

Distribuição de tamanhos de aerossóis

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Processos

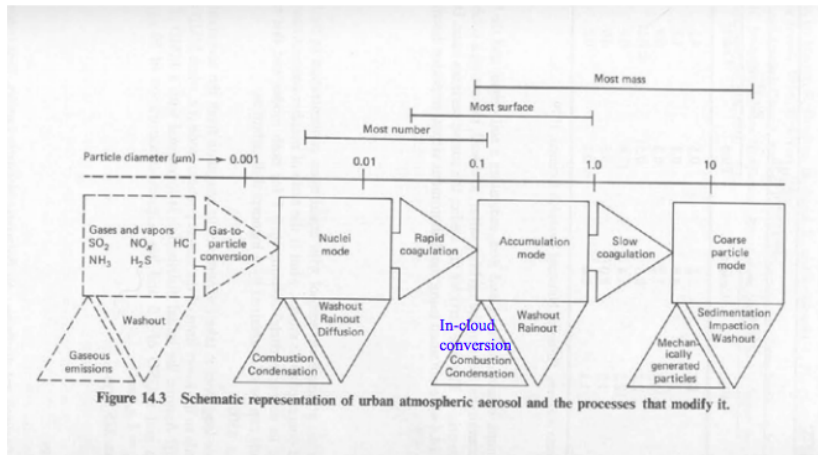
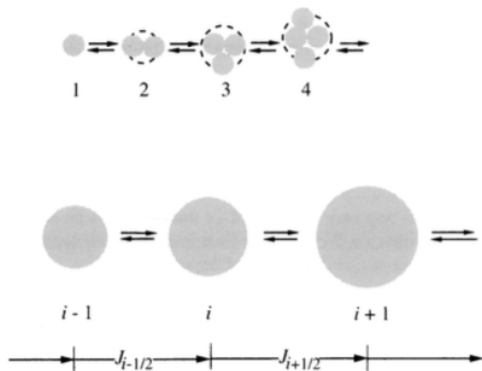


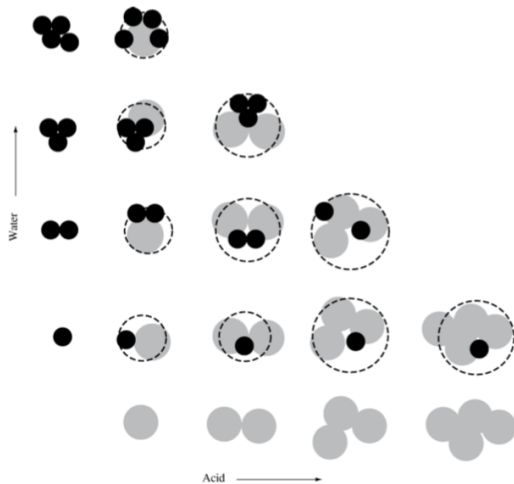
Figure 14.3 Schematic representation of urban atmospheric aerosol and the processes that modify it.

Nucleação

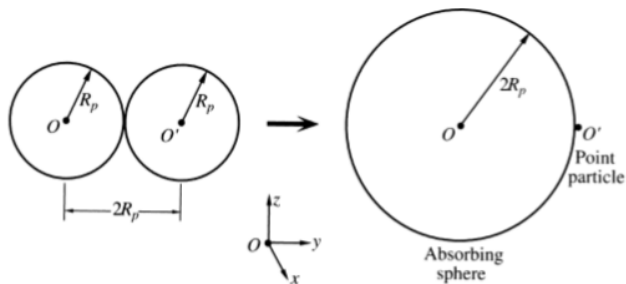
**FIGURE 11.1** Cluster growth and evaporation processes.

$$\frac{dN_i}{dt} = \beta_{i-1} N_{i-1}(t) - \gamma_i N_i(t) - \beta_i N_i(t) + \gamma_{i+1} N_{i+1}(t) \quad (11.2)$$

