

Reversible assembly of terpyridine incorporated norbornene-based polymer via ring-opening metathesis polymerization and its self-healing property

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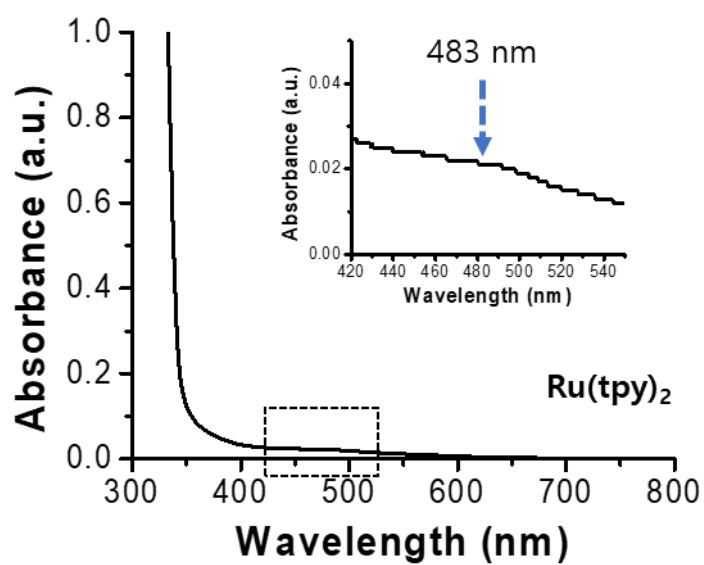


Fig S1. UV-vis absorption spectrum of 0.005 wt% **P30** in DMF. The slight absorbance was observed at a wavelength of 483 nm, which can be attributed to the Ru(tpy)₂ complex.

