Chapter 3

3.1 Additive Molar Functions

• Additive Principles – a powerful tool in the semi-empirical approach in the study of physical properties of polymers

$$F = \Sigma n_i F_i$$

여기처 F = molar property $n_i = the number of contributing properties$ $F_i = numerical contribution of component$

예로서

$$V_{\rm r}(298{\rm K}) = \sum_{i} V_i(298k) \tag{4.36}$$

 \rightarrow molar volume of rubbery polymer

$$\gamma = \left(\frac{P_s}{V}\right)^4$$
 ($\gamma =$ surface tension)

 $P_s(parachor) = \Sigma n_i P_{si}$