Electronic Supplementary Information

Versatile thiolated thermosensitive polymers synthesized by ATRP of MEO_2MA and AcSEMA, a new methacrylic monomer with a protected thiol group.

Marta Liras, Olga García, Nekane Guarrotxena,
Marta Palacios-Cuesta and Isabel Quijada-Garrido

1 Characterization of P(MEO_2MA-*co*-AcSEMA) copolymers

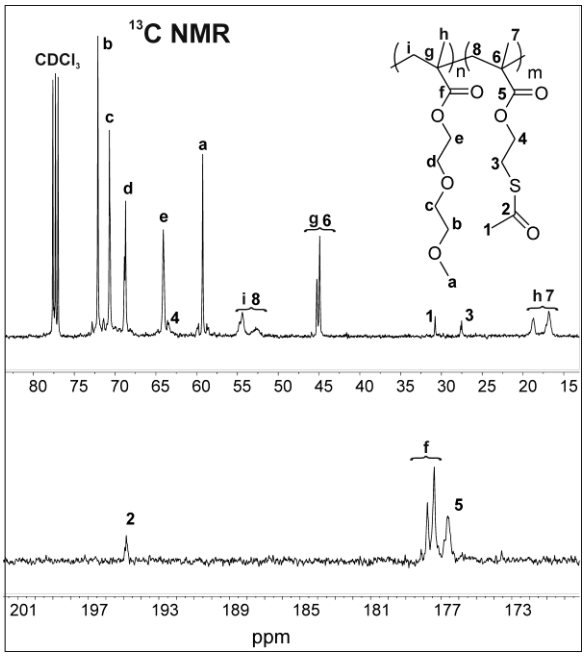

Figure S-1. ^{13}C NMR spectrum corresponding to the copolymer with 10 % mol AcSEMA