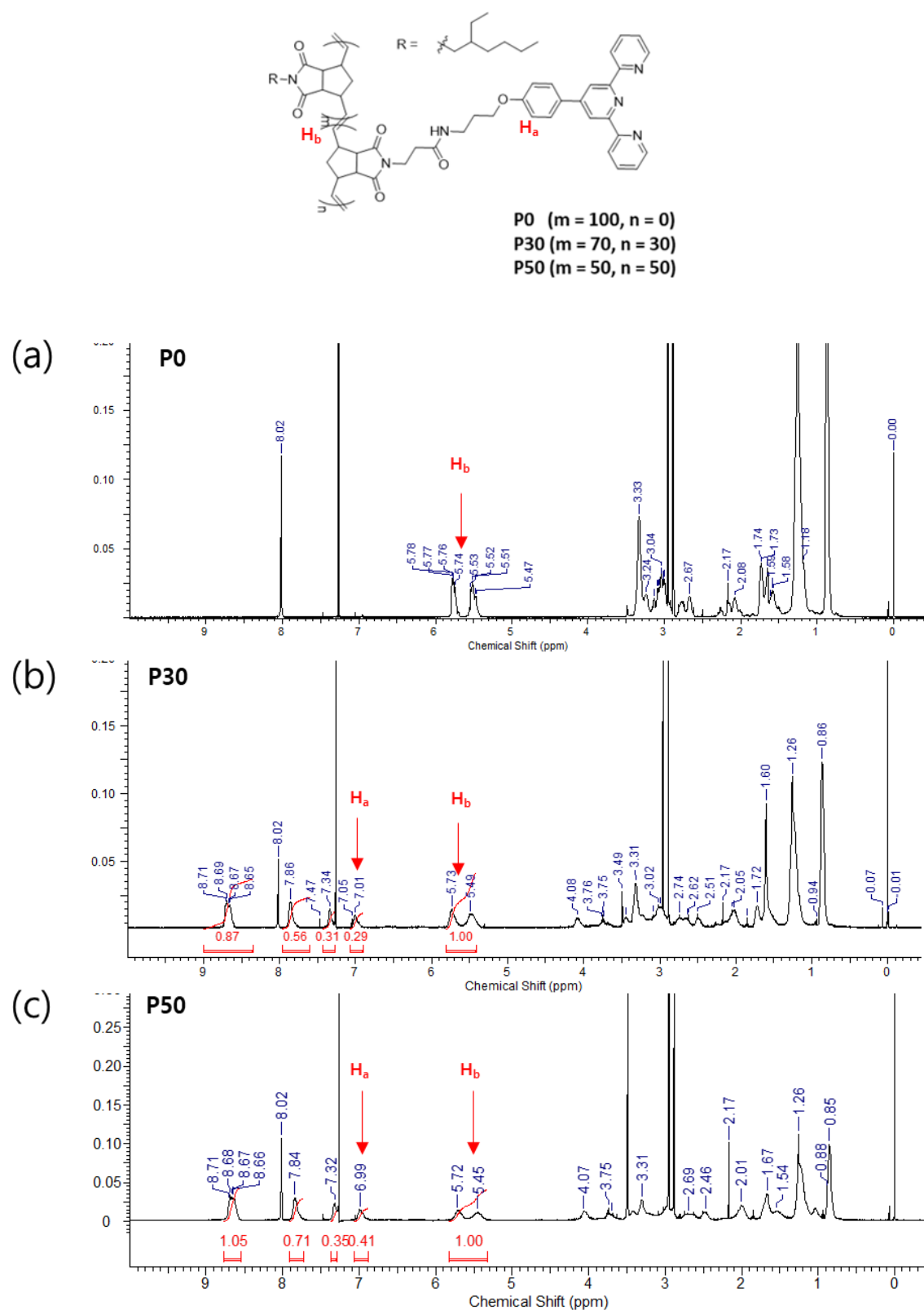


Fig S2. ^1H -NMR (CDCl_3) spectra of (a) **P0**, (b) **P30**, and (c) **P50**.

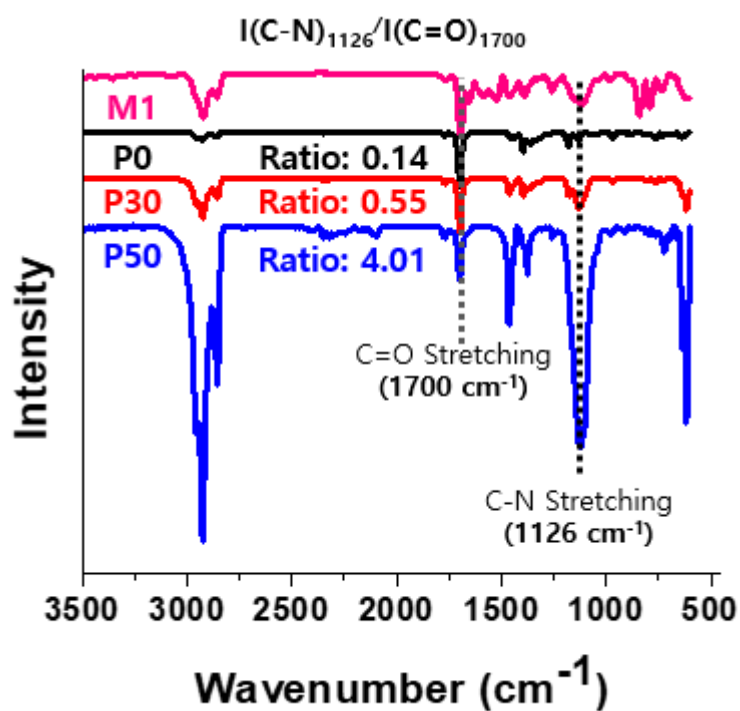


Fig S3. FT-IR analysis of M1, P0, P30, and P50. As the ratio of the terpyridine moiety increased, the C-N stretching peak at 1126 cm^{-1} increased.

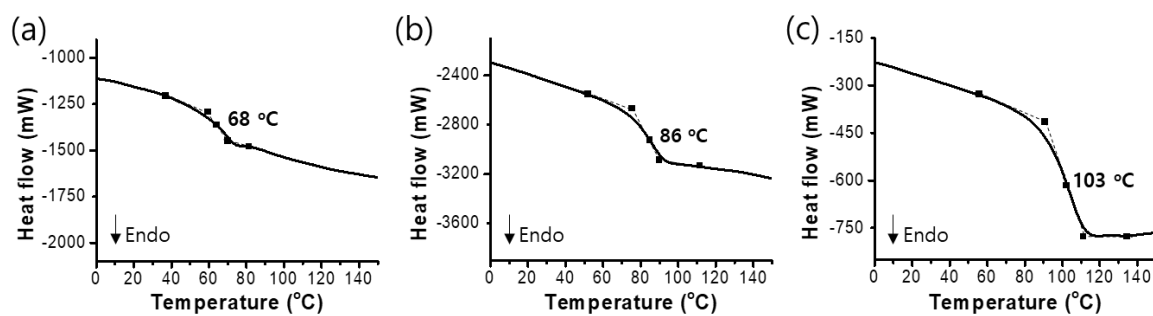


Fig S4. Measurements of glass transition temperature (T_g) by DSC analysis of (a) **P0**, (b) **P30**, and (c) **P50**.

