

عنوان مقاله:

Simulation of Turbulent Reacting Jets in Hot Coflow by using Joint Composition PDF Approach

محل انتشار:

سومین کنفرانس ملی کاربرد CFD در صنایع شیمیایی (سال: 1390)

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خلاصه مقاله:

In this research, the flow of a fuel jet inside a coflow oxidizer which is hot and diluted has been simulated by using the composition probability density function approach. For this issue, the modified k- turbulence model and the EMST micro-mixing model with the empirical constant 2 were used. So far, the results obtained by this model have not been satisfactory. In this work it was shown the mixing model was under the influence of the turbulence intensity at the inlets and modifying this parameter may yield the desirable results for the related flame. It was also shown the effect of chemical kinetics on flame structure is also important and various results can be obtained by using different chemical kinetics.

کلمات کلیدی:

probability density function, EMST Model, Jet in Hot coflow, chemical kinetics

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