2 LCST dependence on pH for thiolated copolymers

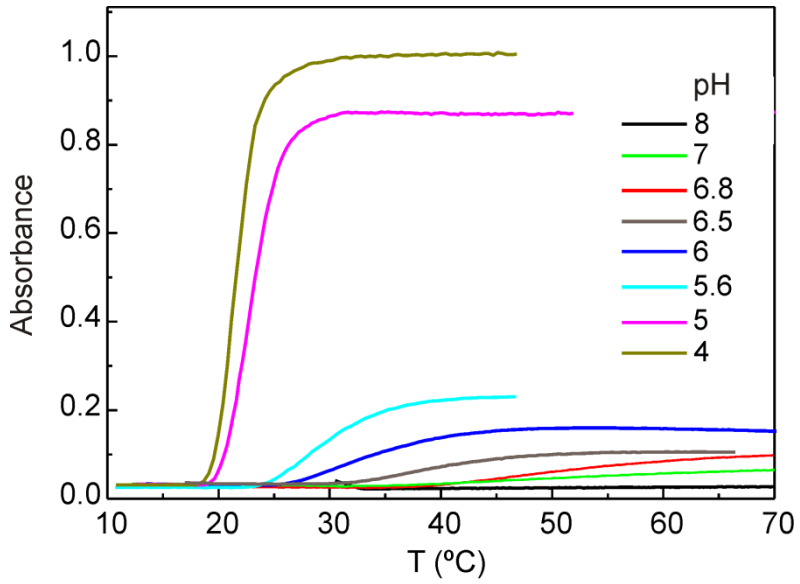

Figure S-2. LCST dependence on pH for hydrolyzed copolymer with 10 mol% of SEMA

3 Michael addition of AcSEAc with model acrylates

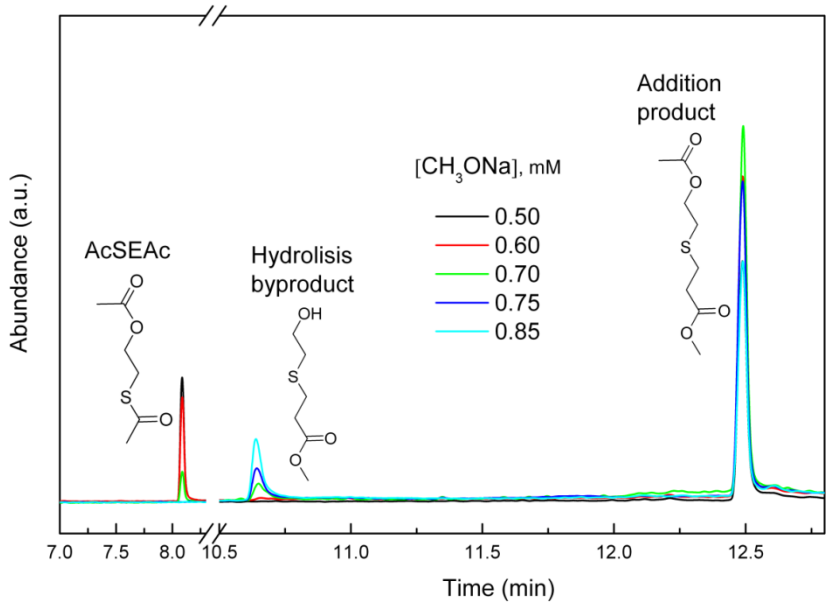

Figure S-3. In situ hydrolysis of AcSEAc and Michael addition with MA in solutions of sodium methoxide in acetonitrile. Reaction time: 40 min.

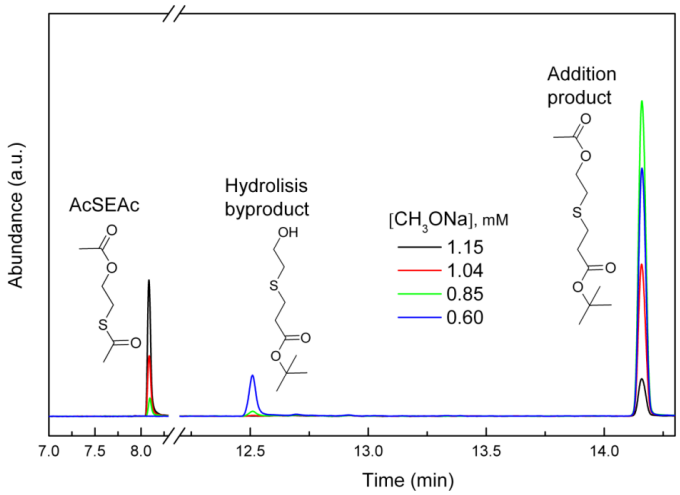

Figure S-4. In situ hydrolysis of AcSEAc and Michael addition with *t*BA in solutions of sodium methoxide in acetonitrile. Reaction time: 40 min.

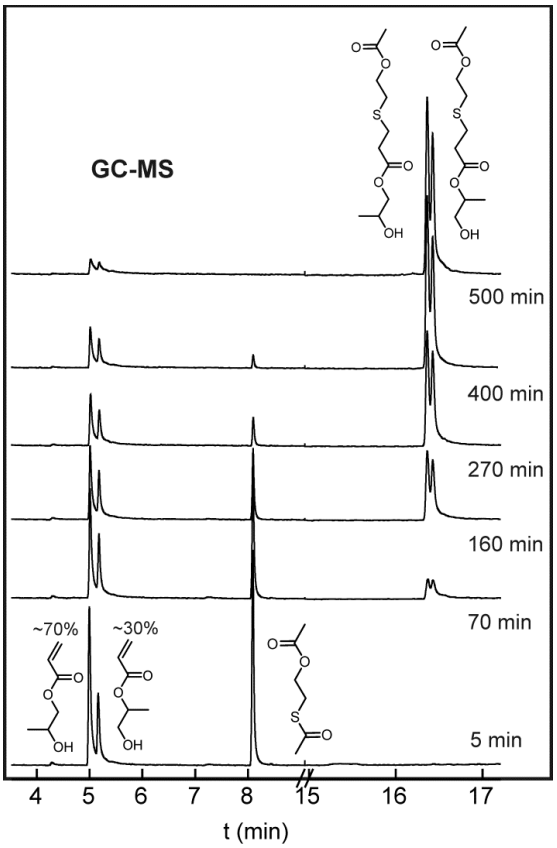

Figure S-5. Michael addition between AcSEAc and HPA in NH_3(aq.)/Acetonitrile monitored by GC-MS.

