Supplemental Information

Reversible Polycondensations outside the Jacobson-Stockmayer Theory and a New Concept of Reversible Polycondensations

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Figure S1. MALDI TOF mass spectra of polyLA polymerized at 130° C in bulk with SnOct₂ as catalyst (LA/Cat =1 0000/1) and initiated with HMBD: (A) full spectrum ((B) expanded segment (No. 1A, Table 1), the asterisk indicates the position of a hypothetical cycle



Figure S2 MALDI TOF mass spectra of polyLAs polymerized in bulk at 160°C/1 h with SnOct₂ (A) initiated with ELA (No. 4, Table 1), (B) neat SnOct₂ (No. 9, Table 1)



Figure S 3 MALDI TOF mass spectra of polyLA polymerized at 130° C/1 h with BuSnOPF (LA/Cat = 400/1): (A) initiated with ELA (No. 2, Table 5), (B) without initiator (No. 4, Table 5)



Figure S 4 MALDI TOF mass spectra of polyCL polymerized at in bulk at 130° C with BuSnOPF (LA/Cat = 1000/1): (A) initiated with ethyl 6-hydroxahexanoate (No. 3,Table 6), (B) expanded segment, the asterisk indicates the position of a hypothetical cycle



Figure S5 MALDI TOF mass spectrum of a polylCL prepared with neat BuSnOPF as catalyst at 130° C/1 h (No. 9, Table 6)



Figure S6 MALDI TOF mass spectra of polyLA polymerized with diethyl succinate at 130°C: (A) after 1 h (No.4A, Table 7), (B) after 2 h (No. 4B, Table 7)



Figure S 7 ESI mass spectra of oligoLA prepared by polycondensation of ELA with BuSnOPF in bulk.(A) at 130° C 4 h (No. 4A, Table 7), (B) at 160° C/4 h (No. 5, Table 7).



Figure S8 ESI mass spectrum of a polyLA prepared by polycondensation of ELA with BuSnOPF at 130°C/24 h (No. 4B, Table 7)



Figure S9 MALDI TOF mass spectra of polyLAs prepared by polycondensation of ELA with BuSnOPF in bulk: (A) at 160°C/4 h (No. 5, Table 7), (B) at 130°C/24 h (No. 4B, Table 7)



Figure S 10 MALDI TOF mass spectrum of a telechelic poly(ethylene adipate) prepared by Bi(III) hexanoate-catalyzed polycondensation of dimethyl adipate with excess ethane diol in bulk at temperatures up to 240°C (reproduced from ref. 38, with permission from Elsevier). L - linear chains having two ethane diol end groups