

Note 54 : Stratégie de questionnement pour deux fluides

VIENNOT L. (2011) *Floating between two liquids*, Muse group.

http://c.ymcdn.com/sites/www.eps.org/resource/collection/016775D4-8888-474D-887F-3E33AEA5E6D0/EPSPED_MUSE_2liq.pdf

Abstract

The hydrostatic equilibrium of a solid floating “between two liquids” is analysed, first as a classical exercise, then as a simple experiment with a particular staging. It is suggested to use this situation to address some students’ difficulties about: pressure in statics of fluids, role of atmospheric pressure, Archimedes’ up-thrust, and thinking this setting as a system. It is shown that a possible way to help students overcome some of these difficulties, especially the last one, is to use graphical representations.