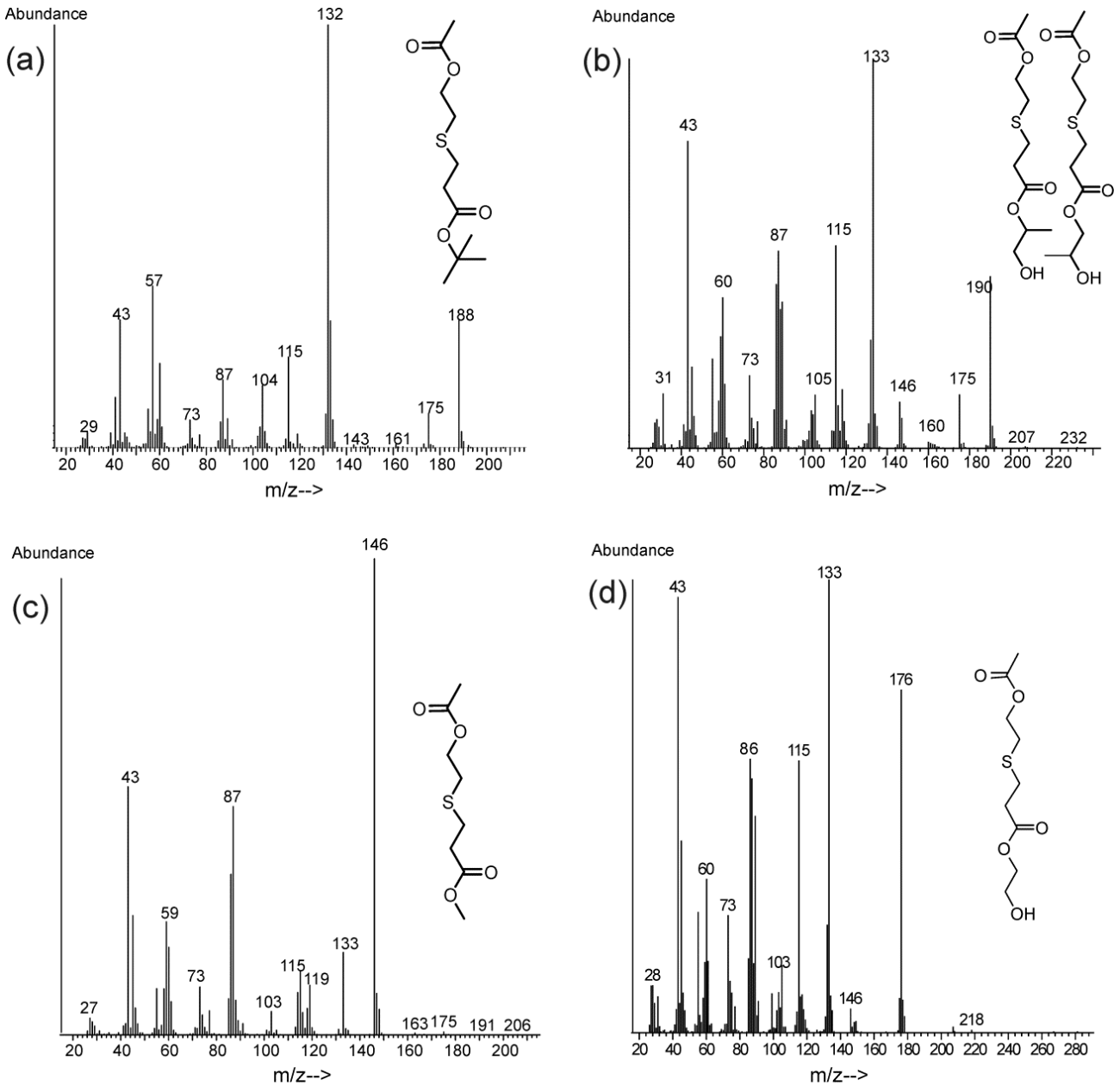

Figure S-6. Mass spectra corresponding to the sulfides products of the model ractions of AcSEAc with (a) *t*BA, (b) HPA, (c) MA and (d) HEA