

Sorption of volatile organic contaminants by soils (a review)

Breus I., Mishchenko A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The sorption of volatile organic compounds (VOCs) - the most common, mobile, but relatively poorly studied contaminants - by soils is considered. Typical VOCs of different classes, the major processes determining their retention by soils, the main rules and mechanisms of VOC sorption, and the experimental methods of its measurement are characterized. The common approximation models and geometrical shapes of VOC sorption isotherms are discussed. Provisional analytical ranges of experimental VOC sorption values in the aqueous and the vapor phases at low and high relative concentrations are reported. © Pleiades Publishing, Inc. 2006.

<http://dx.doi.org/10.1134/S1064229306120015>
