Surface properties of diluted solutions of *n*-heptane,*n*-octanol and *n*-octanoic acid in nitromethane.

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The surface tensions σ of solutions of *n*-heptane, *n*-octanol and *n*-octanoic acid (caprylic acid) in nitromethane were measured in the temperature range between 278 and 308 K using Wilhelmy plate method. Untypical parabolic $\sigma=f(T)$ dependences were observed for all the three systems under investigation. The surface entropies and compositions were calculated. The results were interpreted in terms of formation of specific monolayer structures formed by solute molecules adsorbed at the interface and similarities between interfacial properties of the systems under investigation and the aqueous ones.

Słowa kluczowe

Air–liquid interface, Surface tension, Surface entropy, Non-aqueous solutions, Liquid structure, Nitromethane, n-Heptane, n-Octanol, n-Octanoic acid, UNIFAC model

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