

Positron annihilation in and compressibility of aqueous solutions of 1,2- and 1,6-hexanediols.

Autorzy

Kazimierz Jerie

Andrzej Baranowski

Jacek Gliński

J. Przybylski

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Streszczenie

The results of positron annihilation experiments in aqueous solutions of 1,2- and 1,6-hexanediols were compared to those of ultrasonic velocity. For the former, the positron annihilation measurement shows strong hydrophobic interactions and formation of clathrate-like hydrates in solution, although their stoichiometries as well as architecture are untypical. Ultrasonic data for this system seem to be strongly influenced by a relaxation process and do not allow to conclude about formation of open-work structures in this system. For the system water + 1,6-hexanediol both the ultrasonic and annihilation methods suggest formation of labile, water-rich hydrates. They are very weak compared to those existing in the water + 1,2-hexanediol, what results from the hydrophilic hydration competing the hydrophobic one.

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<http://link.springer.com>