

Supplementary Materials

Polyelectrolytes in Hot Melt Extrusion: A Combined Solvent-Based and Interacting Additive Technique for Solid Dispersions

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Supporting Data

Powder X-ray diffraction patterns

The following graphs were used for the final formulation evaluation of the polyelectrolyte matrices. The following powder X-ray diffraction (PXRD) analyses were based on the benchtop X-ray diffractometer that is described in the methods section.

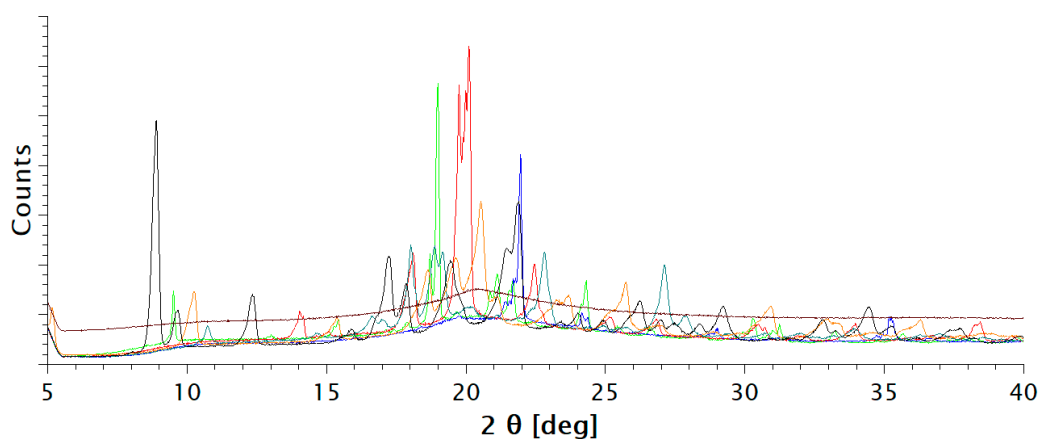


Figure S1. PXRD patterns of the physical mixtures. Colors and labels are in line with Figure 2 and 8, which can be inferred from the main article. The diffraction pattern of pure NaCMC is shown in bordeaux with an offset.

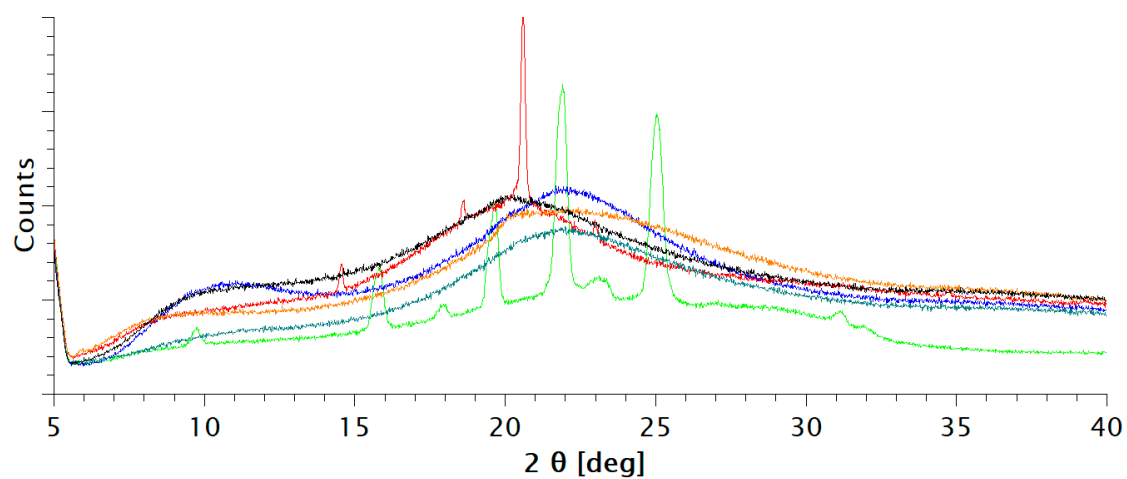


Figure S2. PXRD diffraction patterns of the solvent evaporates. Colors and labels are in line with Figure 2 and 8, which can be inferred from the main article.

