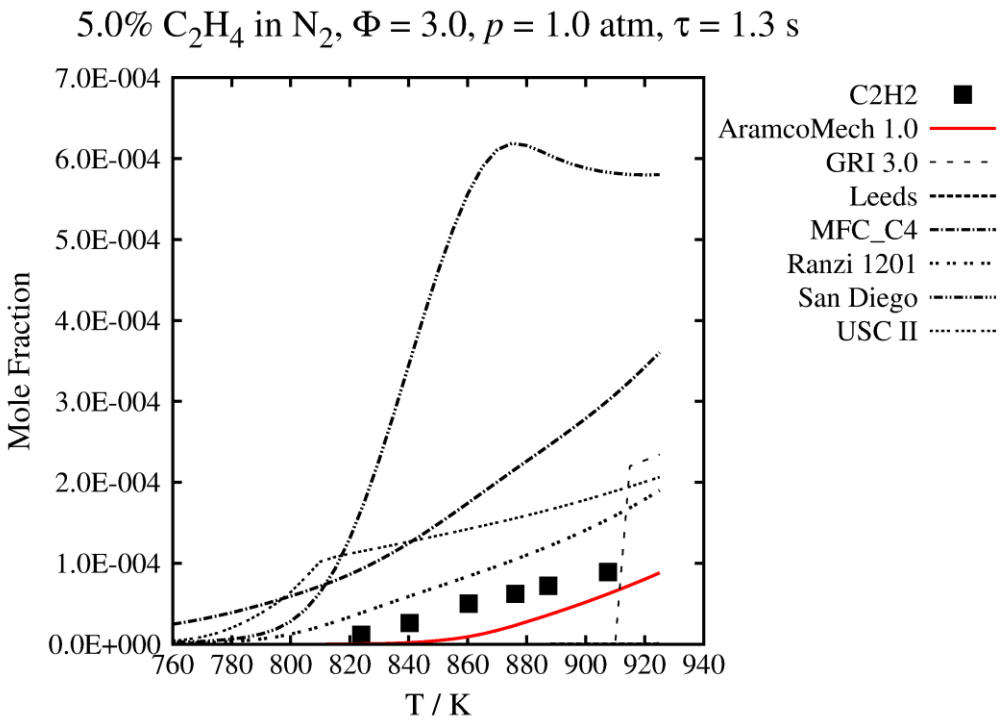
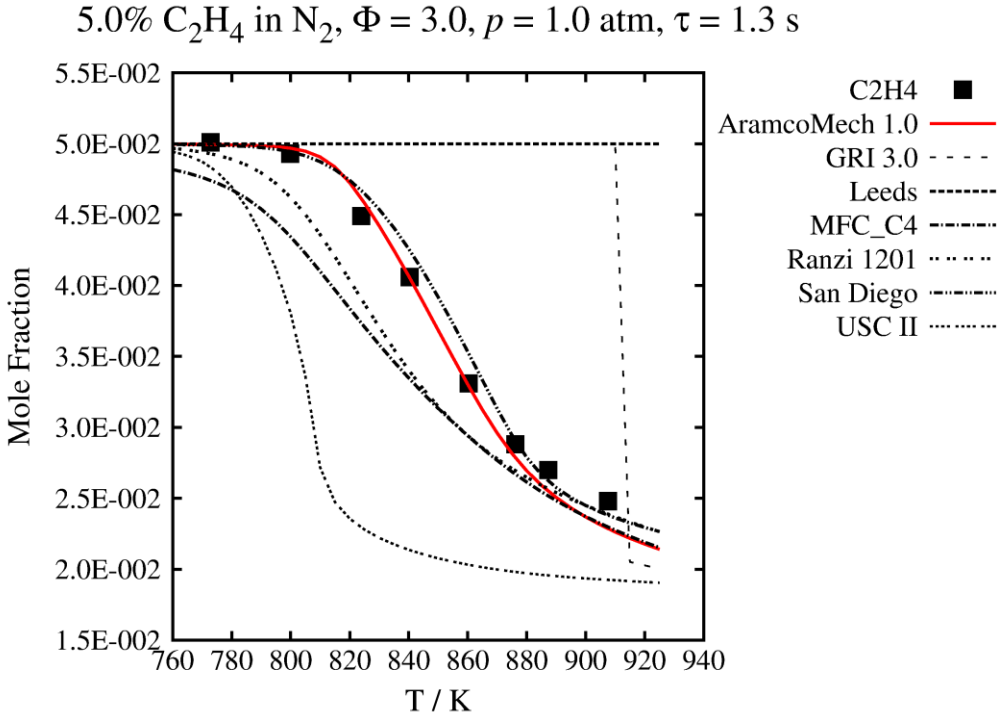
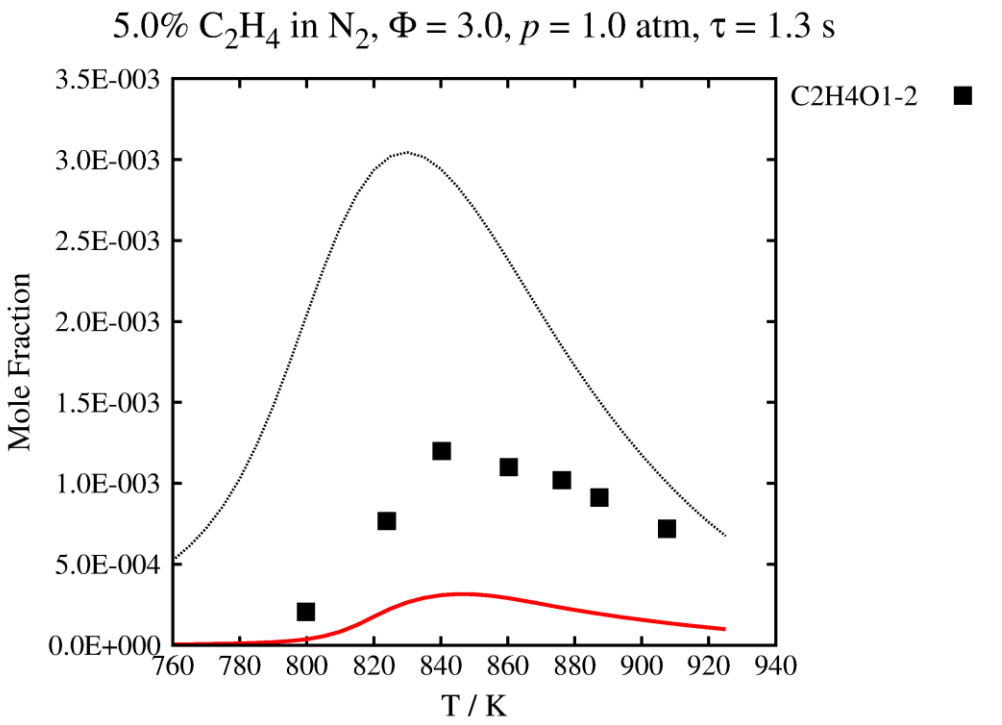