Nucleação



Coagulação

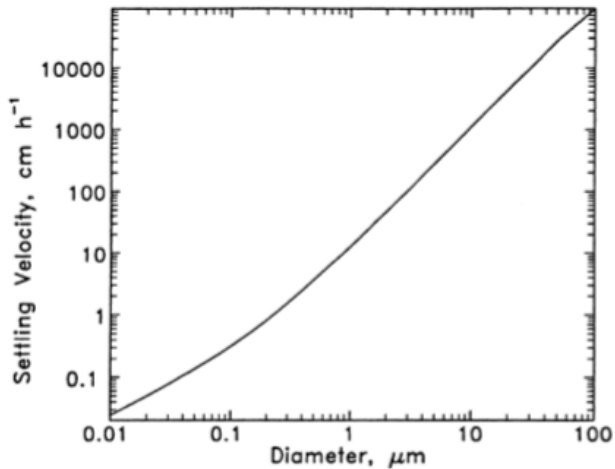


Coagulação

TABLE 13.3 Coagulation Coefficients ($\text{cm}^3 \text{s}^{-1}$) of Atmospheric Particles^a

D_{p2} (μm)	D_{p1} (μm)					
	0.002	0.01	0.1	1.0	10	20
0.002	8.9×10^{-10}	5.7×10^{-9}	3.4×10^{-7}	7.8×10^{-6}	8.5×10^{-5}	17×10^{-5}
0.01	5.7×10^{-9}	19×10^{-10}	2.5×10^{-8}	3.4×10^{-7}	3.5×10^{-6}	7.0×10^{-6}
0.1	3.4×10^{-7}	2.5×10^{-8}	15×10^{-10}	5.0×10^{-9}	4.5×10^{-8}	9.0×10^{-8}
1	7.8×10^{-6}	3.4×10^{-7}	5.0×10^{-9}	6.9×10^{-10}	2.1×10^{-9}	3.9×10^{-9}
10	8.5×10^{-5}	3.5×10^{-6}	4.5×10^{-8}	2.1×10^{-9}	6.1×10^{-10}	6.8×10^{-10}
20	17×10^{-5}	7.0×10^{-6}	9.0×10^{-8}	3.9×10^{-9}	6.8×10^{-10}	6.0×10^{-10}

Assentamento gravitacional



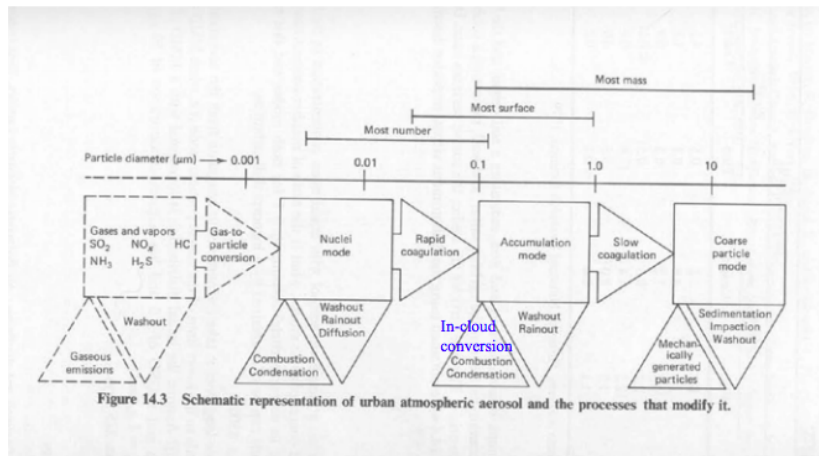


Figure 14.3 Schematic representation of urban atmospheric aerosol and the processes that modify it.

Plots de distribuições

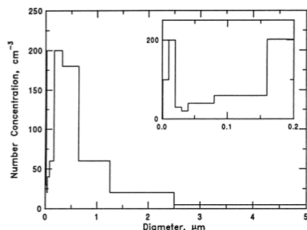


FIGURE 8.1 Histogram of aerosol particle number concentrations versus the size range for the distribution of Table 8.1. The diameter range 0–0.2 μm for the same distribution is shown in the inset.

