

of atmospheric chemistry. Considerable attention has been given to formaldehyde photolysis in recent years. There appears to be general agreement that the primary paths are:



In order to compare the rates of photolysis with the depletion of formaldehyde by HO reaction, one can calculate a photolysis rate of approximately 13 percent per hour for a solar zenith angle of 20° using the value of the photodissociation rate given by Horowitz and Calvert.<sup>17</sup>

The interaction with NO and NO<sub>2</sub> of the organic free radicals produced by hydrocarbon oxidation represents an extremely important aspect of the chemistry of the oxides of nitrogen in the polluted atmosphere. The radicals can be classed according to:

R	alkyl	0	
		"	
RO	alkoxyl	RC	acyl
ROO	peroxyalkyl	0	
		"	
		RCO	acylate
		0	
		"	
		RCCO	peroxyacyl

In air it can be assumed that combination with O<sub>2</sub> is the sole fate of alkyl (R) and acyl (RCO) radicals and that the reaction is essentially instantaneous. Consequently, in reactions with alkyl or acyl radicals as products, these