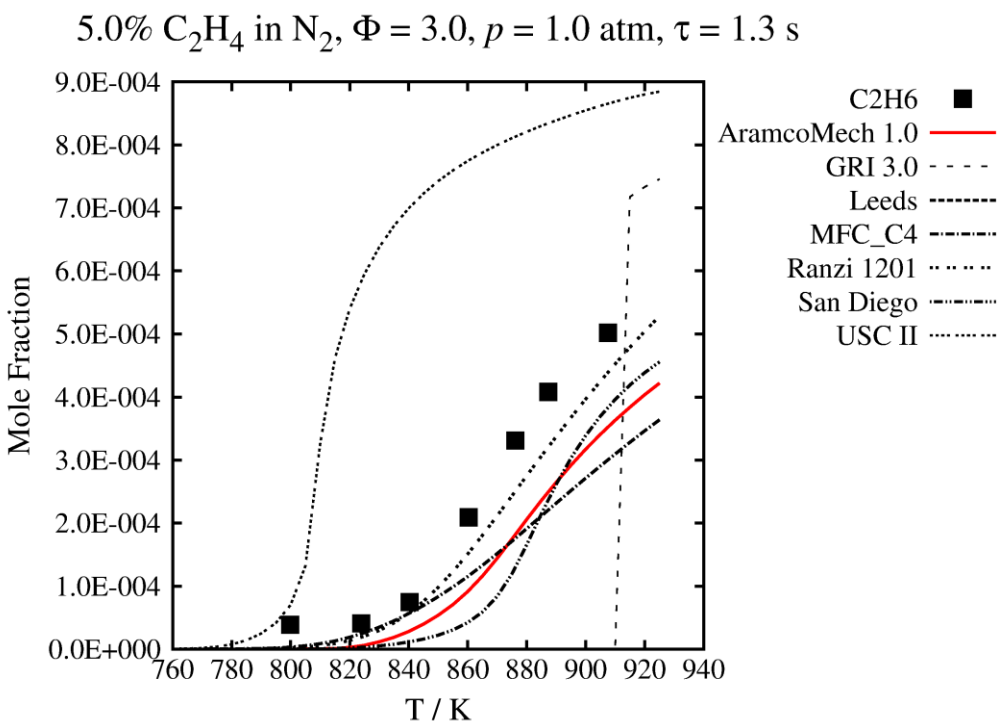
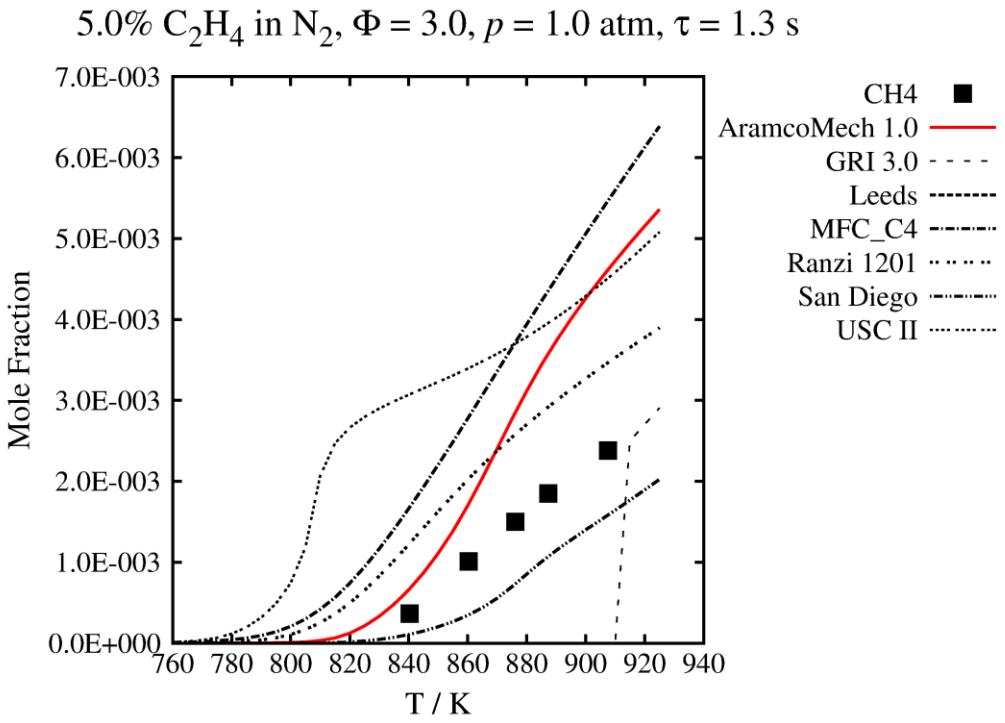
Figure 4

