

Correction to “Lower Critical Solution Temperature in Polyelectrolyte Complex Coacervates”

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In this work on the lower critical solution temperature in polyelectrolyte complex coacervates, two commercially available polymers were used. Sodium poly(styrenesulfonate) (NaPSS) with a mass-average relative molar mass (M_w) of 200 kg/mol and poly(diallyl dimethylammonium chloride) (PDADMAC) with a M_w of 100–200 kg/mol (reported as ~150 kg/mol) were purchased from Sigma-Aldrich, Inc. Polydispersity was not provided. As described, the counterions were exchanged to obtain potassium poly(styrenesulfonate) (KPSS) and poly(diallyl dimethylammonium bromide) (PDADMAB). Since the original publication, aqueous size-exclusion chromatography measurements indicate a need to correct the M_w and provide the relative number-average (M_n) and polydispersity (\mathcal{D}). We measure the molecular mass and distribution of KPSS ($M_n = 70$ kg/mol, $M_w = 196$ kg/mol, $\mathcal{D} = 2.80$) using low polydispersity NaPSS calibrants with a M_n between 1.6 to 1188.4 kg/mol purchased from Scientific Polymer Products and PDADMAB ($M_n = 22$ kg/mol, $M_w = 60$ kg/mol, $\mathcal{D} = 2.76$) with low polydispersity poly(2-vinylpyridine) calibrants with M_n between 4.8 and 539 kg/mol from Polymer Standard Services (Ma et al. Enhanced Concentration Fluctuations in Model Polyelectrolyte Coacervate Mixtures along a Salt Isopleth Phase Diagram. *Macromolecules* 2021, accepted for publication). This correction in molecular mass and distribution does not affect the major observations of the phase behavior; however, the asymmetry in the molecular mass and the polydispersity should be corrected for the record.

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