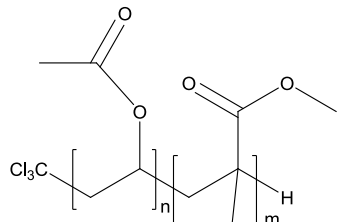
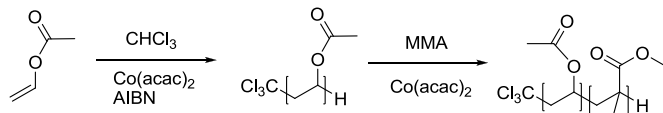


Sample Name:**Poly(vinyl acetate-b-methyl methacrylate)****Sample #: P20080Ac-VAcMMA****Structure:****Composition:**

| $M_n \times 10^3$ VAc-b-MMA | PDI |
|--------------------------------|-----|
| 4.5–25.1 | 1.7 |
| VAc:MMA = 1:4.8 (NMR) | |

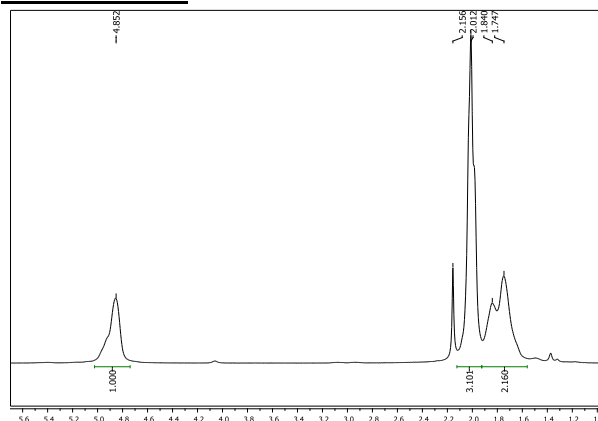
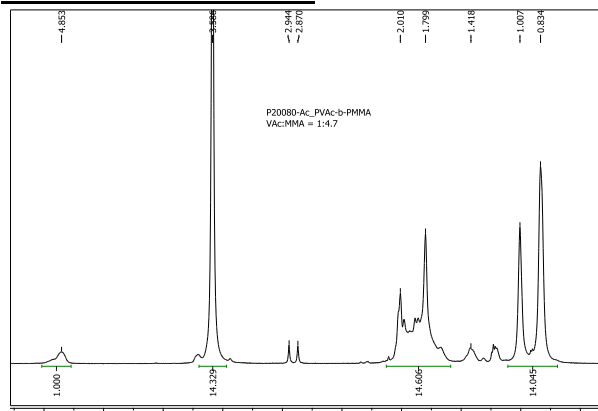
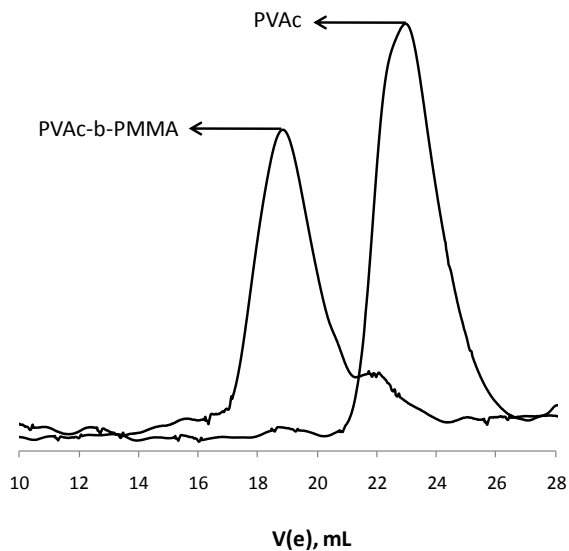
Synthesis Procedure:

The product was obtained by successive telomerization of vinyl acetate and methyl methacrylate using CHCl_3 as telomer, $\text{Co}(\text{II})$ acetylacetonate as chain transfer agent and AIBN as a radical initiator, as presented in the Scheme below:

**Characterization:**

Poly(vinyl acetate) was characterized by size-exclusion chromatography (SEC) to estimate M_n (PS standards) and polydispersity (PDI). NMR was used to confirm structure. M_n of PVAc-b-PMMA was estimated from NMR using SEC M_n of PVAc as a reference, and PDI was estimated from SEC.

The polymer is soluble in THF, Acetone, CHCl_3 and precipitates from Hexane.

HNMR of PVAc**HNMR of PVAc-b-PMMA****SEC of the block copolymer:****P20080Ac-VAc-b-MMA**

PVAc, $M_w / M_n = 1.7$, PVAc-b-PMMA, $M_w / M_n = 1.7$