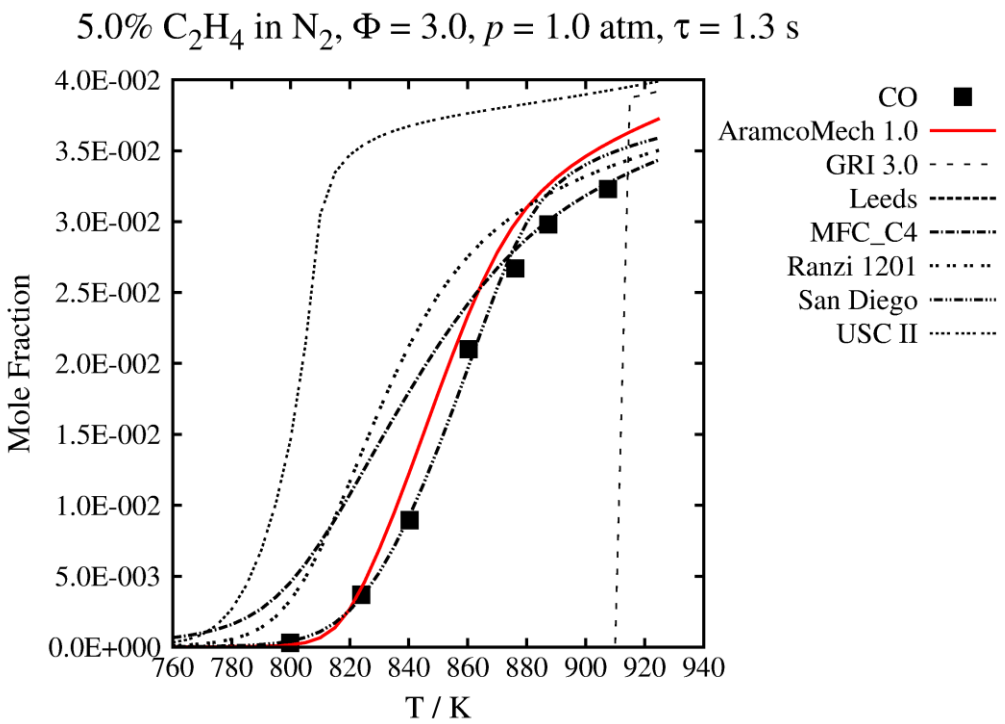

5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
7.0E-004
6.0E-004
5.0E-004
4.0E-004
3.0E-004
2.0E-004
1.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
5.5E-002
5.0E-002
4.5E-002
4.0E-002
3.5E-002
3.0E-002
2.5E-002
2.0E-002
1.5E-002
760 780 800 820 840 860 880 900 920 940
T / K
C2H4
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
3.5E-003
3.0E-003
2.5E-003
2.0E-003
1.5E-003
1.0E-003
5.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H4O1-2


5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
9.0E-004
8.0E-004
7.0E-004
6.0E-004
5.0E-004
4.0E-004
3.0E-004
2.0E-004
1.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H6
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
7.0E-003
6.0E-003
5.0E-003
4.0E-003
3.0E-003
2.0E-003
1.0E-003
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CH4
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
4.0E-002
3.5E-002
3.0E-002
2.5E-002
2.0E-002
1.5E-002
1.0E-002
5.0E-003
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CO
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II

