



Untypical surface properties of aqueous solutions of 1,5-pentanediol.

Autorzy

Jacek Gliński

G. Chavepeyer

J. K. Platten

Rok wydania

1999

Czasopismo

Colloids and Surfaces A:
Physicochemical and
Engineering Aspects

Numer woluminu

162

Strony

233-238

DOI

10.1016/S0927-
7757(99)00207-1

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The surface tensions σ of aqueous solutions of 1,5-pentanediol were measured in the temperature range between 278 and 338 K using Wilhelmy plate method. They exhibit, in a wide range of concentrations, the S-shaped temperature dependencies with a region of positive $d\sigma/dT$, never reported before. The results were interpreted in terms of specific interactions of molecules adsorbed at the interface. Increasing surface concentration of diol molecules forming an interface causes their rearrangement, which microscopic structure strongly depends on temperature, most possibly agglomeration or formation of micelles.

Słowa kluczowe

Air-liquid interface, Surface tension, Surface entropy, Aqueous solutions, UNIFAC model, atom, 5-Pentanediol

Adres publiczny

[https://doi.org/10.1016/S0927-7757\(99\)00207-1](https://doi.org/10.1016/S0927-7757(99)00207-1)

Strona internetowa wydawcy

<http://www.elsevier.com>