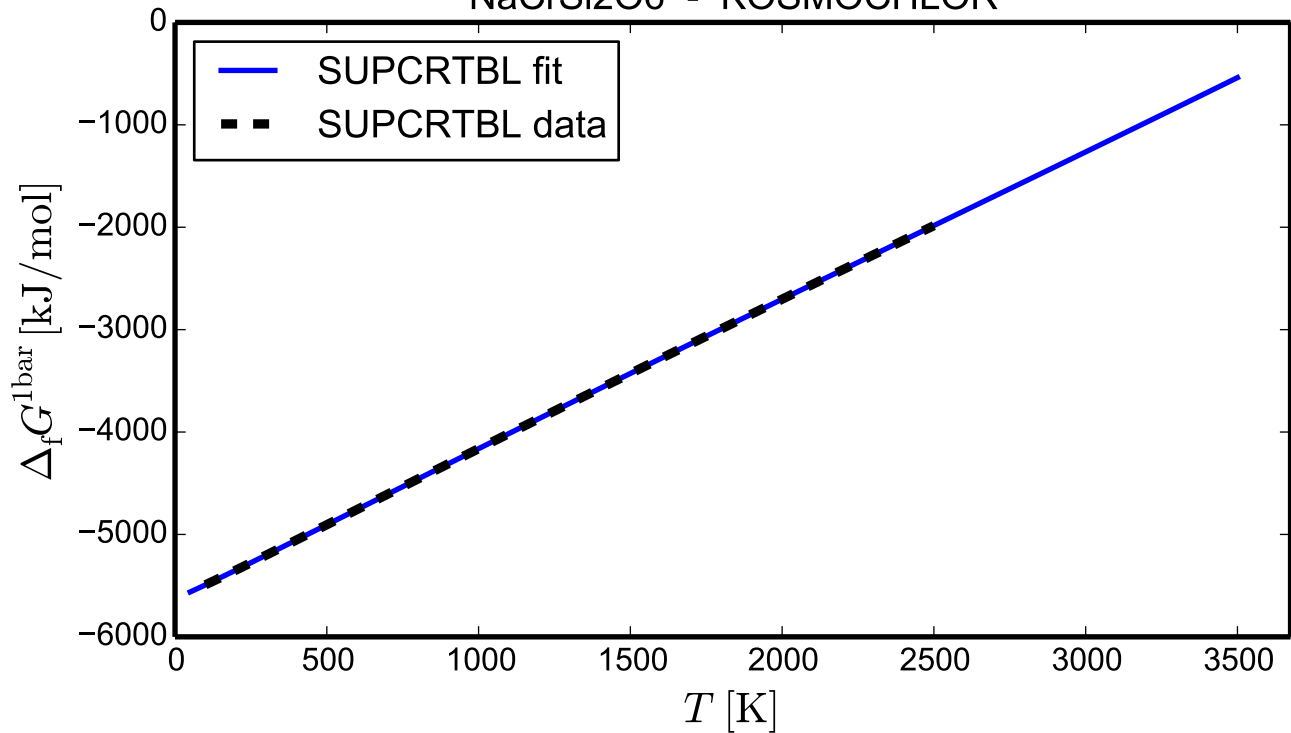
## Mg3Si4O12H2 - TALC



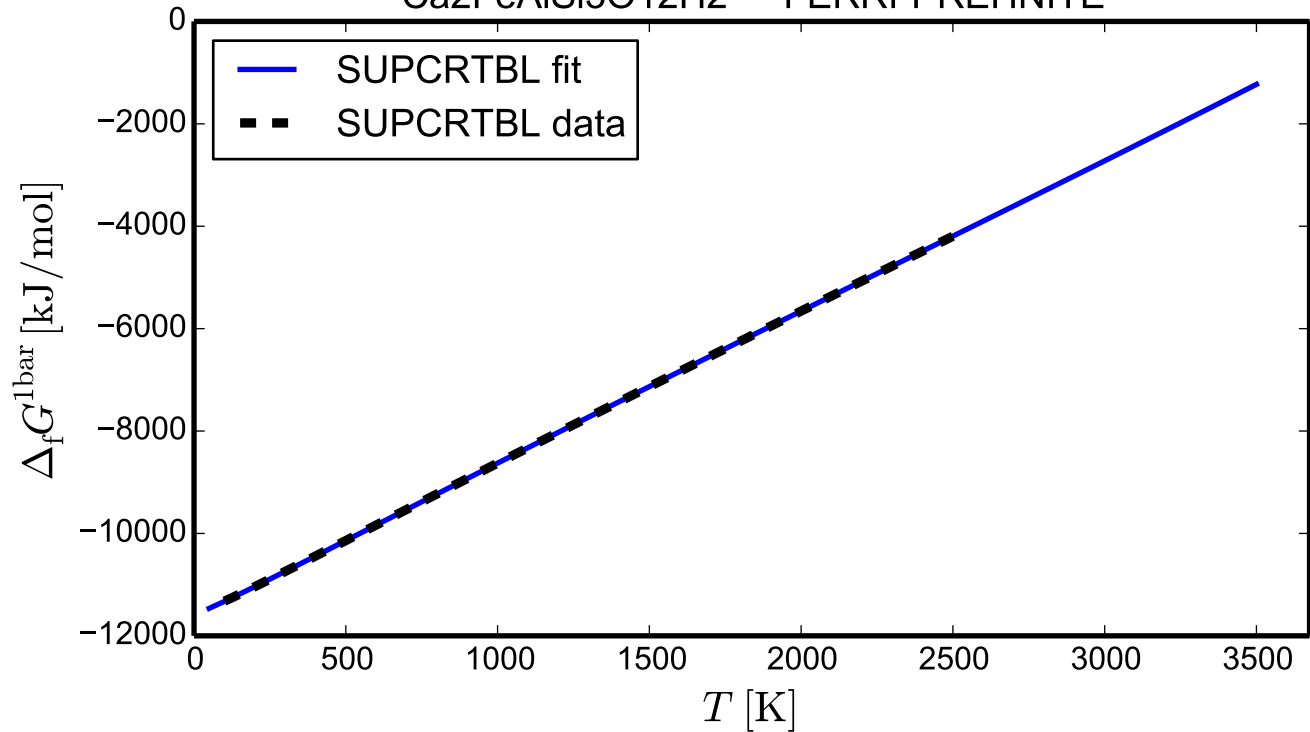
## KMgAlSi4O12H2 - CELADONITE



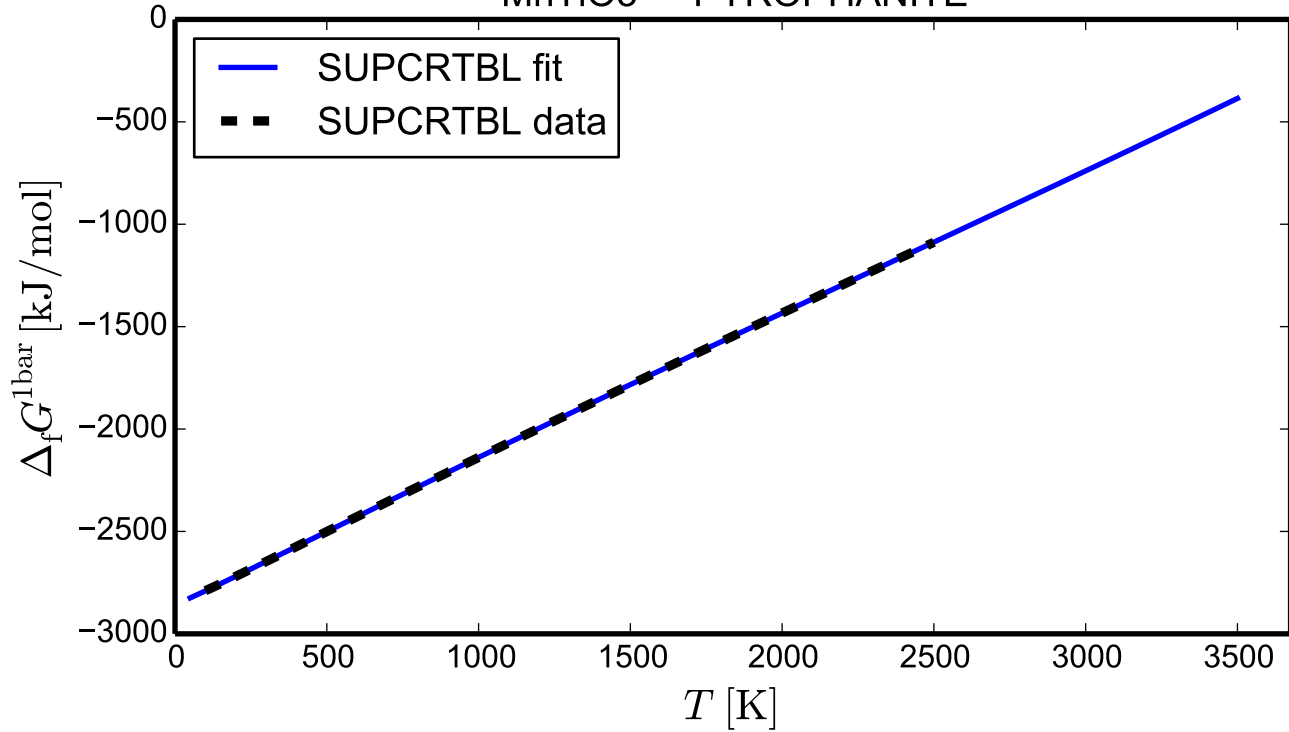
## NaCrSi2O6 - KOSMOCHLOR

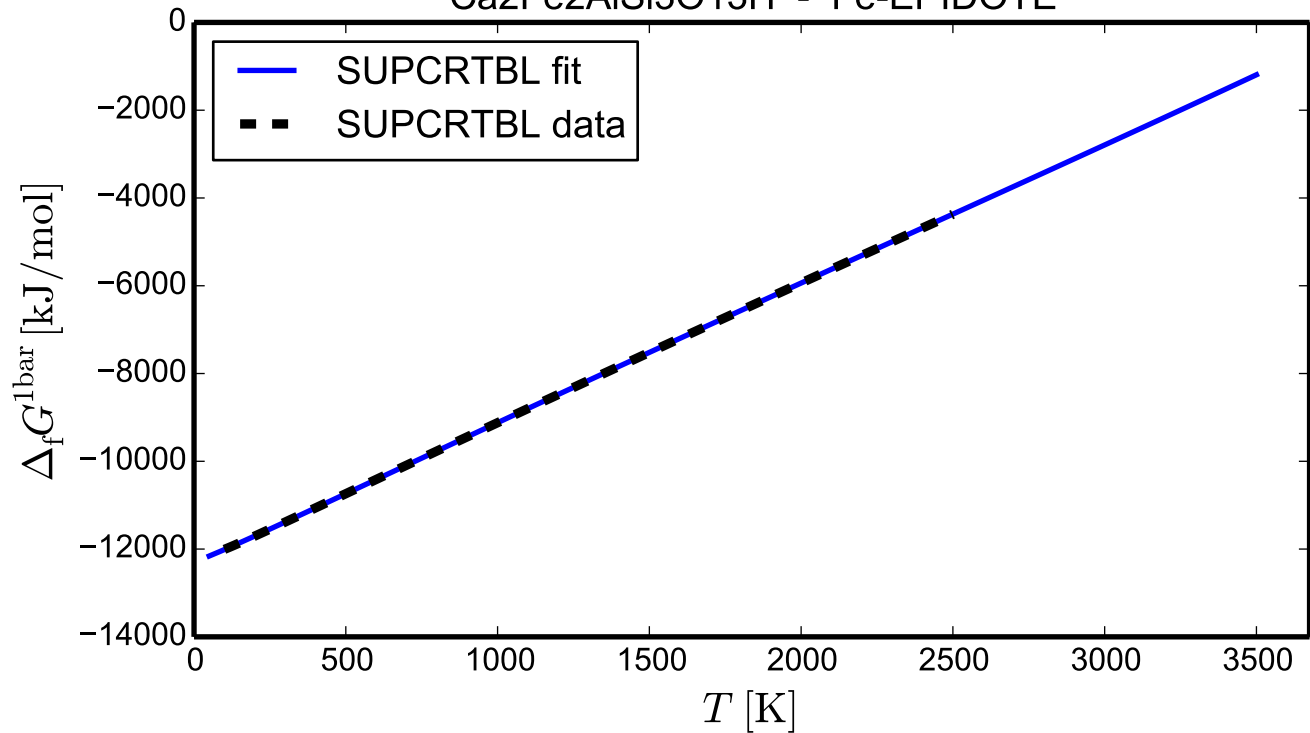


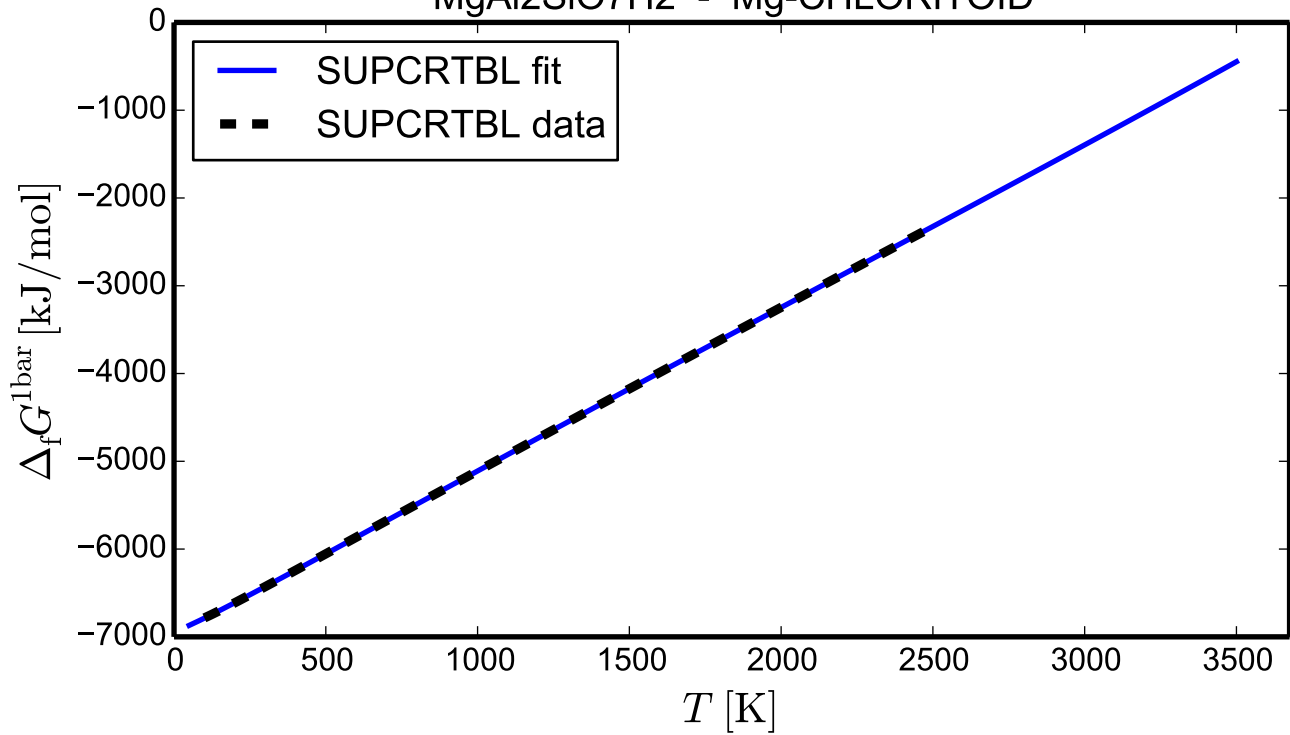
# Ca<sub>2</sub>FeAlSi<sub>3</sub>O<sub>12</sub>H<sub>2</sub> - FERRI-PREHNITE



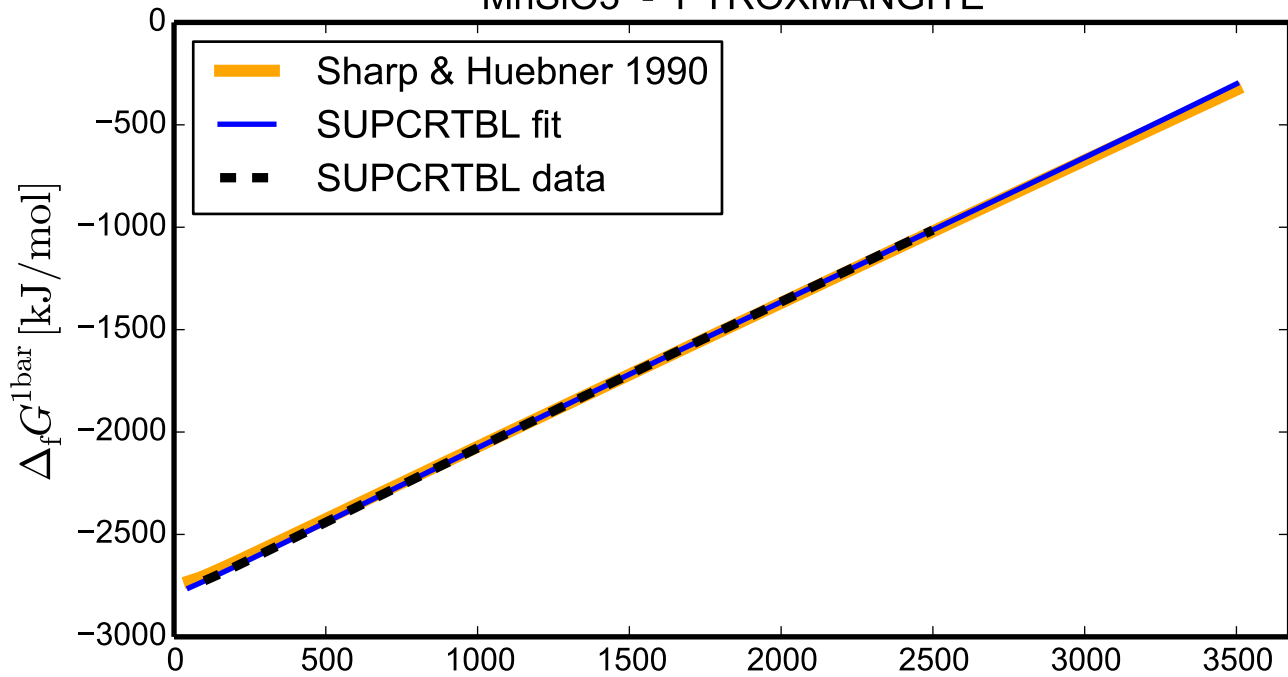
## MnTiO3 - PYROPHANITE



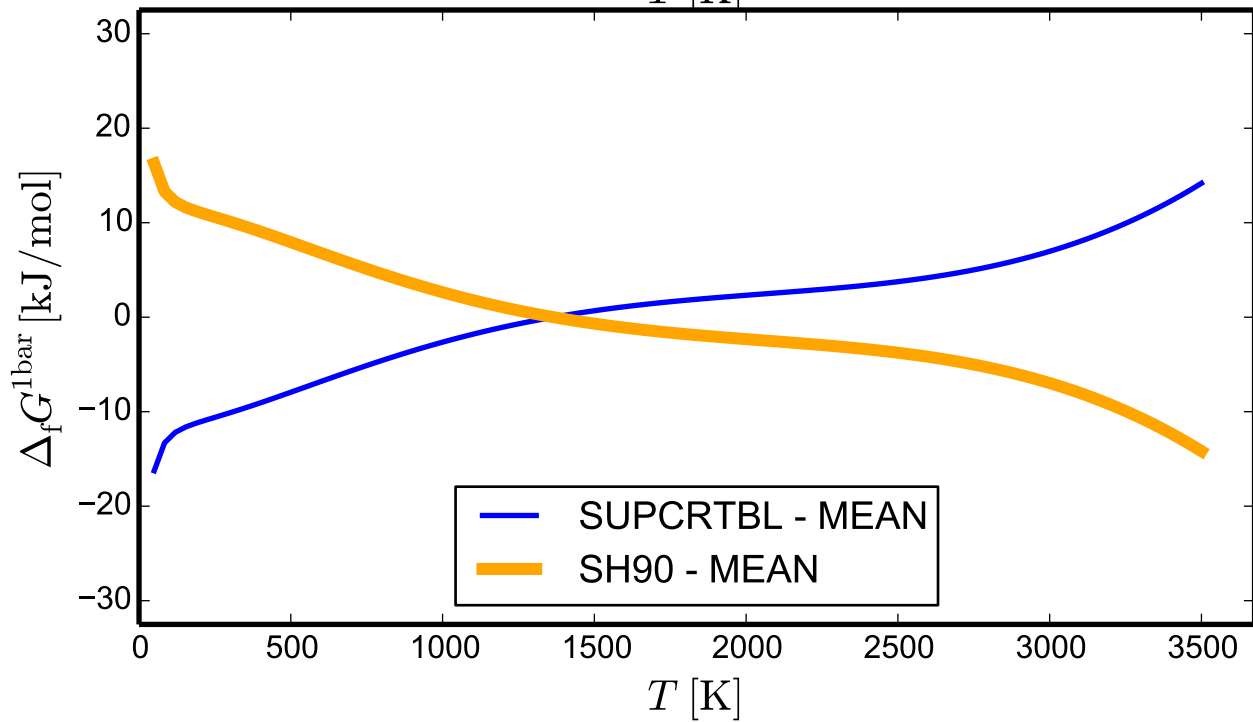
Ca<sub>2</sub>Fe<sub>2</sub>AlSi<sub>3</sub>O<sub>13</sub>H - Fe-EPIDOTE

MgAl<sub>2</sub>SiO<sub>7</sub>H<sub>2</sub> - Mg-CHLORITOID

# MnSiO<sub>3</sub> - PYROXMANGITE

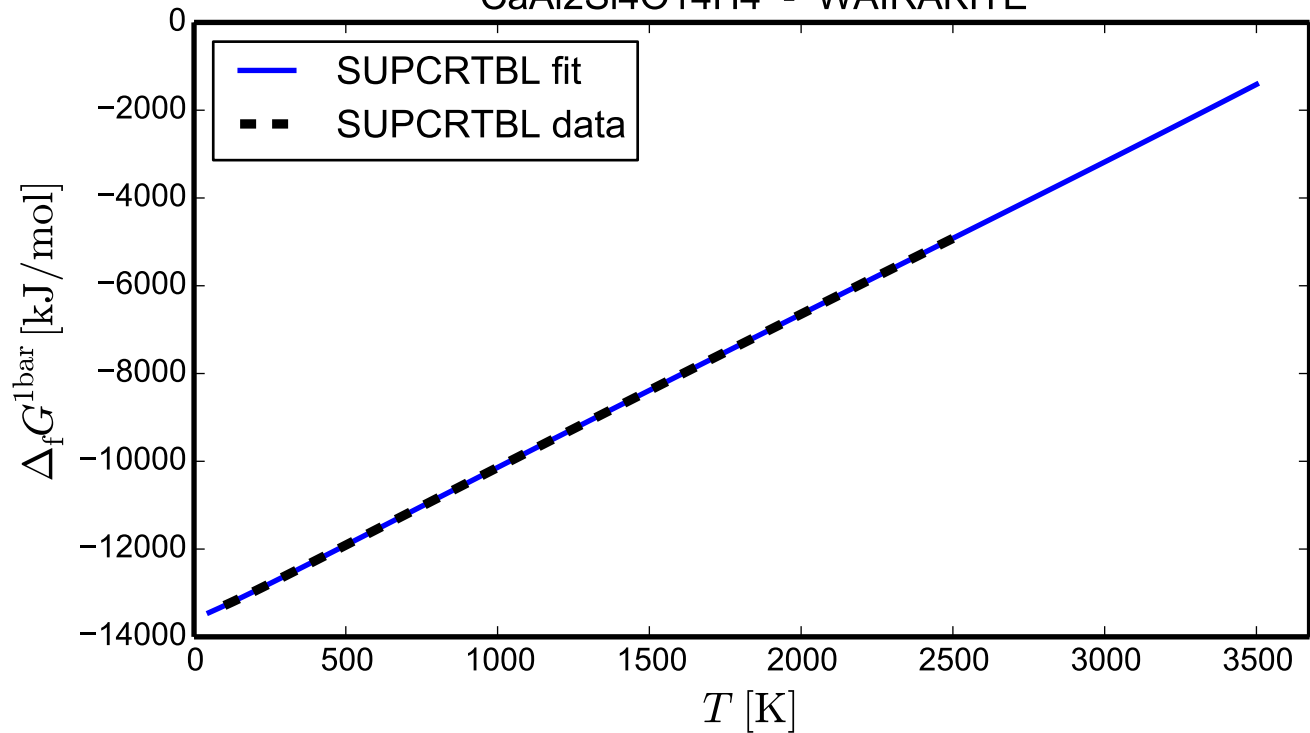


$T$  [K]

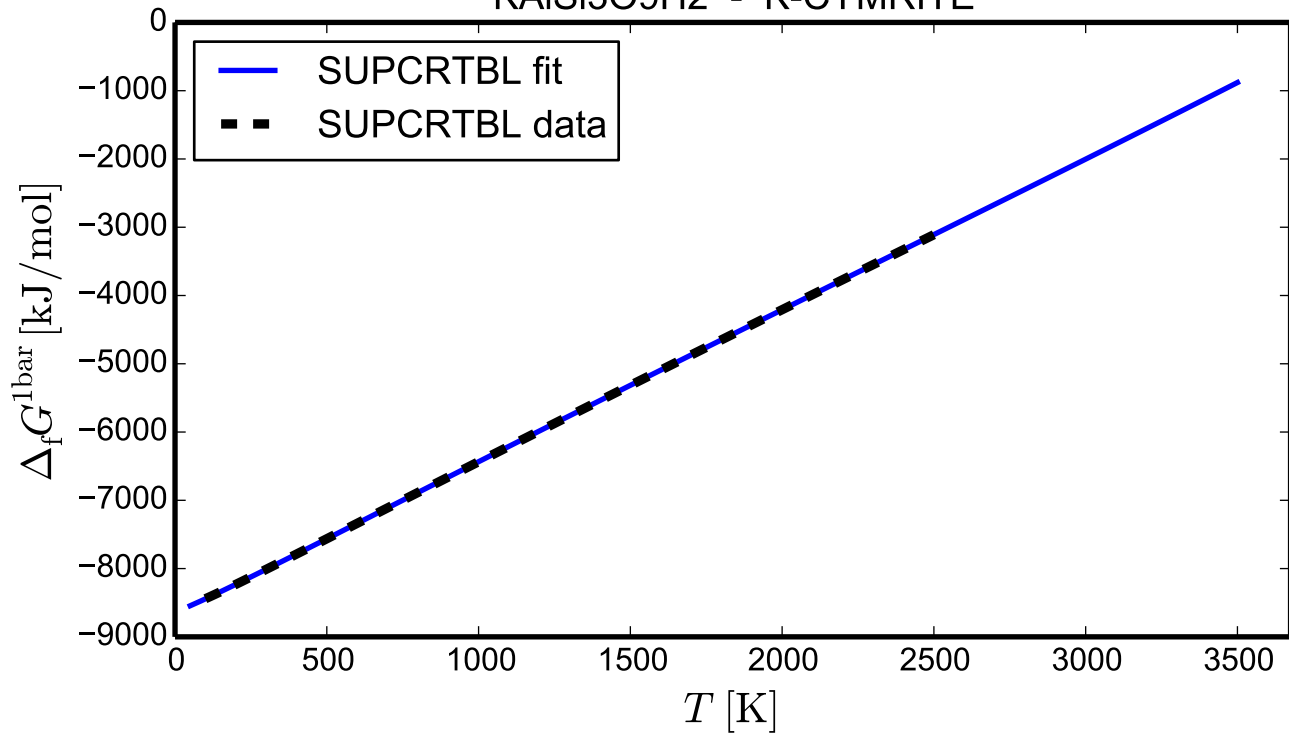


$T$  [K]

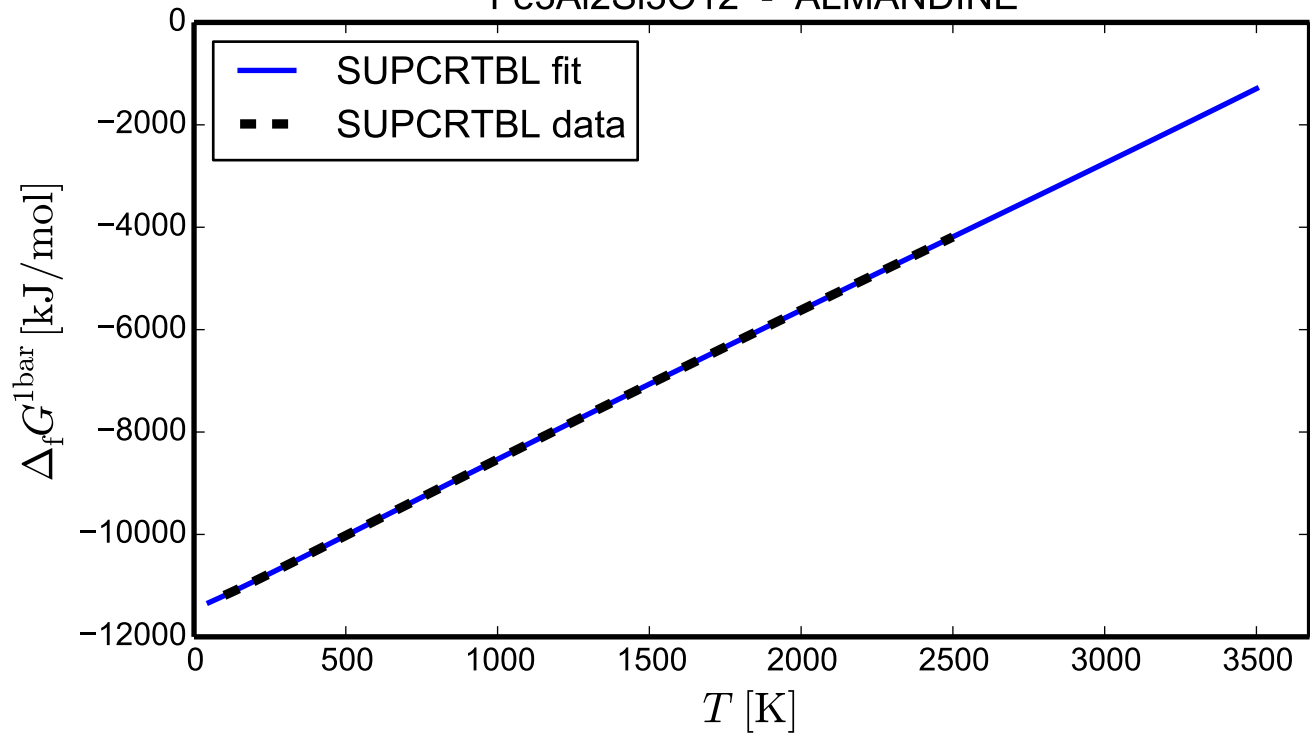


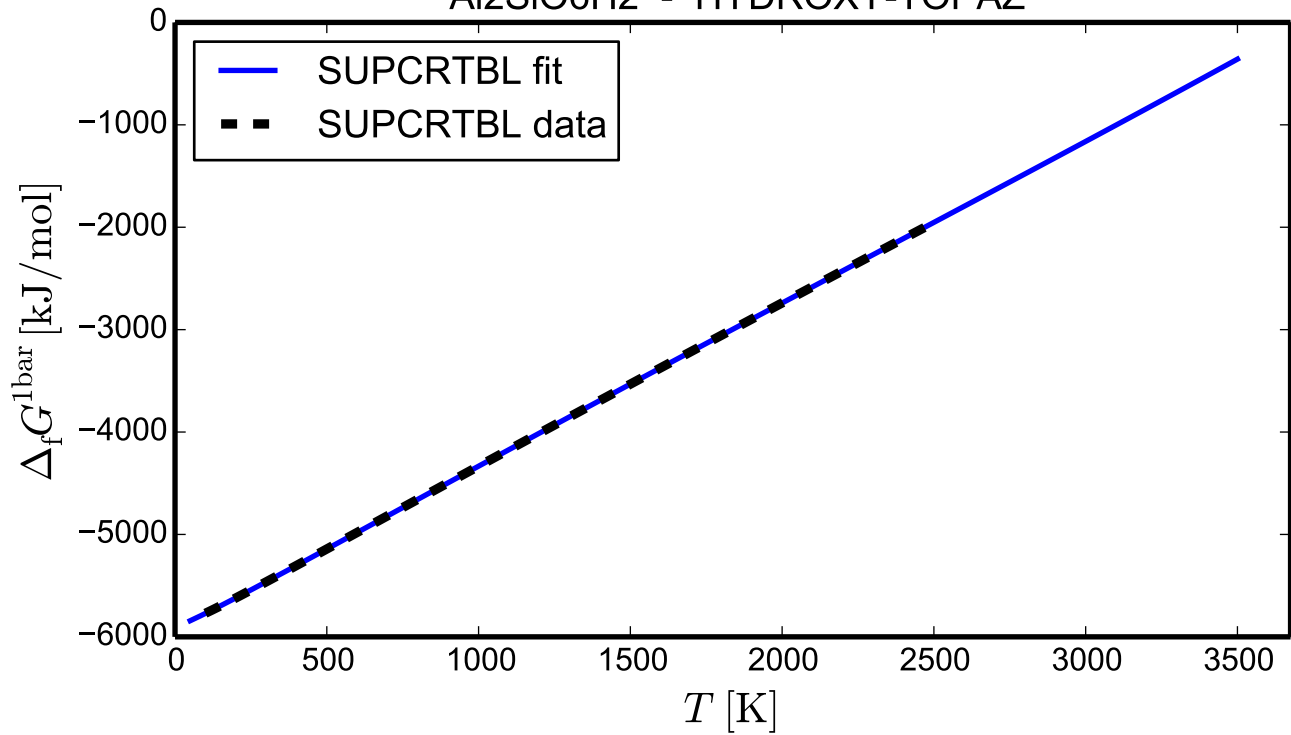
CaAl<sub>2</sub>Si<sub>4</sub>O<sub>14</sub>H<sub>4</sub> - WAIRAKITE