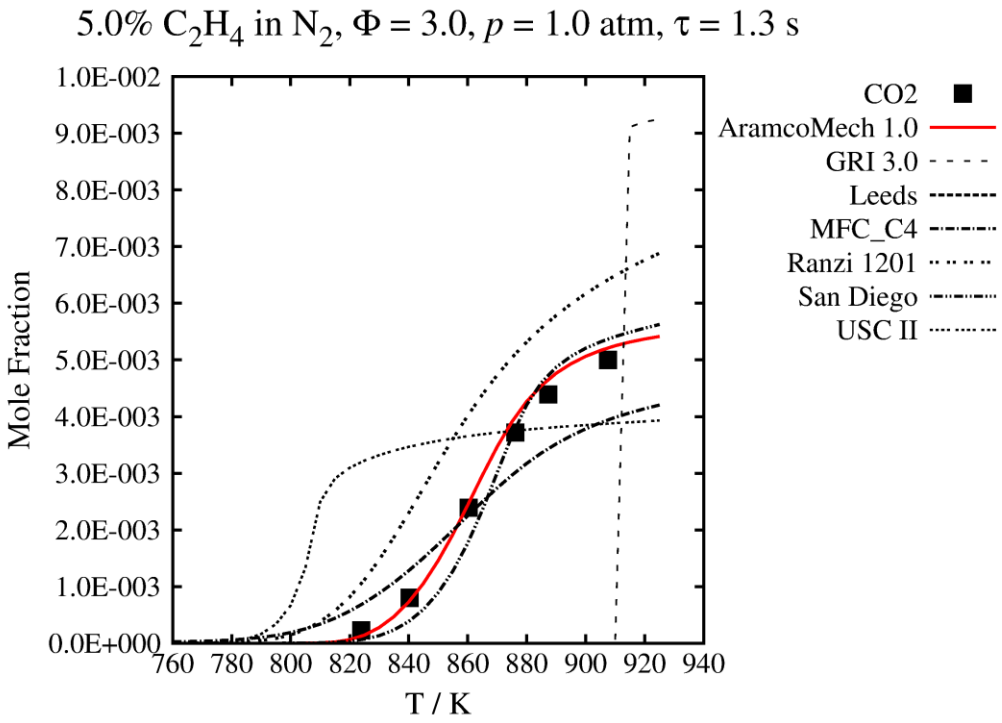
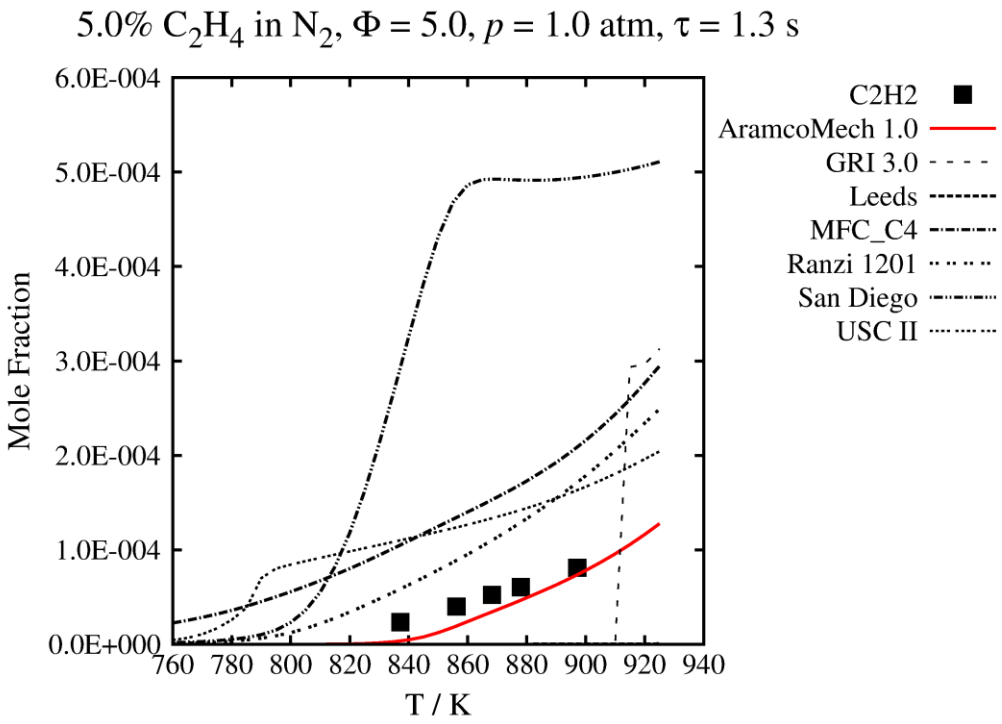
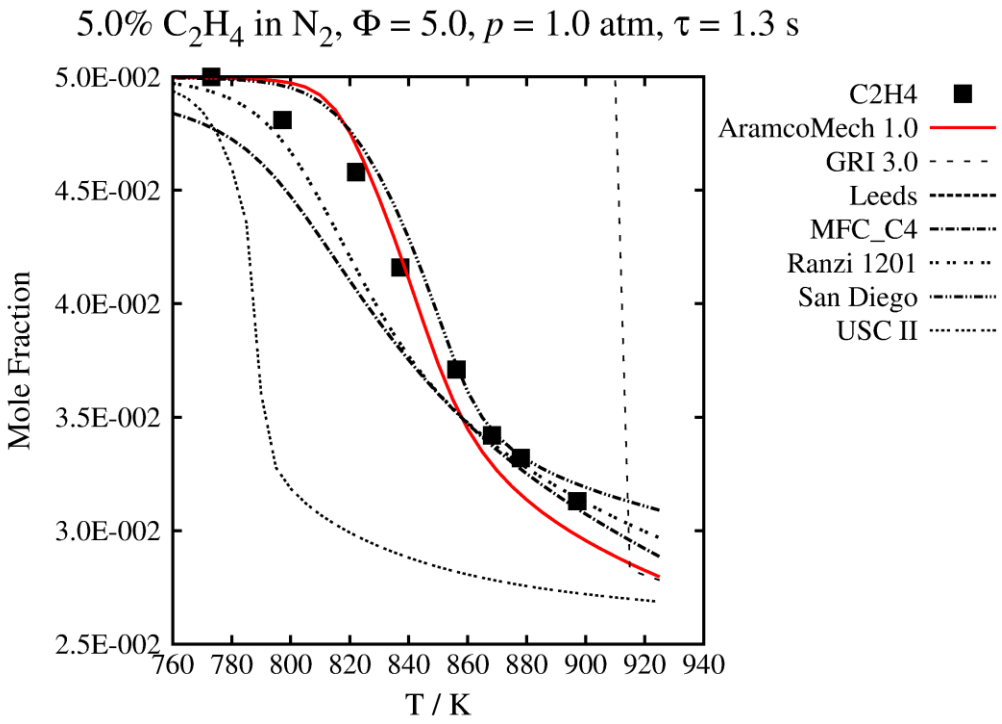
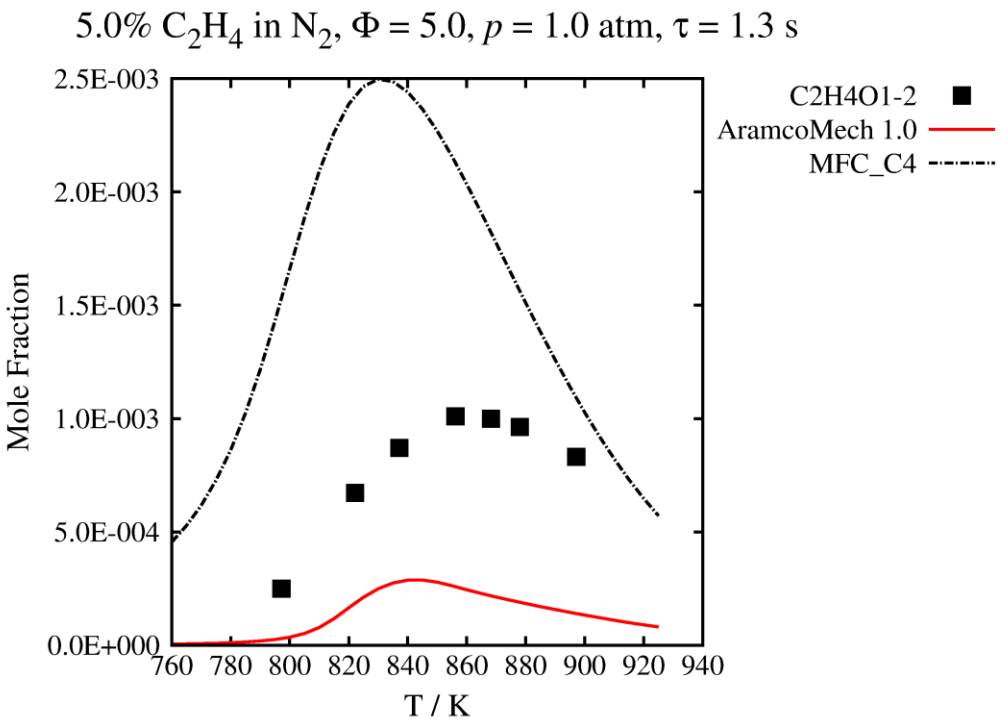
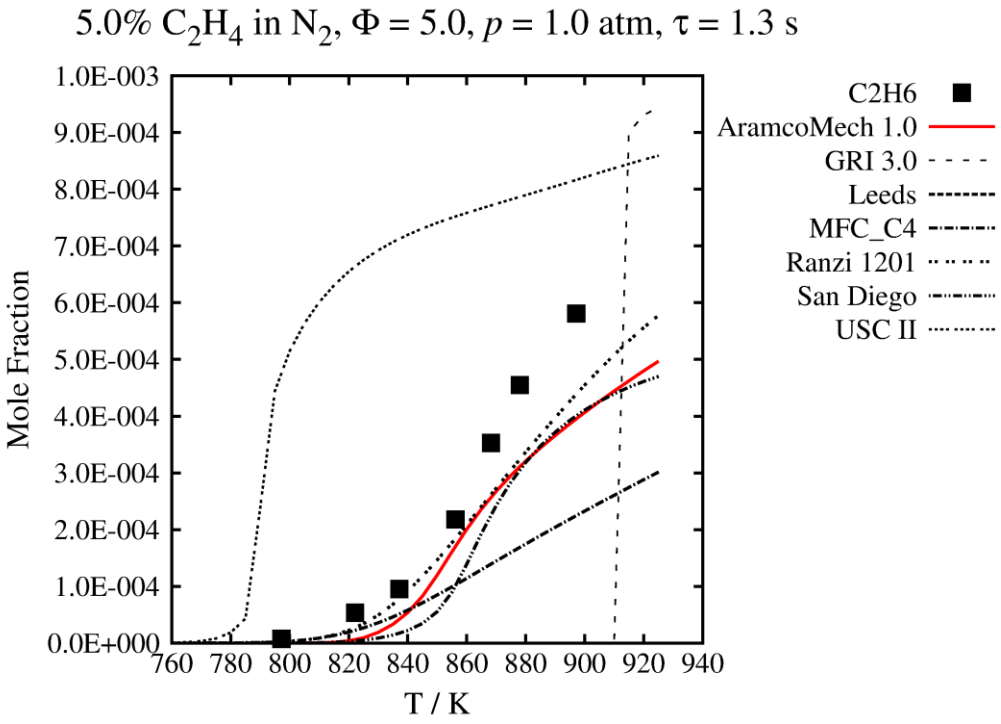

