反胶束系统及萃取蛋白质的分子热力学模型**1**: 反胶束系统的分 子热力学模型

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摘要　　以反胶束系统稳定性的热力学分析为基础,综合分析了反胶束系统的三大效应,即低界面张力效应、界面弯矩效应、混合熵效应,提出了一个分子热力学模型,模型所预言的反胶束水分含量随无机盐种类、浓度、表面活性剂浓度以及助表面活性剂含量的变化与所获实验规律定量相符,还能预言反胶束内表面处电势值、表面活性剂解离度。

Molecular thermodynamic model for reverse micelles system and protein extraction 1: Molecular thermodynamic model for reverse micelles system

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Abstract　A thermodynamic molecular model is presented by analyzing three effects related to the formation of reverse micelles system comprehensively i.e. low interfacial tension effect, interfacial bending effect, mixing entropy effect, based on thermodynamic analysis on the stability of reverse micelles system. The predicted changes in water content of reverse micelles system with the variation of inorganic salt type and concentration, surfactant concentration and consurfactant content are in accordance with the experimental law obtained quantitatively. The model can also predict electrostatic potential value on the inside surface of the reverse micelles system and surfactant dissociation degree.

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