## KAISi3O9H2 - K-CYMRITE

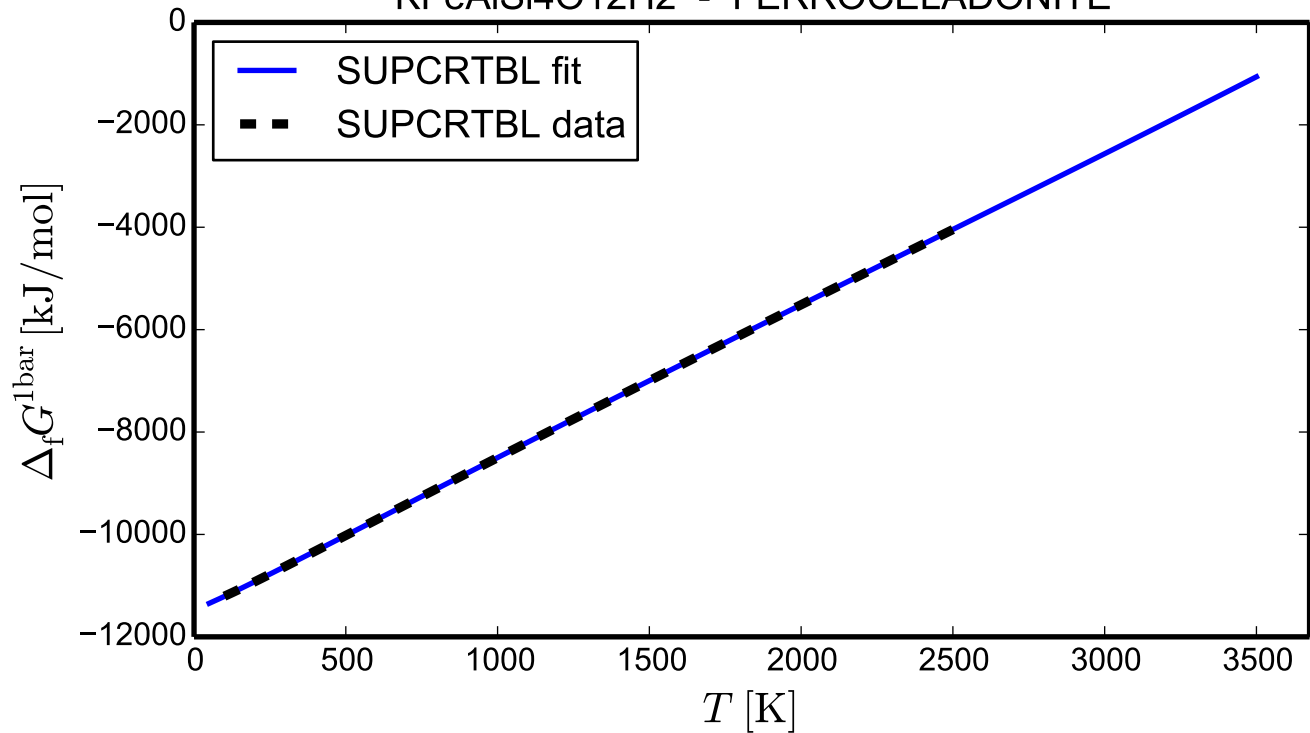


## Fe3Al2Si3O12 - ALMANDINE

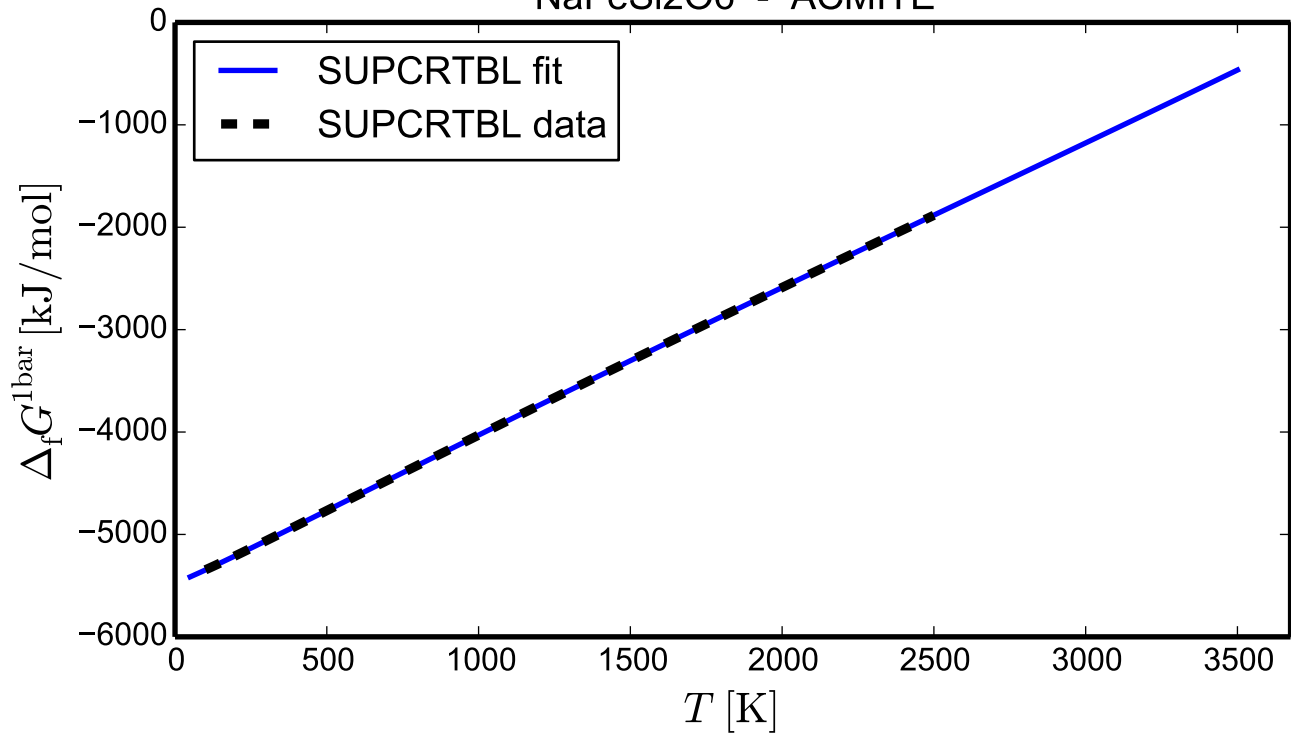


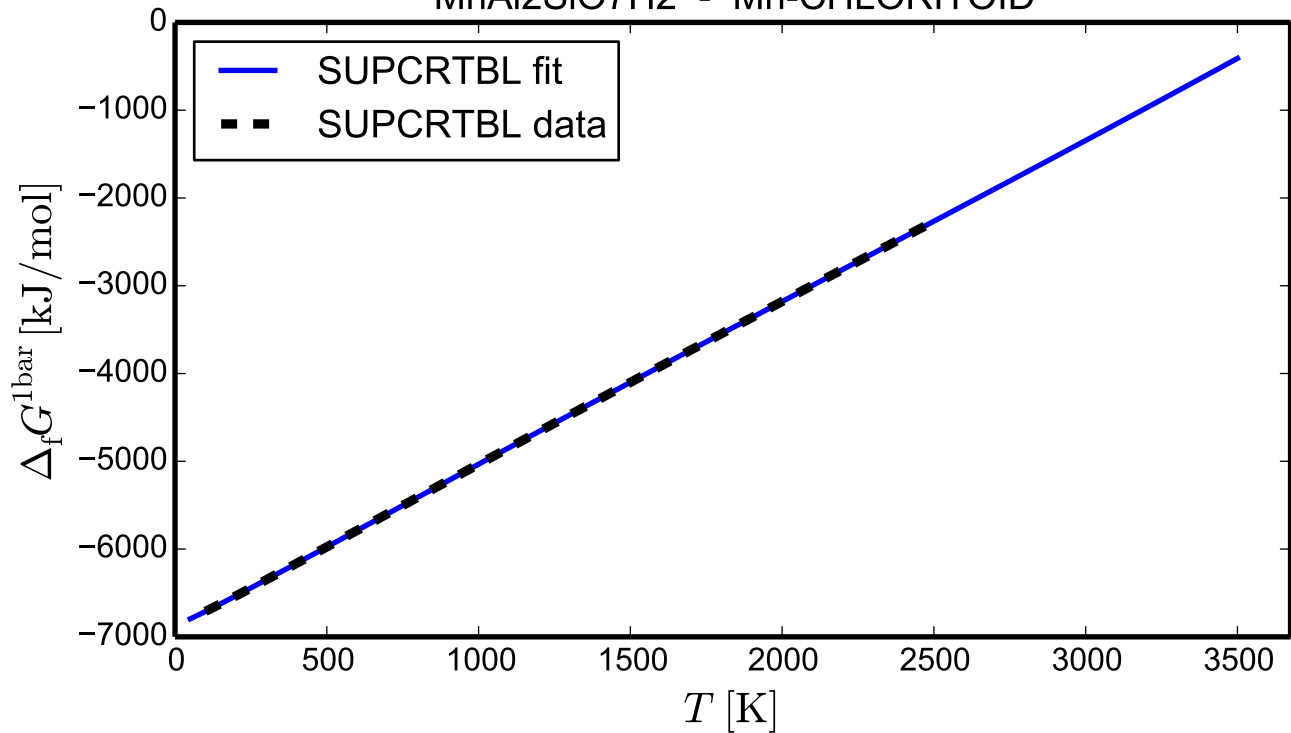
Al<sub>2</sub>SiO<sub>6</sub>H<sub>2</sub> - HYDROXY-TOPAZ

## KFeAlSi4O12H2 - FERROCELADONITE

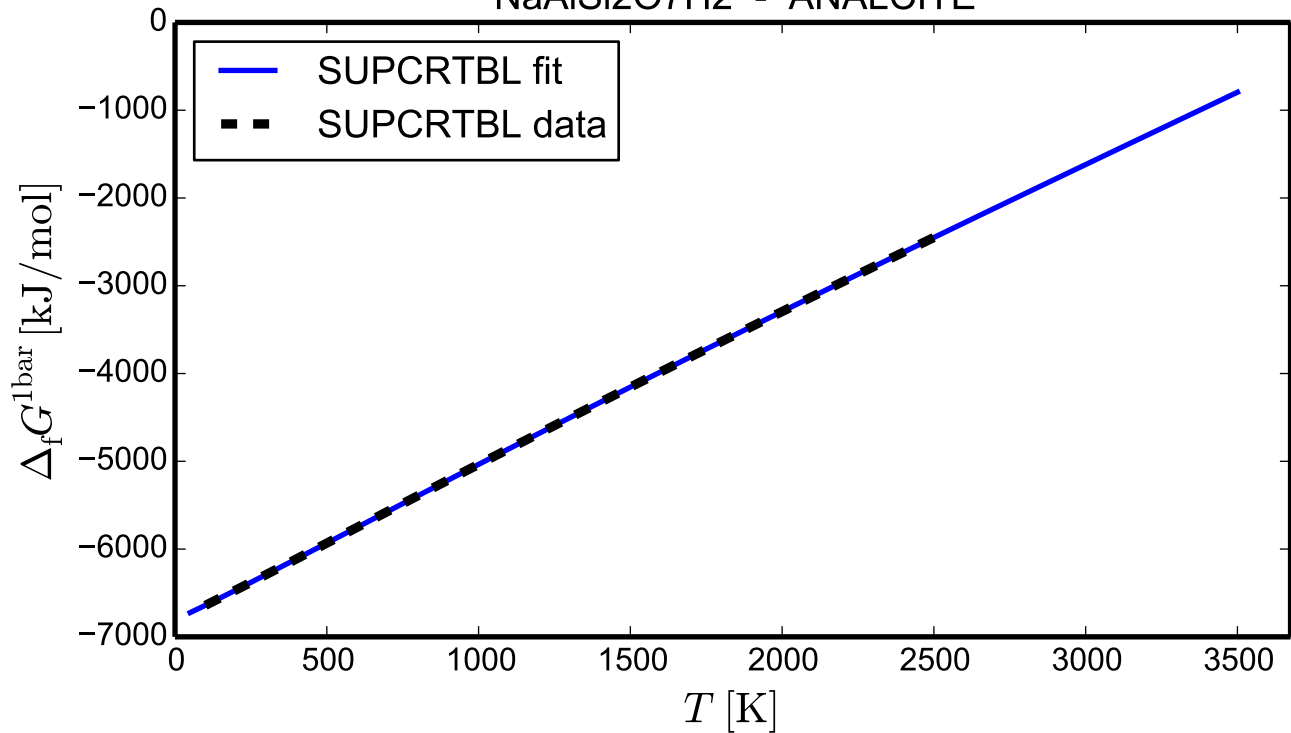


## NaFeSi2O6 - ACMITE



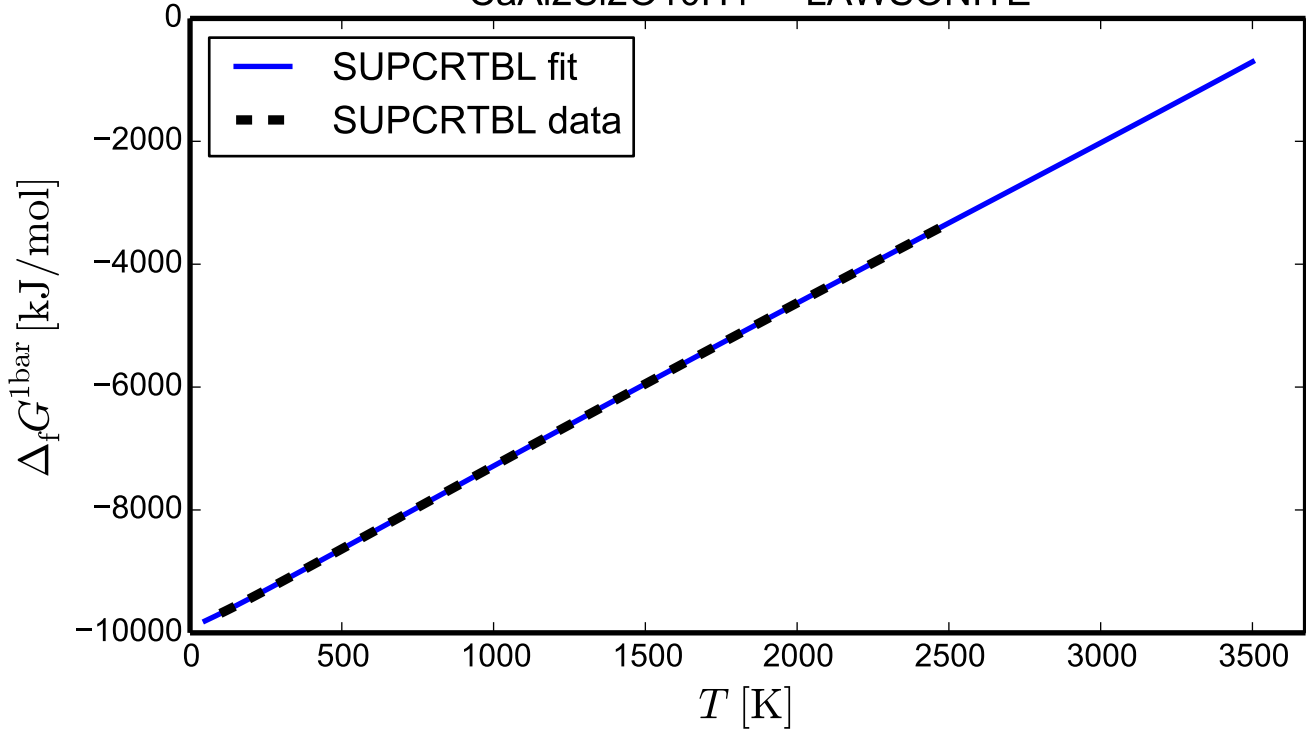
MnAl<sub>2</sub>SiO<sub>7</sub>H<sub>2</sub> - Mn-CHLORITOID

## NaAlSi2O7H2 - ANALCITE

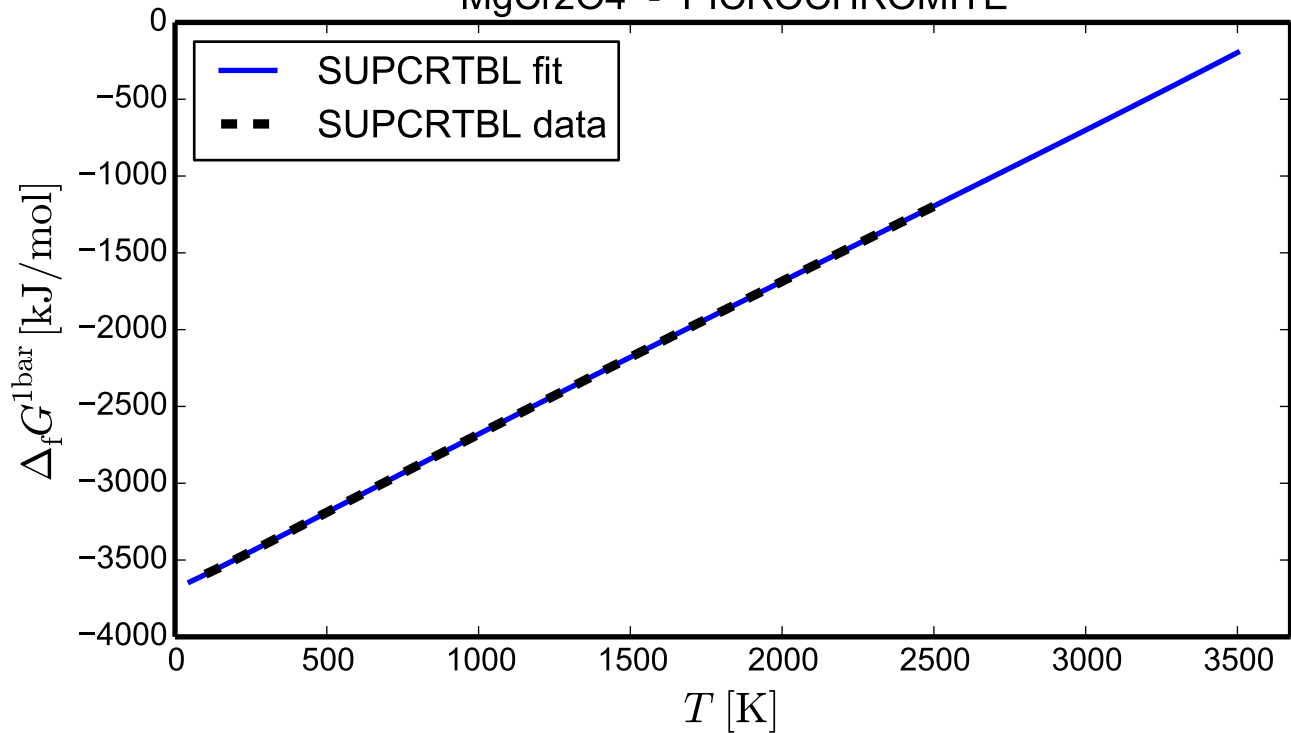


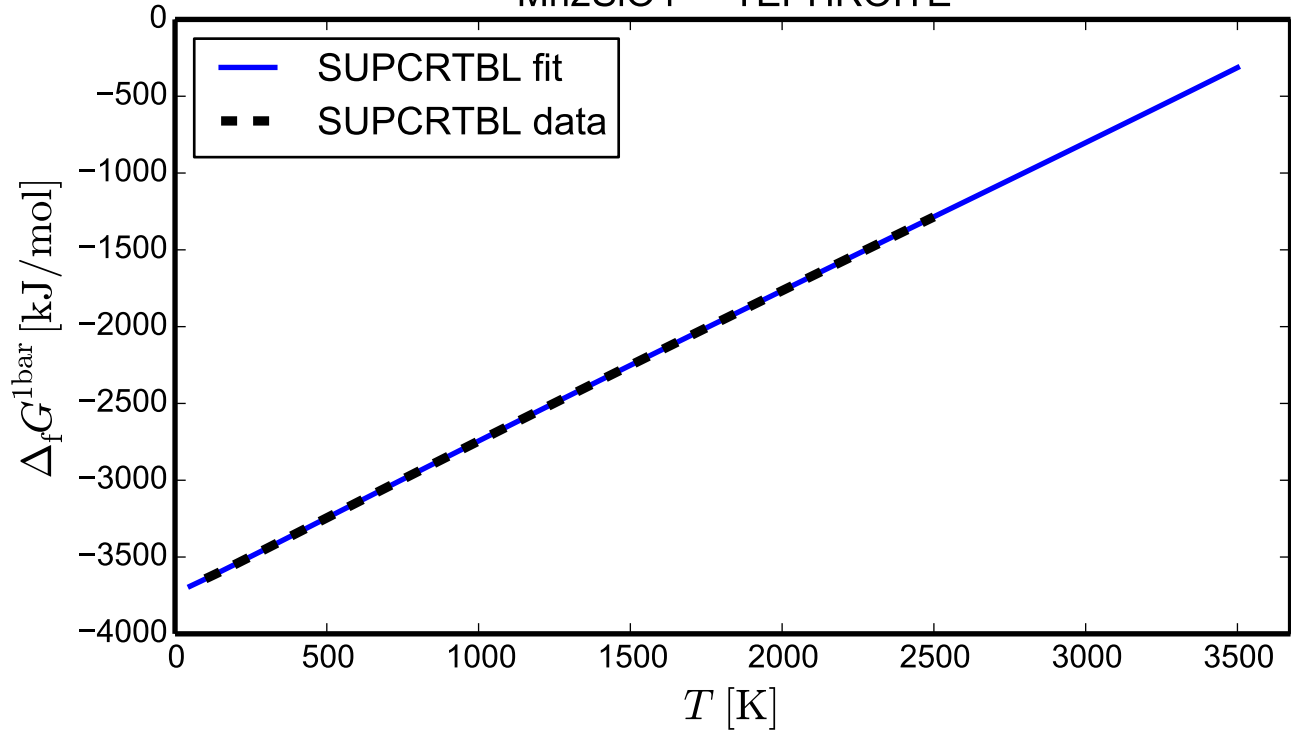


# CaAl<sub>2</sub>Si<sub>2</sub>O<sub>10</sub>H<sub>4</sub> - LAWSONITE

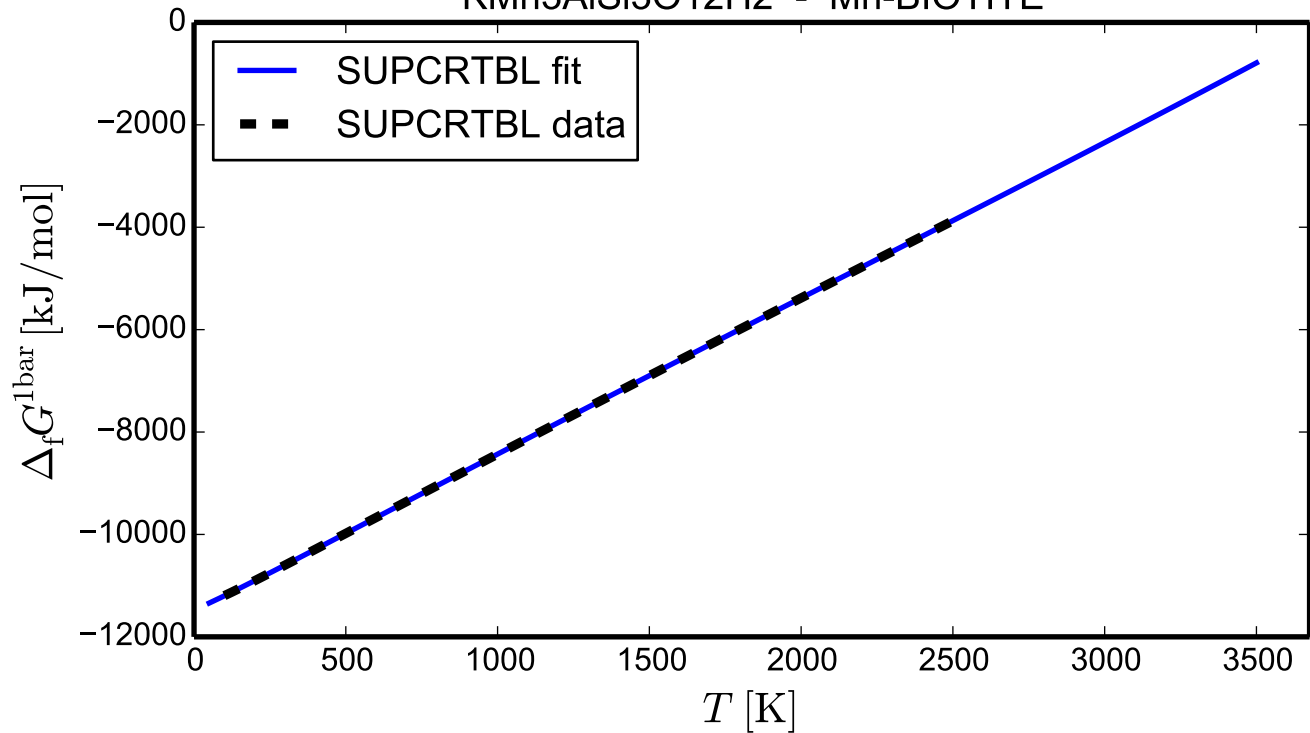


# MgCr2O4 - Picrochromite

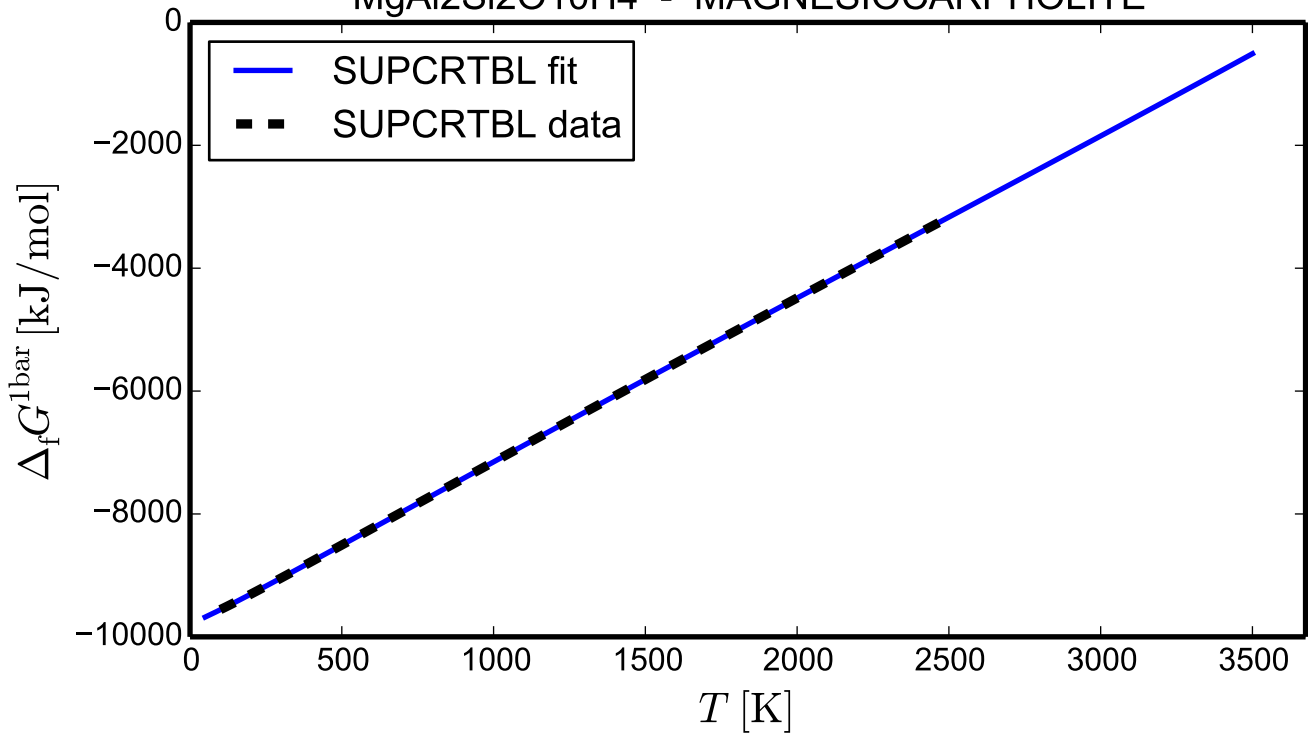


Mn<sub>2</sub>SiO<sub>4</sub> - TEPHROITE

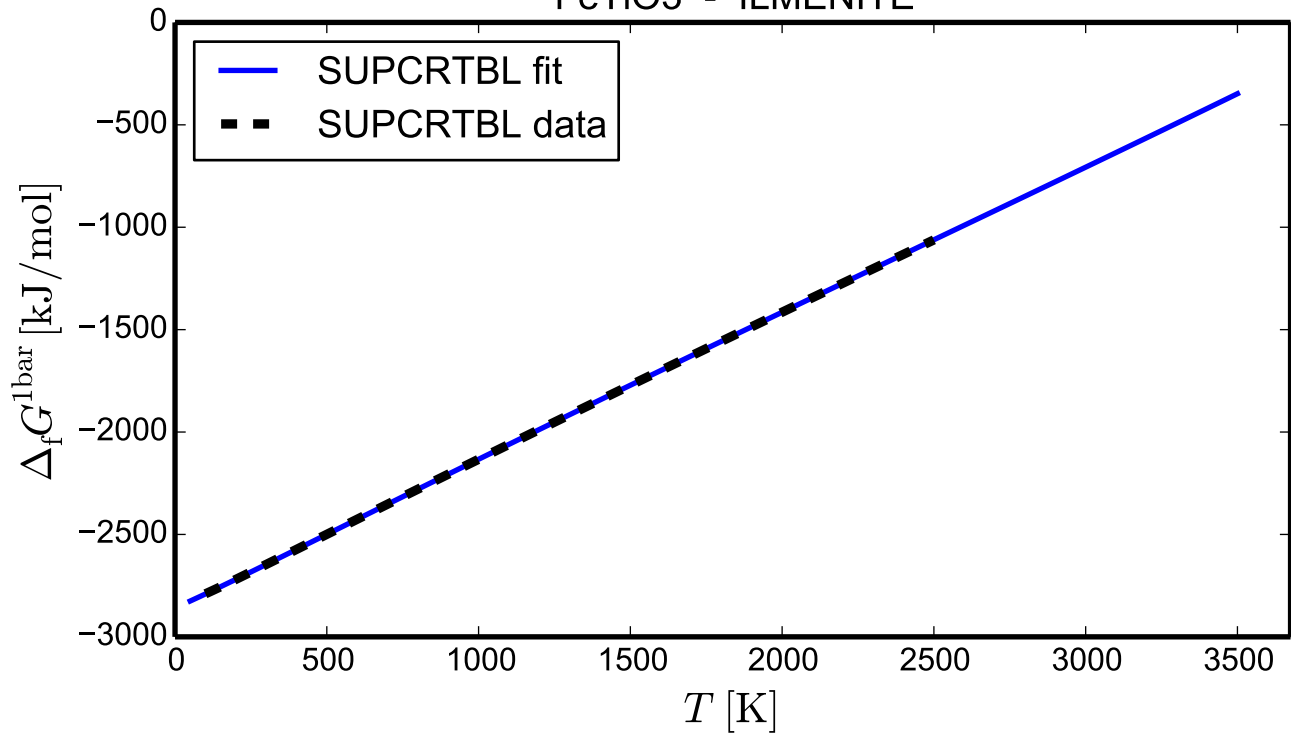
## KMn3AlSi3O12H2 - Mn-BIOTITE



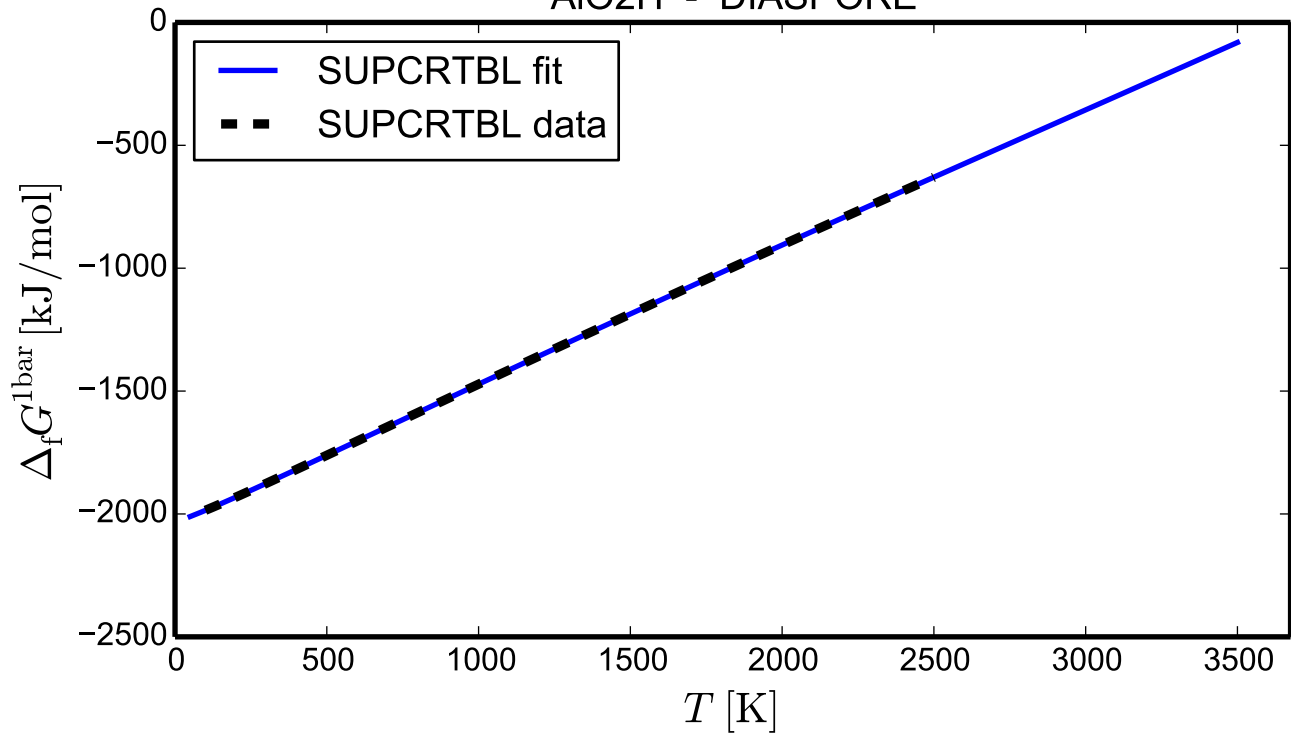
MgAl<sub>2</sub>Si<sub>2</sub>O<sub>10</sub>H<sub>4</sub> - MAGNESIOCARPHOLITE