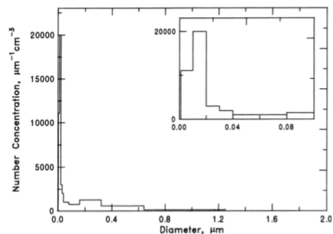
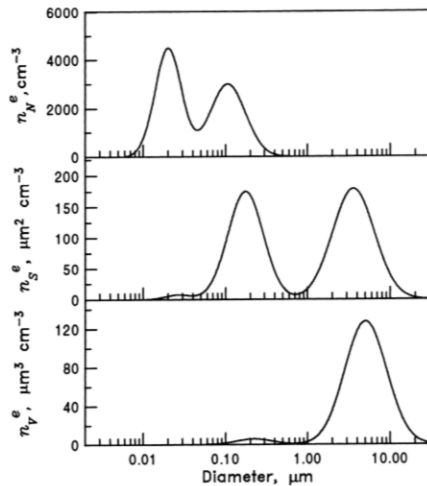


FIGURE 8.2 Aerosol number concentration normalized by the width of the size range versus size for the distribution of Table 8.1. The diameter range 0–0.1 μm for the same distribution is shown in the inset.

Plots de distribuições



Distribuições típicas

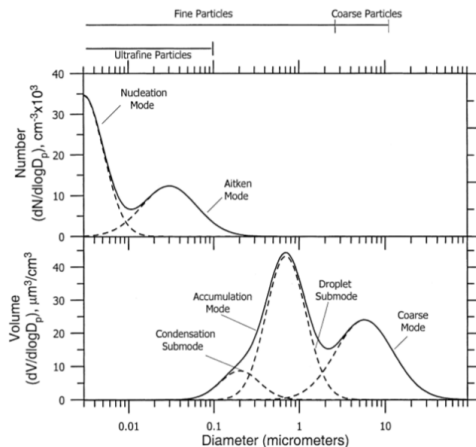
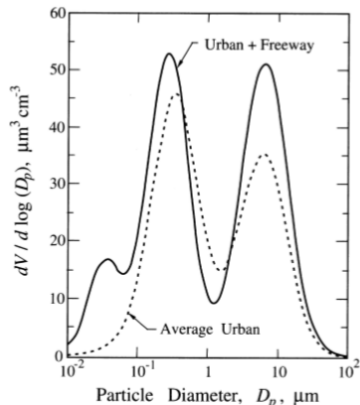
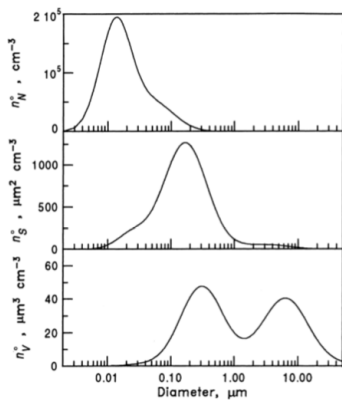


FIGURE 8.10 Typical number and volume distributions of atmospheric particles with the different modes.

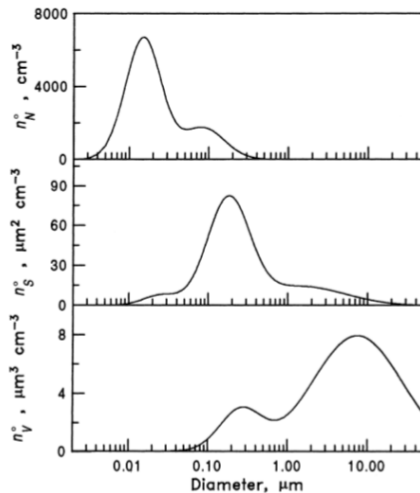
Distribuições típicas

Urbanas



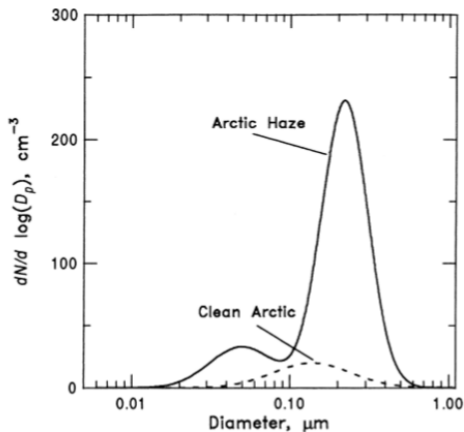
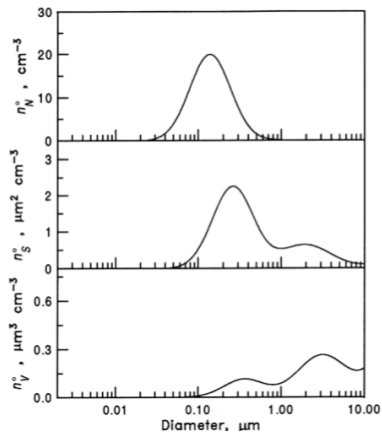
Distribuições típicas

