

A

Supporting information

Table A: Polymerization of MMA with initiator 1; reaction time 3 hours; mass data determined using GPC with linear poly(MMA) standards.

Time/ min	Conv/ %	Mn	Mw	PDI
30	22.1	2270	3170	1.39
60	32.5	3110	4200	1.35
90	42.4	4240	5140	1.21
120	50.6	4670	5660	1.21
150	55.5	5480	6420	1.17
180	58.5	5670	6610	1.17

Table B: Polymerization of MMA with initiator 2; reaction time 3 hours; mass data determined using GPC with linear poly(MMA) standards.

Time/ min	Conv./ %	Mn	Mw	PDI
30	9.9	5170	6460	1.25
60	15.5	8210	10100	1.23
90	19.6	9760	11900	1.22
120	24.3	11100	13600	1.23
150	28.8	12200	15100	1.24
180	34.3	13900	16300	1.18

B

Table C: Polymerization of MMA with initiator **3** (12-arm); reaction time 3 hours; mass data determined using GPC with linear poly(MMA) standards.

Time/ min	Conv./ %	Mn	Mw	PDI
30	16.2	15700	18500	1.17
60	24.3	20700	25000	1.21
90	29.3	24600	30300	1.24
120	34.6	27400	34900	1.27
150	39.8	29300	39000	1.33
180	46.5	33000	42600	1.29

Table D: Polymerization of MMA with initiator **3** (6-arm); reaction time 3 hours; mass data determined using GPC with linear poly(MMA) standards.

Time/ min	Conv./ %	Mn	Mw	PDI
30	8.1	13900	18600	1.34
60	14.4	16200	22400	1.38
90	23.8	22100	32400	1.47
120	32.6	26100	38400	1.47
150	41.3	29600	44000	1.48
180	44.9	37200	59000	1.59

C

Table E: Polymerization of MMA with initiator **3** (2-arm) reaction time 3 hours; mass data determined using GPC with linear poly(MMA) standards.

Time/ min	Conv./ %	Mn	Mw	PDI
30	6.9	22 400	26 600	1.19
60	20.6	37 400	78 900	2.11
90	33.0	50 600	135 000	2.68
120	54.5	49 200	171 000	3.47
150	72.9	65 900	202 000	3.07
180	94.1	51 800	178 00	3.44

