



Fig. 1.7. Interactions and feedbacks between important chemical systems in the troposphere and stratosphere. The figure particularly emphasizes the factors that influence ozone concentrations in both regions as well as showing the formation of important pollutants in the boundary layer (roughly the first km of highly turbulent air next to the surface). Many of the chemical species modify atmospheric temperatures which in turn determine the rates and relative importance of the different processes. Not shown on the diagram, but also an important feedback mechanism, is the control that the chemical compounds may exert on cloud formation and thus indirectly on the biogenic source gases.

Source species are shown in the small oblong boxes, while radicals and other secondary intermediate species are shown in circles: DMS = dimethylsulphide, CFC = chlorofluorocarbons, NMHC = non-methane hydrocarbons.

Based on a diagram presented by Professor O. Hov, University of Bergen, in Varese, September 1989.