Supporting Information for Manuscript Entitled

Phosphazene Superbase Catalyzed Ring-Opening Polymerization of Cyclotetrasiloxane toward Copolysiloxanes with High Diphenyl Siloxane Content

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Table S1. ROP of D_4 catalyzed by *t*-BuP_2 and BnOH.[a]

run	initiator	M/B/I	*T* (°C)	time (min)	con %[b]	$M_{n,GPC}$[c] (kg mol^{-1})	*Đ*[c]
1	BnOH	100/1/1	30	1	0	-	-
2	BnOH	100/1/1	30	60	37	26.9	2.02

[a] Conditions: *t*-BuP_2 0.05 mmol; M/B/I = D_4/*t*-BuP_2/initiator; the base and initiator were mixed firstly in 1 mL toluene, followed by addition of D_4. [b] Determined by ^{1}H NMR. [c] Determined by GPC at 40 °C in THF relative to polystyrene standards.

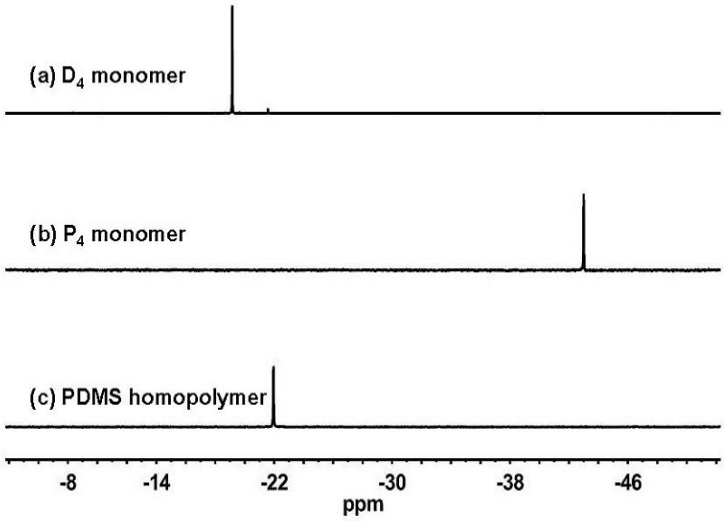

Figure S1. ^{29}Si NMR spectra of the D_4 monomer (a), P_4 monomer (b) and PDMS homopolymer (c).

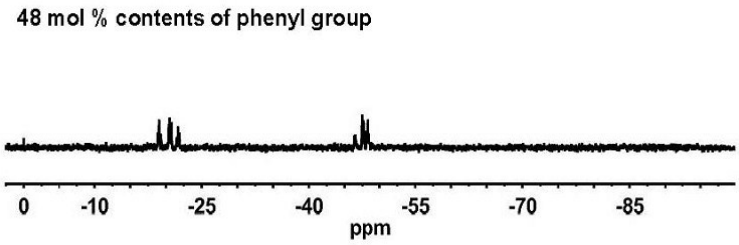

Figure S2. ^{29}Si NMR spectrum of copolymer in Table 2 run 5.

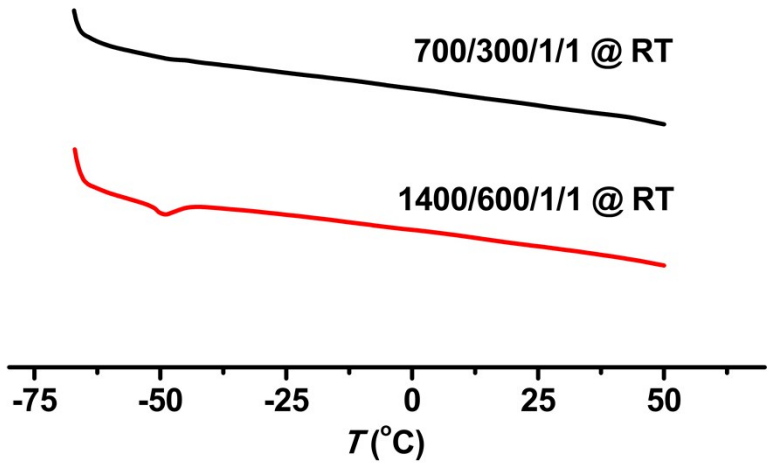

Figure S3. DSC thermograms of the second heating run of the PDMS-*ran*-PDPS copolymers with different diphenyl group contents (Table 2, runs 9 and 10).

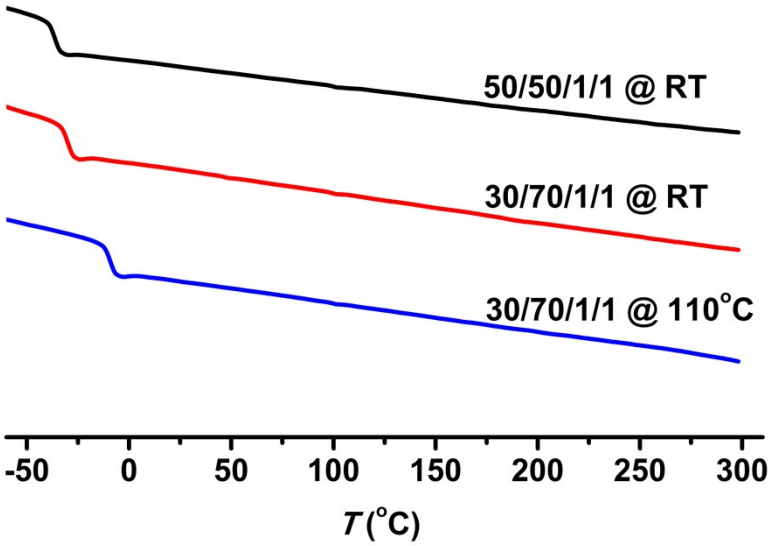

Figure S4. DSC thermograms of the second heating run of the PDMS-*ran*-PDPS copolymers with different diphenyl group contents (Table 2, runs 4-6).