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reduced mobile phase velocity, v

in chromatography

A term used mainly in liquid chromatography. It compares the mobile phase velocity with the velocity of diffusion into the pores of the particles (the so-called diffusion velocity, u_D):

$$v = \frac{\bar{u}}{u_D} = \frac{\bar{u}\, d_p}{D_M}$$

In open-tubular chromatography:

$$v = \frac{\bar{u}\, d_c}{D_M}$$

Source:

PAC, 1993, *65*, 819 *(Nomenclature for chromatography (IUPAC Recommendations 1993))* on page 840

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