

(a) Concentric jet flames

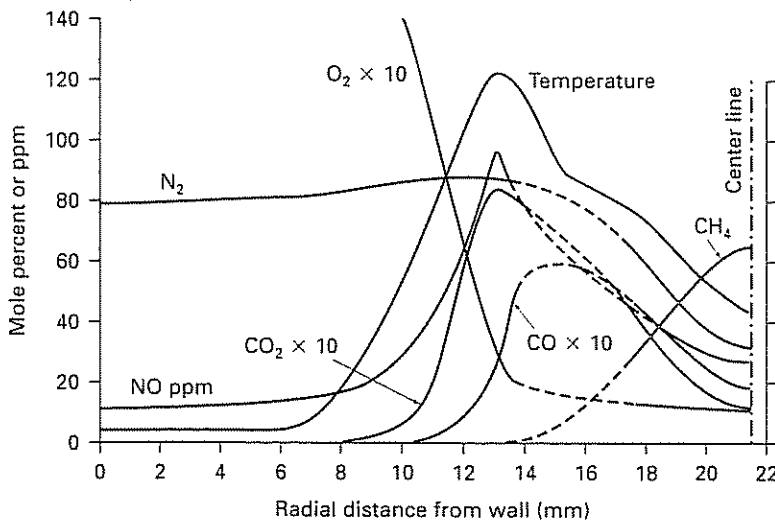
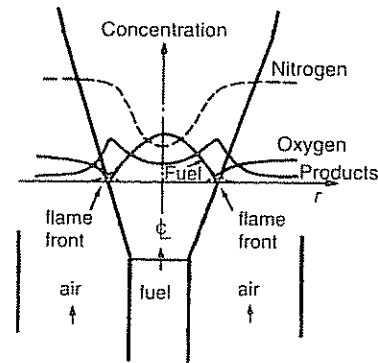
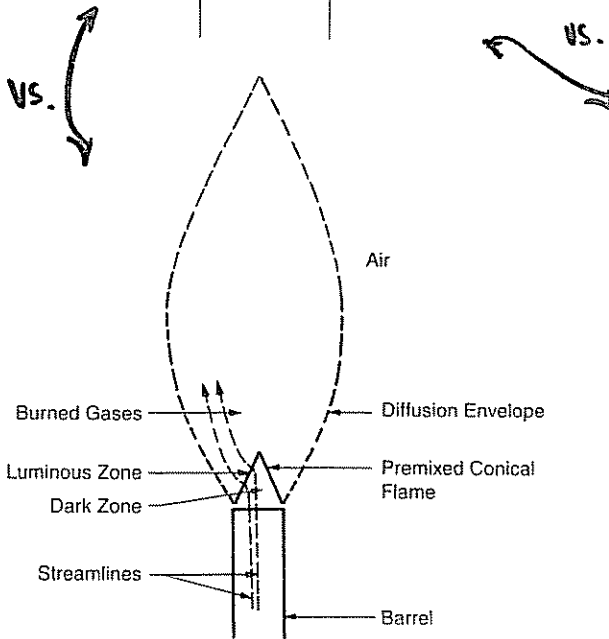
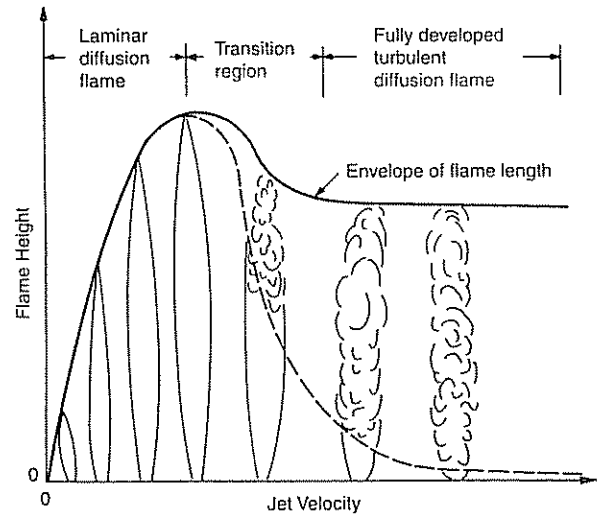
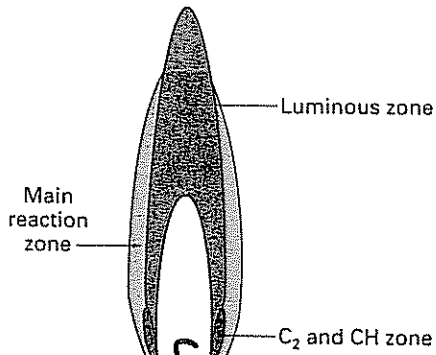


FIGURE 5.24

Methane-air diffusion flame temperature and concentration profiles, concentric jet burner (methane velocity 0.22 m/s, air velocity 0.41 m/s, overall fuel-air ratio 0.577, standard temperature and pressure initially, 17 mm above fuel inlet) [Tuteja].

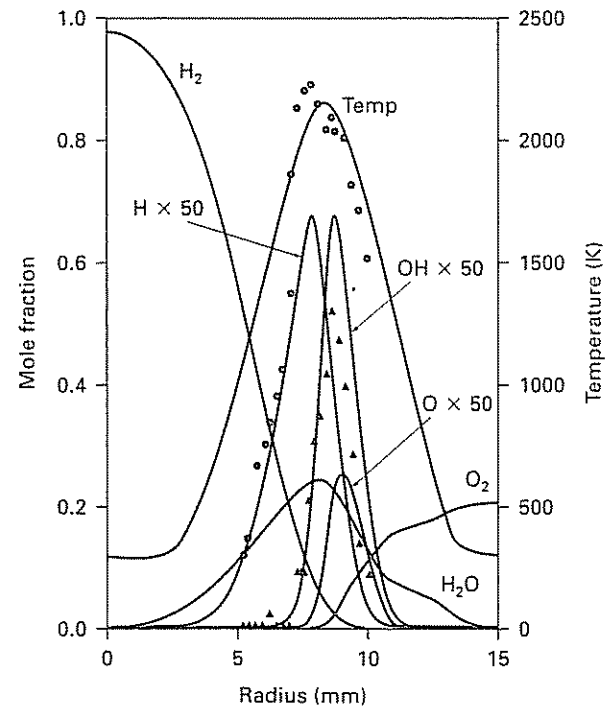


FIGURE 5.25

Concentration and temperature profiles in a hydrogen-air diffusion flame at 2 cm above fuel inlet; the hydrogen tube had a 5-cm radius. Circles are measured temperatures and triangles measured OH concentrations [Fukutani et al., by permission of The Combustion Institute].