

**NEUTRON RESEARCH OF THE STRUCTURE TRANSITION MICELLE  
TO CRYSTALLITES IN LIQUID SYSTEM  
D<sub>2</sub>O-TETRADECYLTRIMETHILAMMONIUM BROMIDE-NaBr**

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Structure transition in triple liquid system D<sub>2</sub>O-tetradecyltrimethylammonium bromide-NaBr was studied by means of small-angle neutron scattering in a wide range of temperature, pressure and salt concentrations. The phase *P-T* transition diagrams of colloidal micellar system to the suspension colloidal system with crystallites was construct from experimental data. It is shown that salt concentration increasing causes the shift of the boundary in the direction of higher temperatures and lower pressures. Thermodynamic justification of the received results is represented.

*Keywords:* tetradecyltrimethylammonium bromide (TTAB), small angle neutron scattering (SANS), structure transition, phase diagrams.