

$$k_B = 7.125 \text{ Å}$$

$$R_{\text{mon}} = R_{\text{ion}} = 3 \text{ Å}$$

$$k_{\text{spring}} = 0.557 \text{ kT/Å}^2$$

$$r_{\text{eq}} = 0 \text{ Å}$$

Polyelectrolytes: Variation of chain length

Dimer

2 * Dimer

R _{cell}	R _{mm}	R _{ee}	P _{mon}	P _{count}	R _{cell}	R _{mm}	R _{ee}	P _{mon}	P _{count}
20	7.59	7.59	0.0473	0.0957	25	7.63	7.63	0.0474	0.0973
15	7.59	7.59	0.121	0.237	20	7.60	7.60	0.0977	0.199
10	7.42	7.42	0.505	0.944	15	7.53	7.53	0.290	0.523
8	7.32	7.32	1.35	2.21	10	7.36	7.36	1.58	2.44
6	7.11	7.11	5.26	7.22	8	7.18	7.18	5.00	6.95
5	6.84	6.84	14.8	17.4	6	6.85	6.85	32.0	34.4

4 * Dimer

8 * Dimer

30	7.64	0.0592	0.114	—	40	7.66	0.0488	0.0931
25	7.62	0.110	0.201	—	30	7.62	0.129	0.238
20	7.57	0.242	0.432	—	25	7.58	0.250	0.439
15	7.47	0.791	1.277	—	20	7.51	0.642	1.02
10	7.18	6.507	8.446	—	15	7.34	2.66	3.74
8	6.87	28.92	30.8	—	10	6.93	22.8	32.9

Tetramer

2 * Tetramer

R _{cell}	R _{mm}	R _{ee}	P _{mon}	P _{count}	R _{cell}	R _{mm}	R _{ee}	P _{mon}	P _{count}
25	7.80	15.8	0.0192	0.0925	30	7.81	15.8	0.0253	0.107
20	7.76	15.5	0.0450	0.192	25	7.77	15.6	0.0520	0.193
15	7.68	14.8	0.147	0.521	20	7.72	15.3	0.132	0.419
10	7.46	12.8	1.07	2.63	15	7.61	14.6	0.506	1.27
8	7.27	11.4	3.95	7.36	10	7.28	12.7	5.42	8.71
6	7.00	9.80	29.7	34.7	8	7.01	11.6	25.1	31.6

4 * Tetramer

8 * Tetramer

40	7.82	15.9	0.0224	0.0885	50	7.83	15.9	0.0238	0.0894
30	7.78	15.6	0.0656	0.223	40	7.80	15.8	0.0527	0.183
25	7.73	15.4	0.140	0.425	30	7.73	15.4	0.180	0.506
20	7.65	14.9	0.404	1.015	25	7.65	15.0	0.446	1.05
15	7.46	14.1	2.08	3.79	20	7.51	14.4	0.58	3.01
10	7.27	12.9	23.8	35.7	15	7.16	13.1	12.5	17.2

Oktamer

2* Oktamer

Rcell	Rmm	Rec	P _{mon}	P _{count}	Rcell	Rmm	Rec	P _{mon}	P _{count}
30	7.91	29.2	0.0113	0.097	40	7.93	29.9	0.00985	0.0786
25	7.86	27.5	0.0265	0.178	30	7.86	28.4	0.0365	0.205
20	7.78	24.2	0.0804	0.400	25	7.81	26.8	0.0899	0.401
15	7.65	19.1	0.376	1.27	20	7.71	24.0	0.297	0.989
10	7.34	13.3	4.67	9.02	15	7.51	19.7	1.73	3.84
8	7.03	10.7	24.2	31.6	10	7.31	18.8	26.4	38.3

4* Oktamer

8* Oktamer

40	7.89	29.1	0.0301	0.166	60	7.95	30.1	0.0140	0.0927
30	7.80	27.3	0.120	0.476	50	7.89	29.3	0.0312	0.168
25	7.71	25.6	0.325	1.02	40	7.83	28.0	0.0910	0.377
20	7.56	22.8	1.30	3.02	30	7.69	25.6	0.451	1.28
15	7.19	18.9	11.6	17.4	25	7.55	23.7	1.49	3.22
50	7.93	30.0	0.0113	0.0792	20	7.26	21.1	8.53	13.1

2* 16mer

4* 16mer

60	8.02	55.5	0.00295	0.0398	7.98	52.5	0.00826	0.0822
50	7.98	51.8	0.00685	0.0712	7.94	49.1	0.0201	0.154
40	7.93	45.6	0.0200	0.153	7.86	43.2	0.0660	0.359
30	7.83 _{7.75}	36.4 _{30.5}	0.0859 _{0.256}	0.460 _{1.01}	7.72 _{7.57}	34.9 _{29.8}	0.370 _{1.33}	1.27 _{3.25}
20 ²⁵	7.58	24.1	1.15	3.02	7.28	24.6	8.20	13.3
15	7.20	18.7	11.4	17.3	7.24	18.5	48.5	58.2

8* 16mer

75	7.98	52.9	0.00919	0.0835
60	7.93	48.8	0.0264	0.181
50	7.87	45.4	0.0688	0.364
40	7.76	39.7	0.263	0.965
30	7.52	32.7	2.10	4.48
25	7.24	27.9	10.3	15.6