

Kinetic Theory Approach of The Twin Plane Jets Turbulent Combustion  
Analysis

Zuu-Chang Hong (洪祖昌)

Department of Mechanical Engineering  
National Central University  
Chung-Li, Taiwan, R.O.C.

Shu-Hao Chuang (莊書豪)

Department of Mechanical Engineering  
National Chung-Hsing University  
Taichung, Taiwan, R.O.C.

ABSTRACT

<sup>(9-10)</sup>Solutions of the multiple plane jets turbulent mixing are presented and are based upon a Kinetic theory of turbulence. From previous results, we further analyzed the twin plane jets turbulent combustion.

The chemical reacting flow was better described by the constructed pdf. Through the constructed pdf<sup>10</sup>, we calculated the pdf, mass fraction concentration and turbulent transport of the various species, temperature distribution.

The behavior of the turbulent transport of the reacting flow would help understand the twin plane jets combustion.