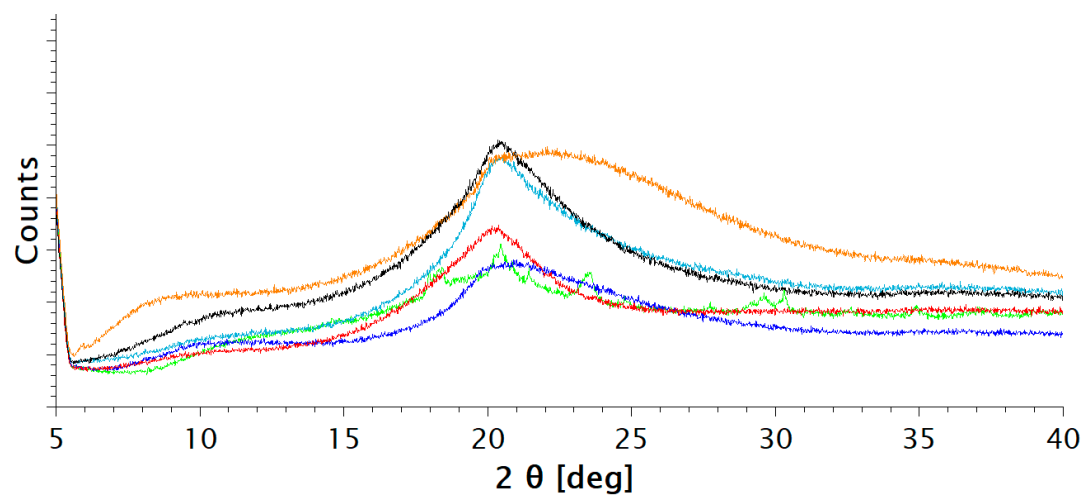


Figure S3. PXRD patterns of the extrudates. Colors and labels are in line with Figure 2 and 8, which can be inferred from the main article.

