**Zimm plot**

A diagrammatic representation of data on scattering from large particles, corresponding to the equation:

\[
\frac{K_c}{\Delta R(\theta)} = \frac{1}{\bar{M}_w P(\theta)} + 2 A_2 c + ... 
\]

and used for the simultaneous evaluation of the mass average molar mass, \(\bar{M}_w\), the second virial coefficient of the chemical potential, \(A_2\), and (usually) the z-average radius of gyration, \(<s^2>_z^{1/2}\); \(c\) is the mass concentration of the solute, \(\Delta R(\theta)\) the excess Rayleigh ratio, and \(P(\theta)\) the particle scattering function that comprises (usually) the z-average radius of gyration. \(K\) depends on the solute, the temperature and the type of radiation employed. Several modifications of the Zimm plot are in frequent use; the most common one uses the excess scattering instead of the excess Rayleigh ratio.

**Source:**
Purple Book, p. 66