5.0% C2H4 in N2, Φ = 3.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
1.0E-002
9.0E-003
8.0E-003
7.0E-003
6.0E-003
5.0E-003
4.0E-003
3.0E-003
2.0E-003
1.0E-003
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CO2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II

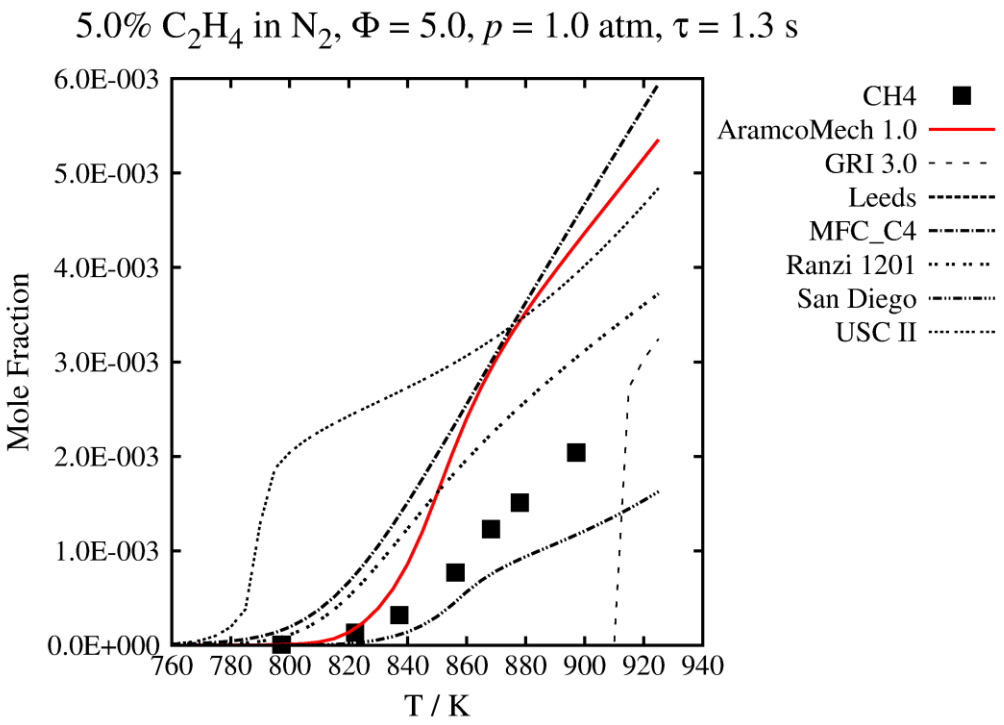
Figure 5

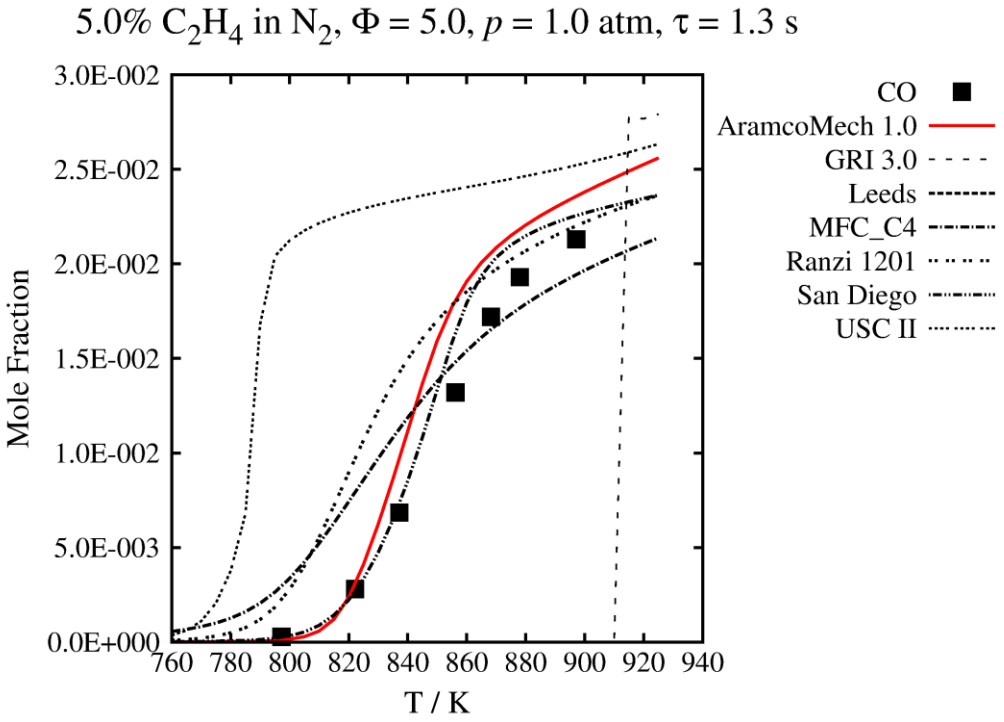

5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
6.0E-004
5.0E-004
4.0E-004
3.0E-004
2.0E-004
1.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
5.0E-002
4.5E-002
4.0E-002
3.5E-002
3.0E-002
2.5E-002
760 780 800 820 840 860 880 900 920 940
T / K
C2H4
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
2.5E-003
2.0E-003
1.5E-003
1.0E-003
5.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H4O1-2
AramcoMech 1.0
MFC_C4


5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
1.0E-003
9.0E-004
8.0E-004
7.0E-004
6.0E-004
5.0E-004
4.0E-004
3.0E-004
2.0E-004
1.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
C2H6
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
6.0E-003
5.0E-003
4.0E-003
3.0E-003
2.0E-003
1.0E-003
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CH4
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
3.0E-002
2.5E-002
2.0E-002
1.5E-002
1.0E-002
5.0E-003
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CO
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II

