

Silver and zinc **decorated**-polyurethane ionomers with tunable *hard/soft* phase segregation

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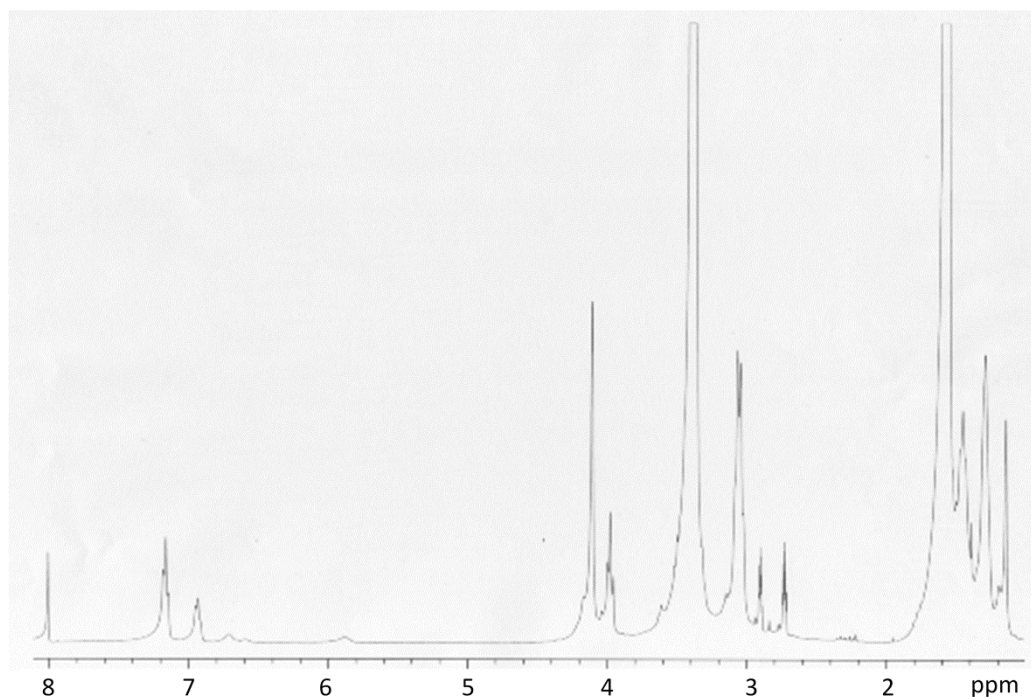


Figure S1: ^1H -NMR spectrum of PU2-HMDI in N,N-DMF-d_7 .

The ^1H -NMR spectrum of PU2-HMDI shows the characteristic peaks that in accordance with the proposed structure confirmed the success of the reaction. In particular, Signals at 6.9 and 7.2 ppm were related to urethane NH, specifically to the *syn* and *anti* rotamers around the C-N linkage of the urethane group [29, 30]. Signals at 1.6 and 3.5 ppm were related to the hydrogens of the internal CH_2 of HMDI and PTMO while the signal at 3.1 ppm was attributed to CH_2 of HMDI when linked to the urethane NH. Finally, signals at 4.1 and 1.1 ppm were related to the CH_2 and CH_3 of DHMPA, respectively. The 3:2:1 monomer molar ratio of the polymer repeat unit was confirmed by the integrals' ratio of signals at 6.9 (urethane NH) and 1.1 (DHMPA CH_3) ppm.