

Polyelectrolyte complex-surfactant interactions: effect of neutralization degree on viscometric behaviour in aqueous solution

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Abstract/Résumé : The interaction between polyelectrolytes and ionic surfactants has attracted significant interest in recent years in different areas of research. In this study, the effect of the neutralization degree α on the viscosimetric behaviour of (hydrolyzed polyacrylamide, AD37-poly(4-vinylpyridine), P4VP) complex in aqueous solution and in the presence of sodium dodecyl sulphate (SDS) at $T = 25$ A degrees C was studied. Physicochemical results show that neutralization degree has an important effect on reduced viscosities values of (AD37-P4VP-SDS) system that reveals the electrostatic and hydrophobic interactions. Indeed, these values increase with α , and this influence is even greater for low P4VP-high AD37 concentrations systems.

Keywords/Mots clés:

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