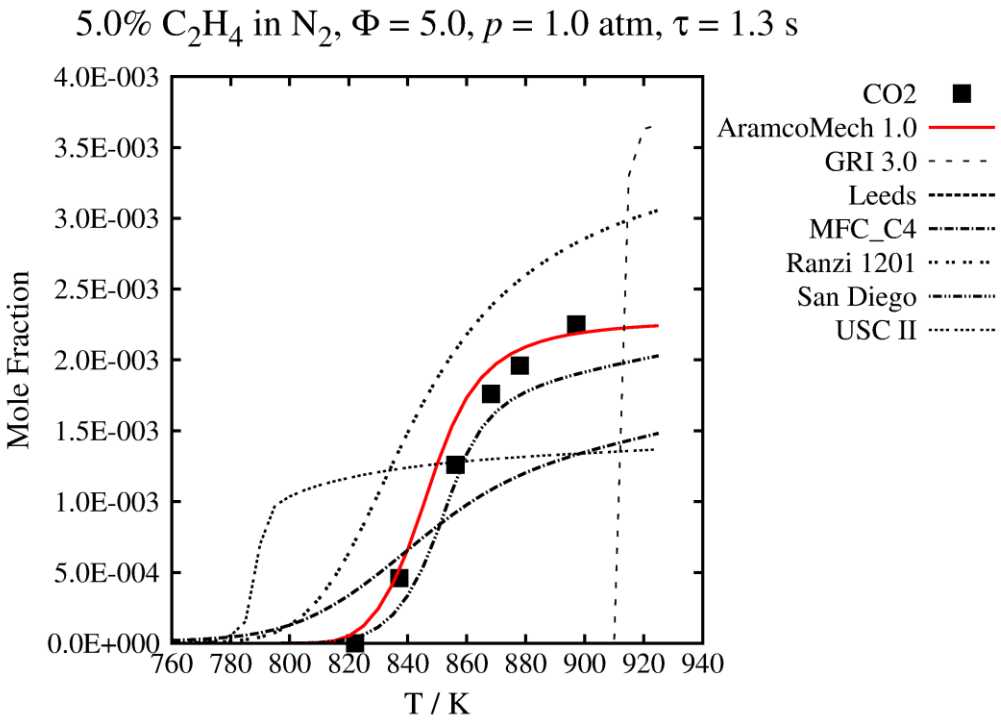
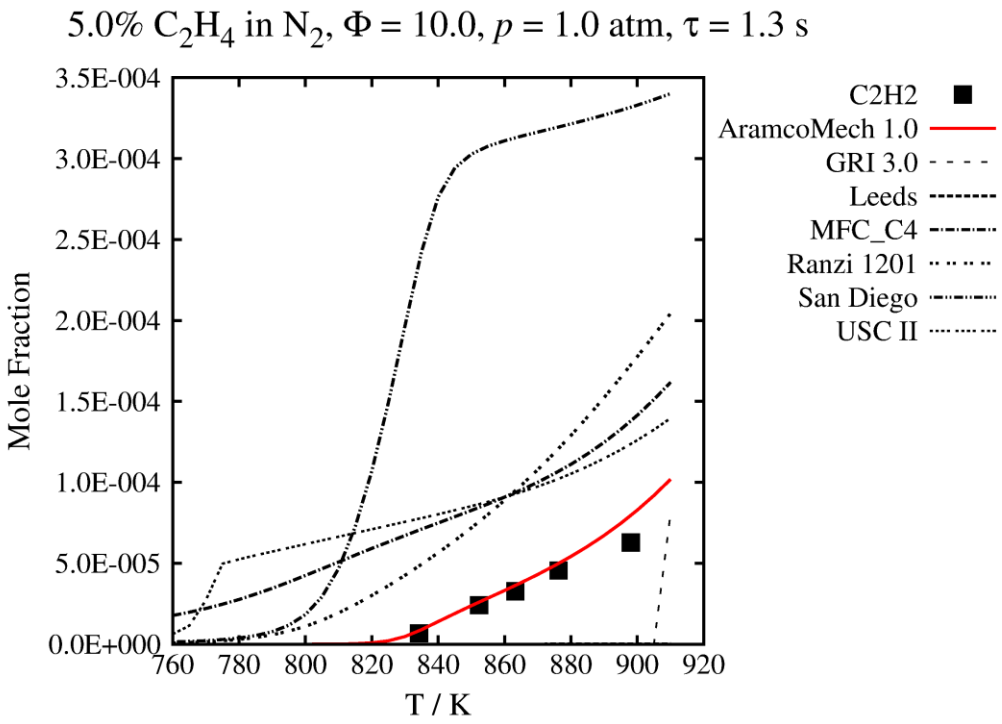
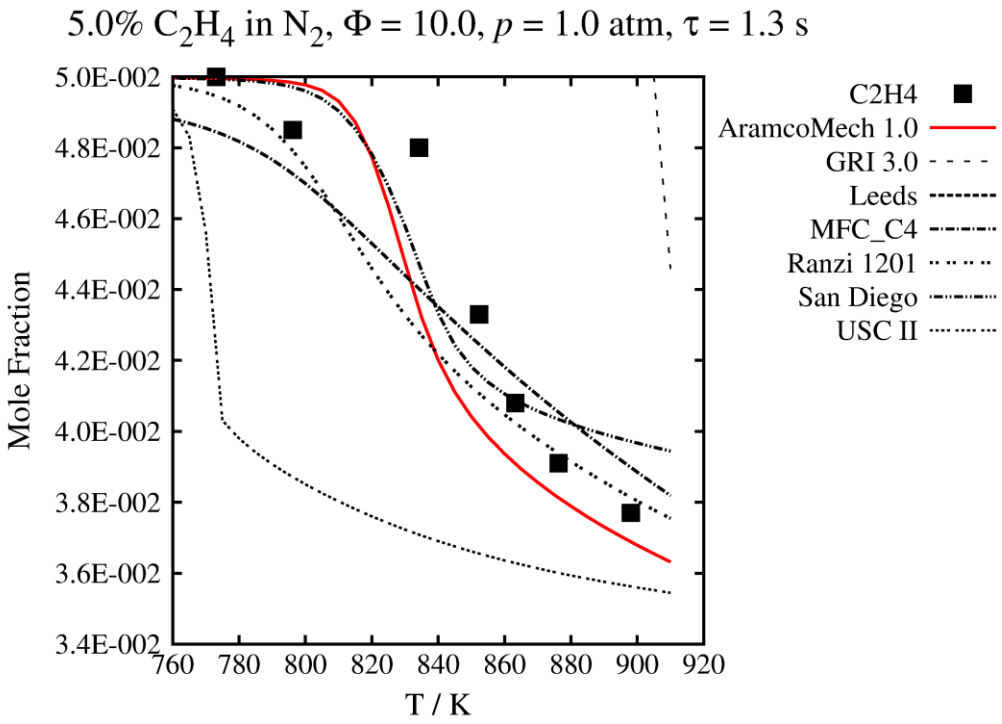
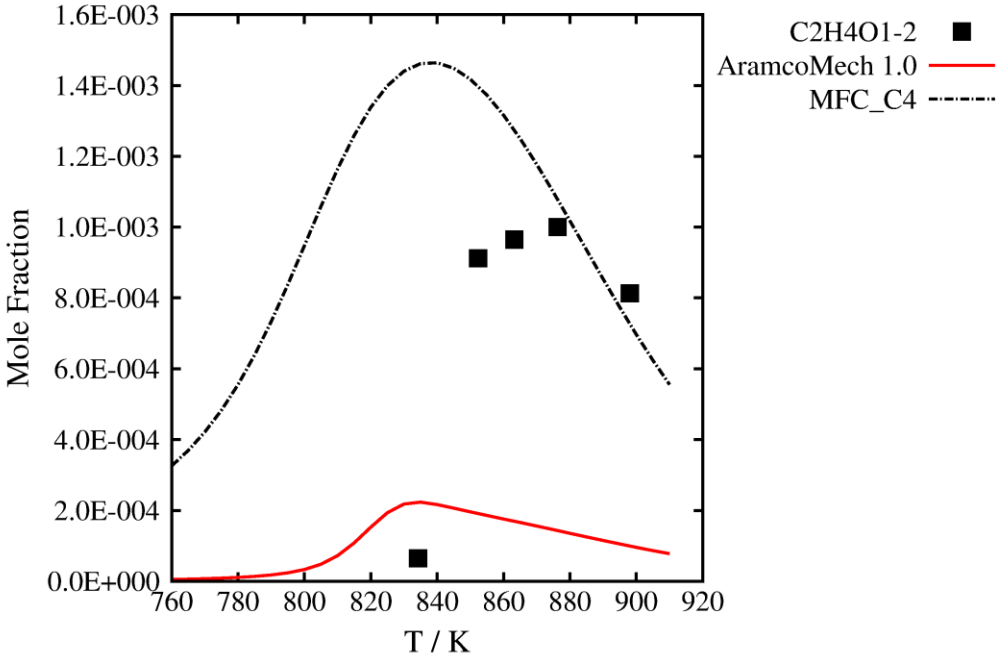

