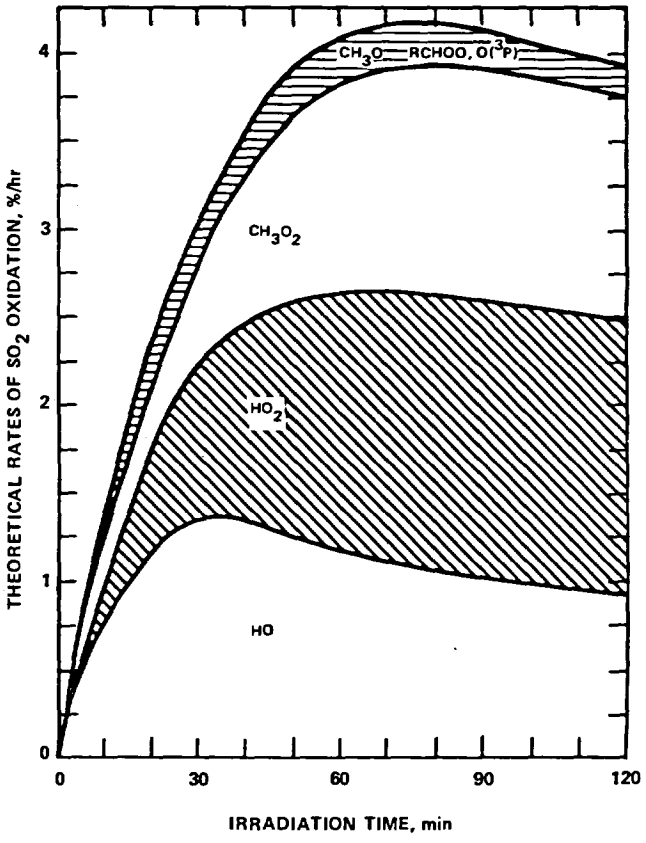

Figure 4-3. The theoretical rate of reaction (percent per hour) of various free-radical species with SO_2 is shown for a simulated sunlight-irradiated (solar zenith angle of 40^0) polluted atmosphere. The initial concentrations (in ppm) were as follows: SO_2, 0.05; NO, 0.15; NO_2, 0.05; CO, 10; CH_4, 1.5; CH_2O, 0; CH_3CHO, 0. The relative humidity was 50 percent, and the temperature was 25^o C.

Note: The rate constants for HO_2 and CH_3O_2 radical reactions with SO_2 are not well established.

Source: Calvert et al. (1978).