Hot stage microscopy and hot stage FTIR

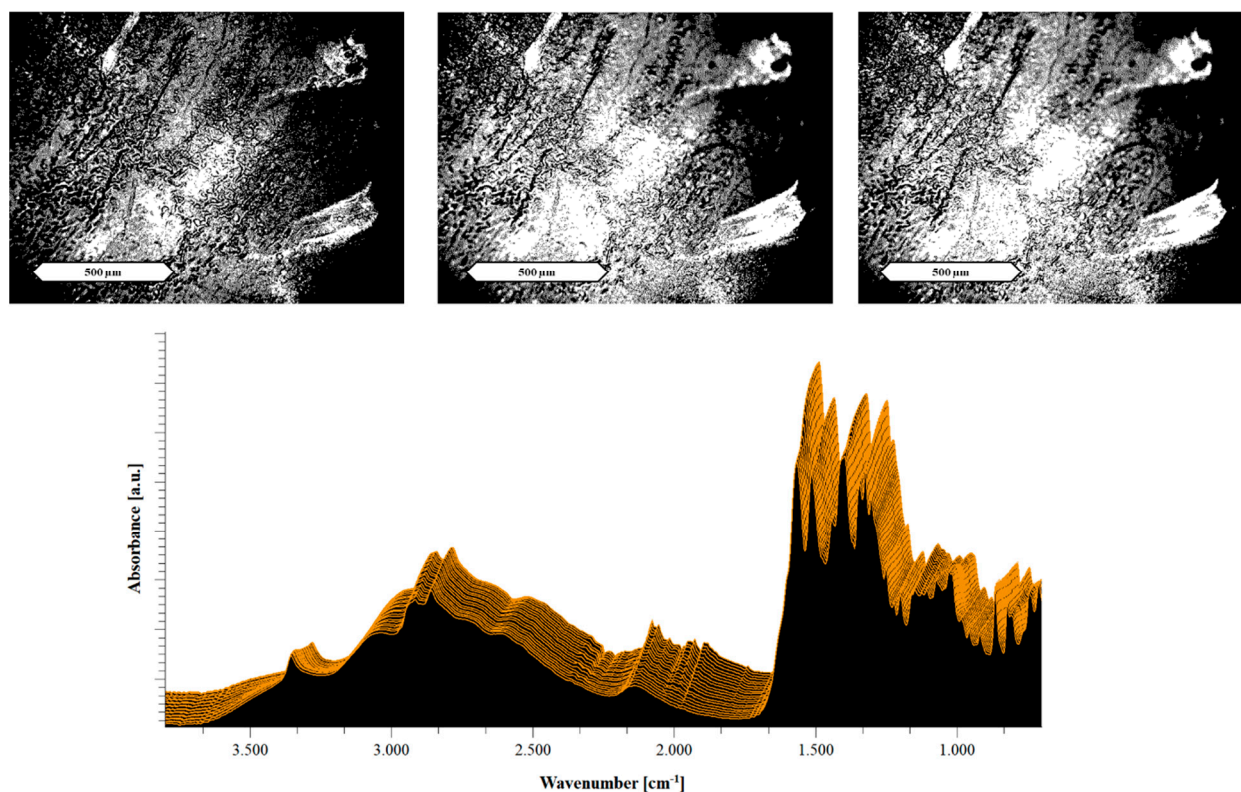


Figure S4. Heat resolved FTIR and HSM images of 50 % lysine / NaCMC solvent evaporates. The images at the top show HSM images taken at RT, 90 °C and 130 °C (from left to right). Each spectrum was measured at temperatures from 30°C (measured first in the front) to 130°C (in the back) by increasing steps of 5°C.

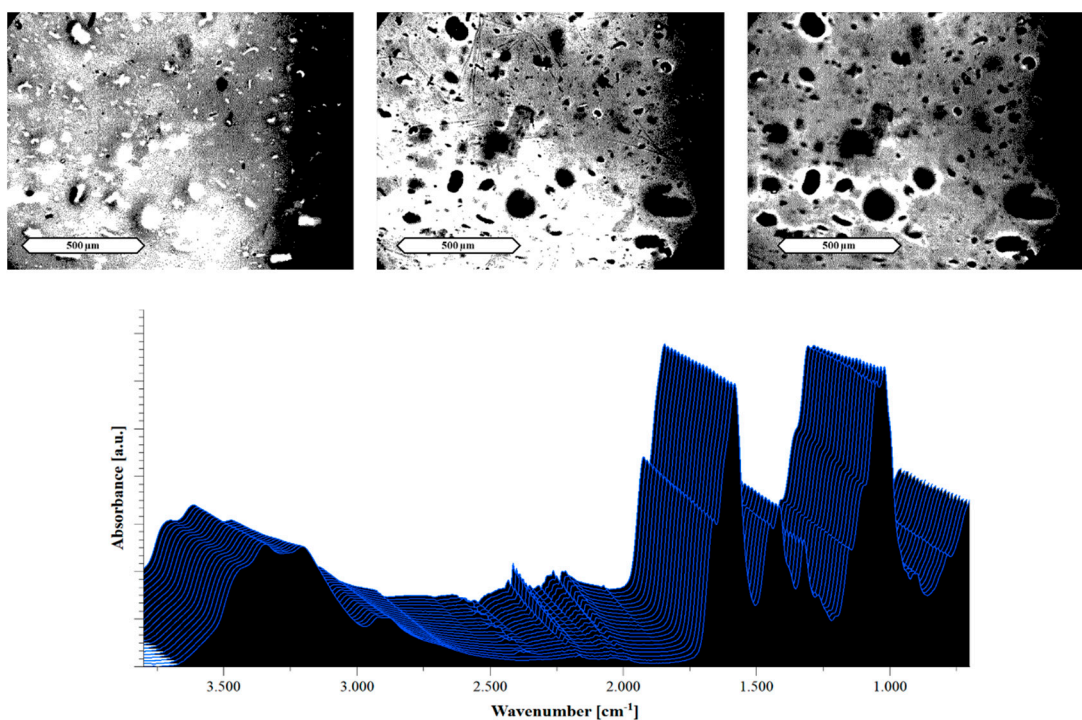


Figure S5. The images at the top show HSM images of 20 % urea / NaCMC solvent evaporated films taken at RT, 90 °C and 130 °C (from left to right). At the bottom, a temperature resolved FTIR spectrum is shown. Each spectrum was measured at temperatures from 30°C (measured first in the front) to 130°C (in the back) by increasing steps of 5°C