5.0% C2H4 in N2, Φ = 5.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
4.0E-003
3.5E-003
3.0E-003
2.5E-003
2.0E-003
1.5E-003
1.0E-003
5.0E-004
0.0E+000
760 780 800 820 840 860 880 900 920 940
T / K
CO2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II

Figure 6

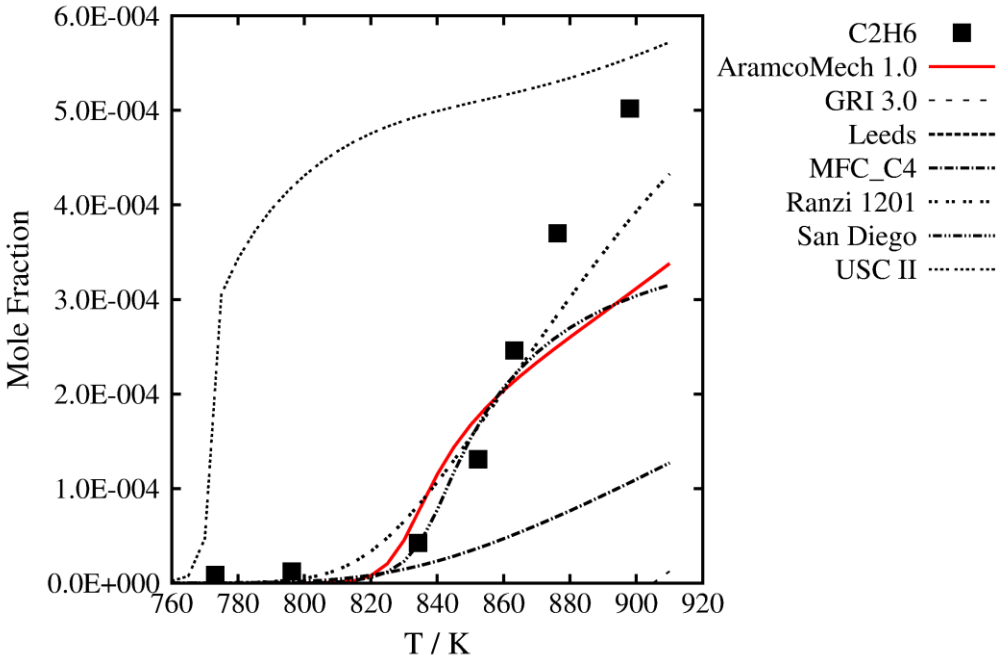

5.0% C2H4 in N2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
3.5E-004
3.0E-004
2.5E-004
2.0E-004
1.5E-004
1.0E-004
5.0E-005
0.0E+000
760 780 800 820 840 860 880 900 920
T / K
C2H2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II


5.0% C2H4 in N2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
5.0E-002
4.8E-002
4.6E-002
4.4E-002
4.2E-002
4.0E-002
3.8E-002
3.6E-002
3.4E-002
760 780 800 820 840 860 880 900 920
T / K
C2H4
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II

