Charge Heterogeneity Induced Binding and Phase Stability in β-lacto-globulin-Gelatin B

Gels and Coacervates at their Common pI

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Electronic Supplementary Information (ESI)



Figure S1: Variation of (a) absorbance spectra (b) absorbance (at 280nm) as a function of mixing ratio r. Note that the intermolecular soluble complexes in phase-I were either partially or fully charge neutralized while in phase-II, these were overcharged. Subsequently, these two phases yielded complex coacervates and transparent gels. See text for details. Solid lines are guide to the eye only.



Figure S2: Cole–Cole plot for different mixing ratios, r= 1.0 (coacervate sample exhibited strong heterogeneity, chi-squared=0.51) and 2.6 (gel sample exhibited much less heterogeneity, chi-squared=0.97). This data was recorded under constant oscillation stress of 1 Pa. The solid line is the fitting of the data to eq. (4) which had acceptable chi-squared values only gel samples.