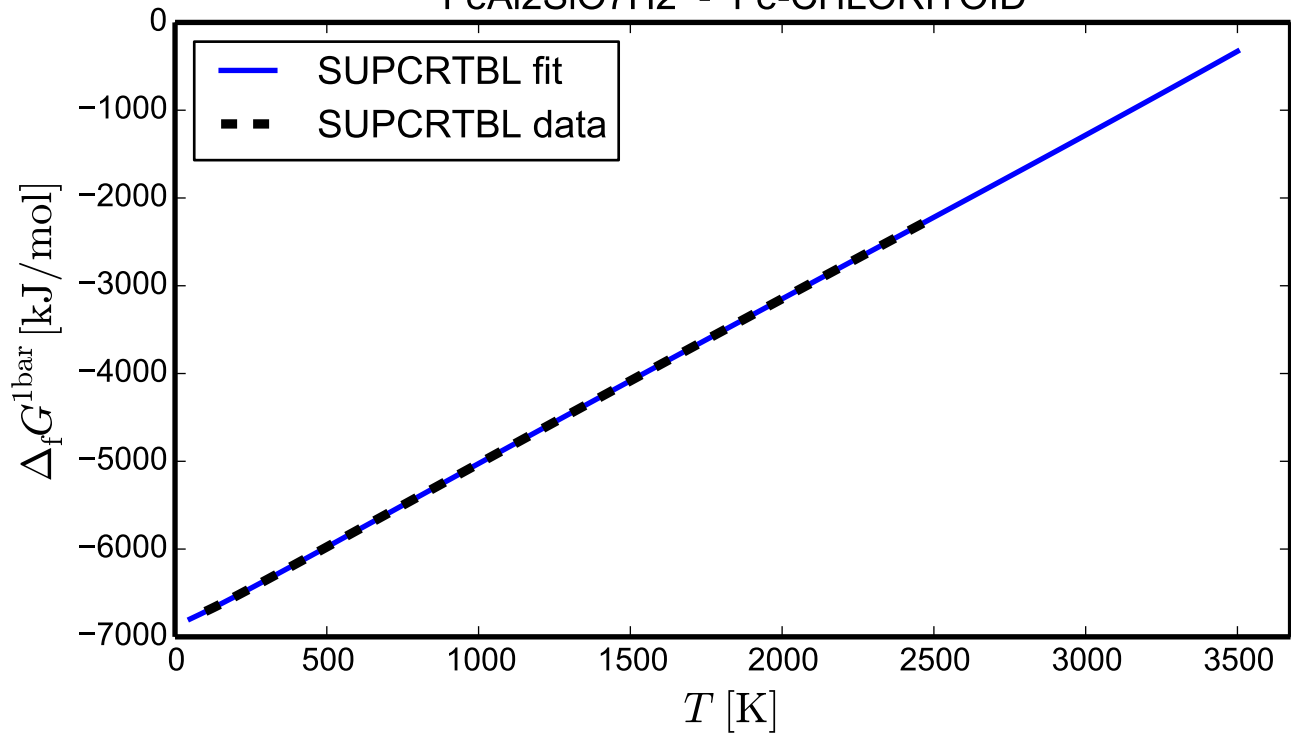


## FeTiO3 - ILMENITE



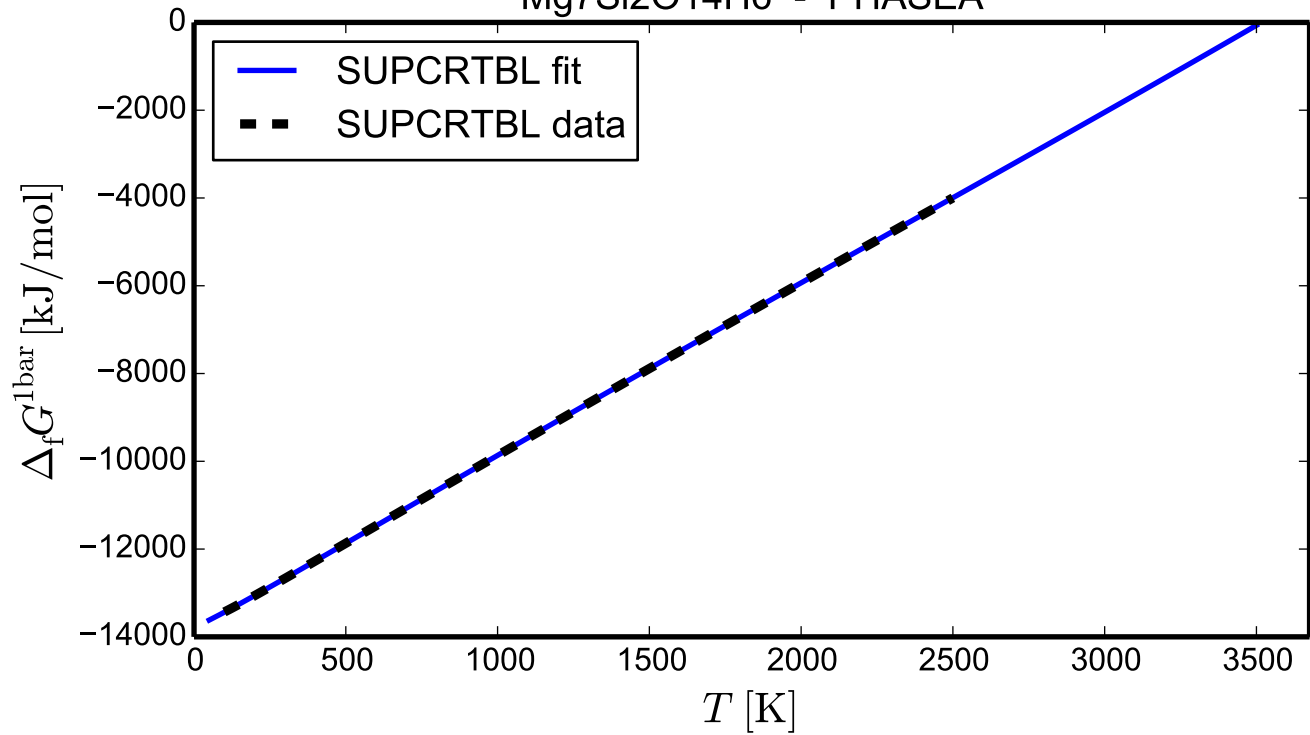
# AlO2H - DIASPORE

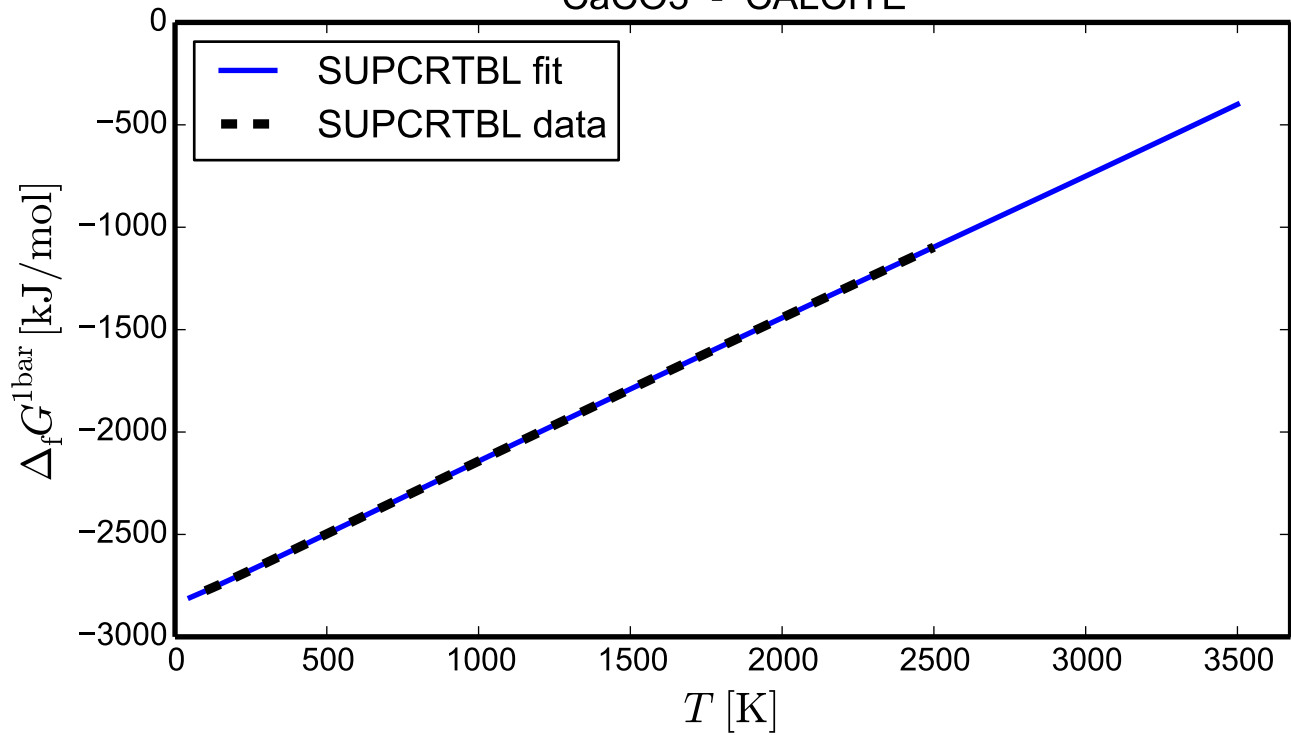


FeAl<sub>2</sub>SiO<sub>7</sub>H<sub>2</sub> - Fe-CHLORITOID

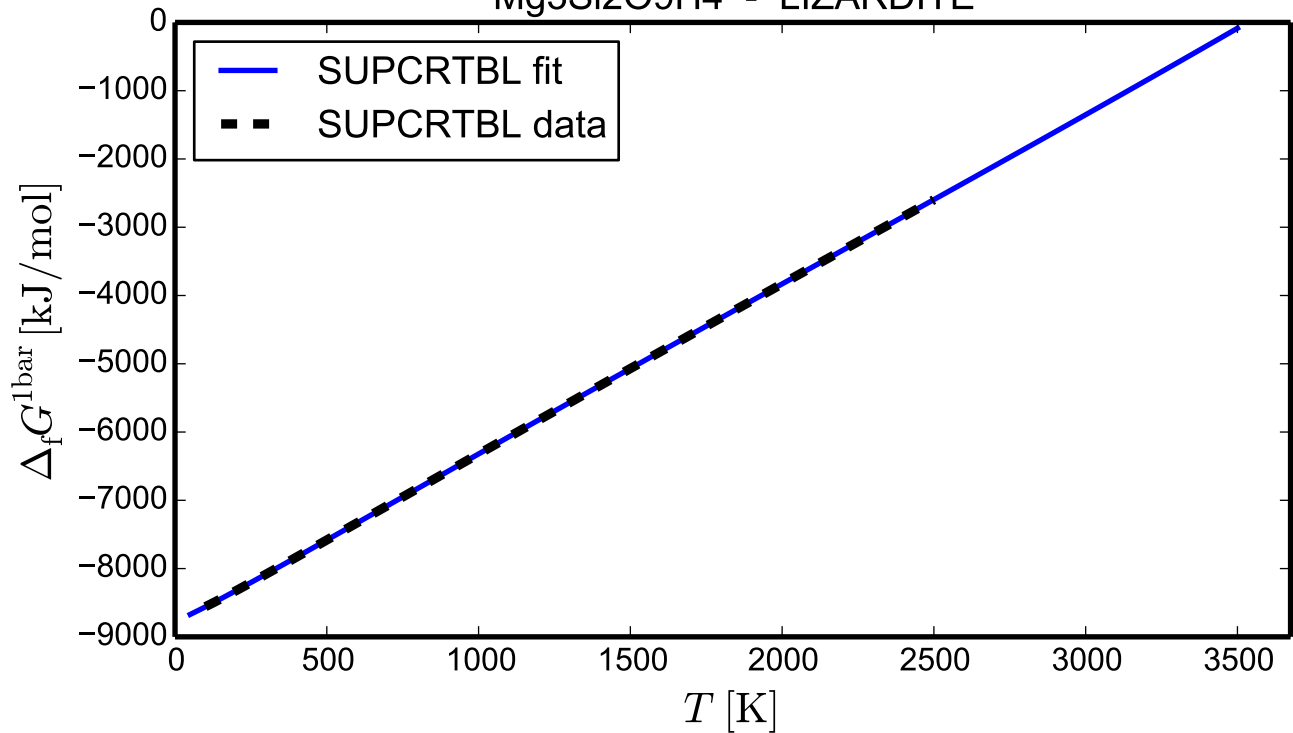


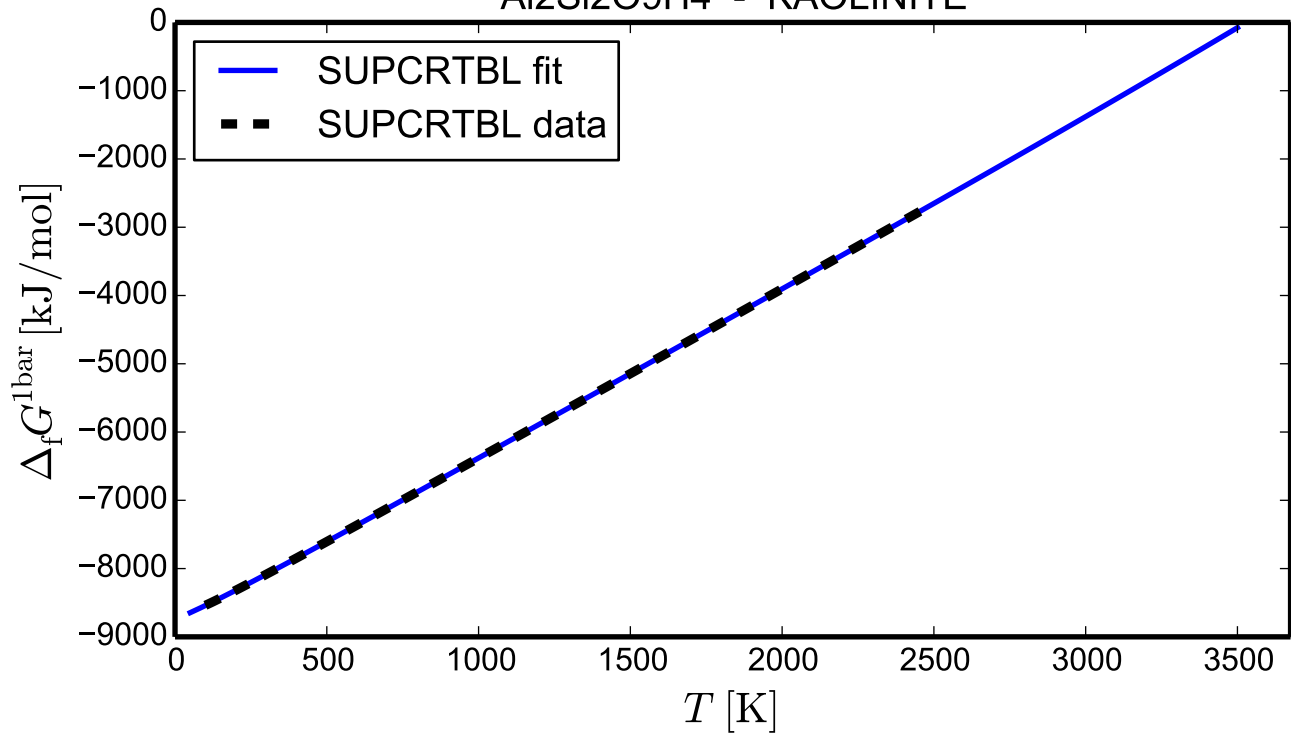
## Mg7Si2O14H6 - PHASEA



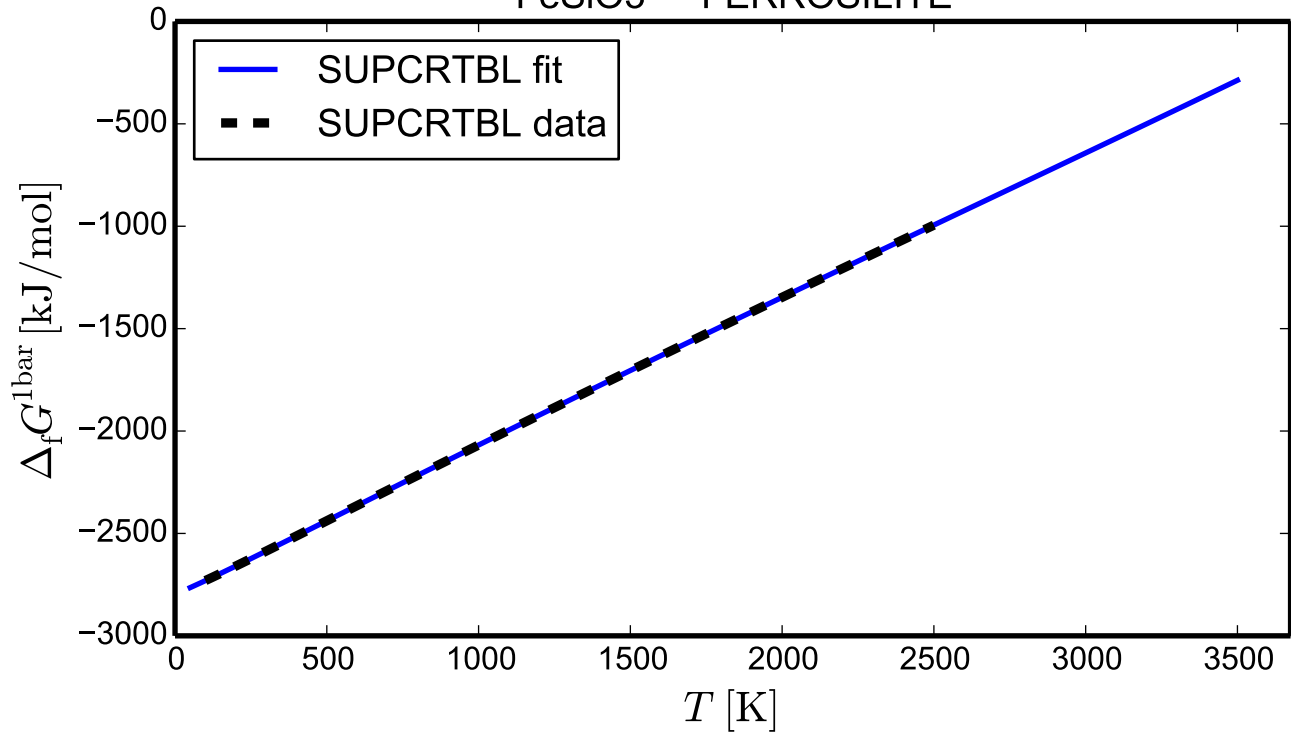
CaCO<sub>3</sub> - CALCITE

# Mg<sub>3</sub>Si<sub>2</sub>O<sub>9</sub>H<sub>4</sub> - LIZARDITE

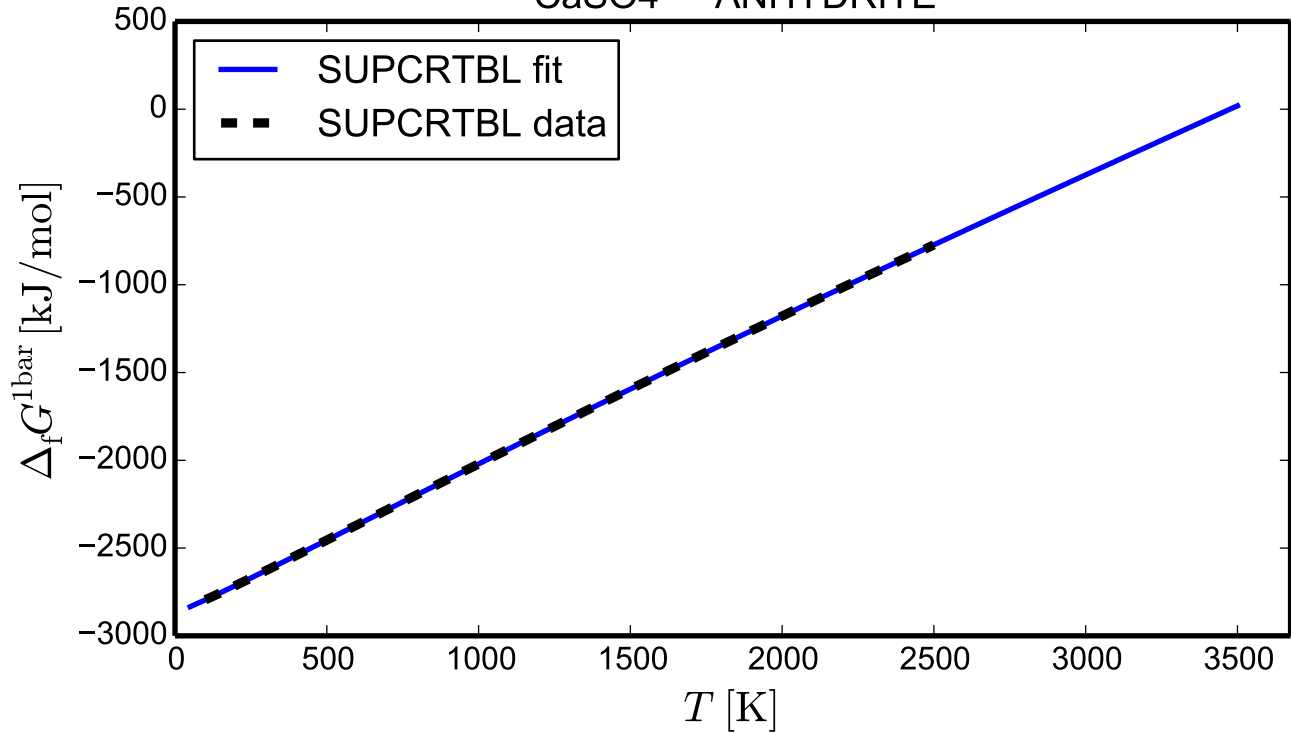


Al<sub>2</sub>Si<sub>2</sub>O<sub>9</sub>H<sub>4</sub> - KAOLINITE

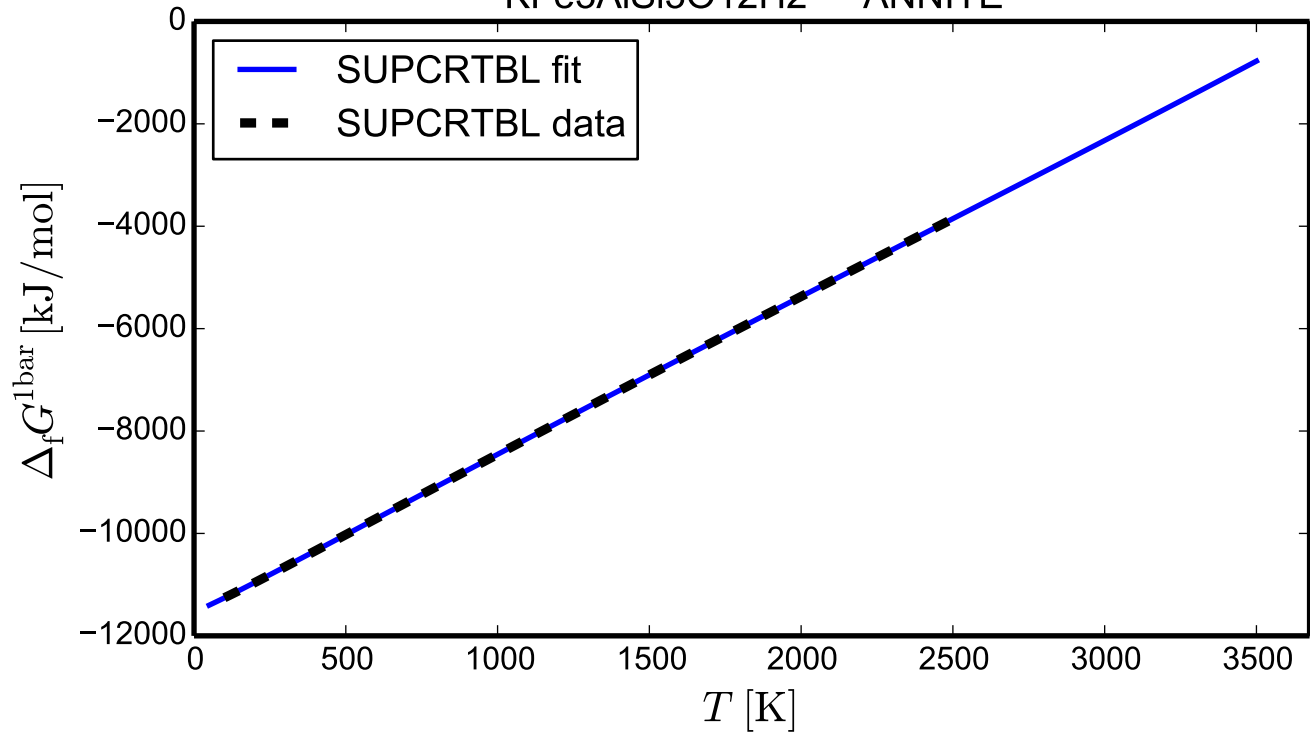
## FeSiO3 - FERROSILITE



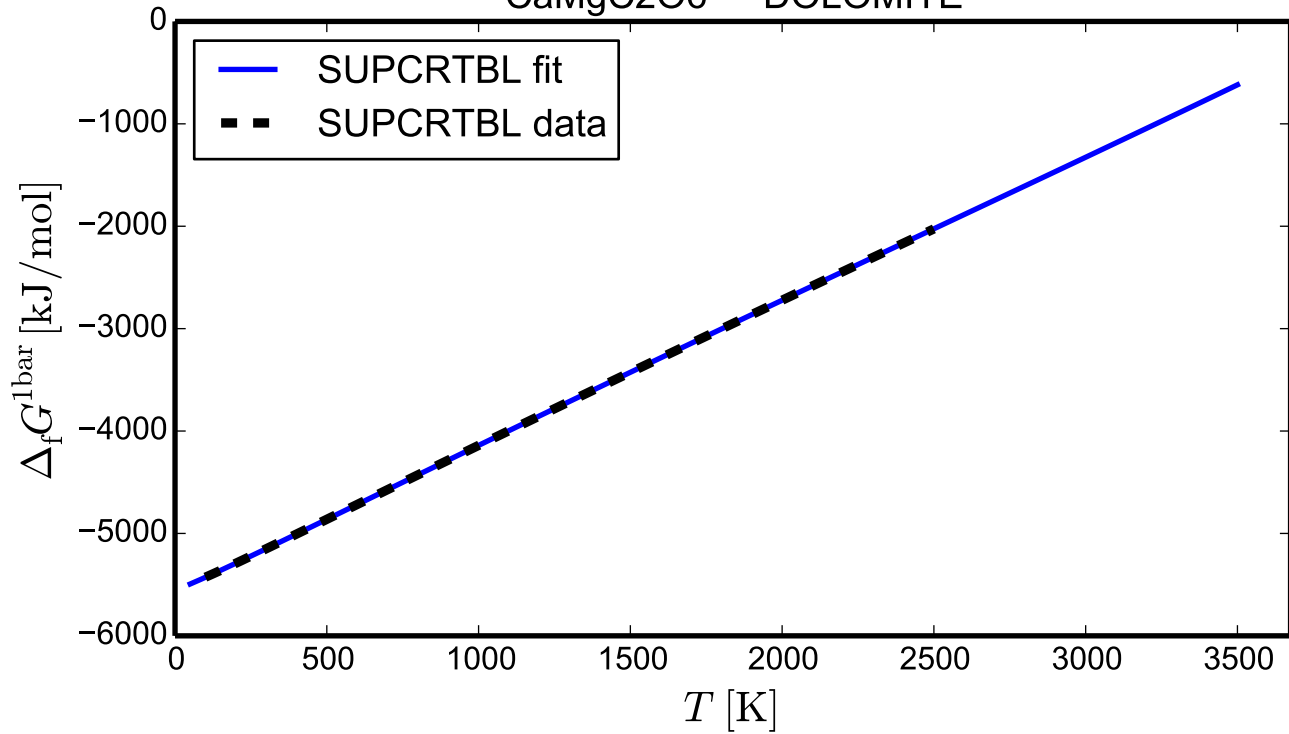
## CaSO4 - ANHYDRITE



## KFe3AlSi3O12H2 - ANNITE

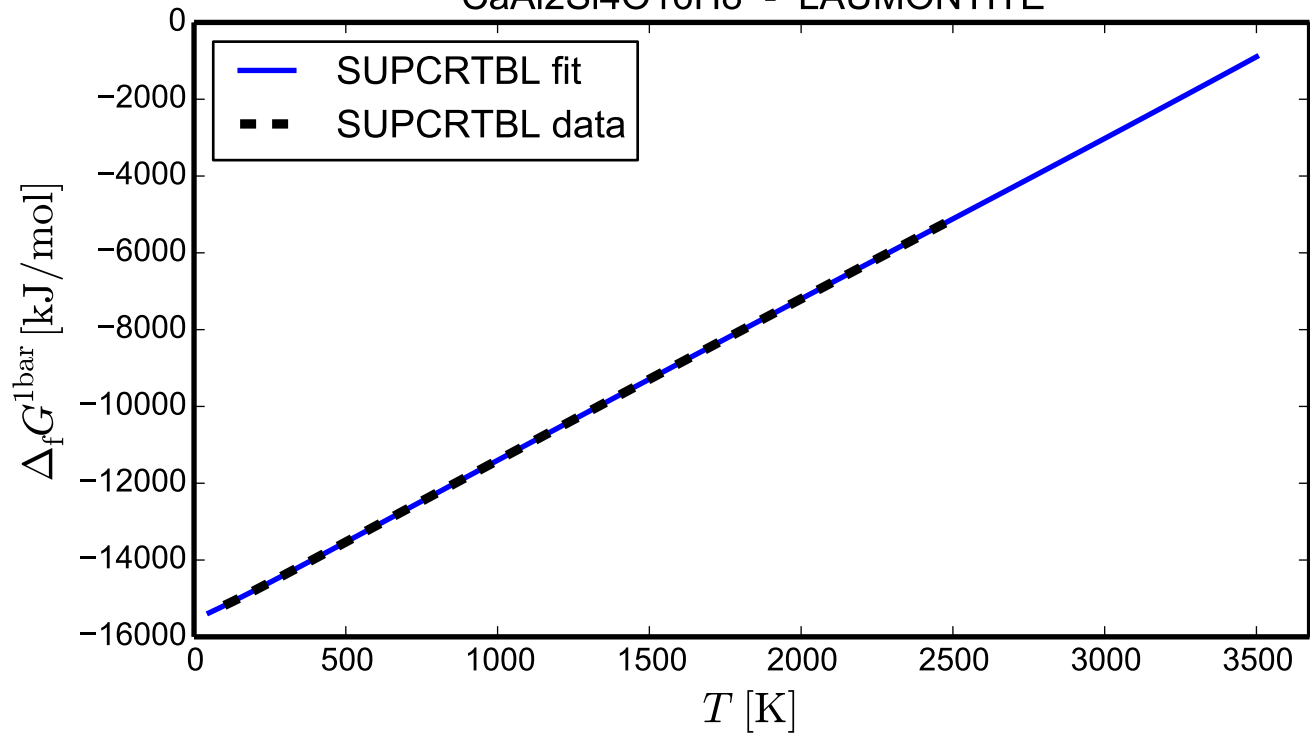


