Contents

Chapter 6

Conclusions and Suggestion

Nomenclature

a	Number of Carbon atoms
b	Number of Hydrogen atoms
c	Number of Oxygen atoms
d	Number of Nitrogen atoms
$\overline{c_p}$	Mole specific heat at constant pressure
$c_{p,i}$	Specific heat of species i
$\overline{h}$	Mole specific enthalpy
$\overline{h}^{0}_{f,i}$	Enthalpy of formation
H_R	Enthalpy of reactants
H_p	Enthalpy of products
K	Equilibrium constant
m_i	Mass of species i
M_i	Molecular weight of species i
n	Total number of moles
n_i	Number of moles of species i
$n_{R,i}$	Number of moles of species i for reactants
$n_{p,i}$	Number of moles of species i for products
P	Total pressure
p_1 , p_2	Total pressure at states 1and2
Q	Heat loss
R	Gas constant
$\overline{R}$	Universal gas constant
$\overline{s}^{o}$	Mole specific entropy
T_a	Adiabatic flame temperature
T_R	Reactants temperature
T_p	Products temperature
T_{ref}	The reference temperature
U_1 , U_2	Internal energy at states 1and 2
V_1 , V_2	Total volume at states 1and 2
W	Work done
x_i	Mole fraction of species i
z_i	Number of mole of species i
Φ	Equivalence ratio
ε	Molar fuel air ratio

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