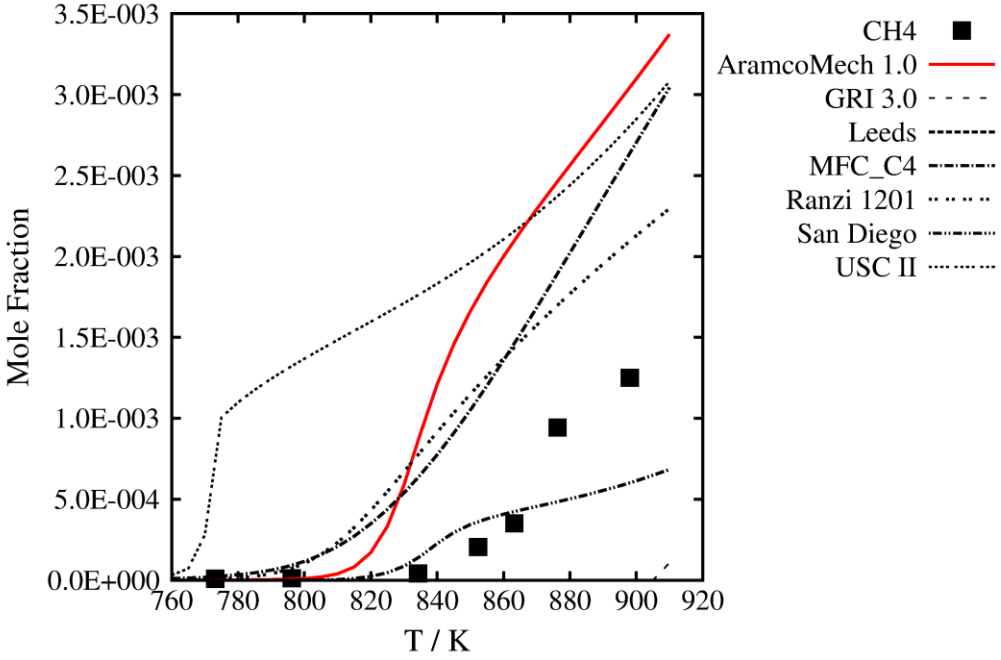
5.0% C_2H_4 in N_2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s



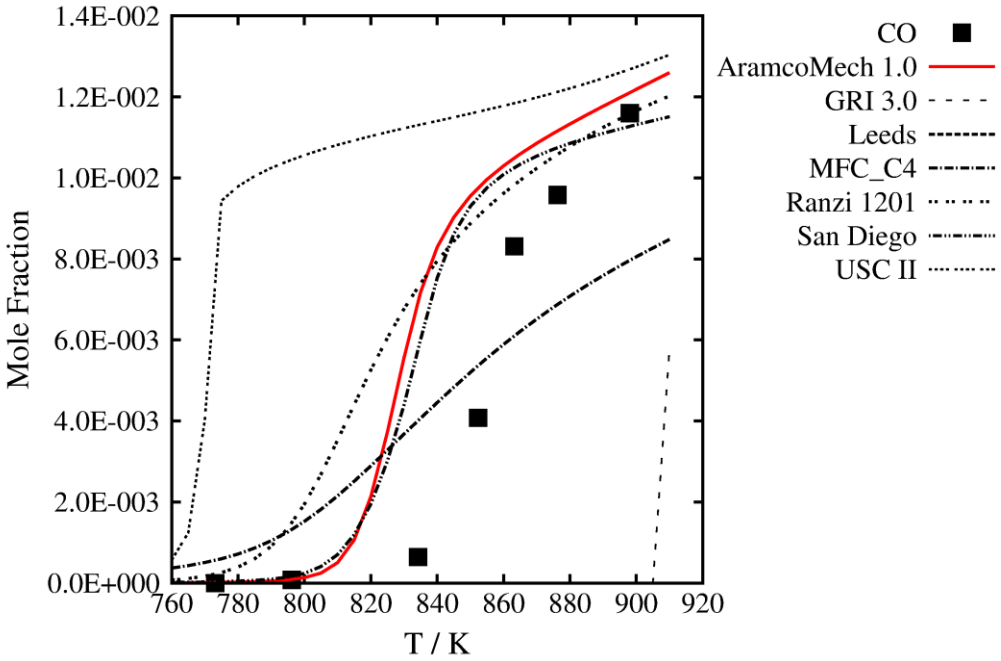
5.0% C_2H_4 in N_2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s

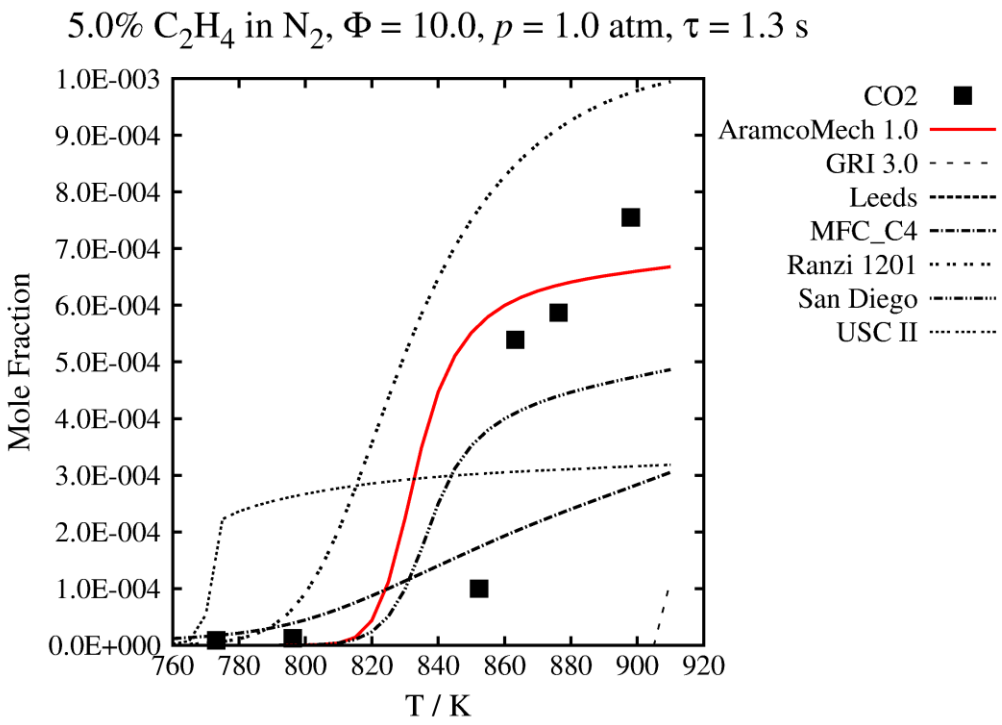


5.0% C_2H_4 in N_2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s



5.0% C_2H_4 in N_2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s




5.0% C2H4 in N2, Φ = 10.0, p = 1.0 atm, τ = 1.3 s
Mole Fraction
1.0E-003
9.0E-004
8.0E-004
7.0E-004
6.0E-004
5.0E-004
4.0E-004
3.0E-004
2.0E-004
1.0E-004
0.0E+000
760
780
800
820
840
860
880
900
920
T / K
CO2
AramcoMech 1.0
GRI 3.0
Leeds
MFC_C4
Ranzi 1201
San Diego
USC II