## CaMgC2O6 - DOLOMITE

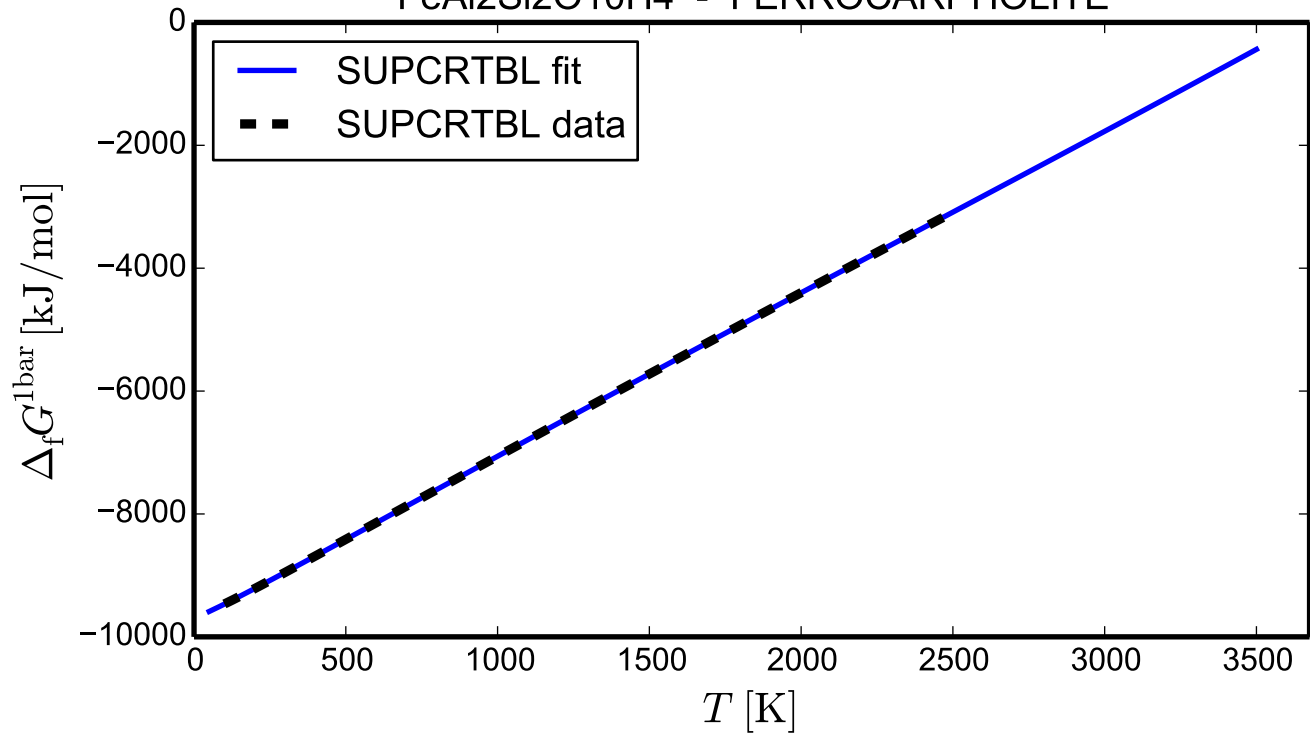




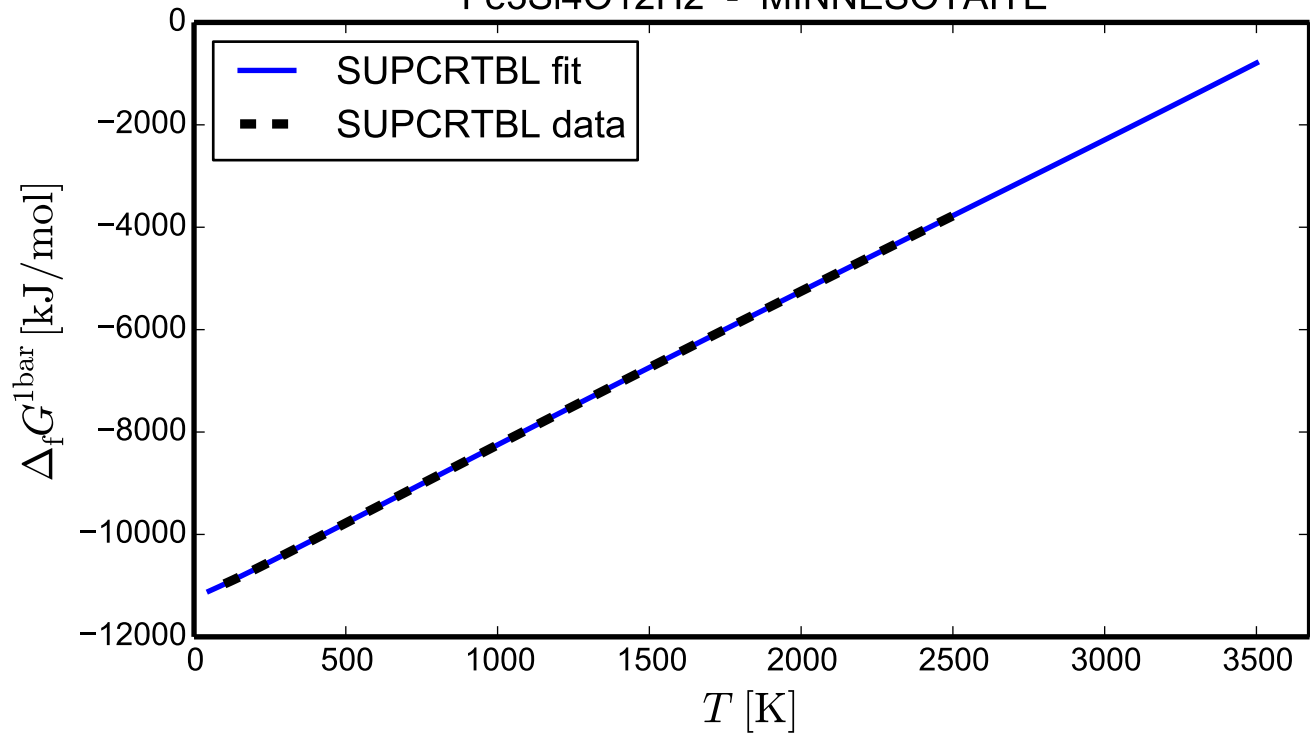
## CaAl2Si4O16H8 - LAUMONTITE



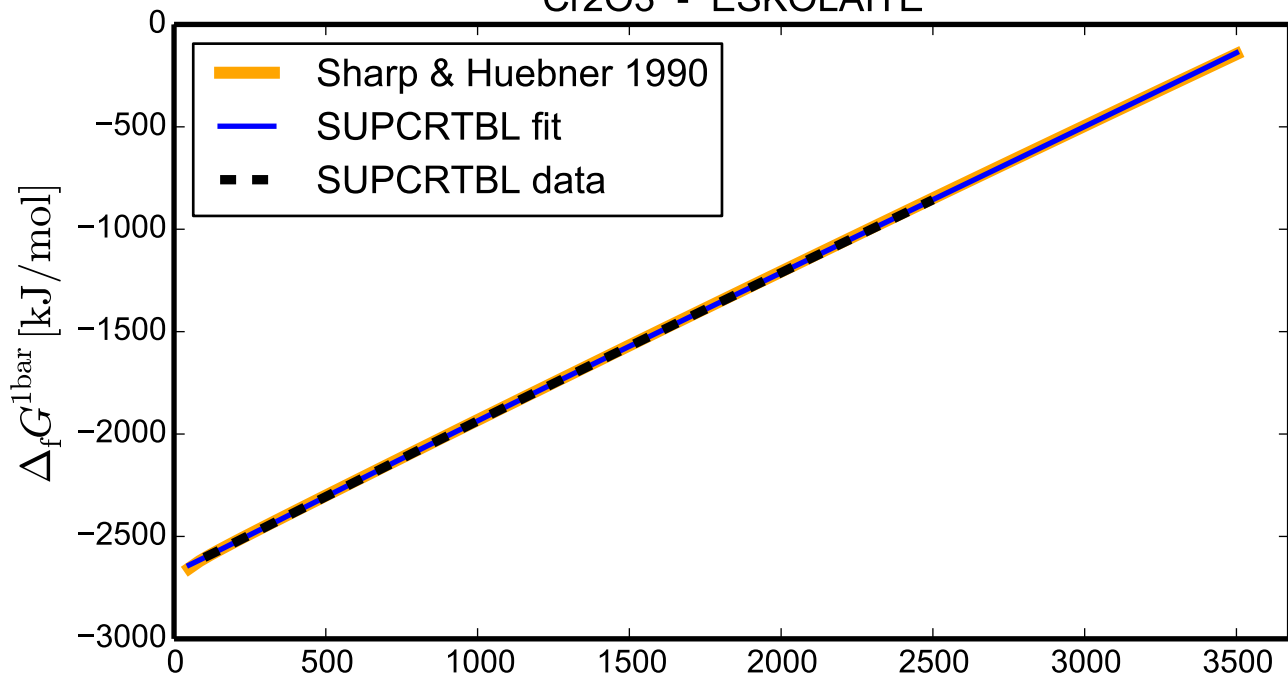
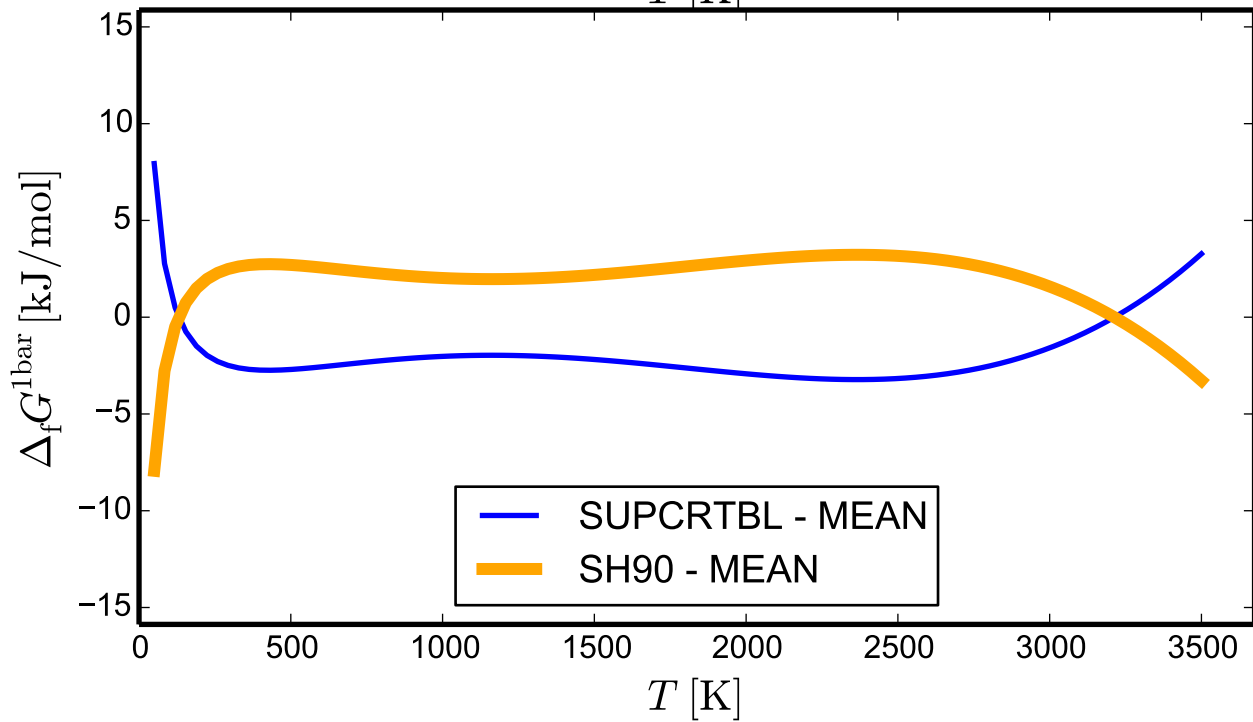
## FeAl2Si2O10H4 - FERROCARPHOLITE



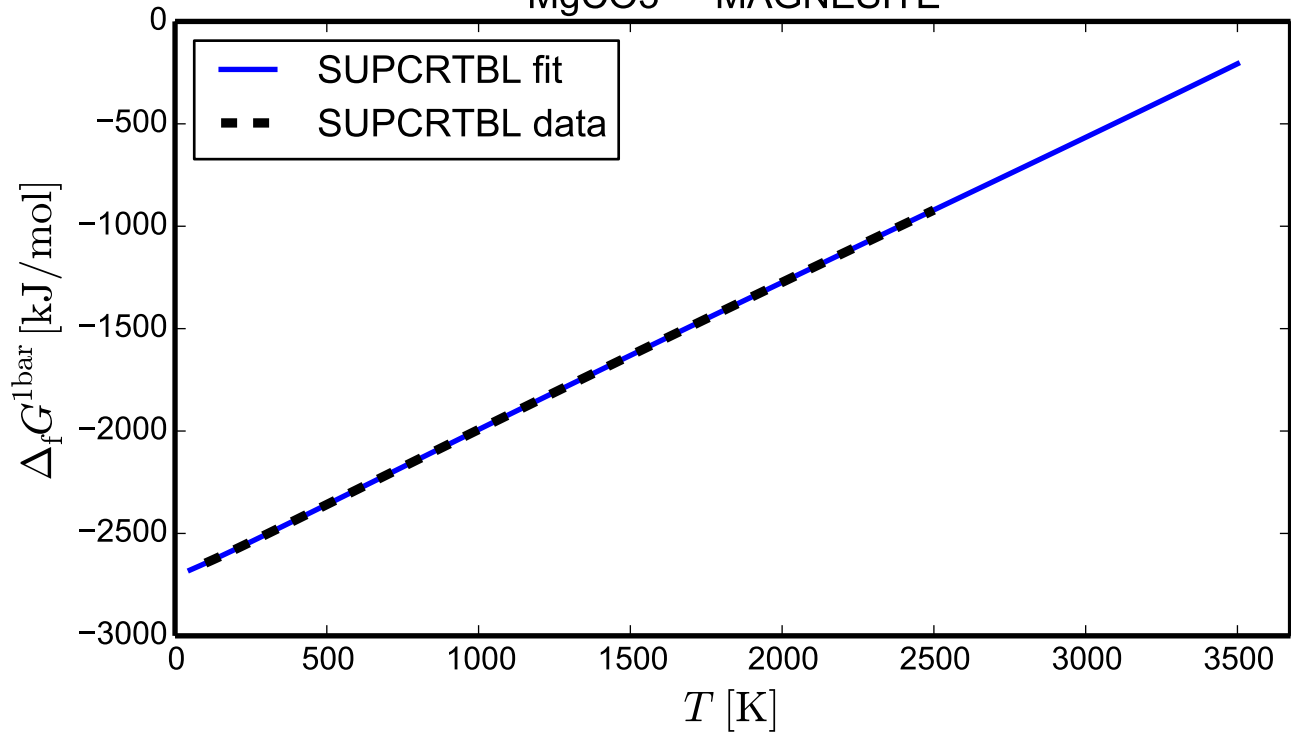
## Fe3Si4O12H2 - MINNESOTAITE



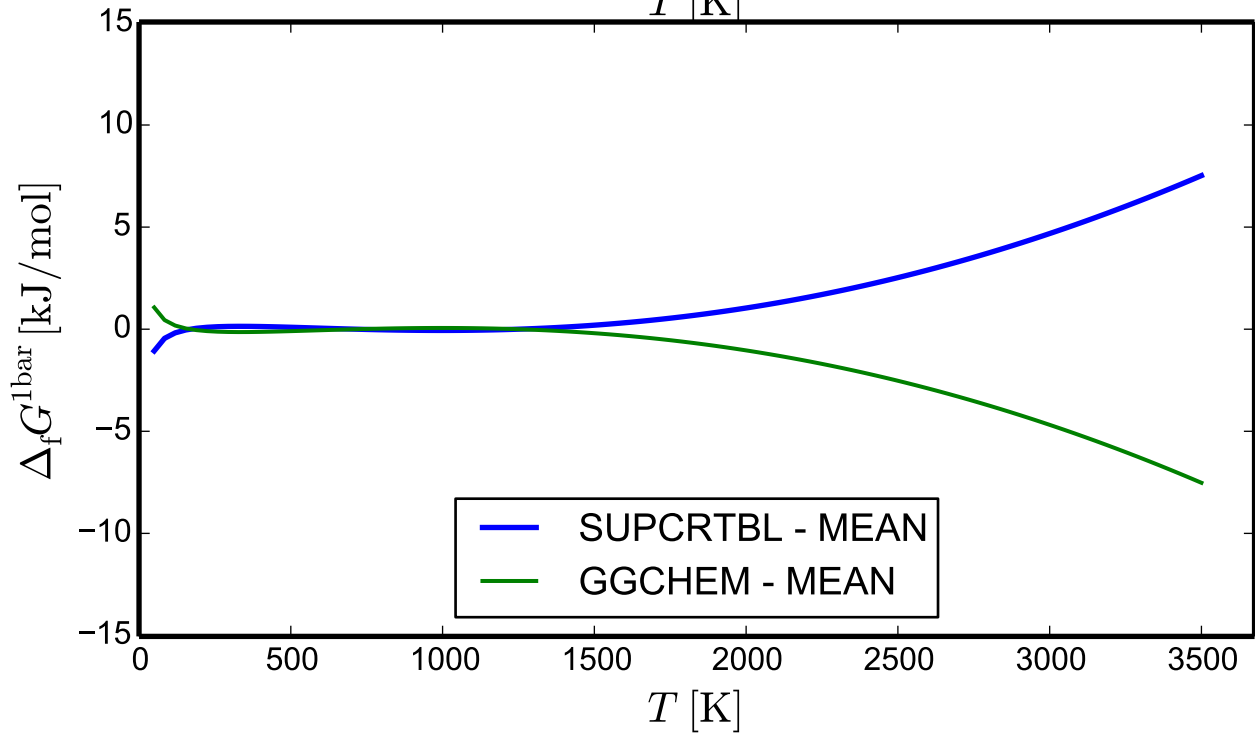
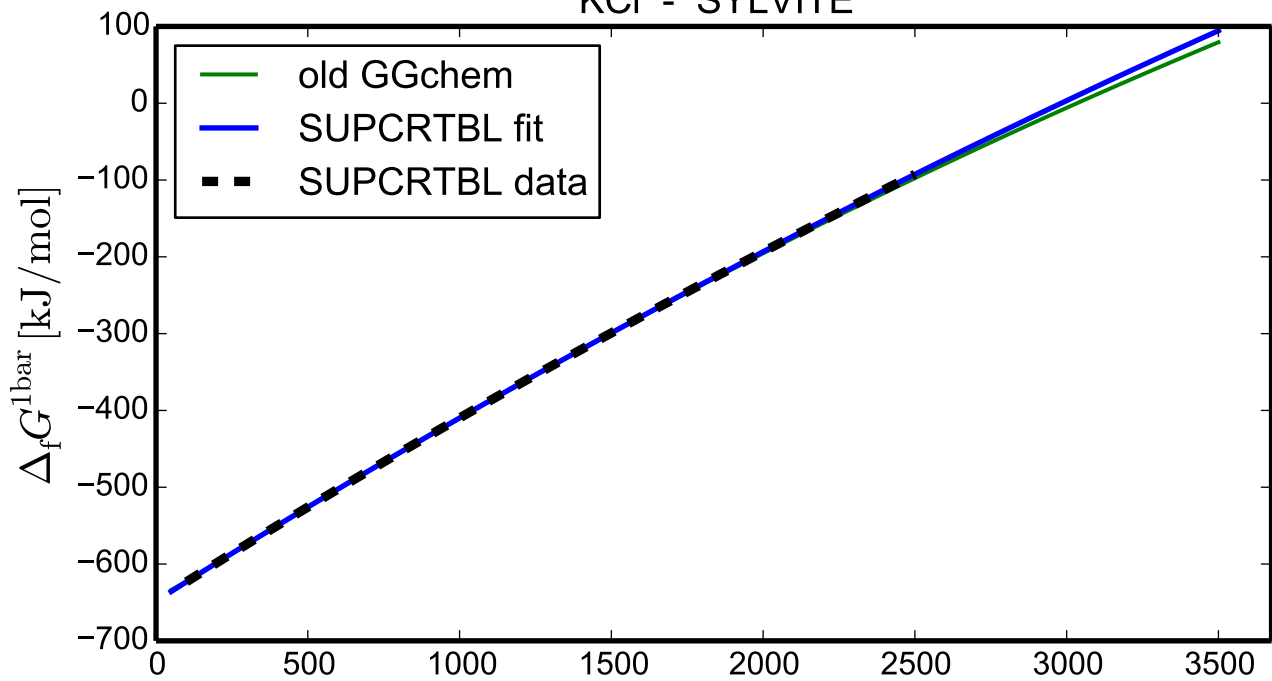
## Cr2O3 - ESKOLAITE

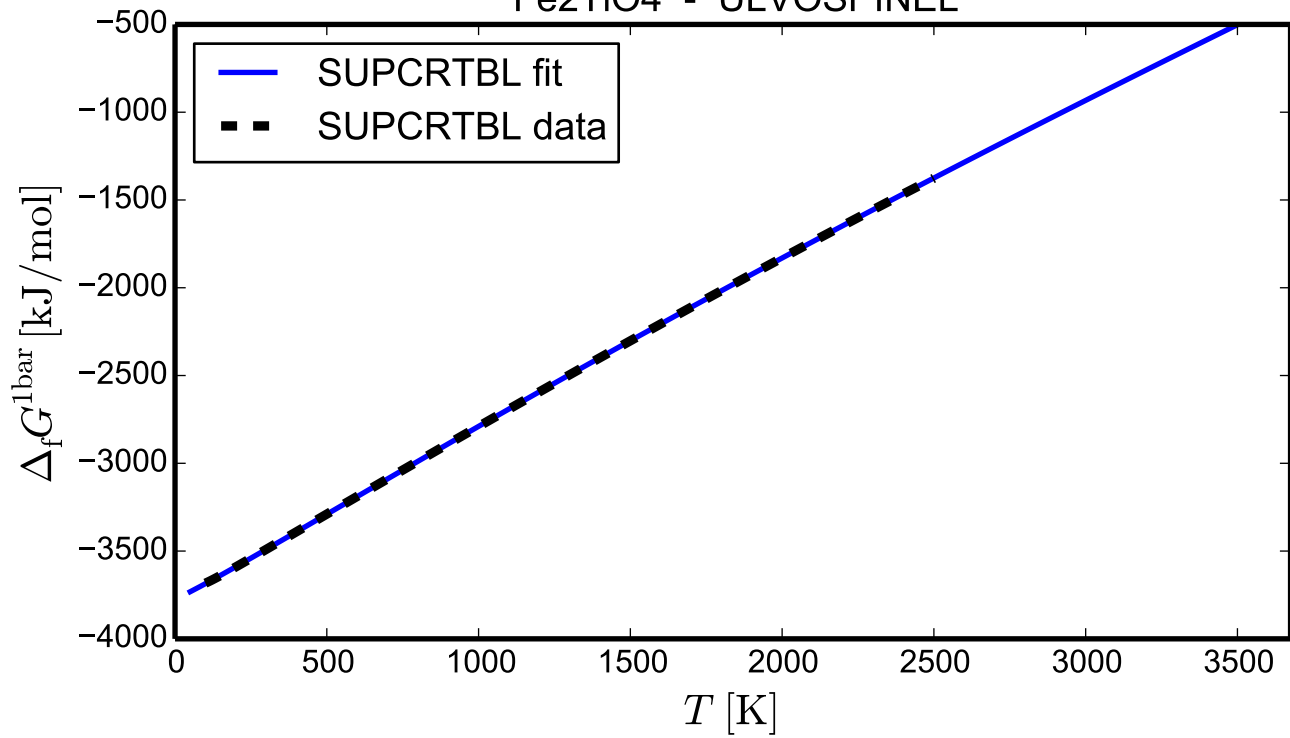
 $T$  [K] $T$  [K]

# MgCO<sub>3</sub> - MAGNESITE

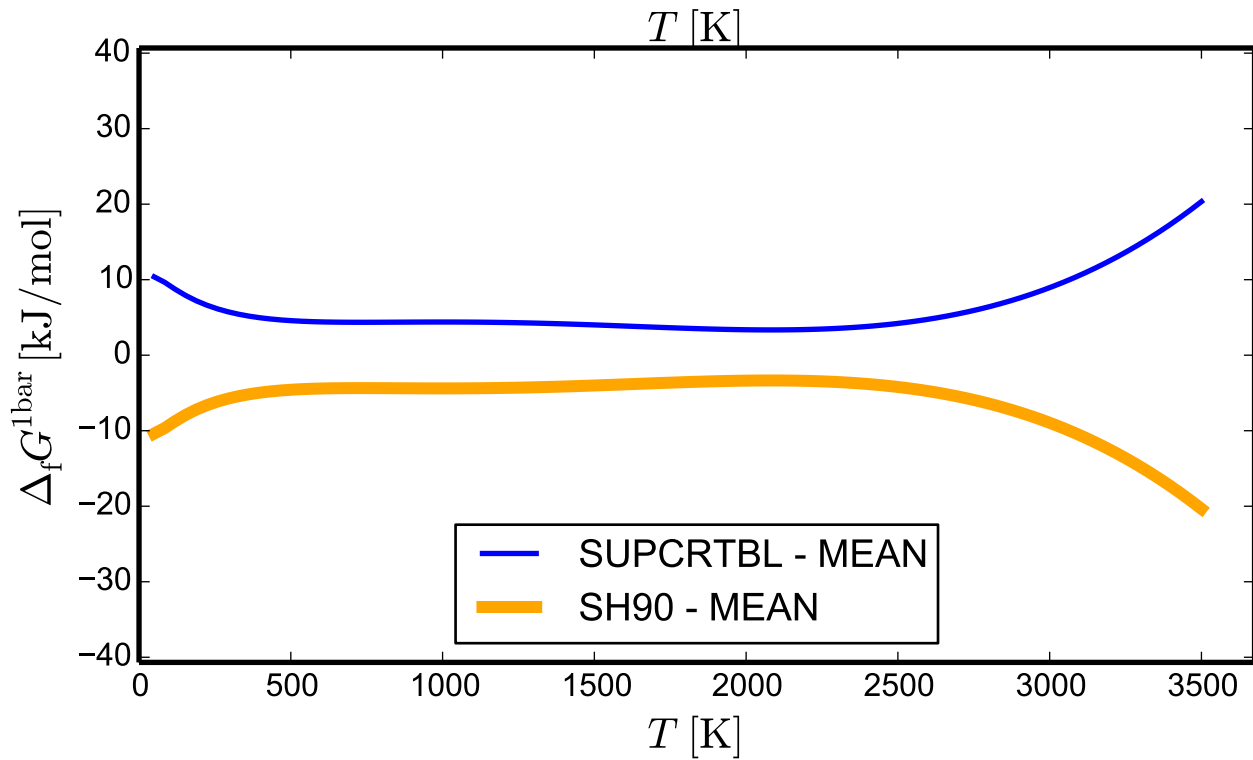
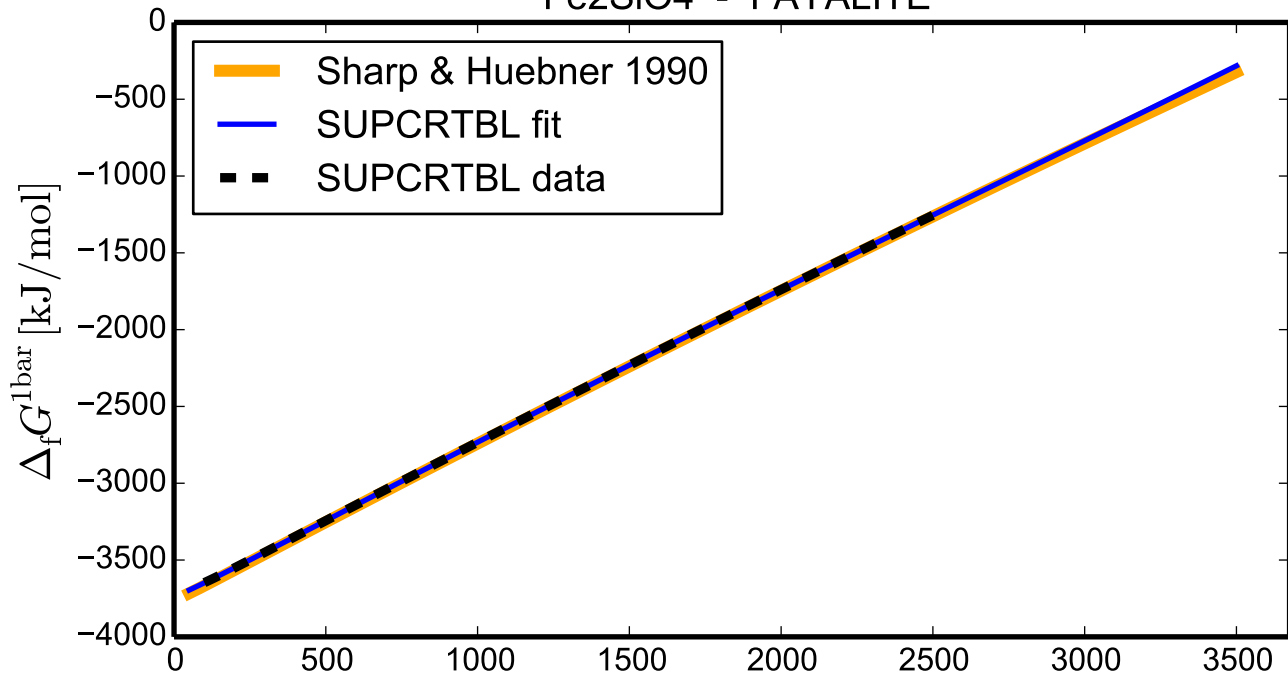


## KCl - SYLVITE



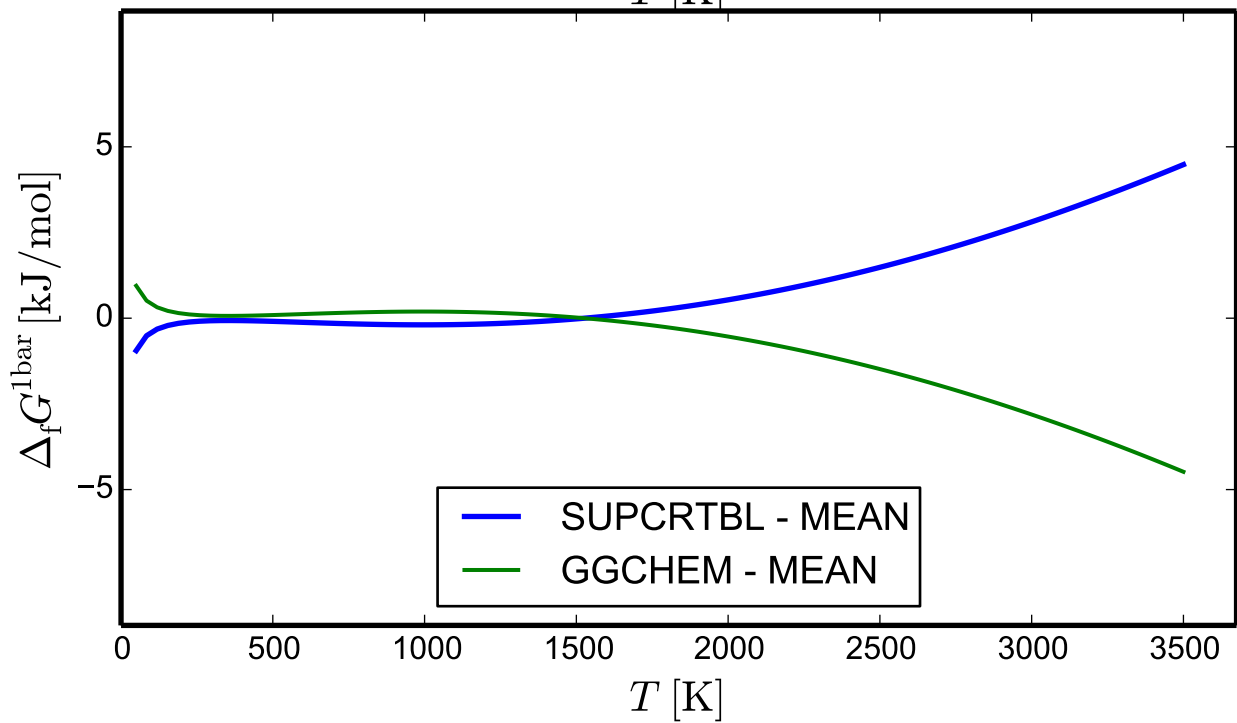
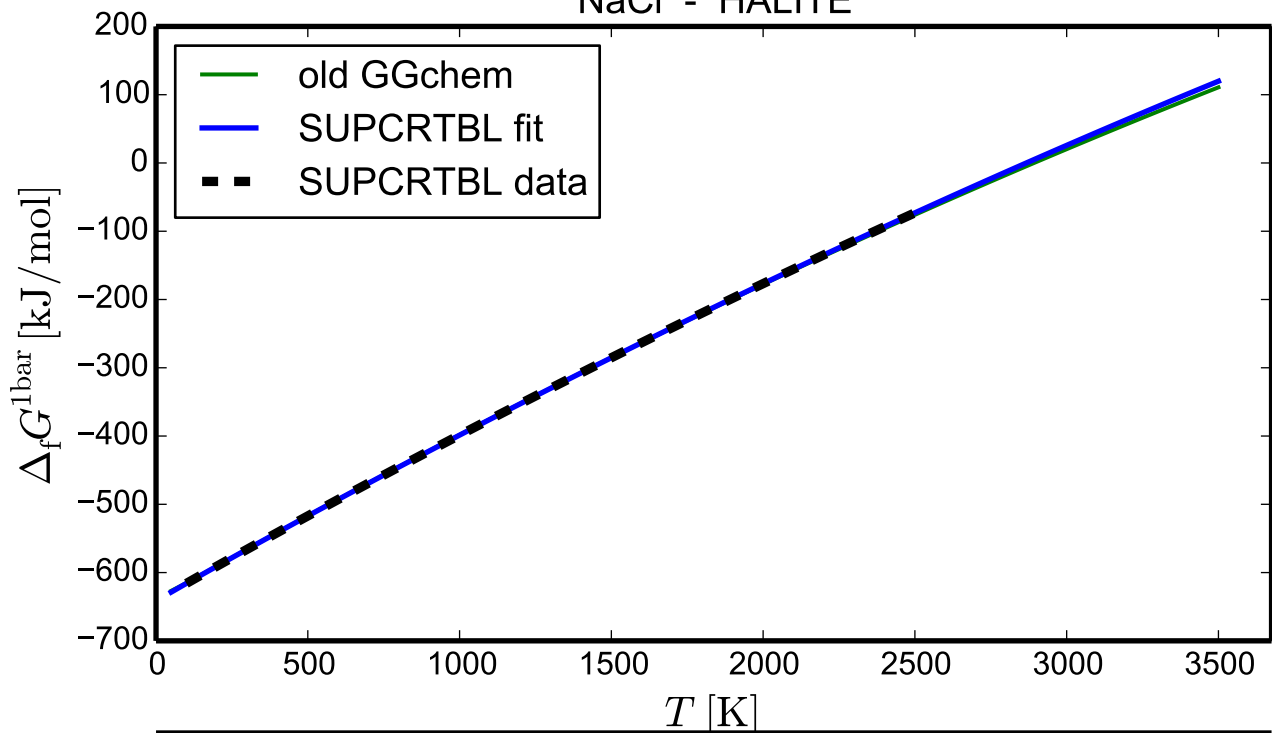
Fe<sub>2</sub>TiO<sub>4</sub> - ULVOSPINEL

