

Partially Premixed Combustion - Exercises

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Exercises

Read "Reaction zone structures and mixing characteristics of partially premixed swirling CH_4 /air flames in a gas turbine model combustor" by Meier et al (2005). This paper shows experimental results from an experiment very similar to this tutorial; with CH_4 injected and an air co-flow.

Create a new mesh (20mmx57mm) that corresponds to the geometry of the combustor used, and adjust boundaries/species inflow amounts according to the experiment values. Compare your results to those of the experiment, using the same methods of PDF mixing table and premixed Zimont flame speed model.

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