Saloplastics: Processing Polyelectrolyte Complexes with Salt Water

Polyelectrolyte complexes spontaneously form when polyelectrolytes with opposite charge are mixed. While they are unprocessable (brittle, and no thermal softening) when dry they are quite tractable when hydrated. The addition of salt and water to complexes further softens them ("saloplasticity"). This talk will address the fundamental aspects of polyelectrolyte complex formation and will also present quantitative relationships between salt water "doping" and their properties.

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