## Fe2SiO4 - FAYALITE

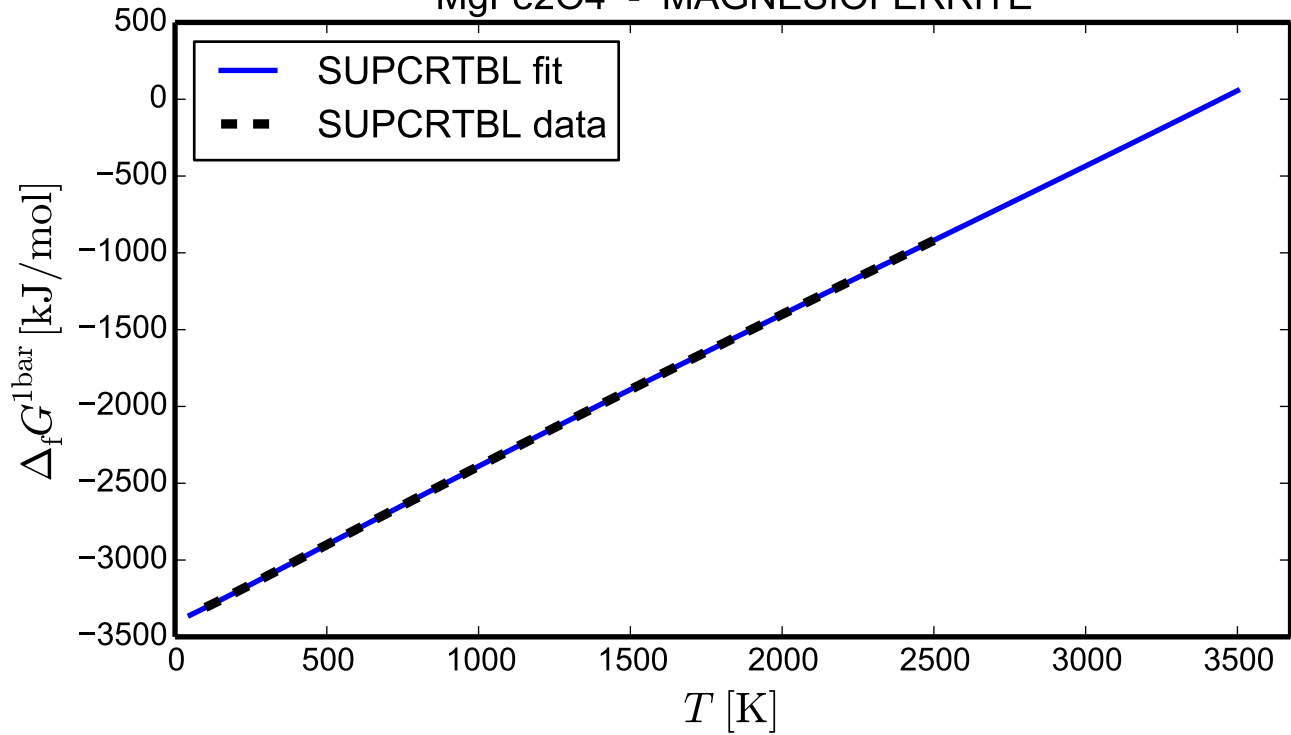




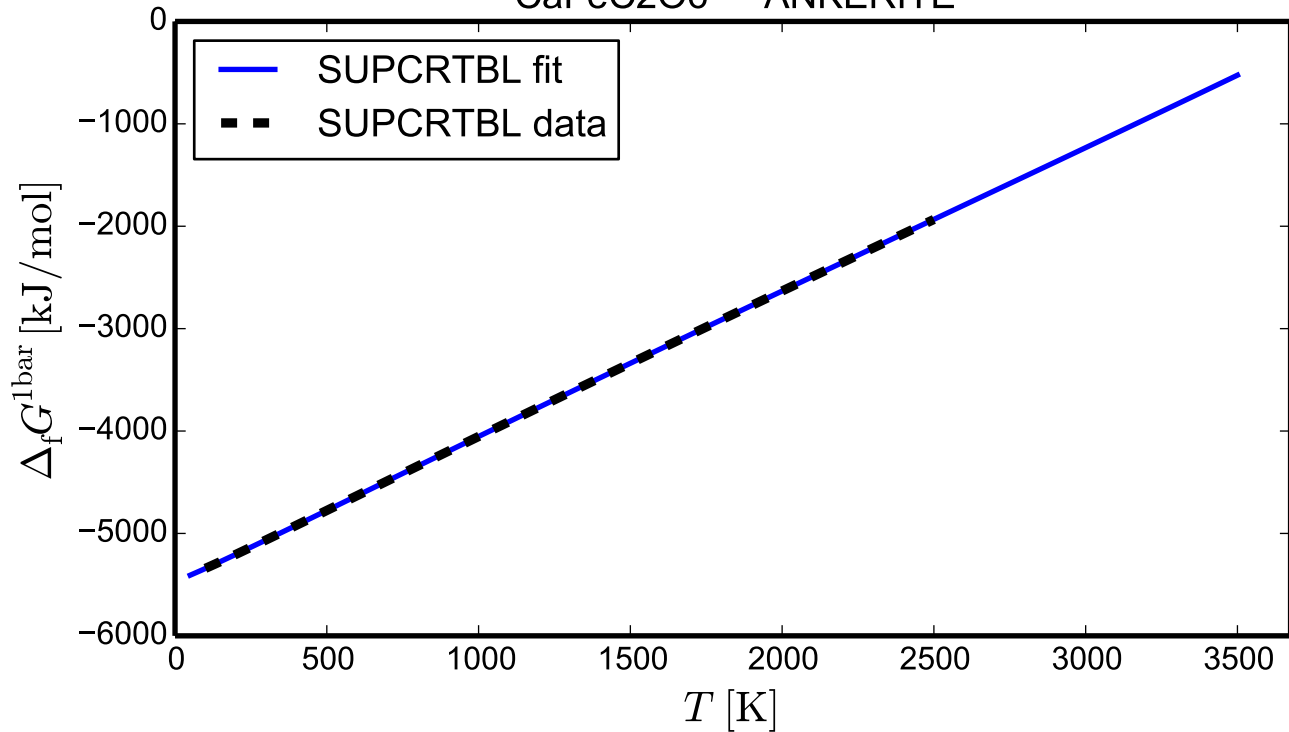
## NaCl - HALITE



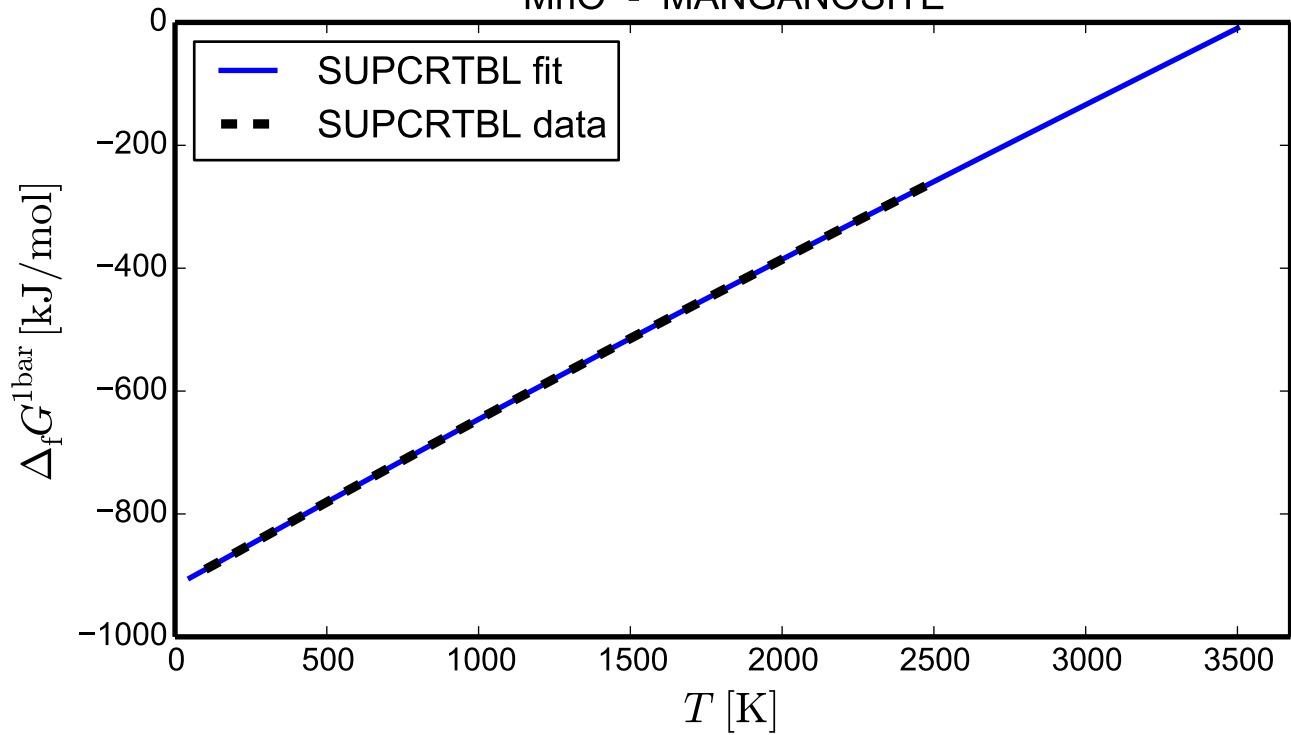
# MgFe2O4 - MAGNESIOFERRITE

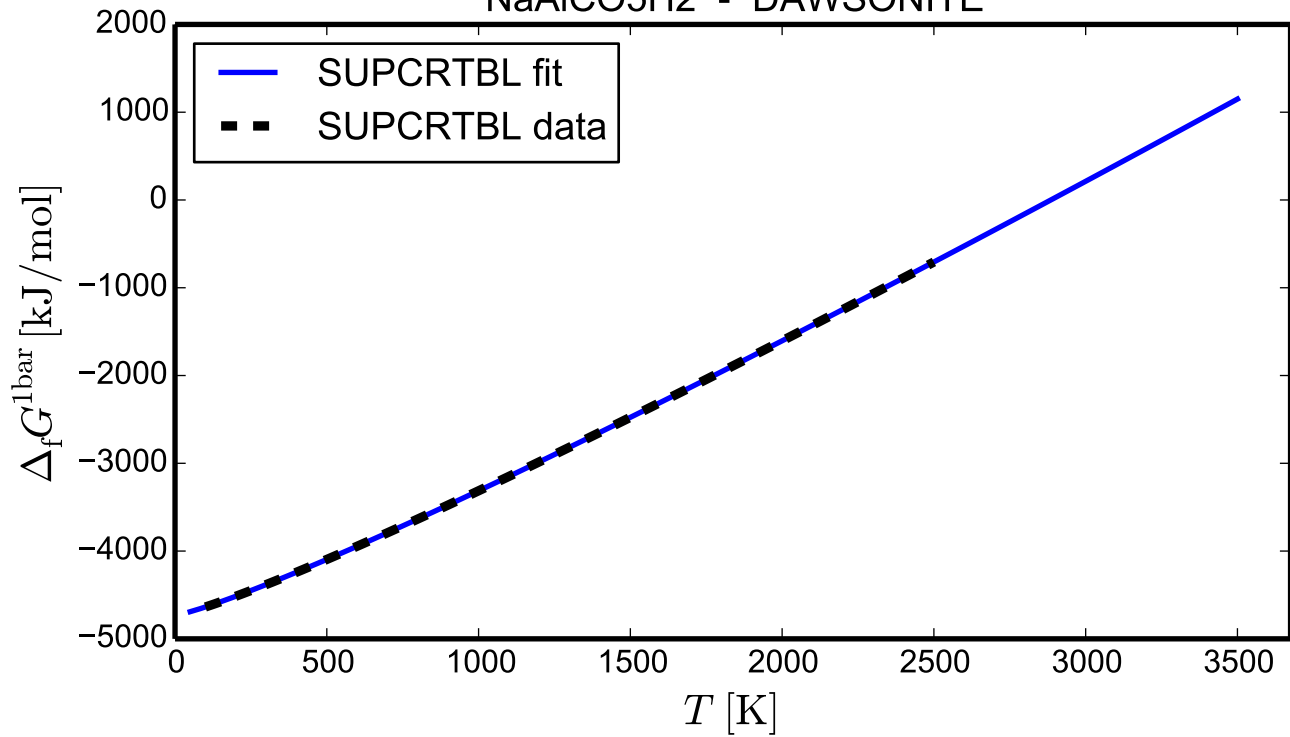


## CaFeC2O6 - ANKERITE

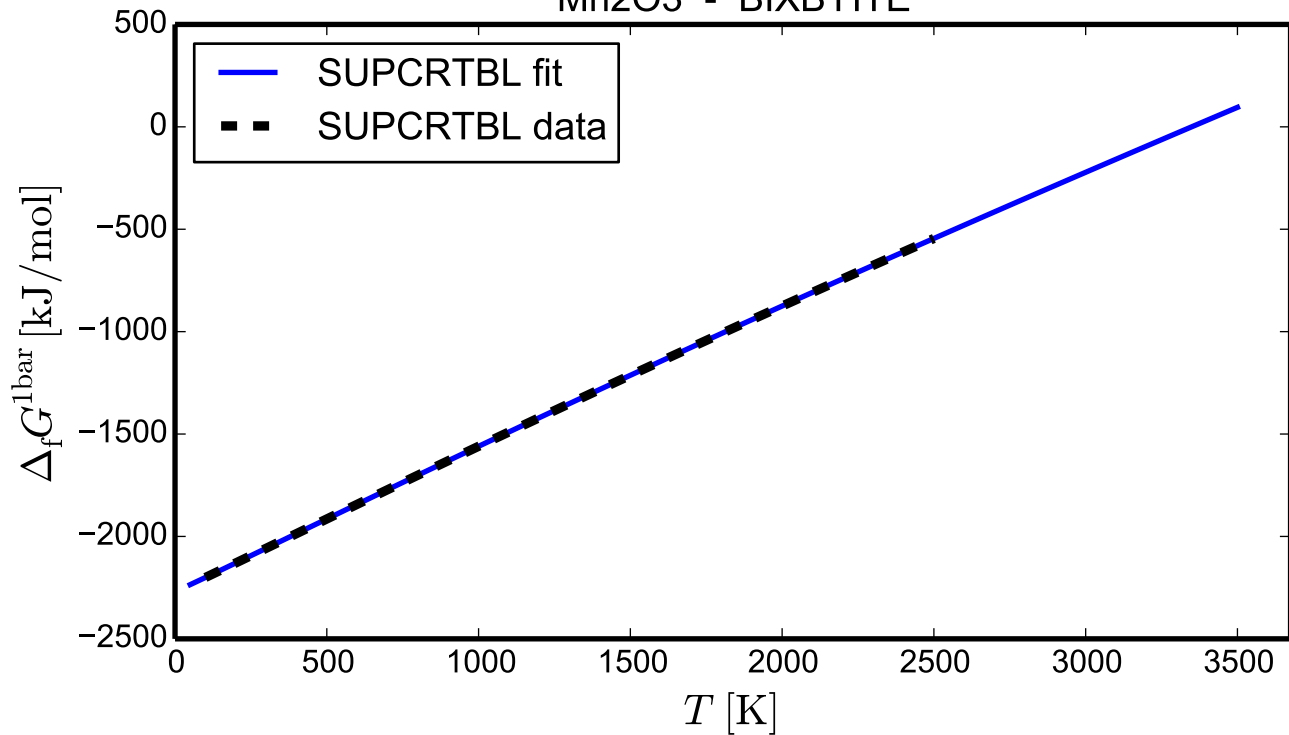


## MnO - MANGANOSITE

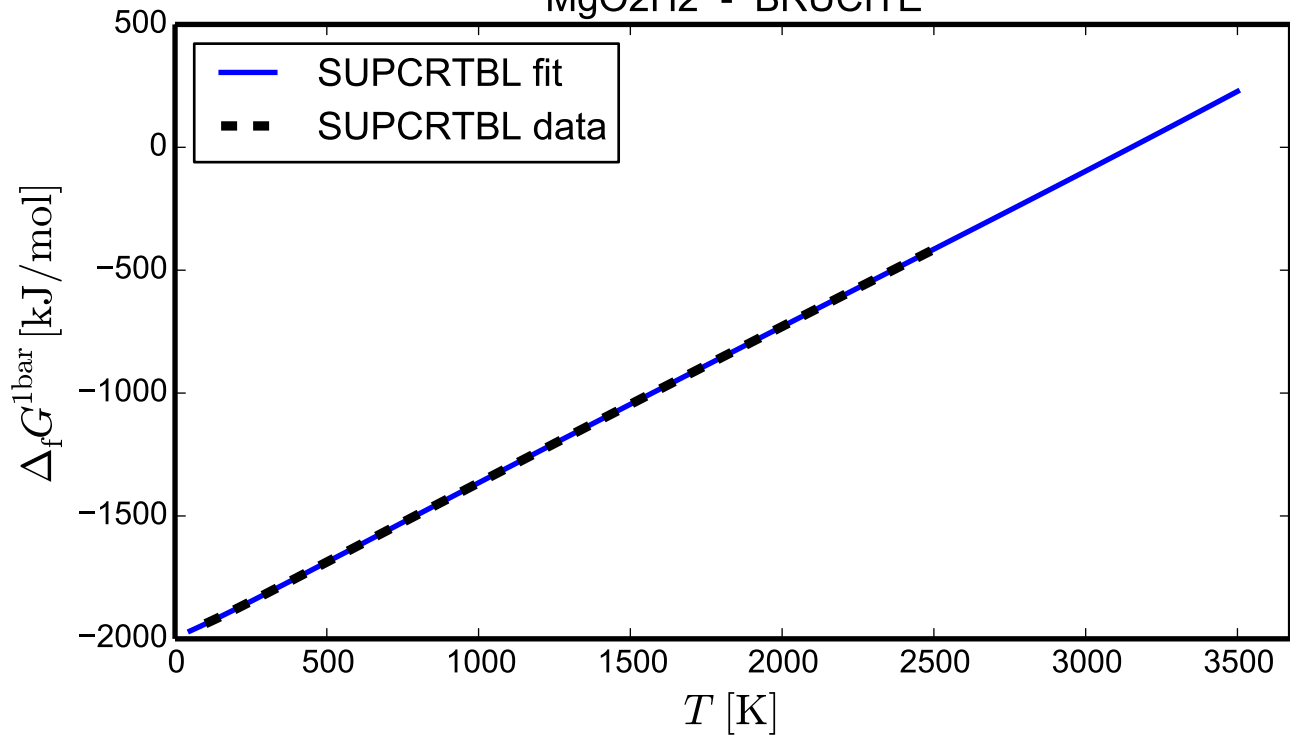


NaAlCO<sub>5</sub>H<sub>2</sub> - DAWSONITE

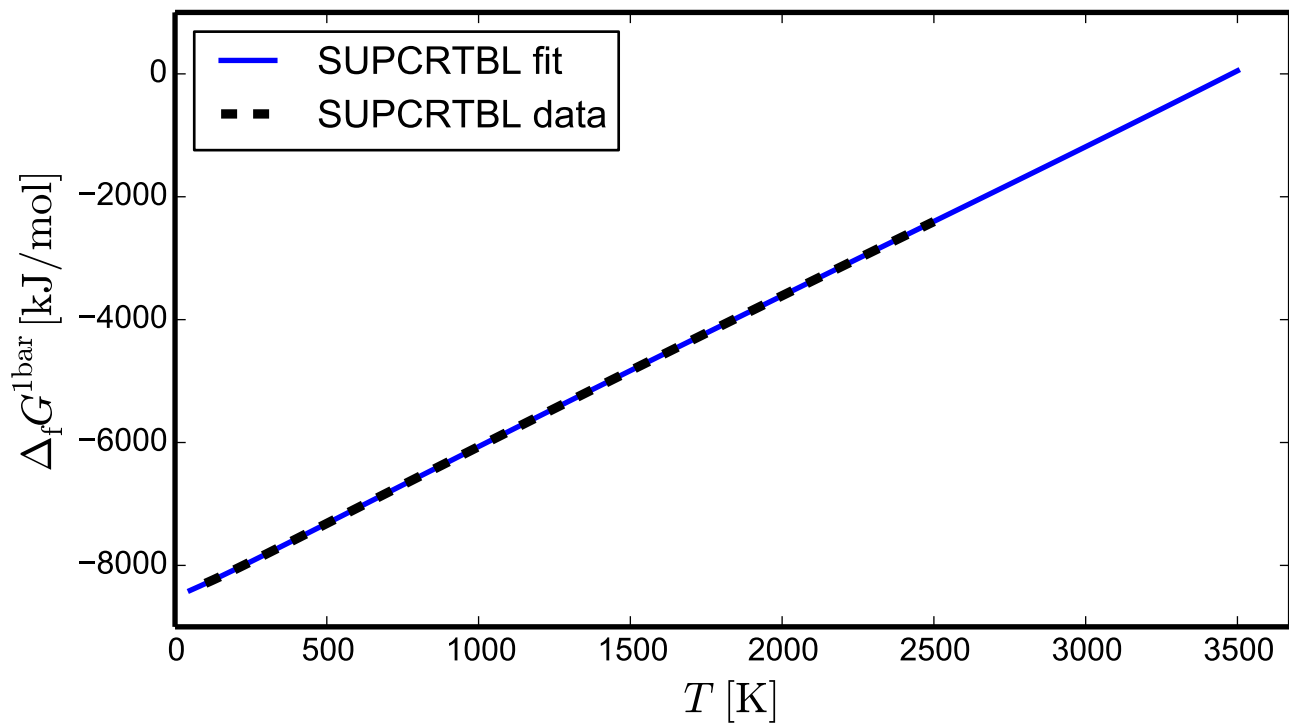
# Mn<sub>2</sub>O<sub>3</sub> - BIXBYITE



# MgO2H2 - BRUCITE

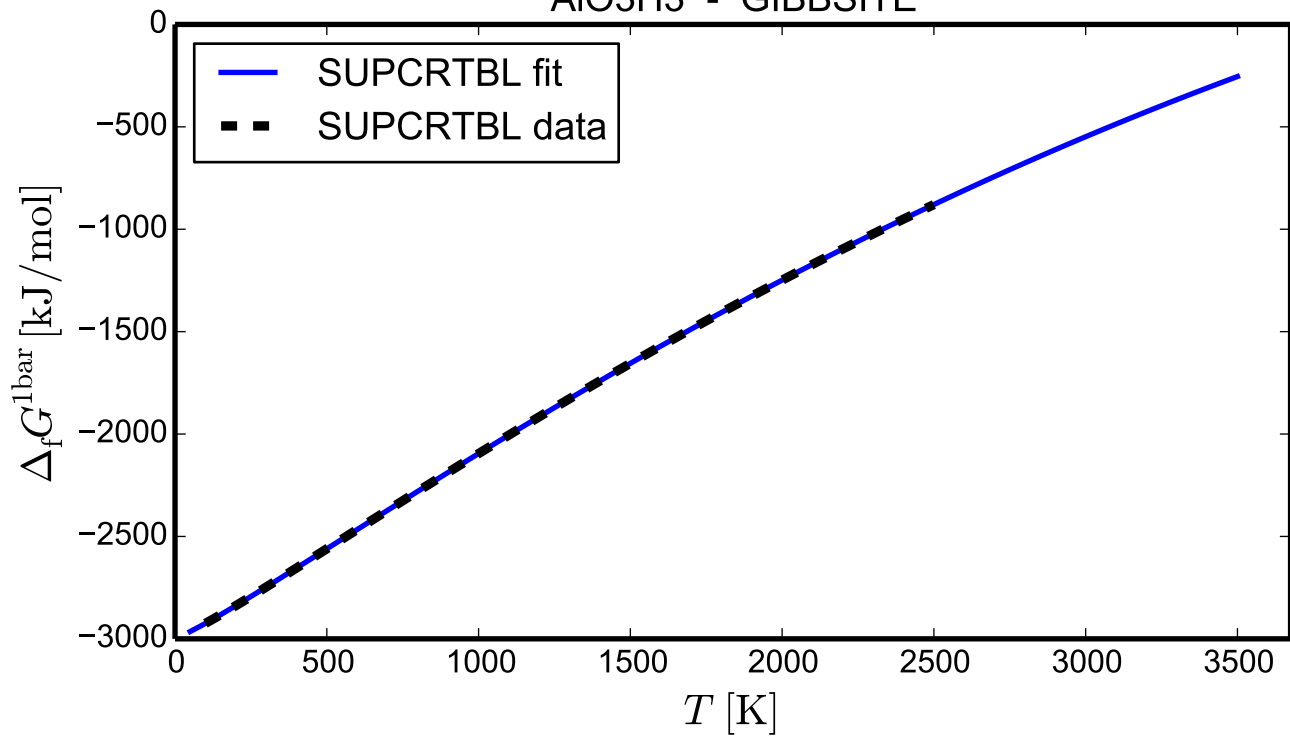


## Fe3Si2O9H4 - GREENALITE

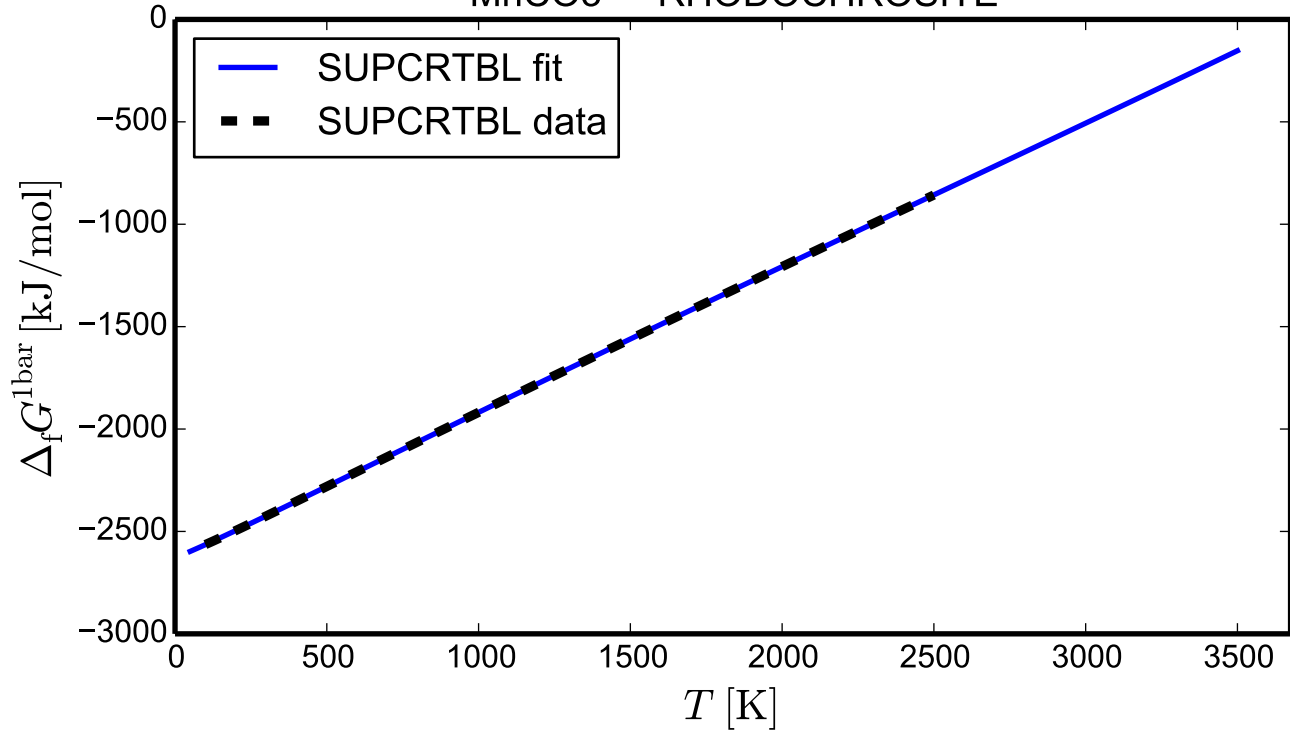




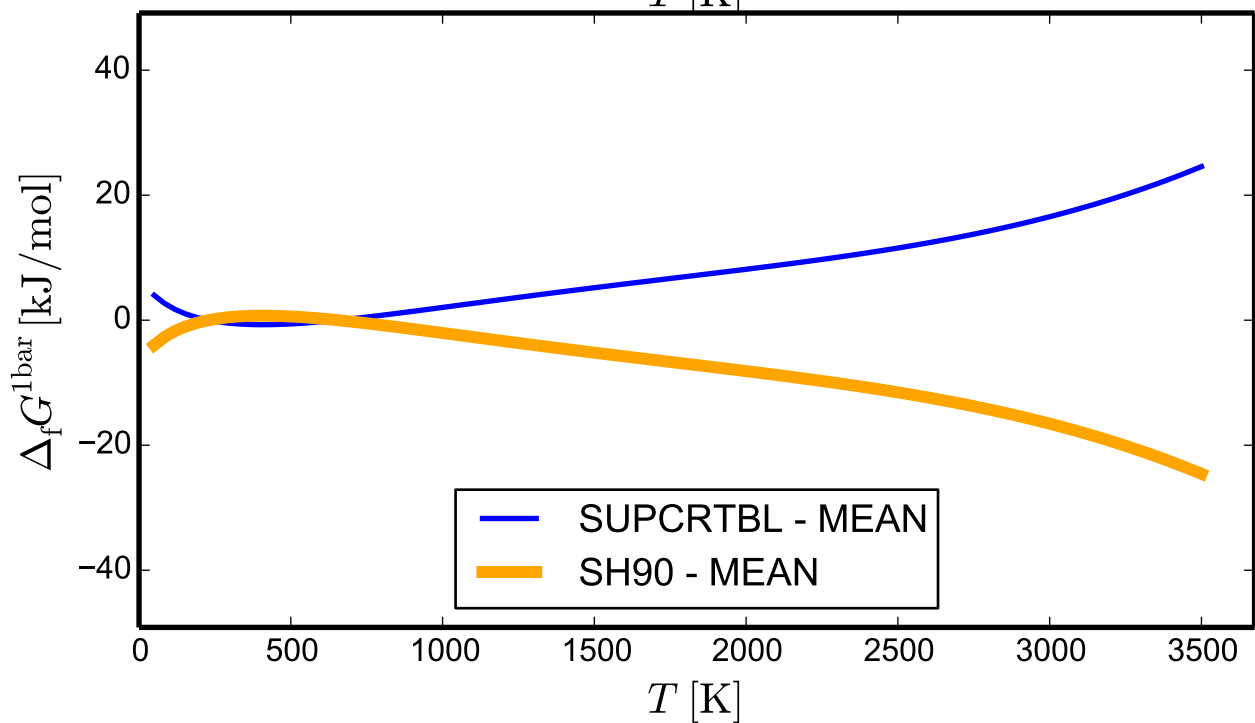
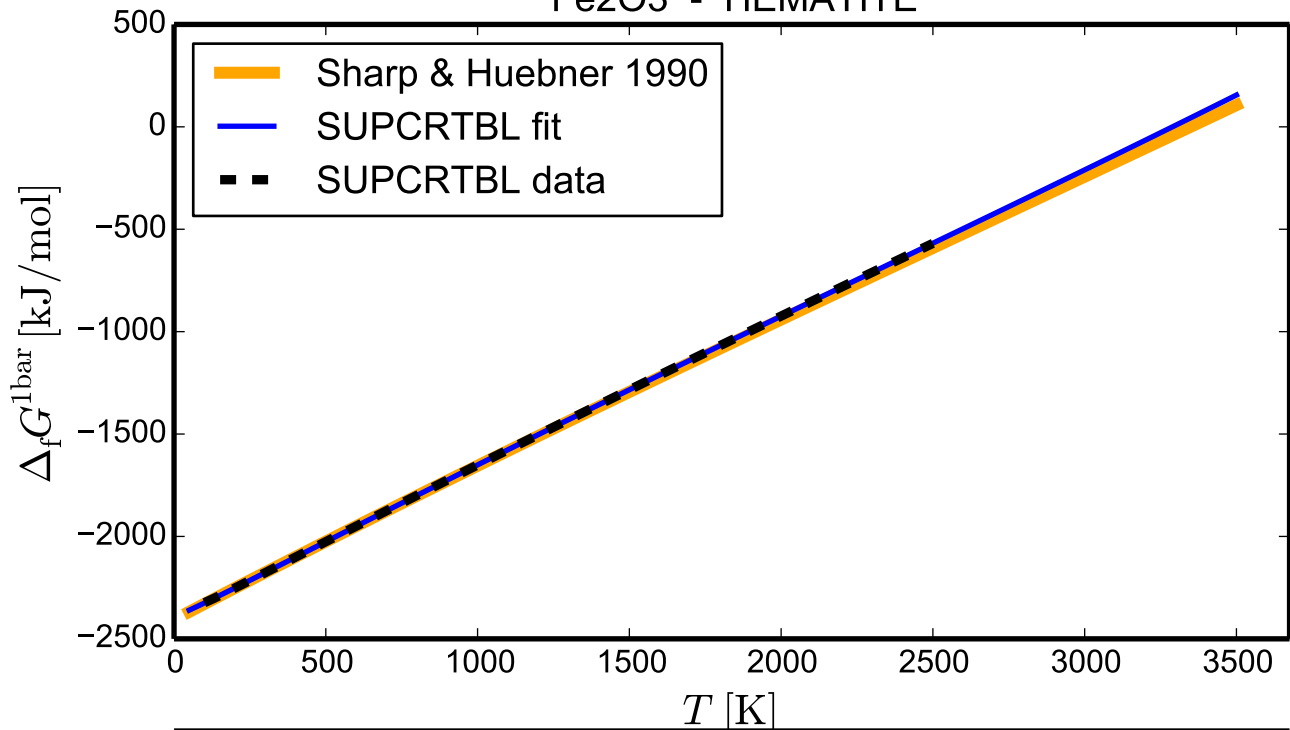
# AlO3H3 - GIBBSITE



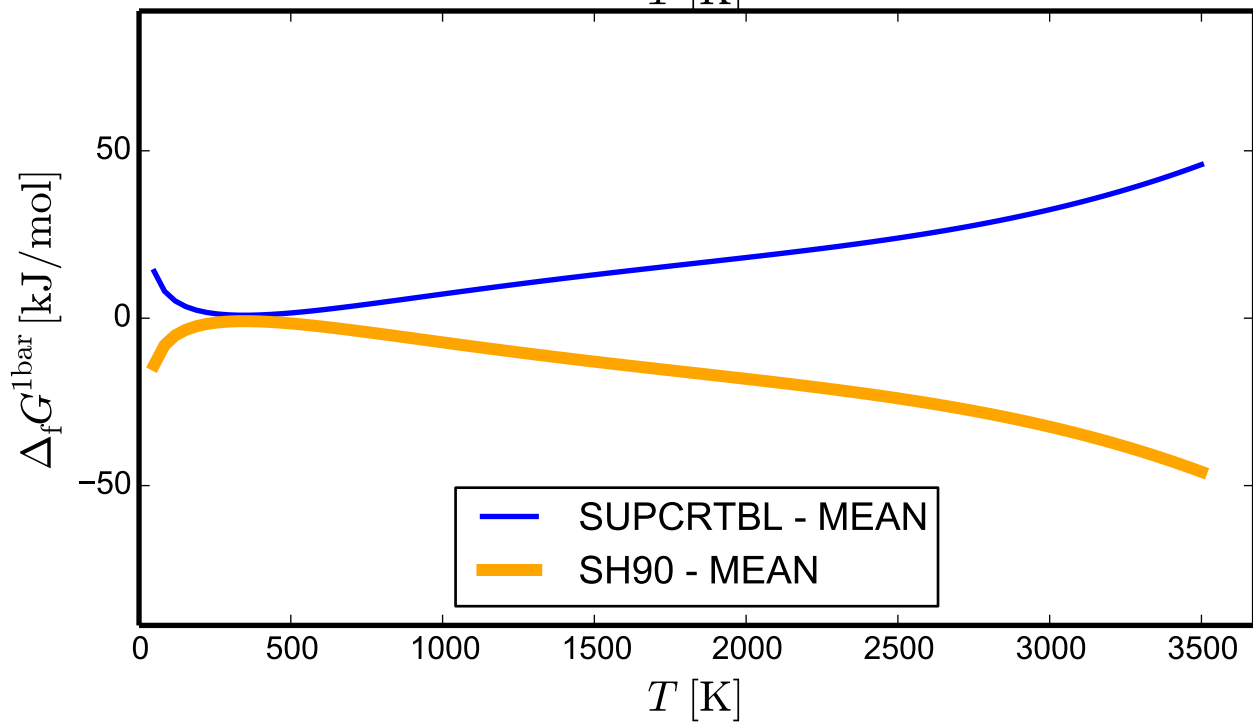
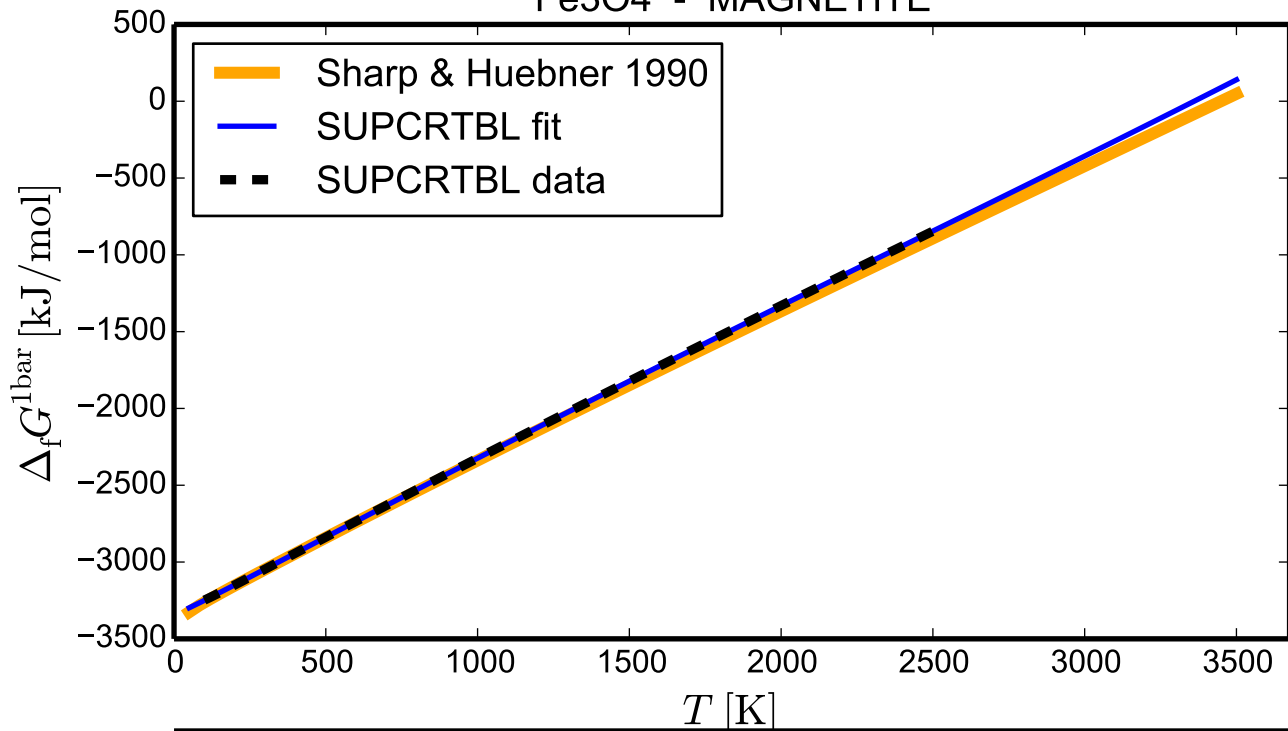
# MnCO<sub>3</sub> - RHODOCHROSITE

