more about Chromatography

Pore size or Void = the space between the particles), void volume

V_o = void volume

V_t = total column volume

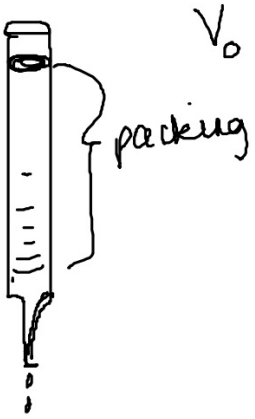
V_e = elution volume (solute)

V_s = volume of the stationary phase

V_i = $V_t - V_o - V_{gel\ matrix}$ (included volume)

K_{av} = partition coefficient

$$K_{av} = \frac{V_e - V_o}{V_t - V_o}$$



particle size determines the needed V_o

V_o determines the resolving range.

Additional Types of Chromatography:

Gel Filtration - gel permease - size exclusion
uses hydrodynamic particles that the user can control the diameter of ∴ controlling the void volume.

Reverse-Phase Chromatography - the stationary phase is made up of hydrophobic material to attract the hydrophobic compounds in the mobile phase. The polarity of the mobile phase is reduced to then pick-up or release the hydrophobic particles.

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space between the particles

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V_s = volume of stationary phase

V_i = included volume = $V_t - V_o - V_{gel}$

K_{av} = partition coefficient

$$K_{av} = \frac{V_e - V_o}{V_t - V_o}$$

Particle size determines the needed V_o
V_o determines the resolving range.