Stability of Biopolymers in Aqueous Solution. GMPC Approach.

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Within the frameworks of Generalised Model of Polypeptide Chain (GMPC)\textsuperscript{1-4} the concentration behaviour of helix-coil transition temperature of biopolymer in two-component solvent was observed on the simplest models. It is shown that if the solvent and the ligand interact with the biopolymer at different binding sites, and even if both components influence the helical state in the same way, the model allows one to obtain the non-monotone character of the melting temperature behaviour of biopolymer depending on the ligand concentration. It is shown that changes in the regime of helical state stability is not always related with the competition of stabilising and destabilising interactions of blend components but can be the result of the cumulative effect of both components.