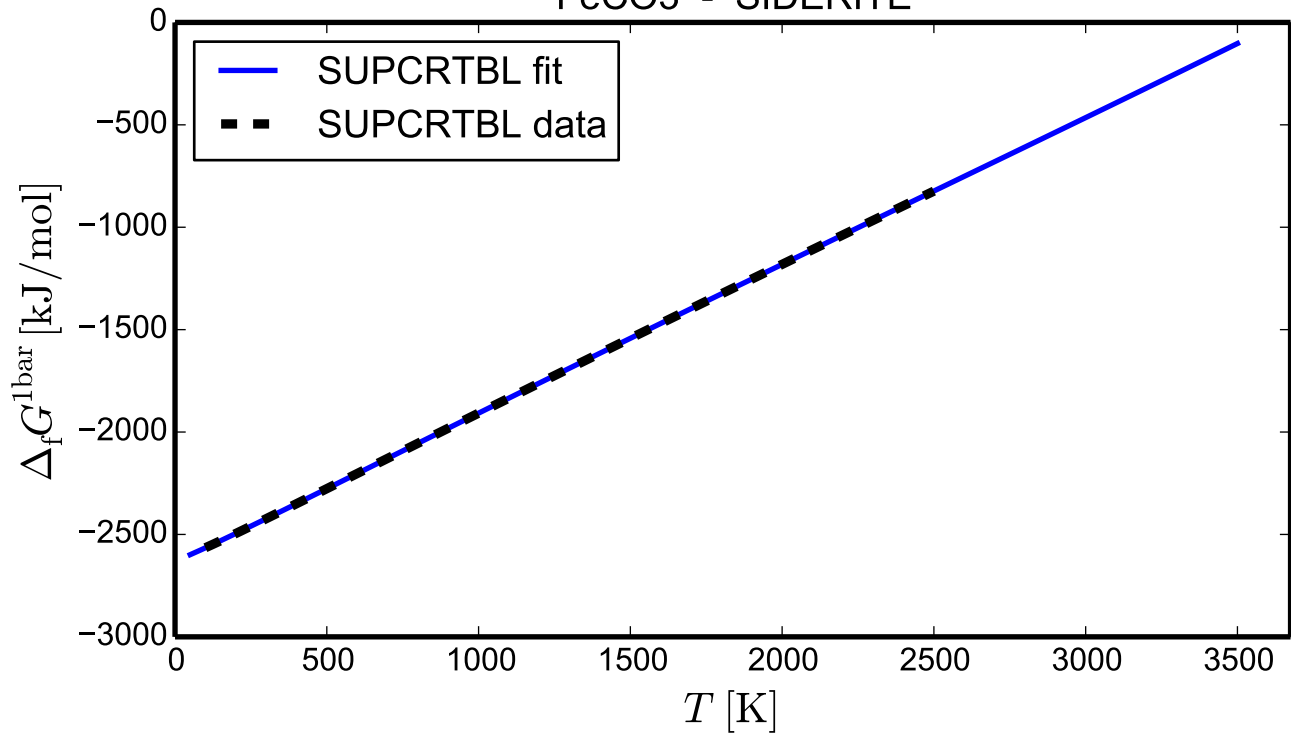


# Fe2O3 - HEMATITE

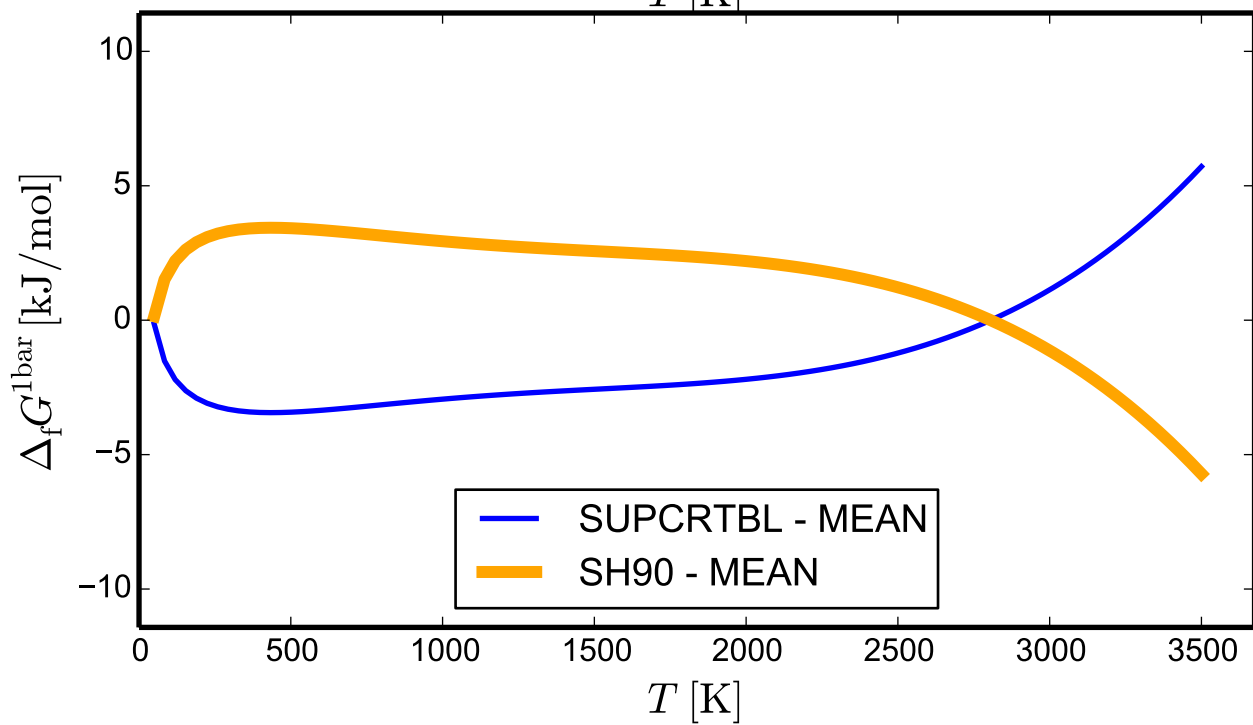
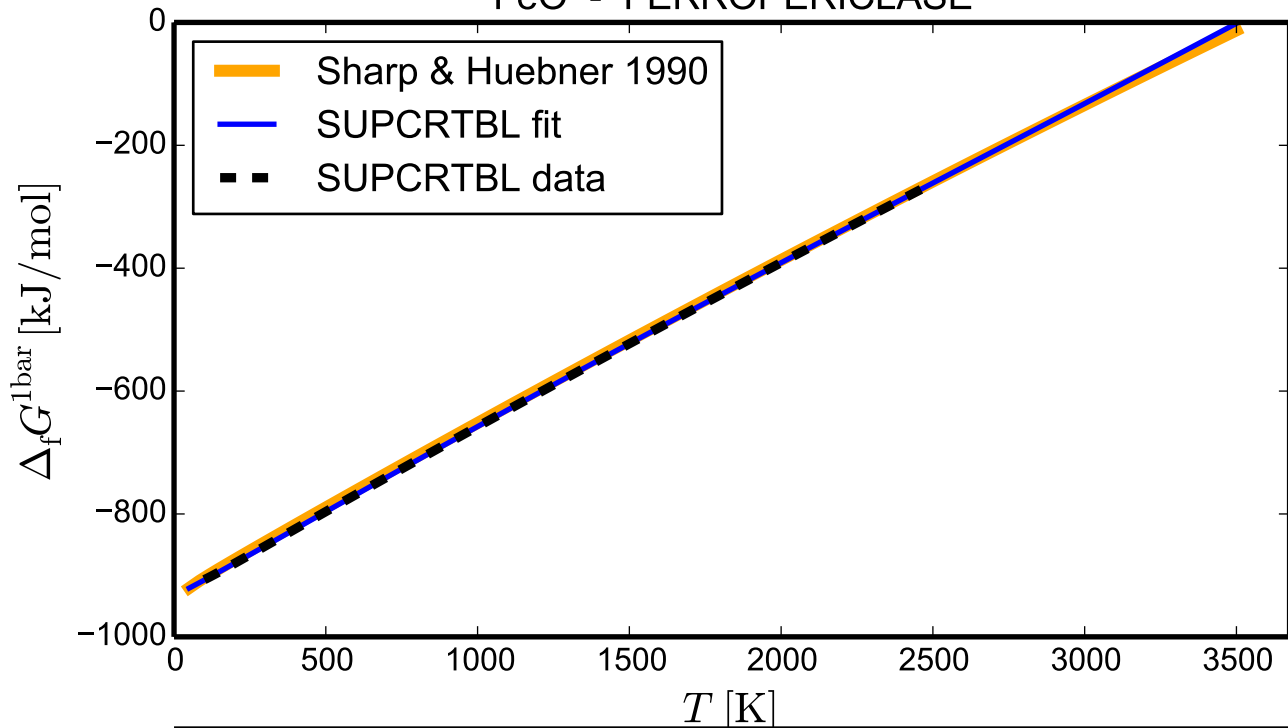


# Fe3O4 - MAGNETITE

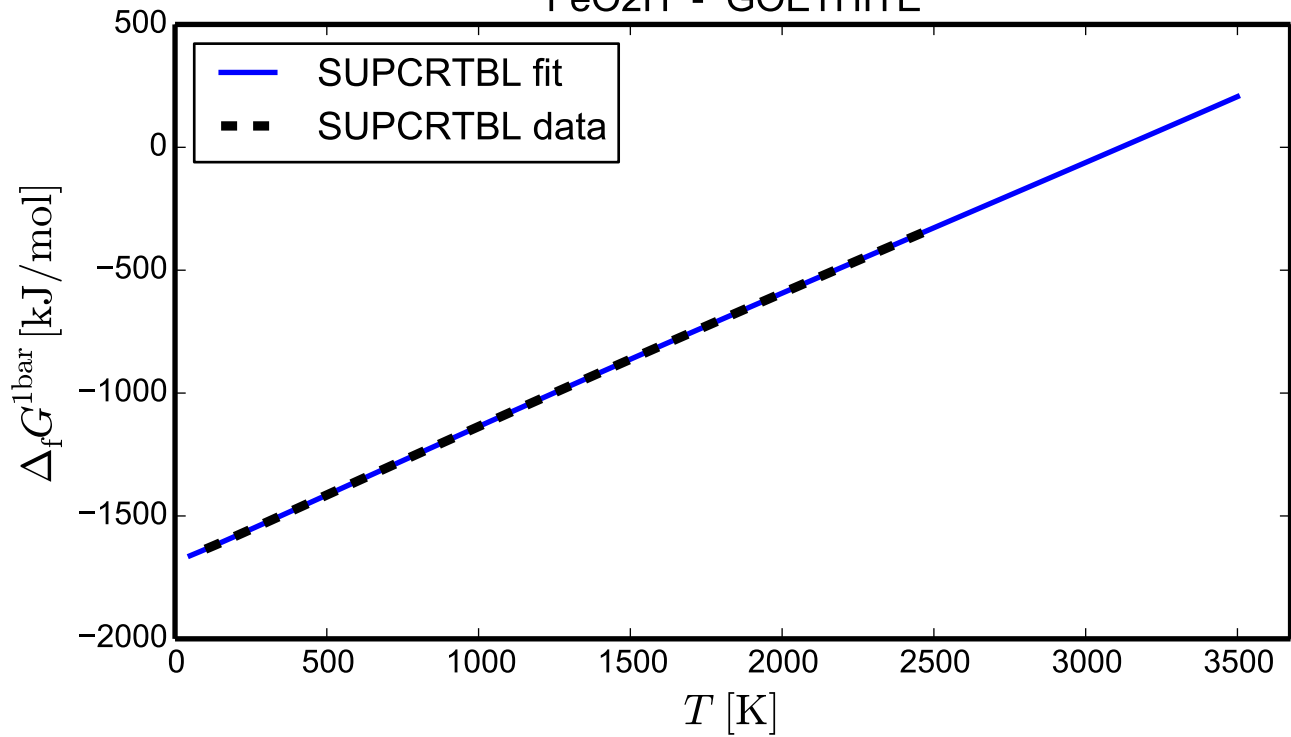


FeCO<sub>3</sub> - SIDERITE

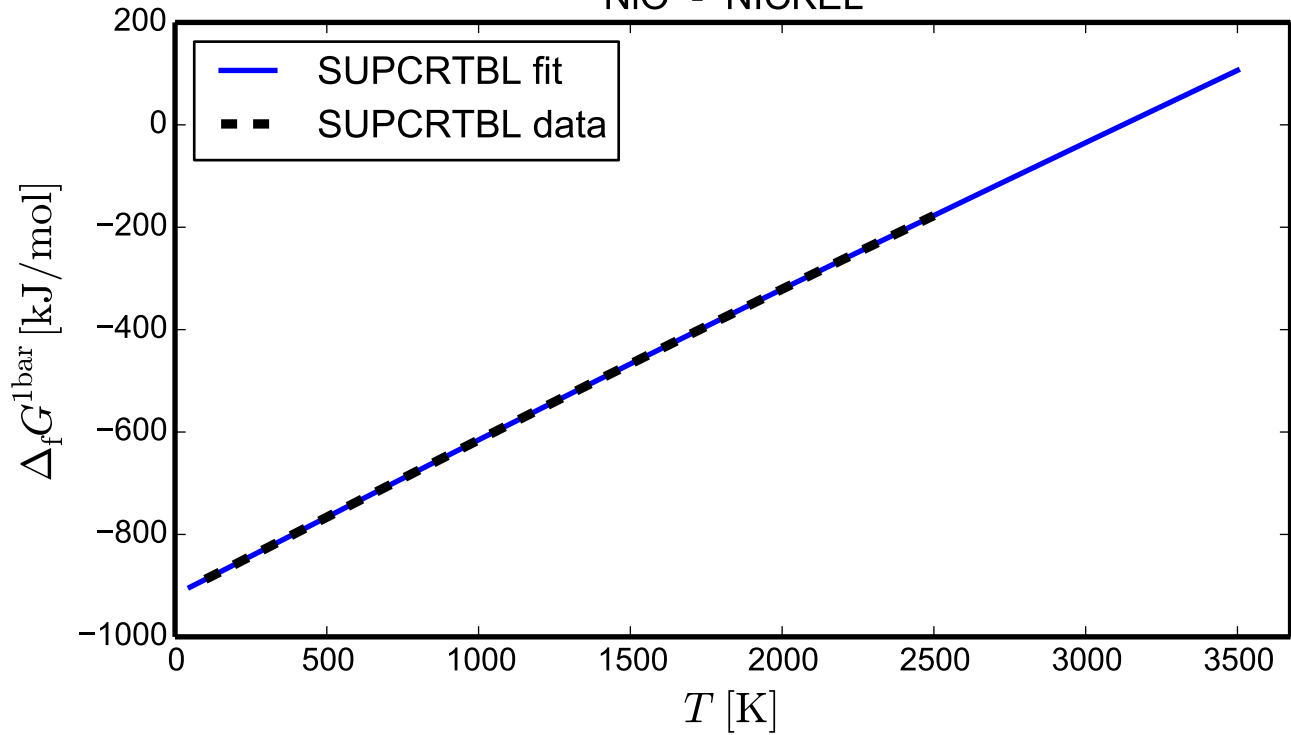
# FeO - FERROPERICLASE



## FeO2H - GOETHITE

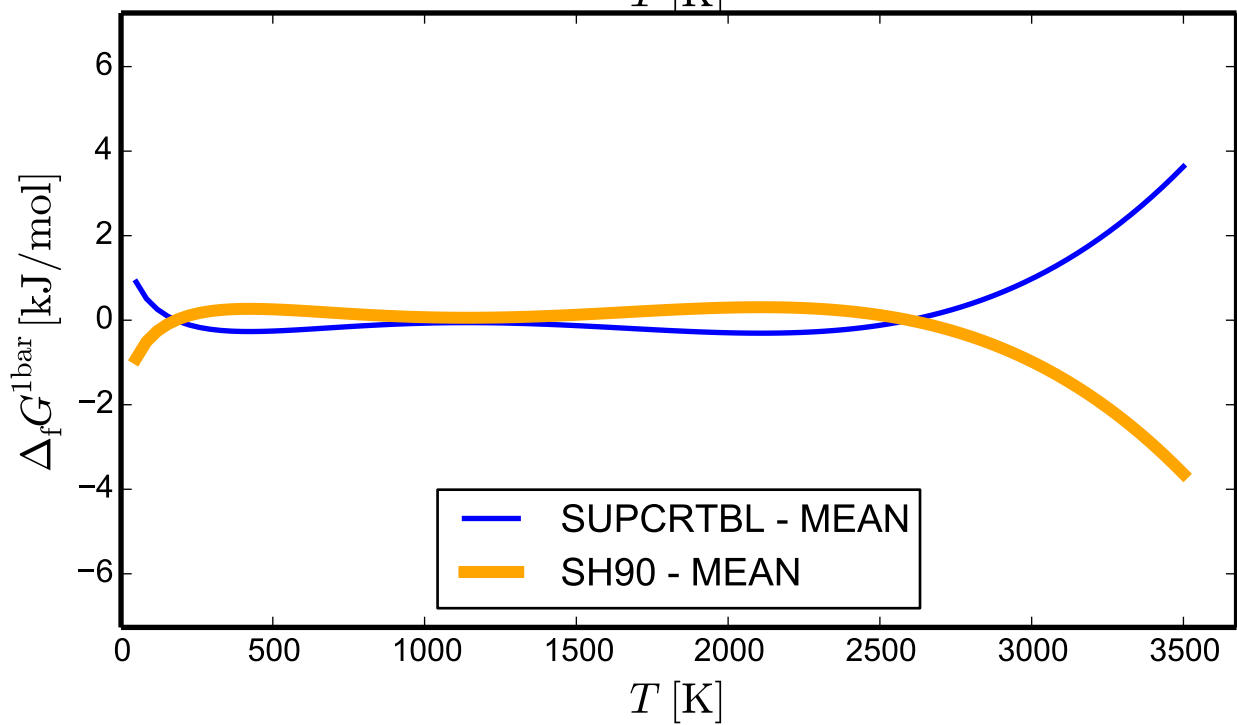
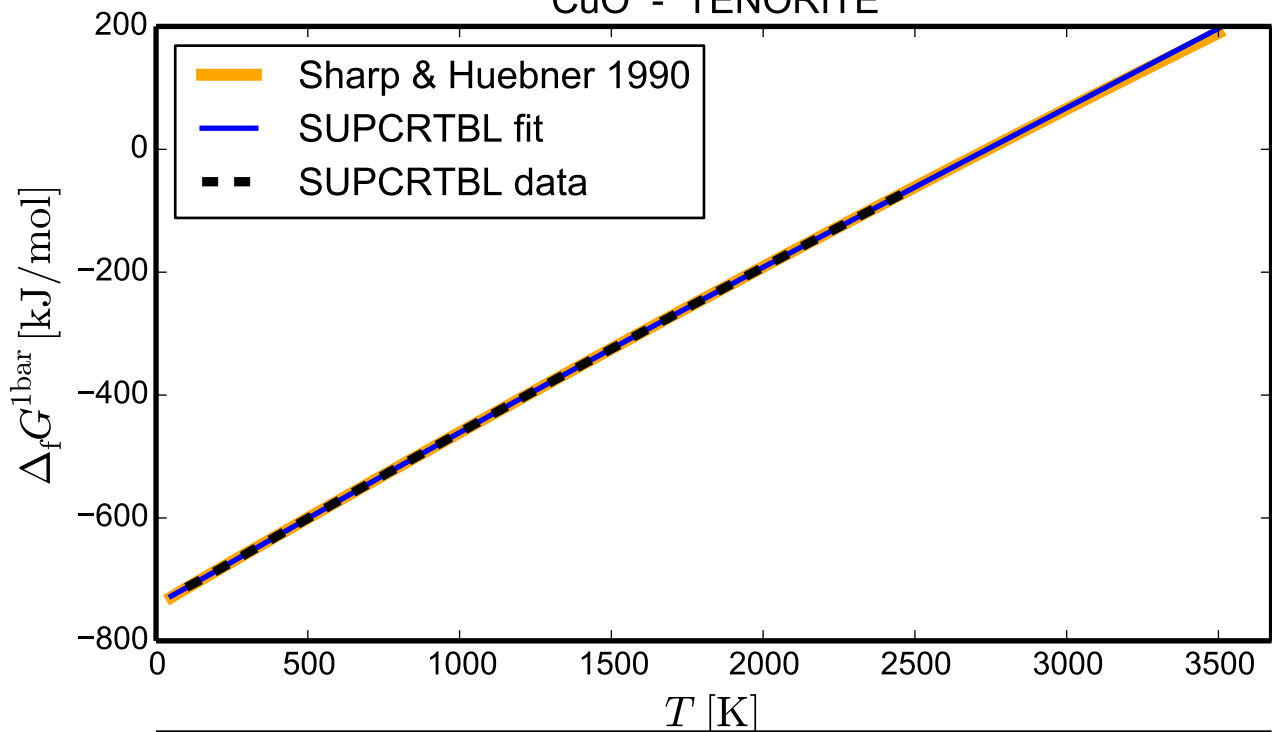


## NiO - NICKEL

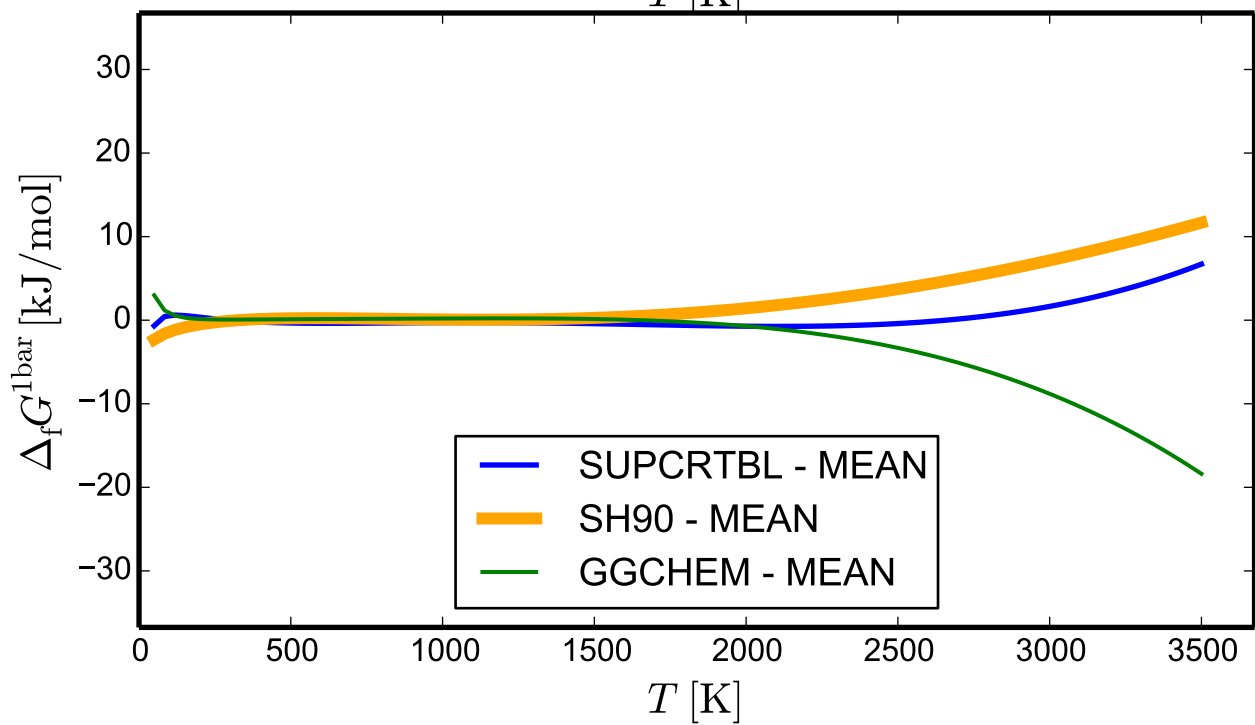
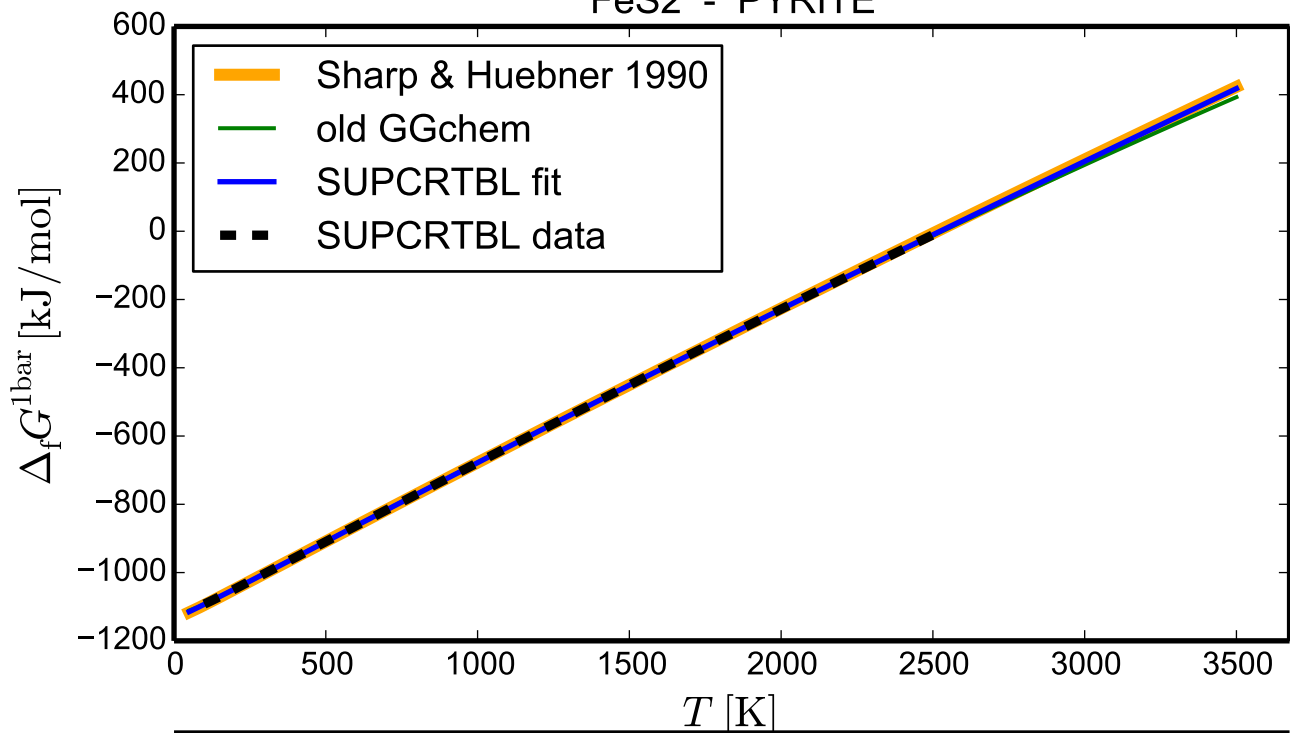




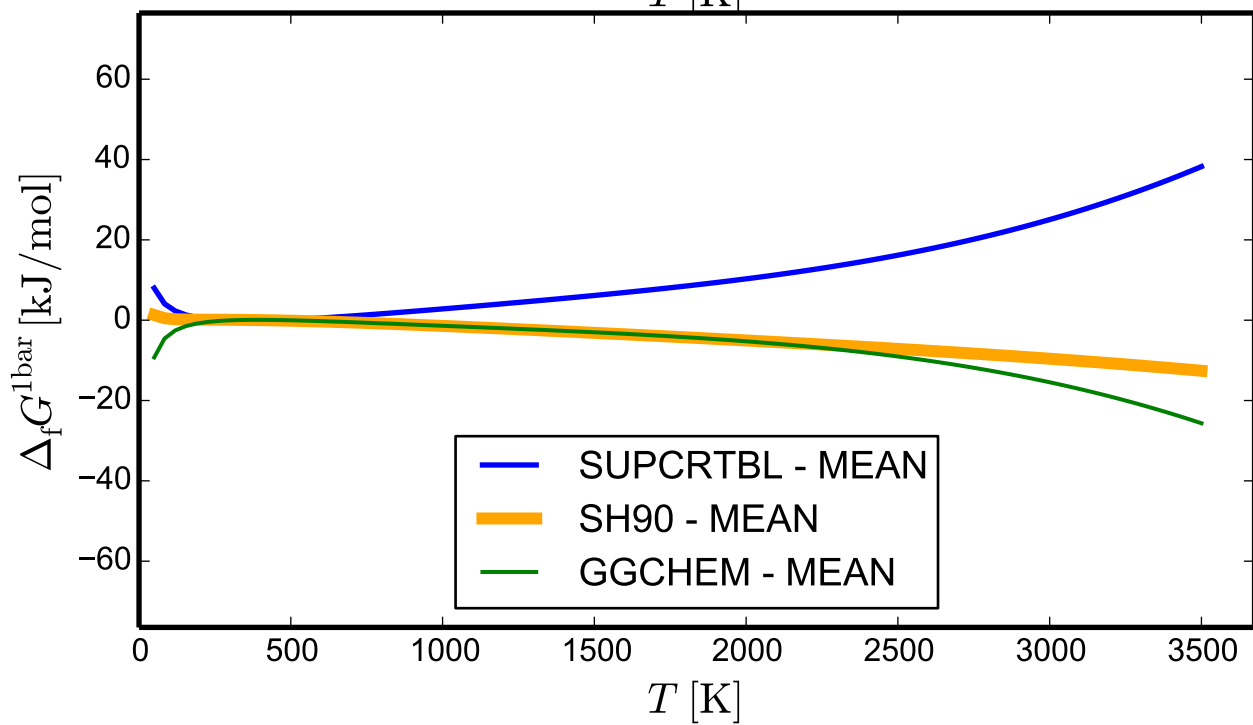
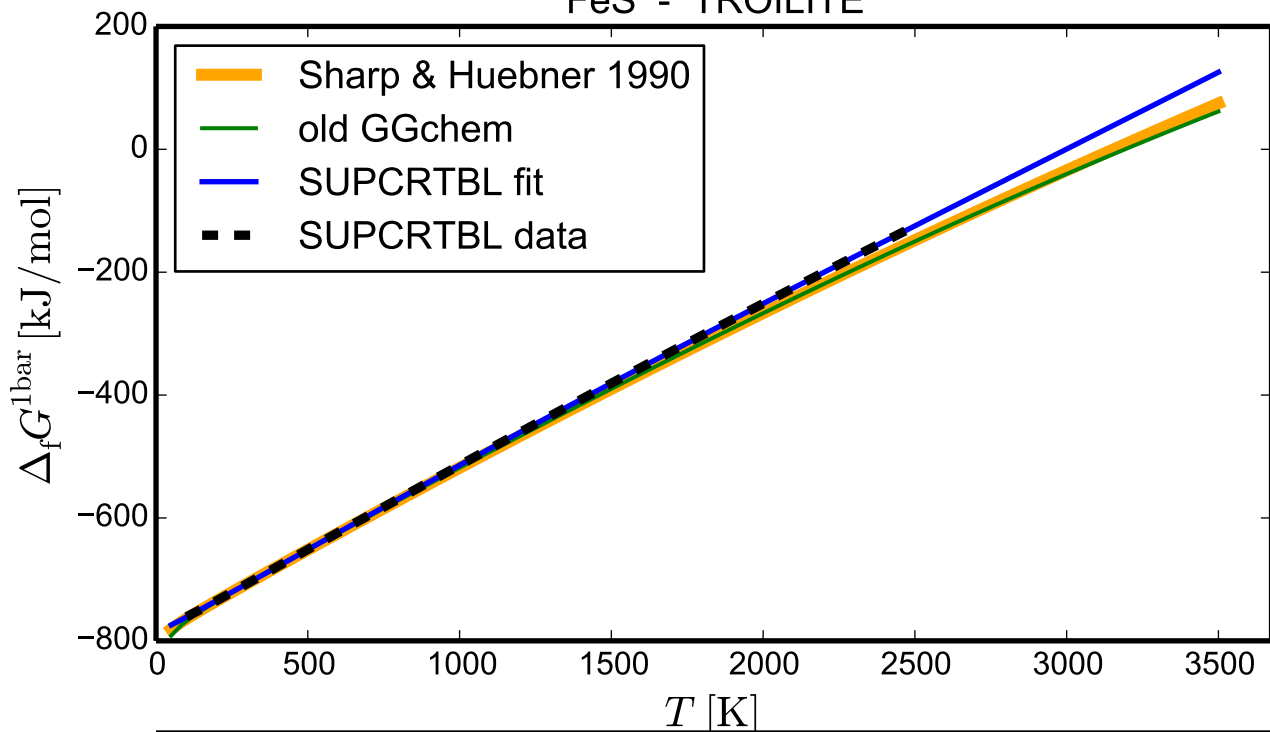
# CuO - TENORITE



