Electronic Supplementary Material (ESI) for Green Chemistry.

Synthesis of novel polyurethane-urea from double CO2-route oligomers

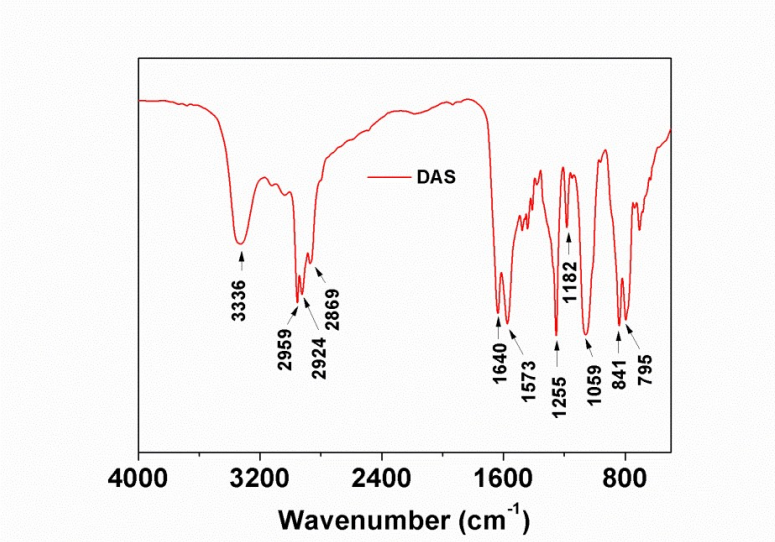

Figure S1 The FT-IR-spectrum of the corresponding oligourea

The urea functional group was identified by the peaks at 1640 cm^{-1} (C=O stretching vibration), 1573 cm^{-1}(N-H bending vibration) and 3336 cm^{-1} (stretching vibration for N-H in the urea functional group), and the signal peaks at 1142 cm^{-1} and 1122 cm^{-1} demonstrated the existence of siloxane bond.

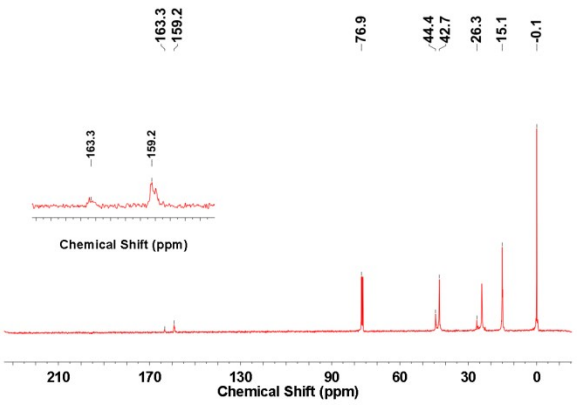

Figure S2 The ^{13}C-NMR spectrum of the corresponding oligourea

The peak at 159.3 ppm in CP/MAS ^{13}C NMR clearly indicated the formation of the urea linkage. The other peaks at 70.0 ppm, 69.4 ppm, 40.1 ppm and 28.6 ppm are ascribed to the corresponding methylene of the substrates. The peak at 163.3 ppm belongs to the carbamate, which is formed from carbon dioxide and amino group.