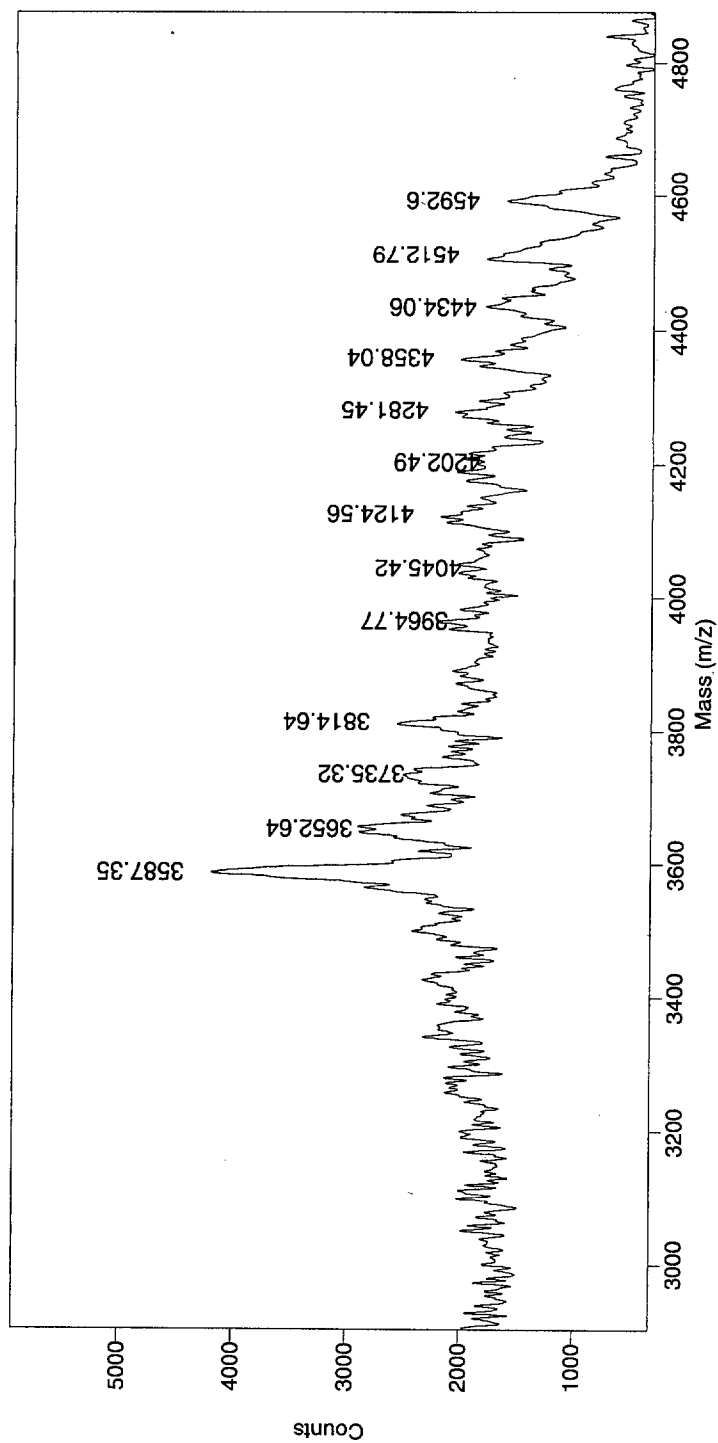


Fig. MALDI of [G1-CH₂OC(O)CMe₂Br] (3)

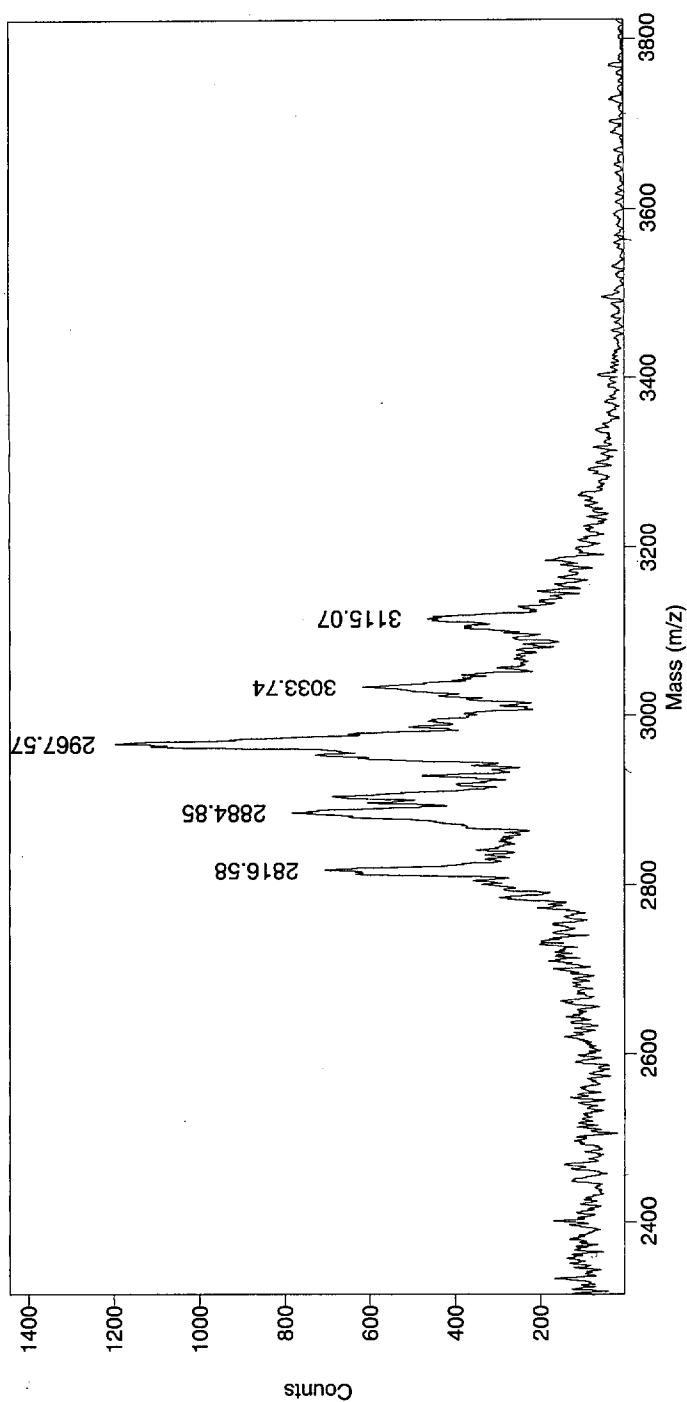


Fig. MALDI of [G1-(CH₂OH)₁₀(CH₂OC(O)CMe₂Br)₂] (4)