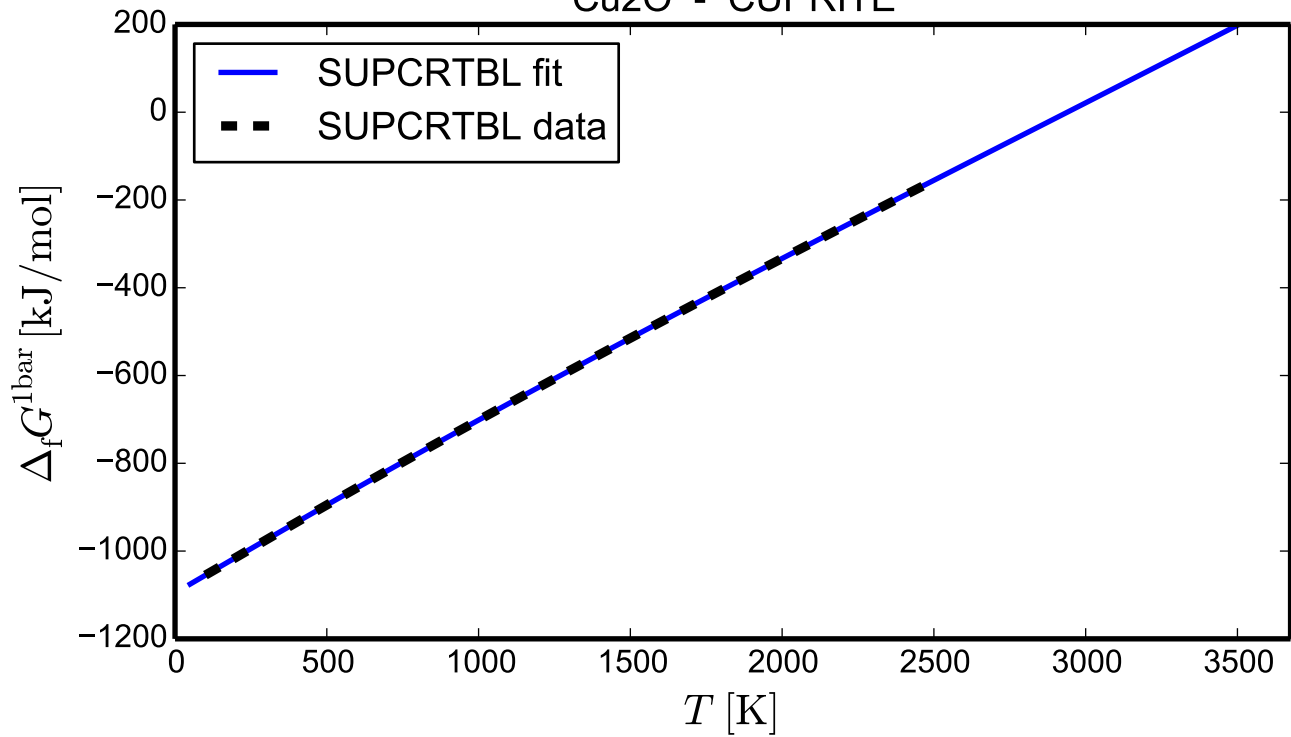
## FeS2 - PYRITE



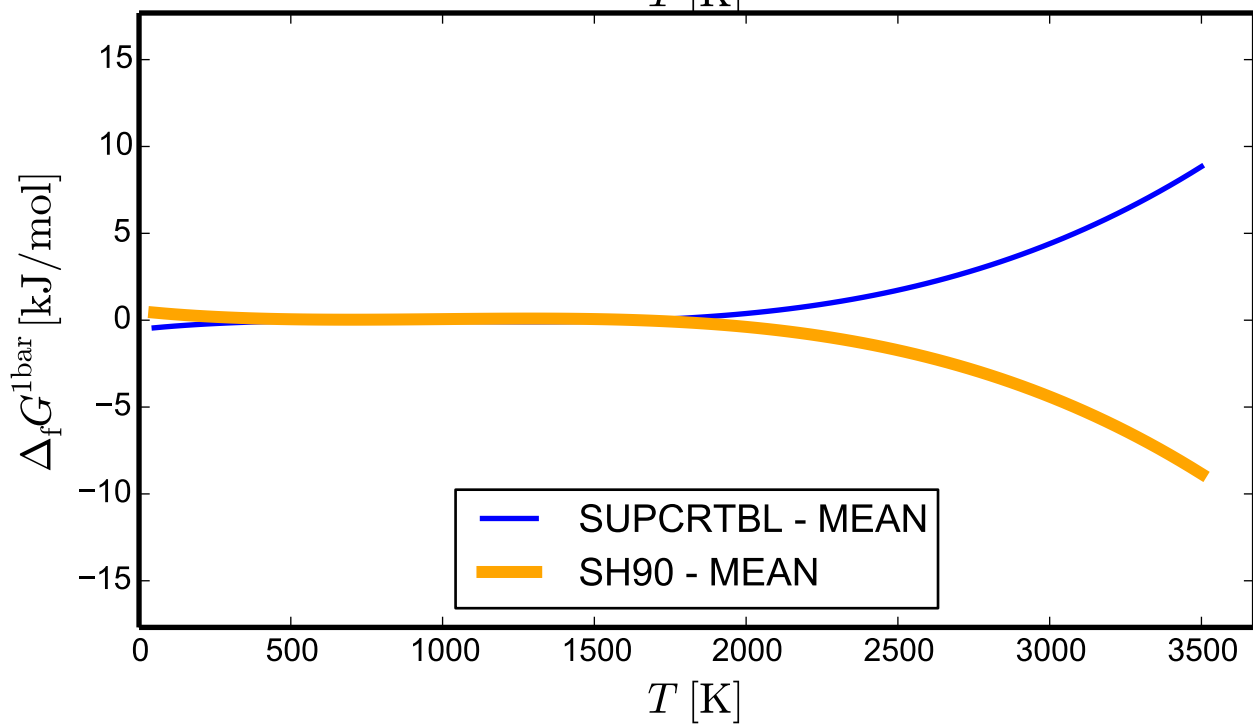
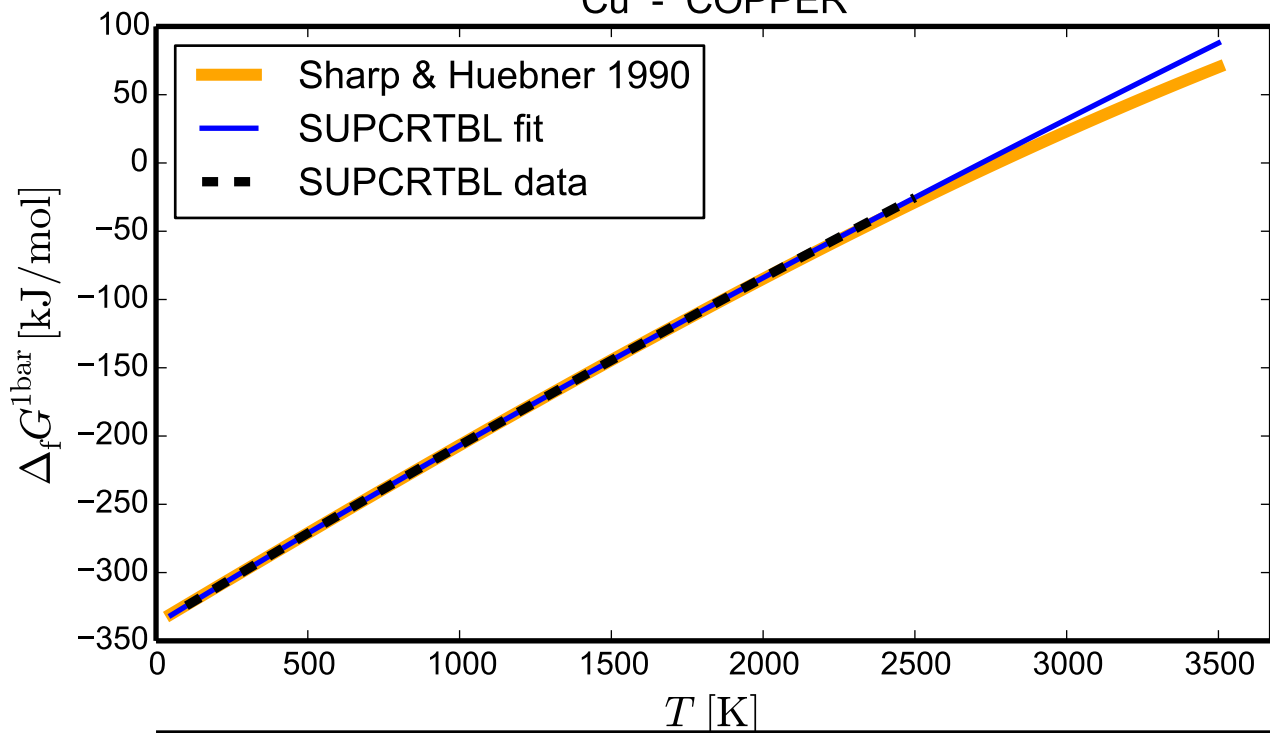
# FeS - TROILITE



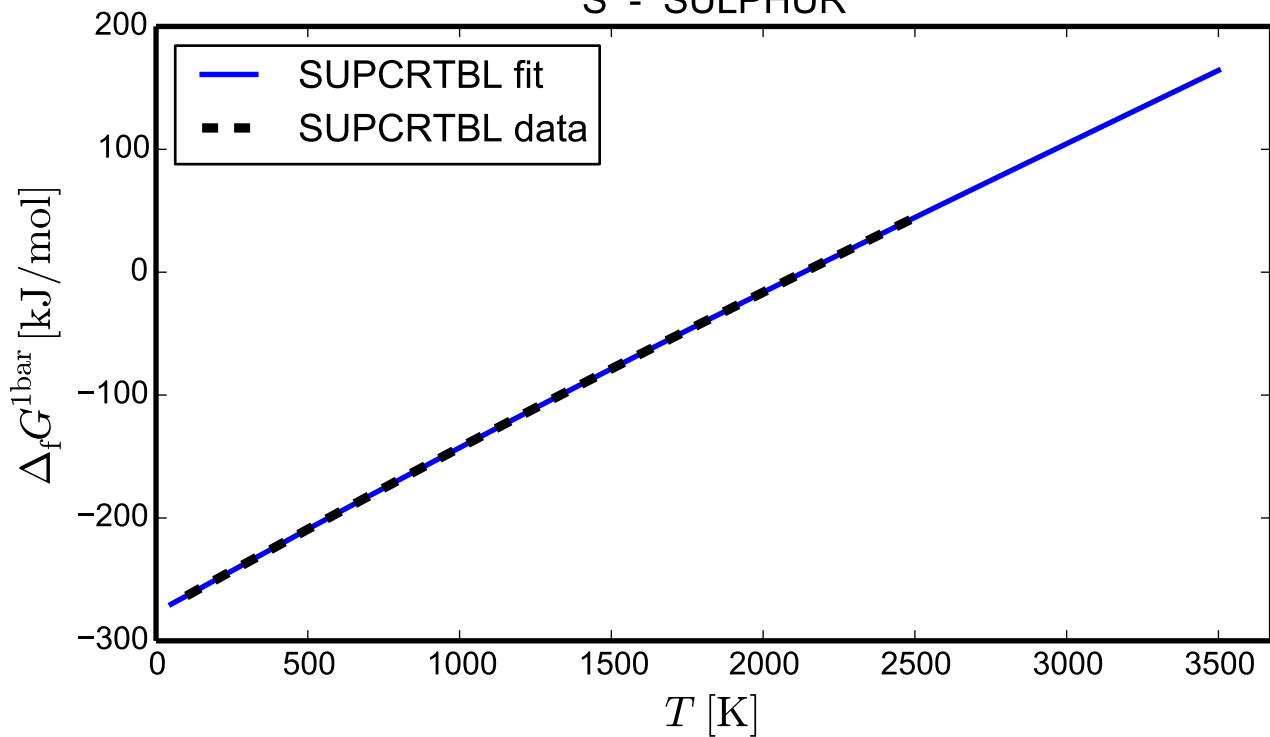
## Cu2O - CUPRITE



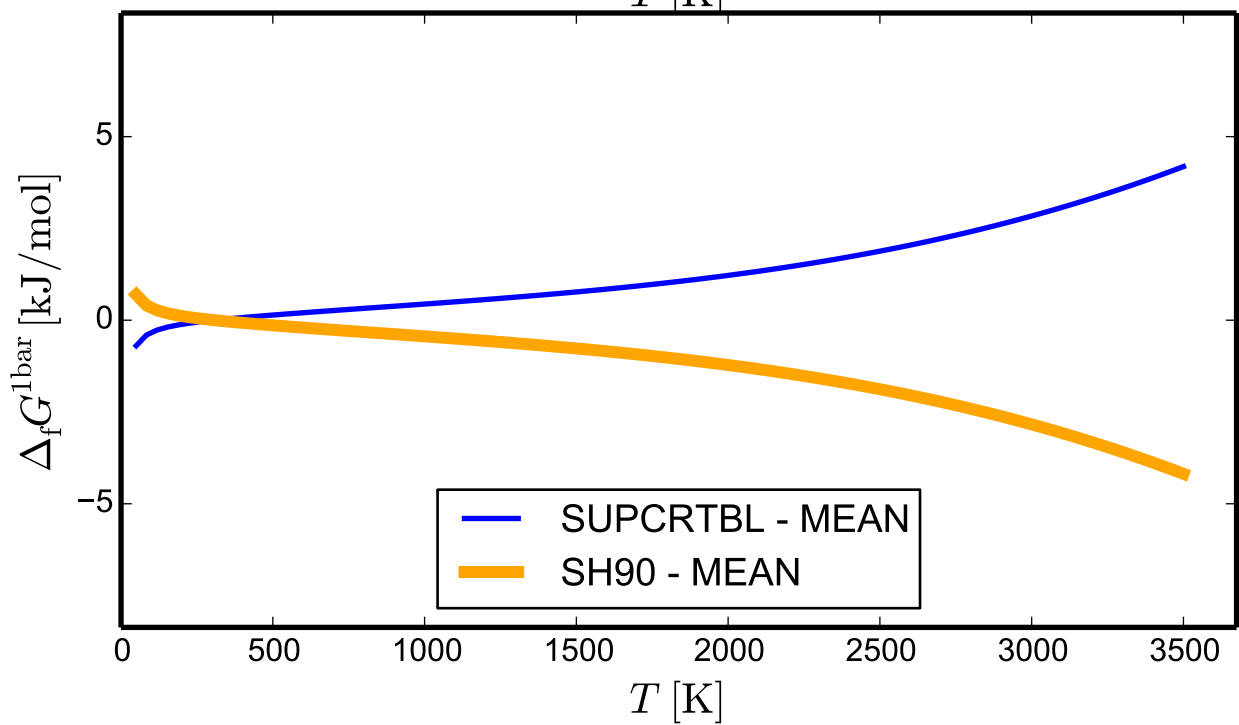
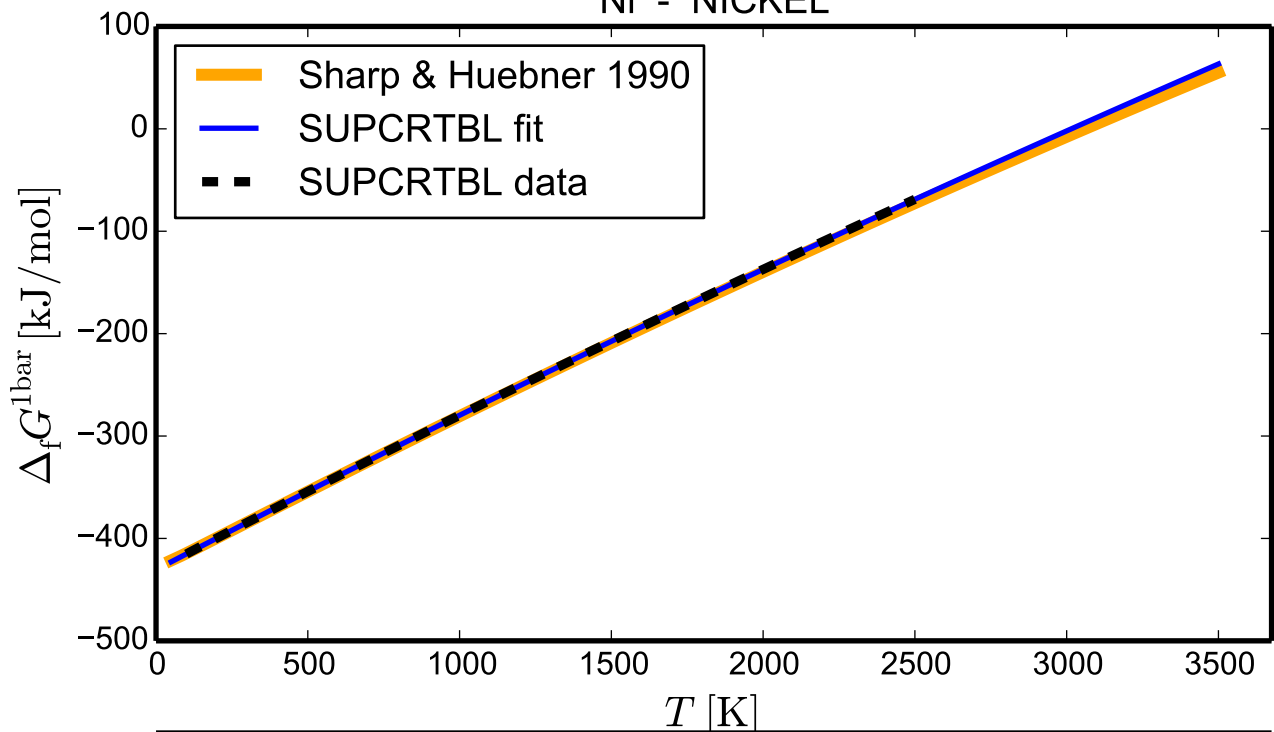
## Cu - COPPER



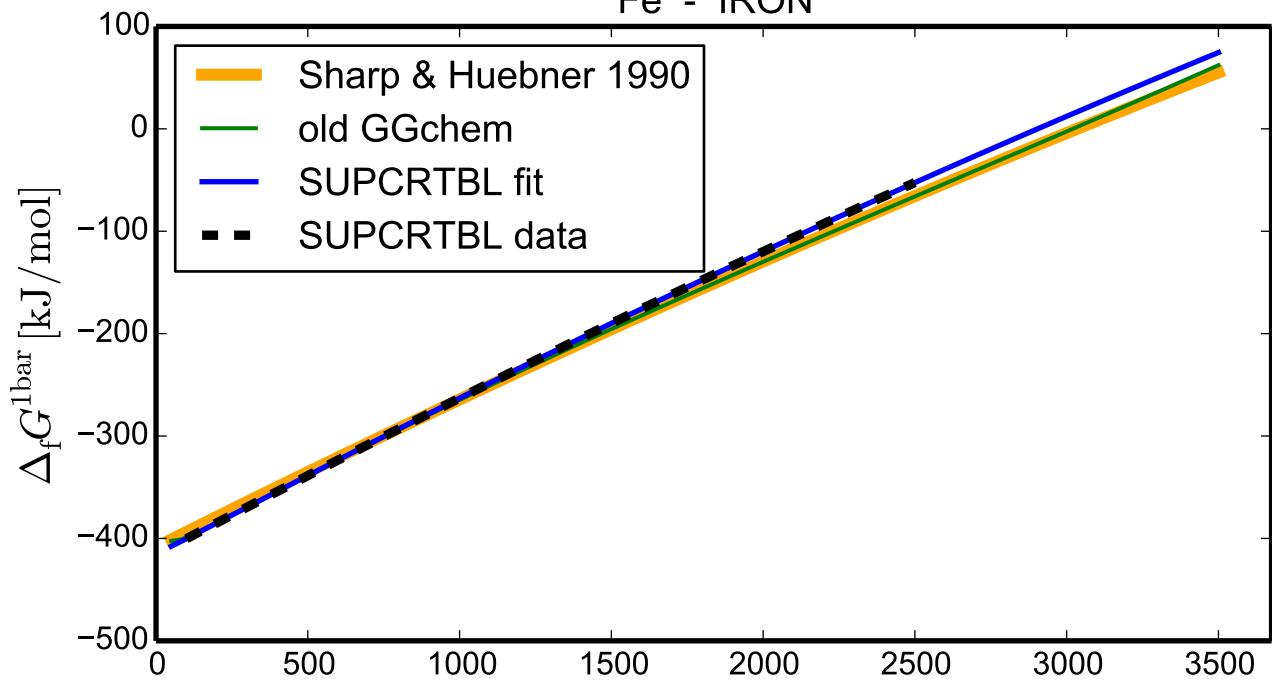
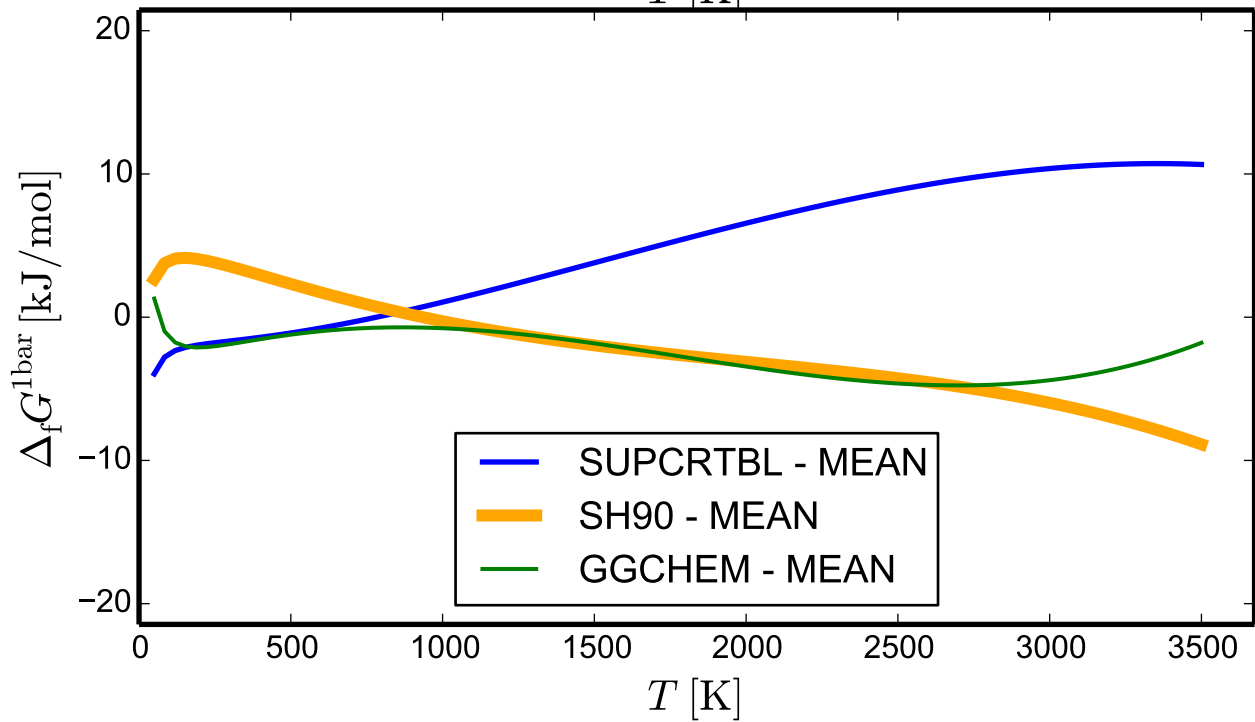
## S - SULPHUR



# Ni - NICKEL

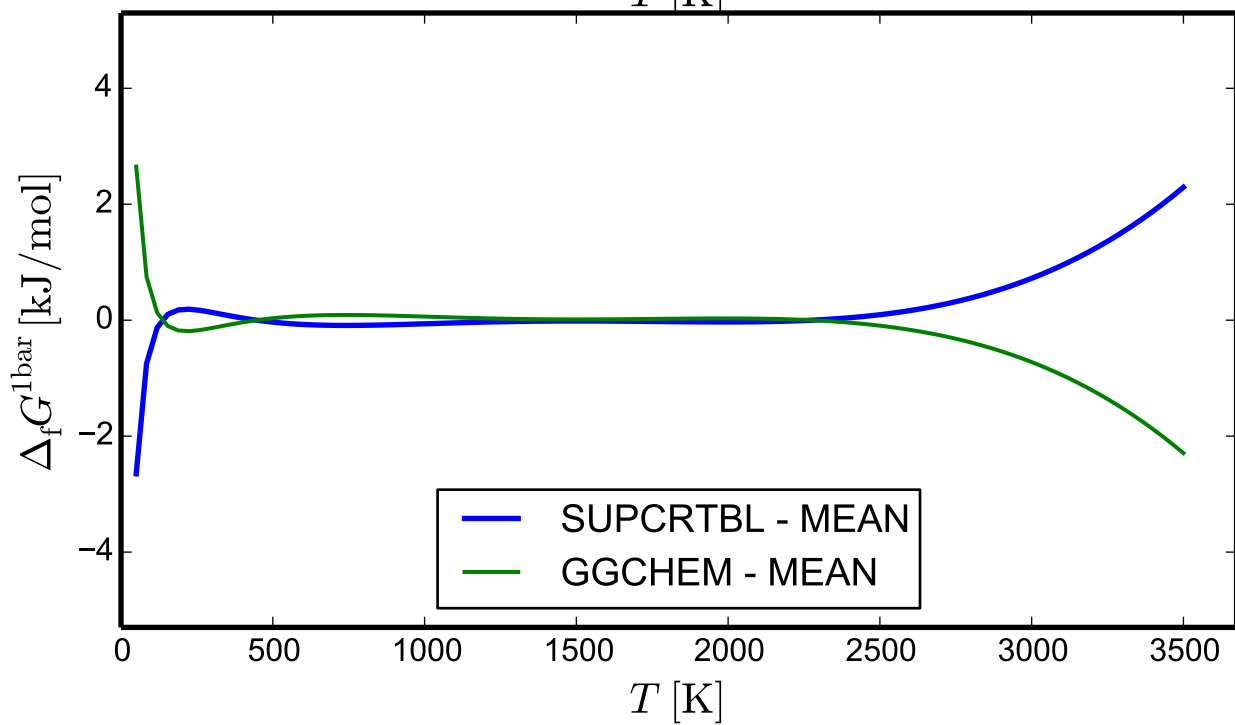
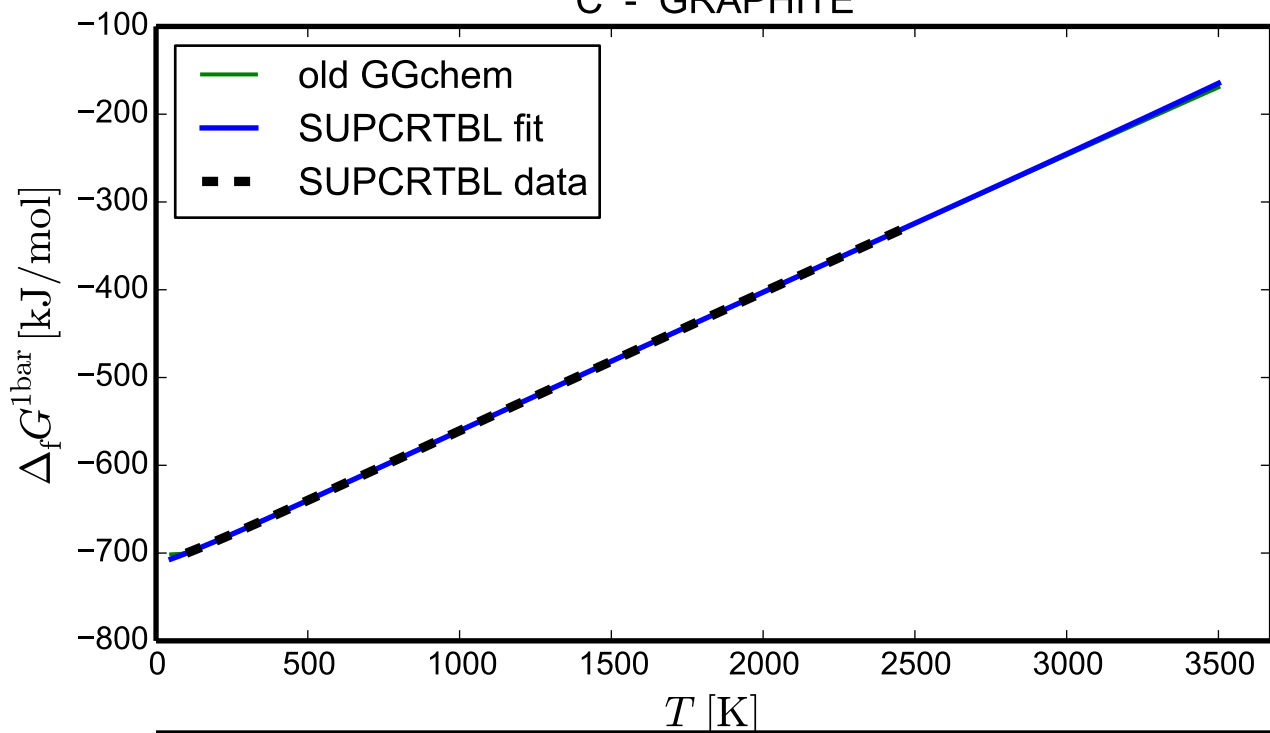


## Fe - IRON

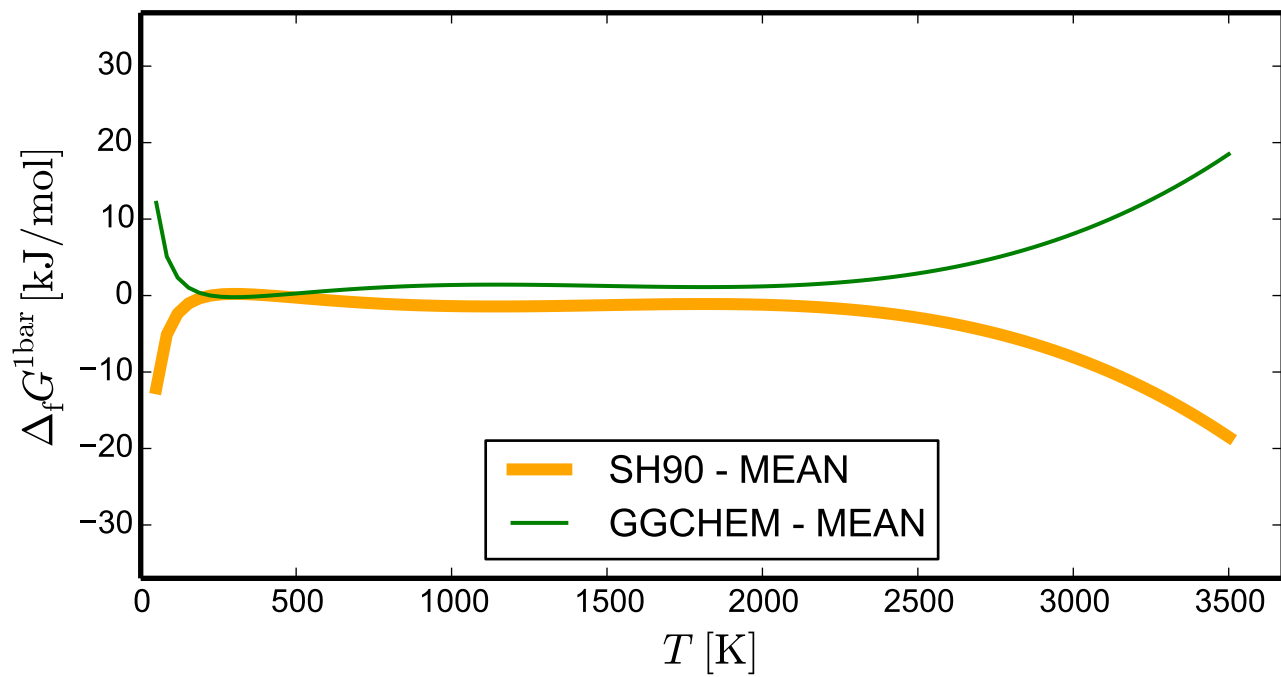
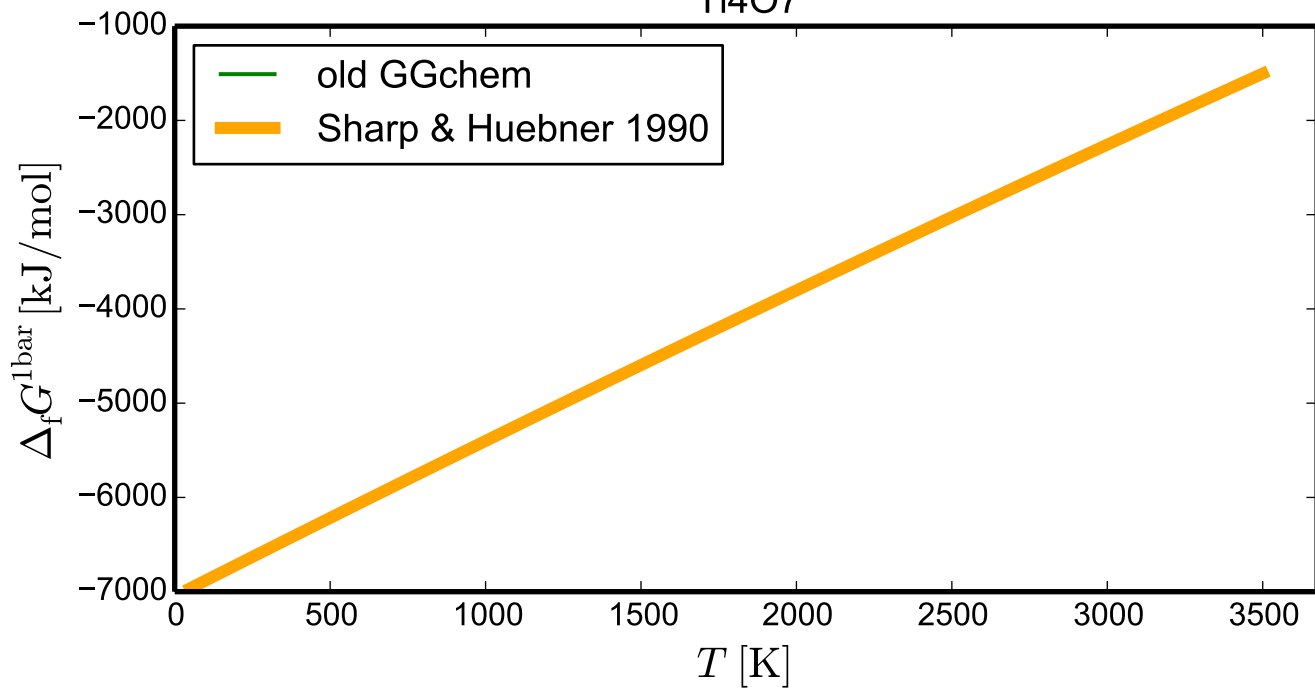
 $T$  [K] $T$  [K]



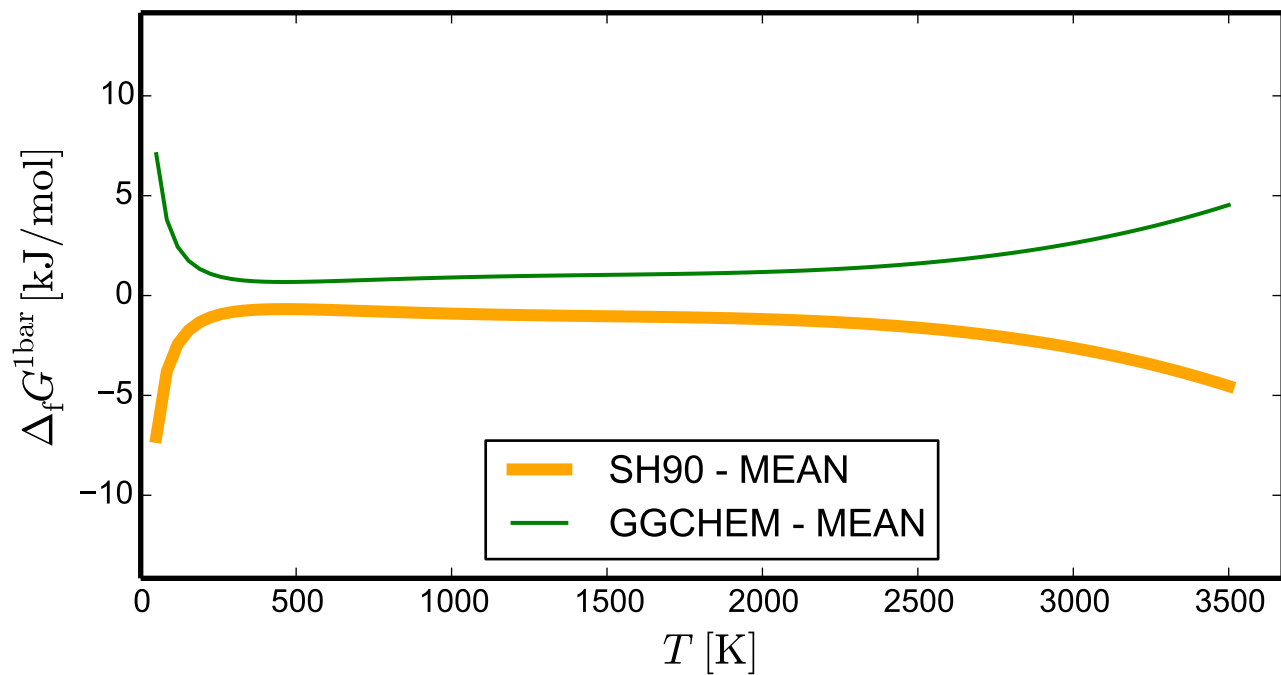
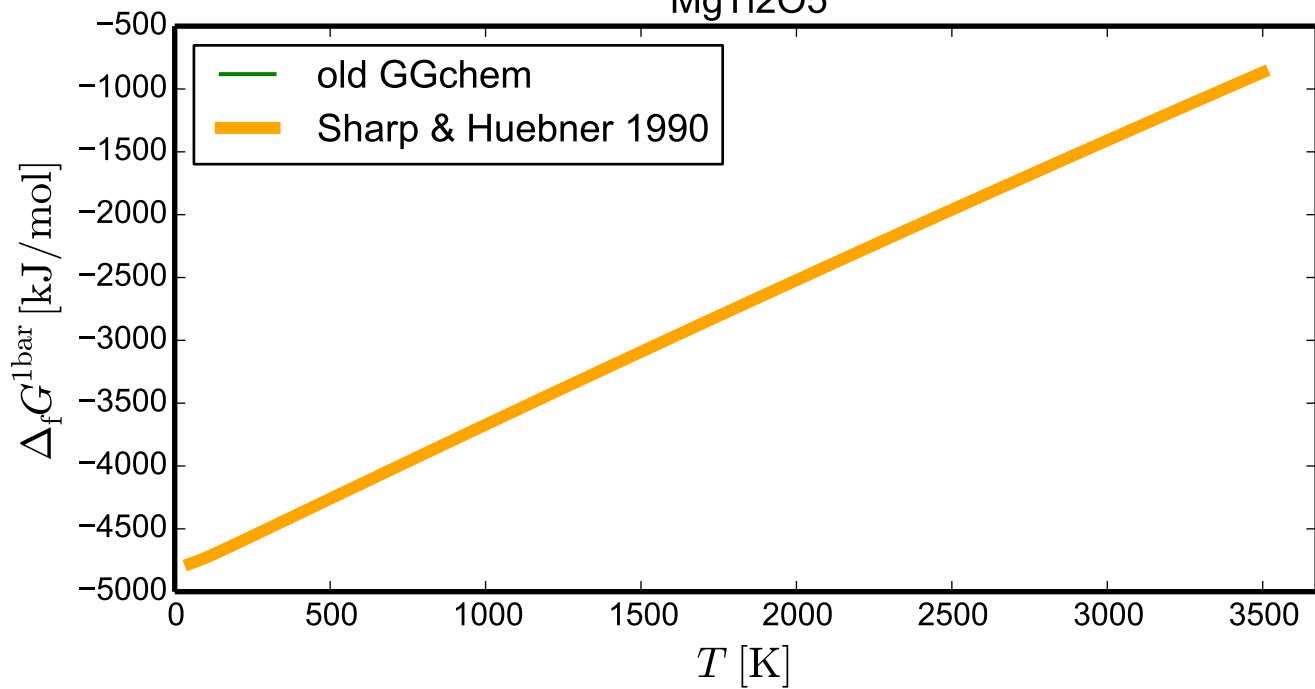
# C - GRAPHITE