Rurais



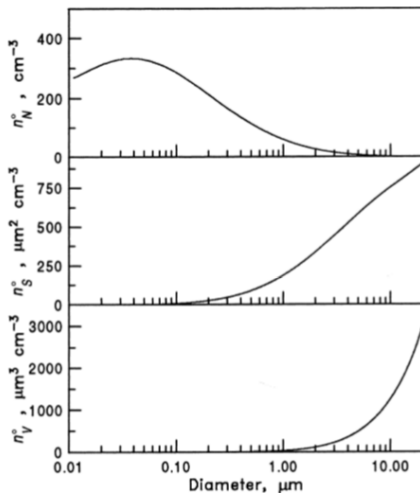
Distribuições típicas

Árticas

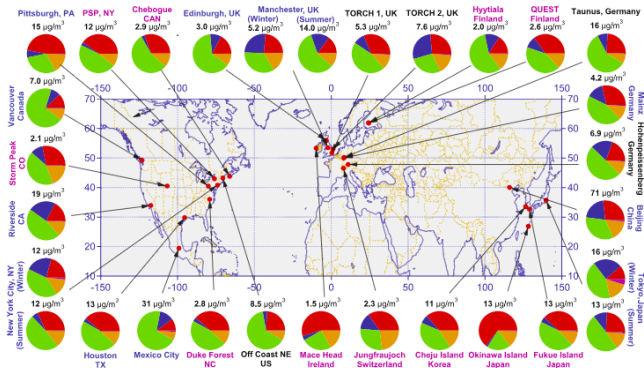


Distribuições típicas

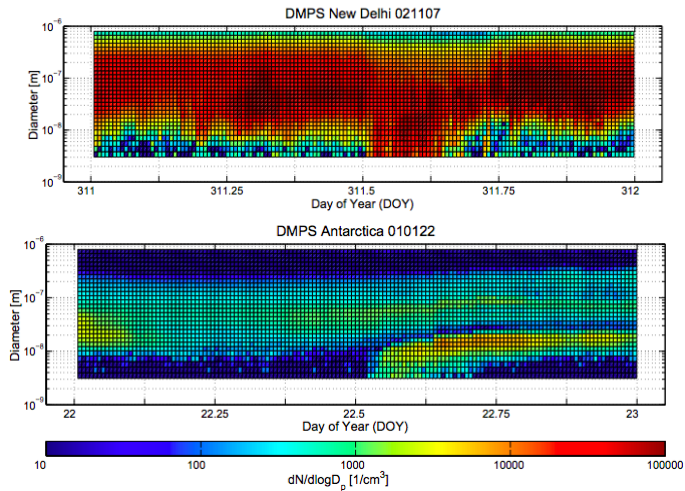
Deserto



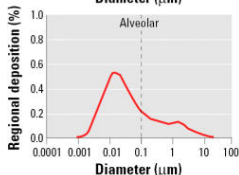
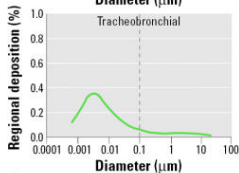
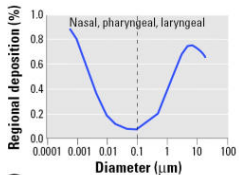
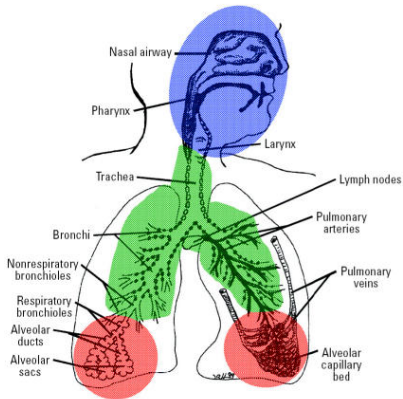
Conteúdo dos aerossóis



Nucleação



Modelo do tracto da respiração



Obrigado!

