Supporting Information

For

An Efficient and Controlled Synthesis of Persulfonylated G1 Dendrimers Via Click Reaction

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1. Copies of ¹H and ¹³C NMR spectra:







Fig S4: ¹³C NMR of compound iib in CDCl₃.



Fig S6: ¹³C NMR of compound iiia in CDCl₃.



Fig S8: ¹³C NMR of compound iiib in DMSO_{d6}











Fig S11: ¹H NMR of compound 2a in CDCl₃.



Fig12: ¹³C NMR (75 MHz, CDCl3) of compound 2a in CDCl₃.







Fig S16: ¹³C NMR of compound 3b in CDCl₃.



Fig S18: ¹³C NMR of compound 3c in DMSO_{d6}.



Fig 20: ¹³C NMR of compound 4c in CDCl₃.



Fig S22: ¹³C NMR of compound 4d in CDCl₃.



Fig S24: ¹³C NMR of compound 5a in CDCl₃.



Fig S26: ¹³C NMR of compound 5b in CDCl₃.



S14

Fig S28: ¹³C NMR of compound 5c in CDCl₃.

PPN



Fig S30: ¹³C- NMR of compound D1 in CDCl₃.



Fig S32: ¹³C- NMR of compound D2 in CDCl₃.



Fig S34: ¹³C- NMR of compound D3 in CDCl₃.



Fig S36: ¹³C- NMR of compound D4 in CDCl₃.



Fig S38: ¹³C- NMR of compound D5 in CDCl₃.



Fig S40: ¹³C- NMR of compound D6 in CDCl₃.



Fig S42: ¹³C- NMR of compound D7 in CDCl₃.



Fig S43: ¹H- NMR of compound D8 in CDCl₃.



Fig S44: ¹³C- NMR of compound D8 in CDCl₃.



Fig S45: ¹H- NMR of compound D9 in CDCl₃.



Fig S46: ¹³C- NMR of compound D9 in CDCl₃.



Fig S48: ¹³C- NMR of compound D10 in CDCl₃.



Fig S49: ¹H- NMR of compound D11 in CDCl₃.



Fig S50: ¹³C- NMR of compound D11 in CDCl₃.



Fig S51: ¹H- NMR of compound **D12** in CDCl₃.



Fig S52: ¹³C- NMR of compound D12 in CDCl₃.

2. Copies of MALDI-TOF-MS Spectra







Fig S54: MALDI-TOF-MS spectra of compound D2.



Fig S55: MALDI-TOF-MS spectra of compound D3.



Fig S56: MALDI-TOF-MS spectra of compound D4.



Fig S57: MALDI-TOF-MS spectra of compound D5.



Fig S58: MALDI-TOF-MS spectra of compound D6.



Fig S59: MALDI-TOF-MS spectra of compound D7.



Fig S60: MALDI-TOF-MS spectra of compound D8.



Fig S61: MALDI-TOF-MS spectra of compound D9.



Fig S62: MALDI-TOF-MS spectra of compound D10.



Fig S63: MALDI-TOF-MS spectra of compound D11.



Fig S64: MALDI-TOF-MS spectra of compound D12.

3. Data of GPC analysis for dendrimers D1- D12.

Standard -Polystyrene

Temperature: 40 ° C

Solvent- THF

Flow rate- 1.0 mL/ min.

 $\label{eq:constraint} \textbf{Table-S1.} \ \text{Representation of } M_n, M_w \ \text{and PDI of Dendrimers D1-D12}.$

S. N.	Sample name	M _n	$\mathbf{M}_{\mathbf{w}}$	PDI
1.	D1	1194	1239	1.01
2.	D2	1280	1293	1.01
3.	D3	1360	1400	1.02
4.	D4	1198	1248	1.03
5.	D5	1280	1295	1.03
6.	D6	1385	1434	1.03
7.	D7	1189	1248	1.01
8.	D8	1230	1268	1.03
9.	D9	1528	1580	1.03
10.	D10	1610	1664	1.03
11.	D11	2545	2582	1.03
12.	D12	2820	2880	1.02

4. UV-absorption spectra of dendrons 5a-5c:



Fig S65: Uv-absorption spectra of dendrons 5a, 5b and 5c.