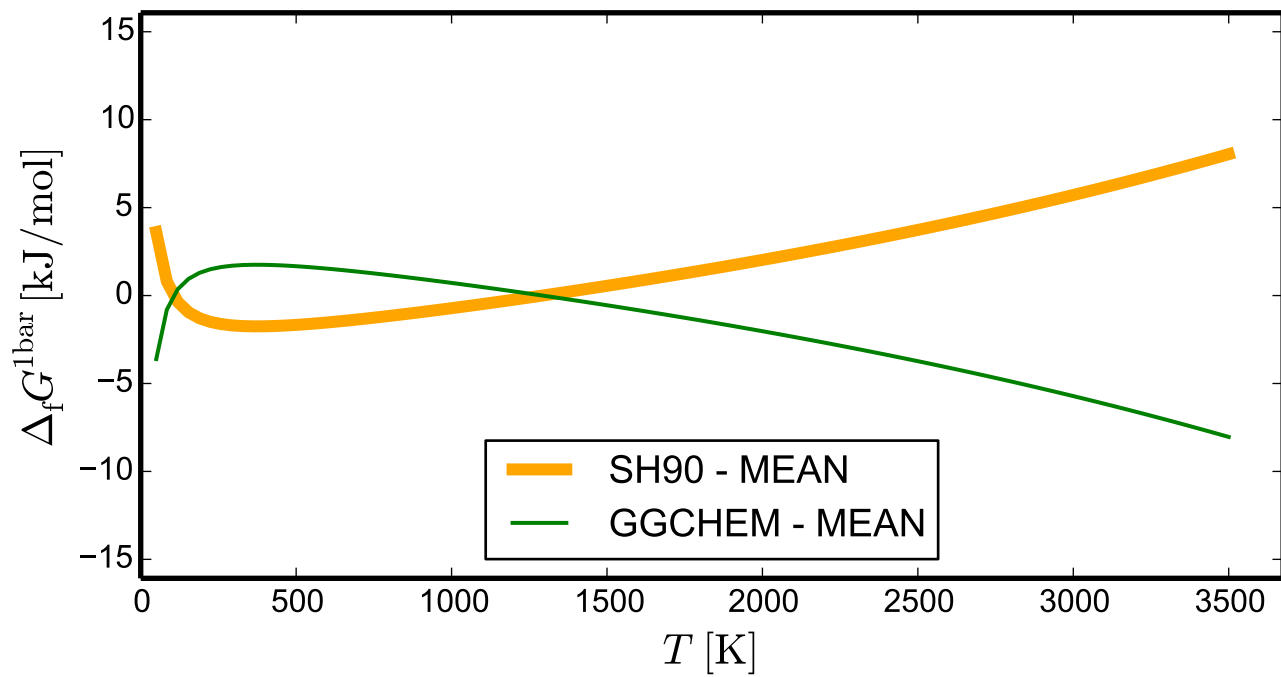
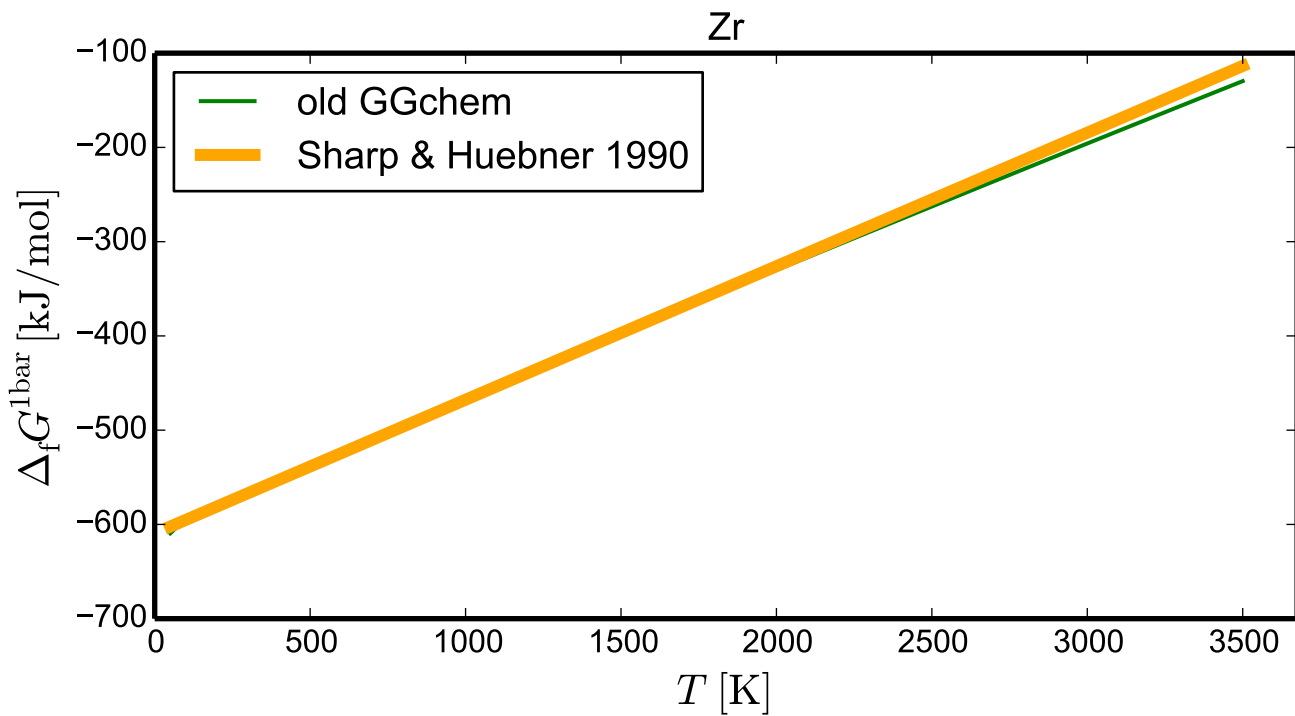


# Ti4O7

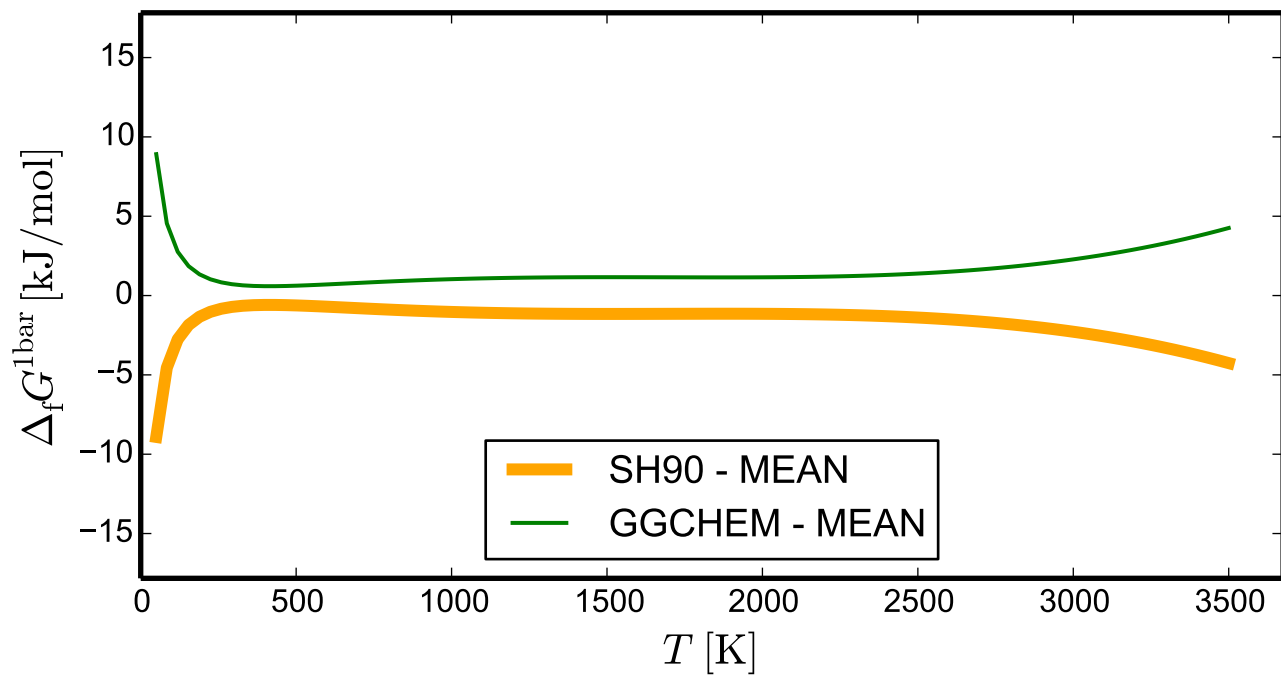
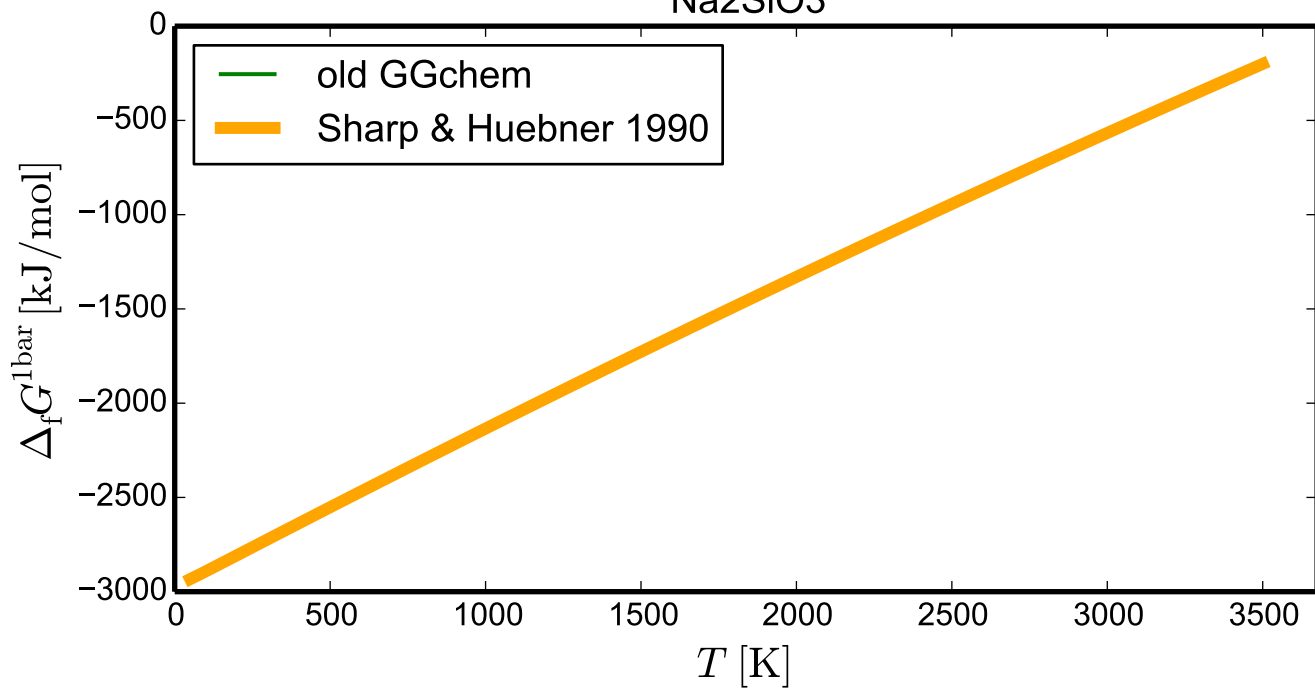


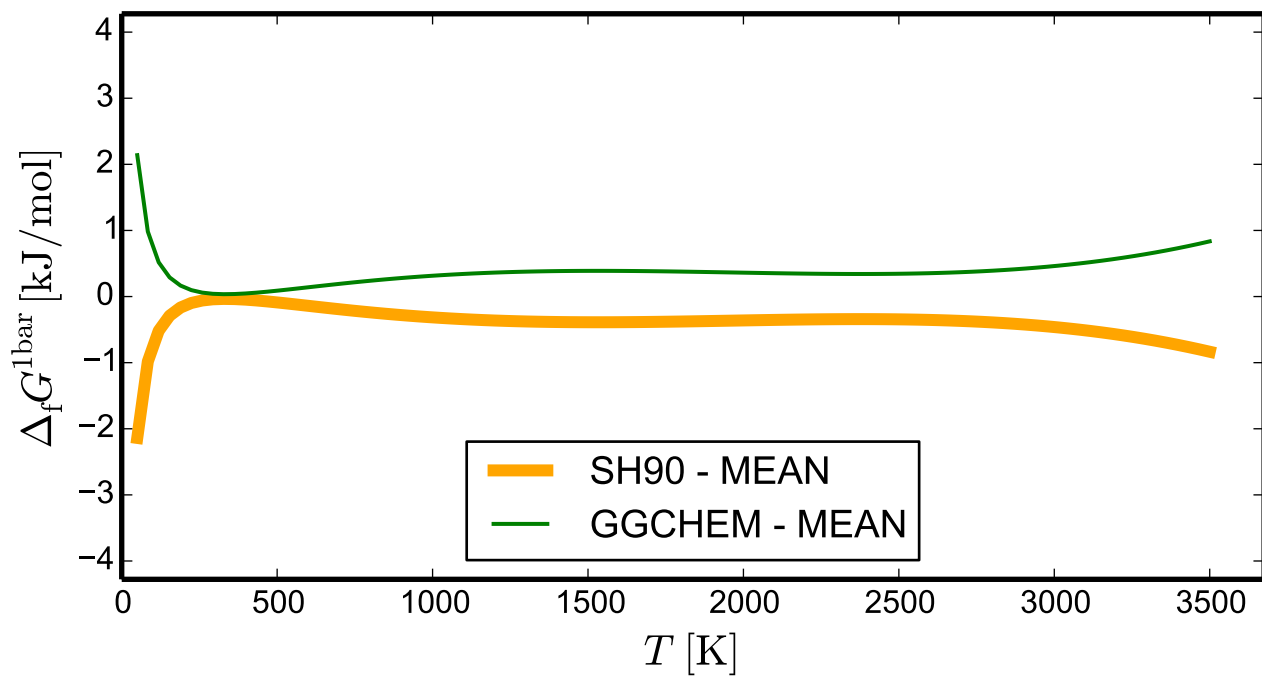
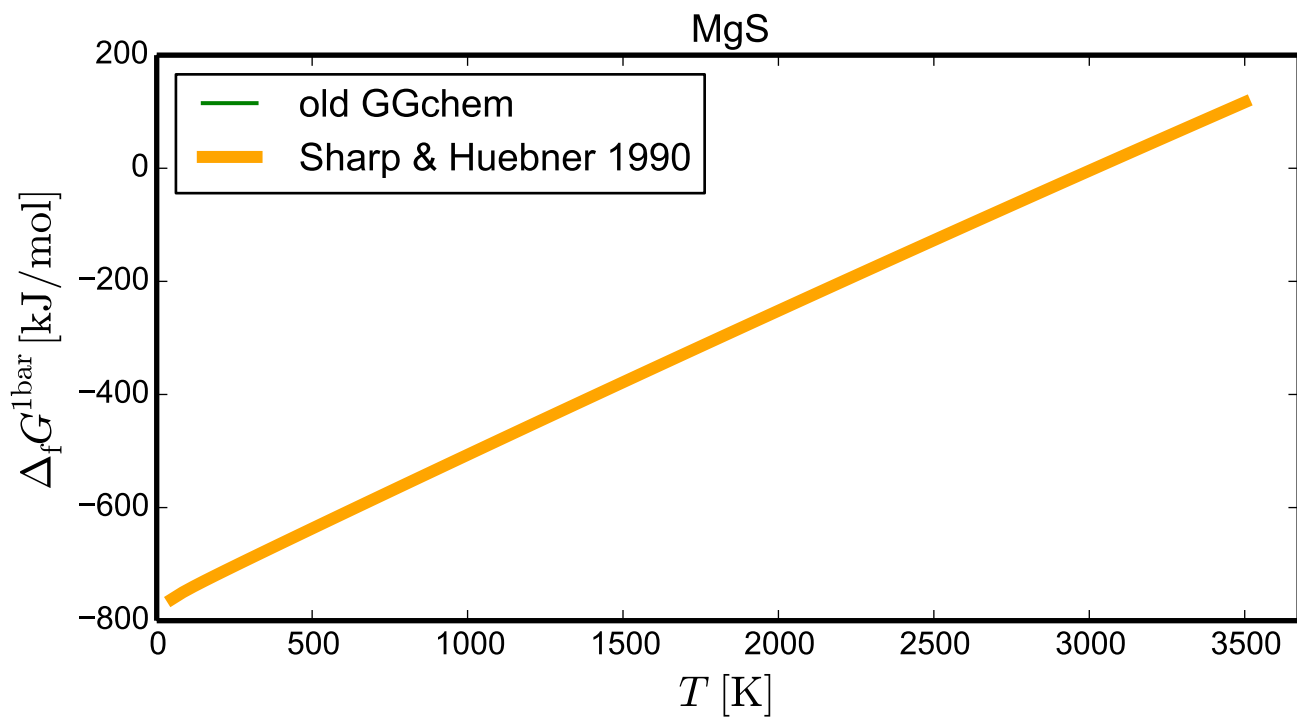
# MgTi2O5



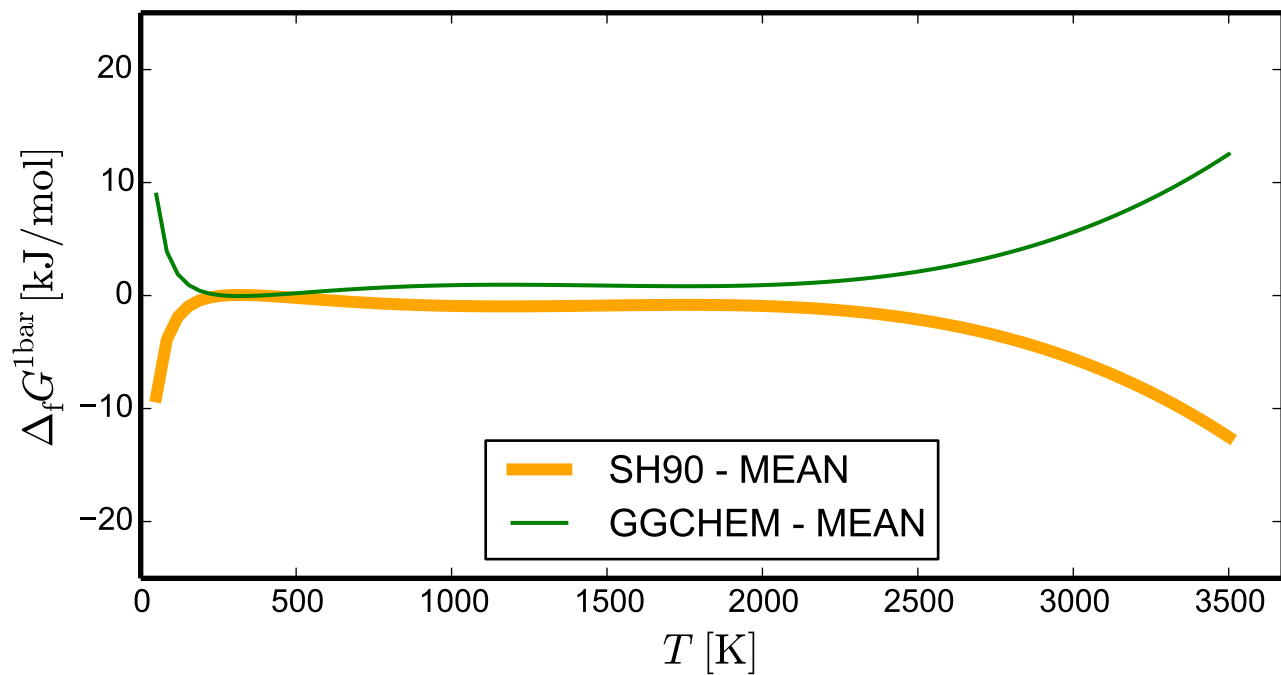
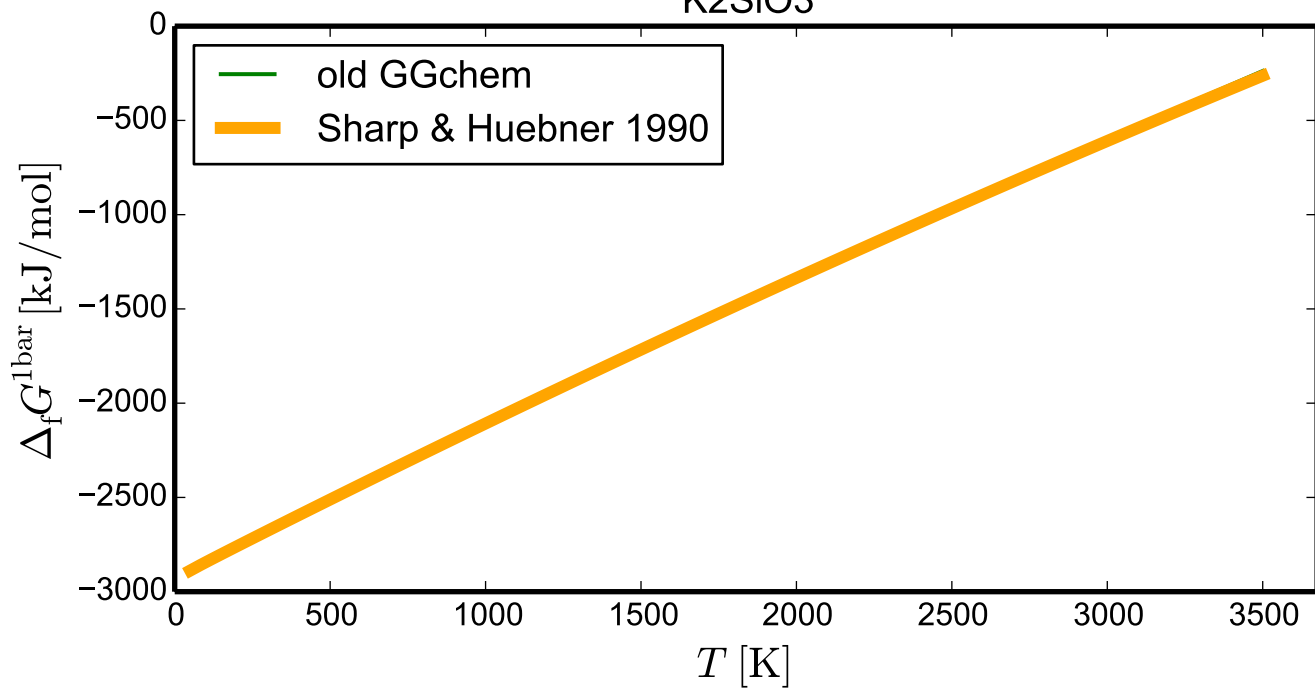


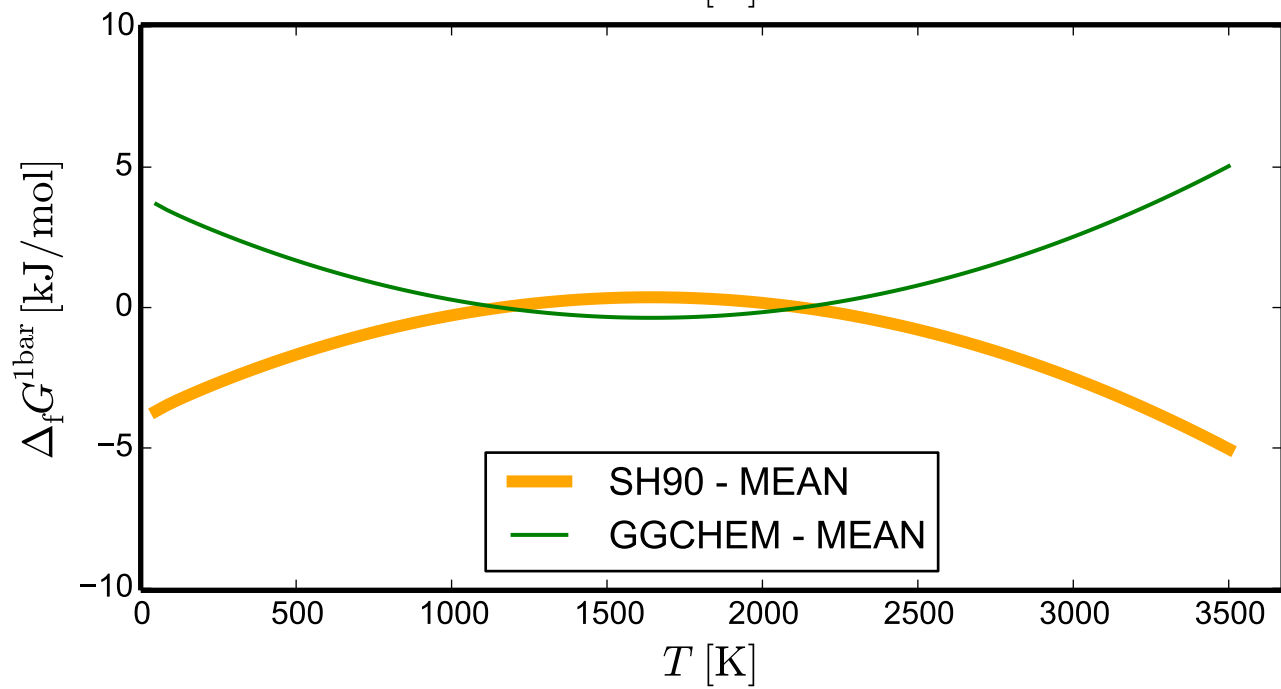
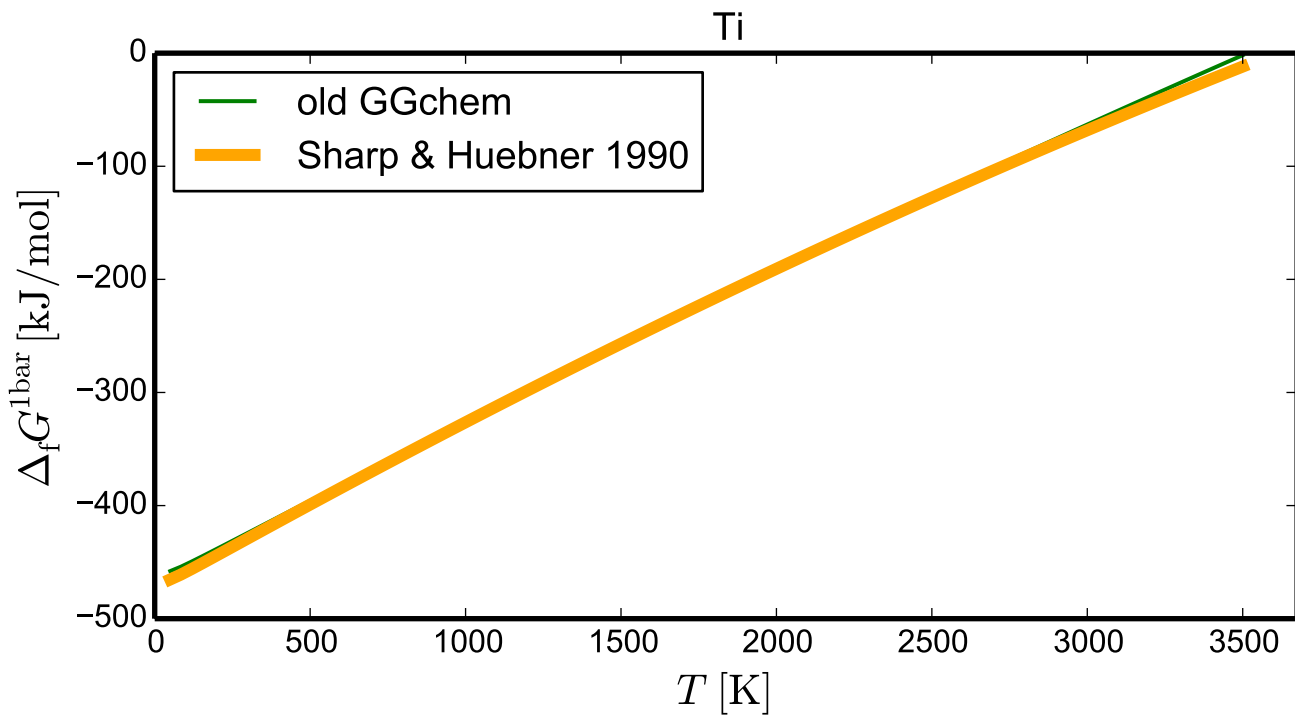
# Na<sub>2</sub>SiO<sub>3</sub>





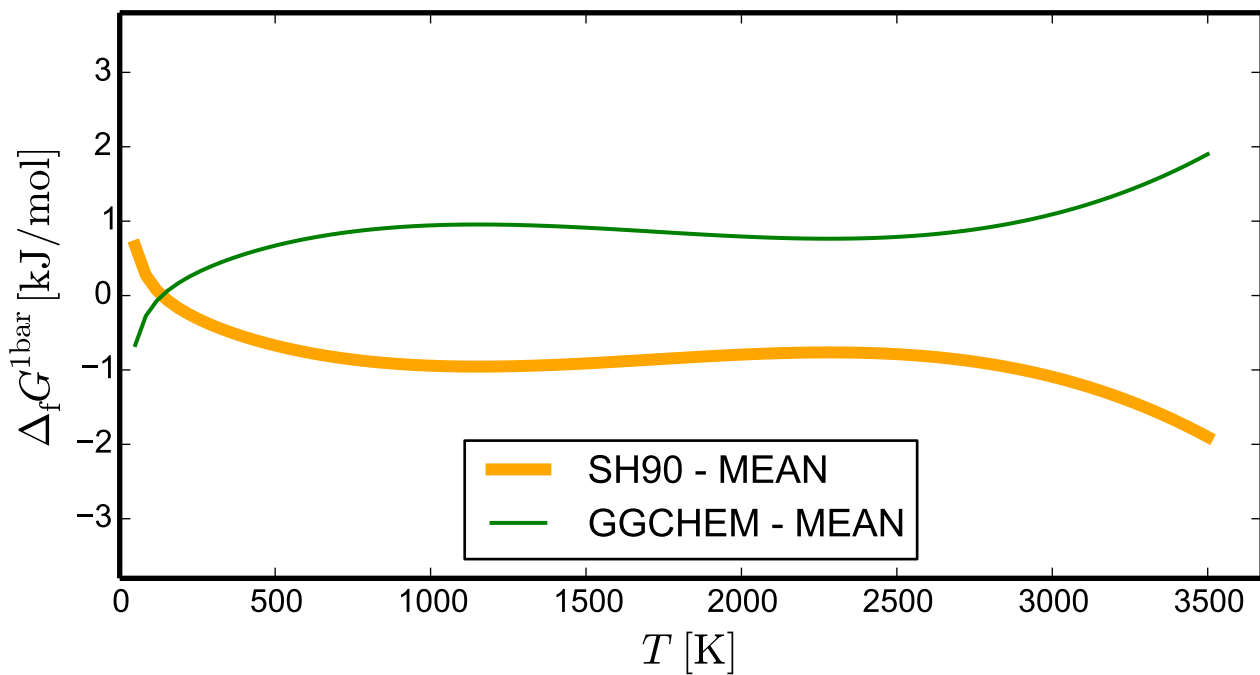
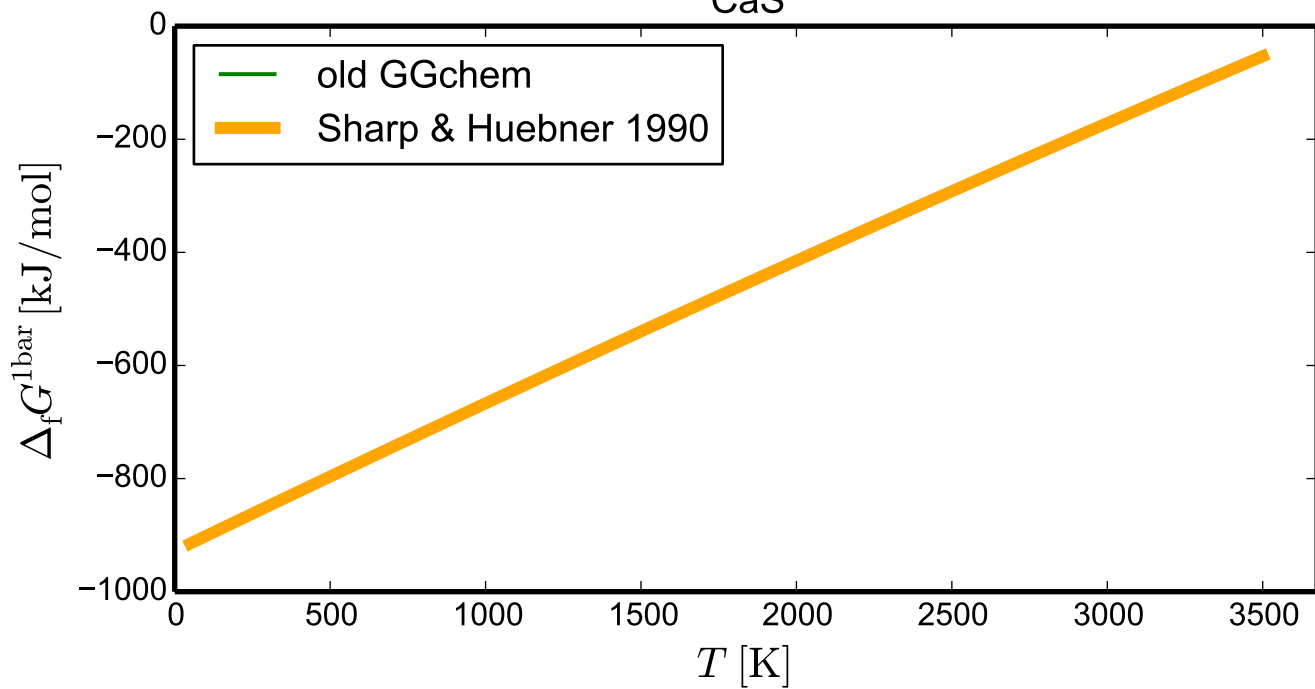
# K<sub>2</sub>SiO<sub>3</sub>







CaS



# Ni3S2