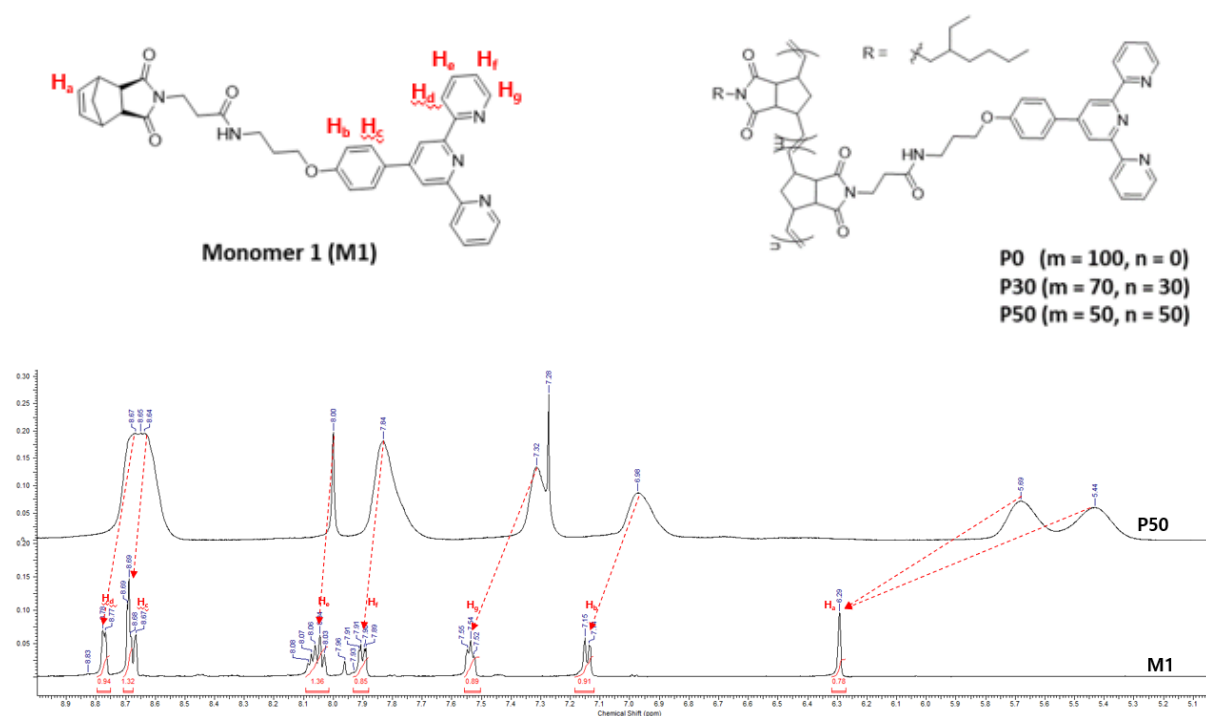


Fig S5. ¹H-NMR (DMSO- d_6) spectra of M1 and P50.

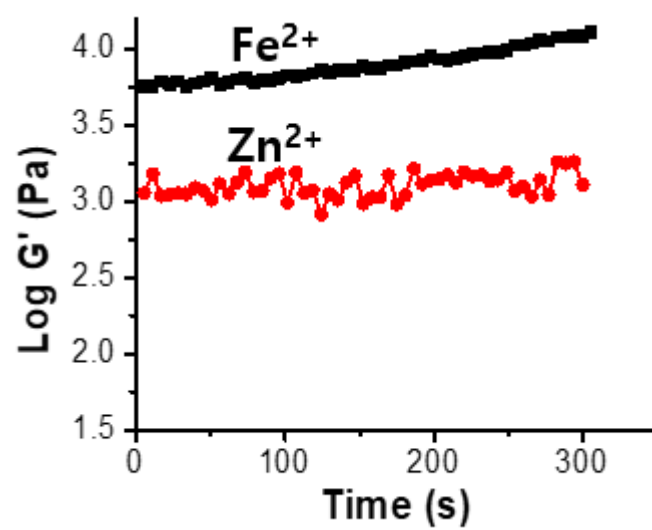


Fig S6. Rheology measurements of Fe-complex and Zn-complex gels.

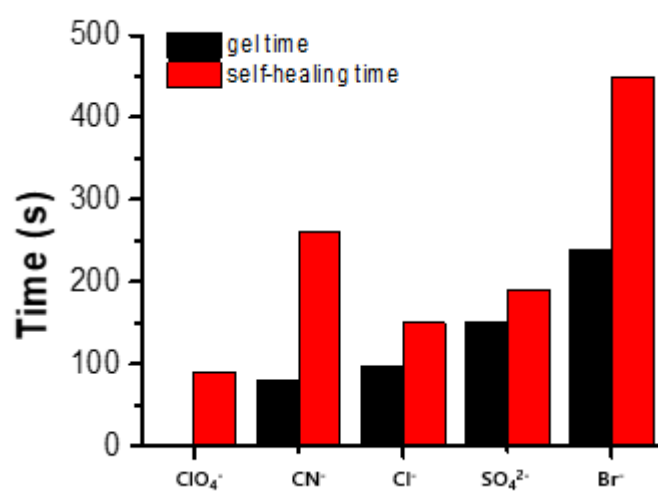


Fig S7. Anion effect on gelation and self-healing time with various Zn salts.