

Supporting information

Micellization and Gelatinization in Aqueous Media of pH- and thermo-responsive Amphiphilic ABC (PMMA₈₂-*b*-PDMAEMA₁₅₀-*b*-PNIPAM₆₅) Triblock Copolymer Synthesized by Consecutive RAFT Polymerization†

Ye Huang,^a Ping Yong,^a Yan Chen,^a Yuting Gao,^a Weixiong Xu,^a Yongkang Lv,^a Liming Yang,^a Rui L. Reis,^b Rogério P. Pirraco,^b Jie Chen^{*a}

^a. Department of Chemical Engineering, School of Environmental and Chemical Engineering, Shanghai University, Shangda Road 99, Shanghai 200444, P. R. China Email: jchen@shu.edu.cn Tel: +86 21 66137482

^b. 3B's Research Group - Biomaterials, Biodegradables and Biomimetics, University of Minho, Portugal

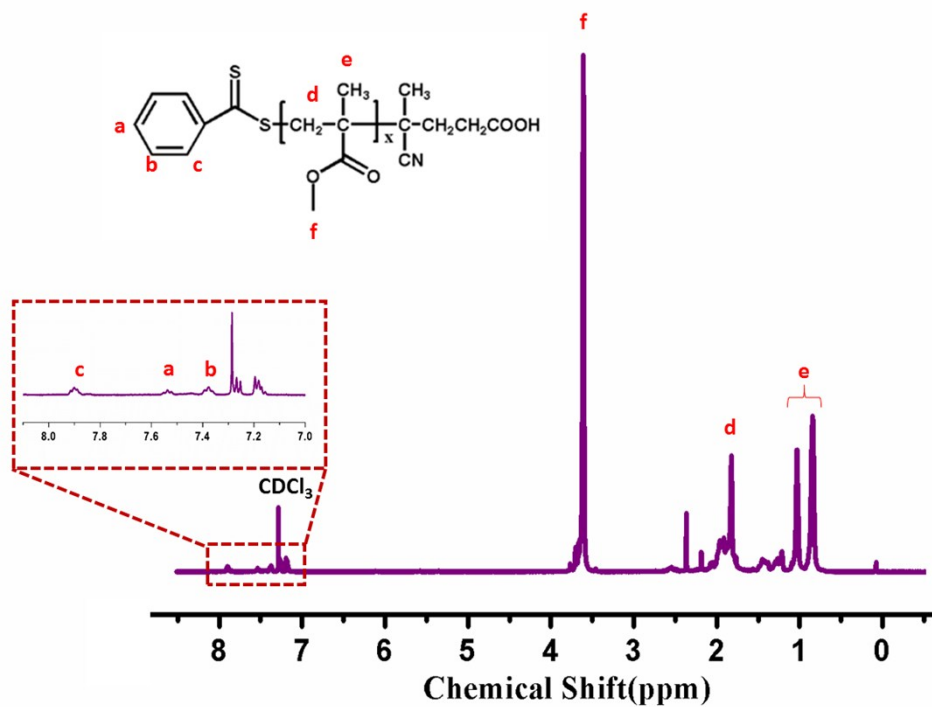


Fig. S1 ¹H-NMR spectrum of PMMA-Macro-CTA in CDCl₃.

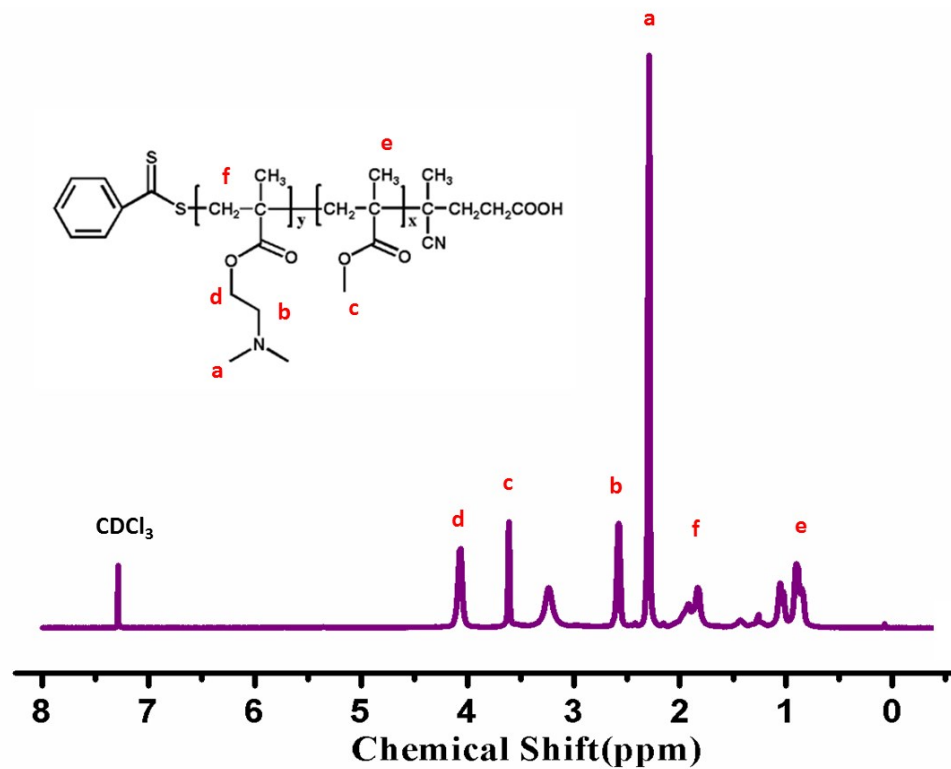


Fig. S2 ¹H-NMR spectrum of PMMA-*b*-PDMAEMA-Macro-CTA in CDCl₃.

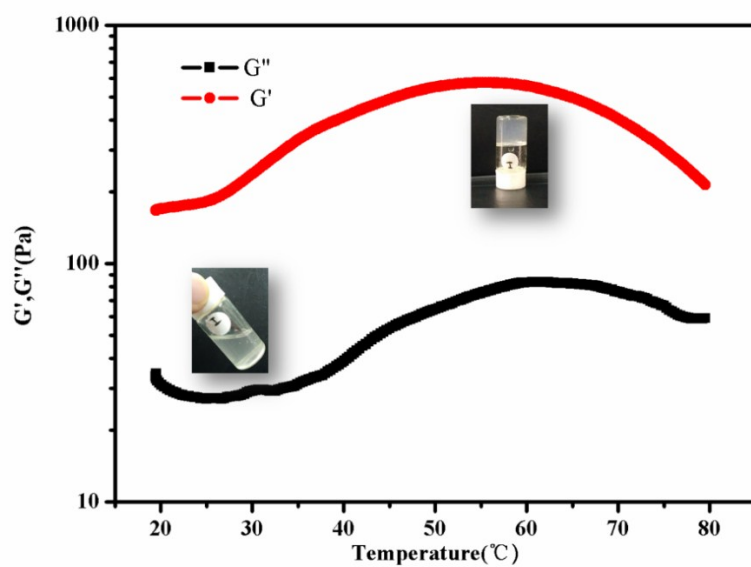


Fig. S3 Temperature dependence of the storage modulus (G') and loss modulus (G'') at a constant strain of 0.5 % for a 3 wt. % PMMA-*b*-PDMAEMA-*b*-PNIPAM triblock copolymer at the frequency of 0.16 Hz at pH=4.

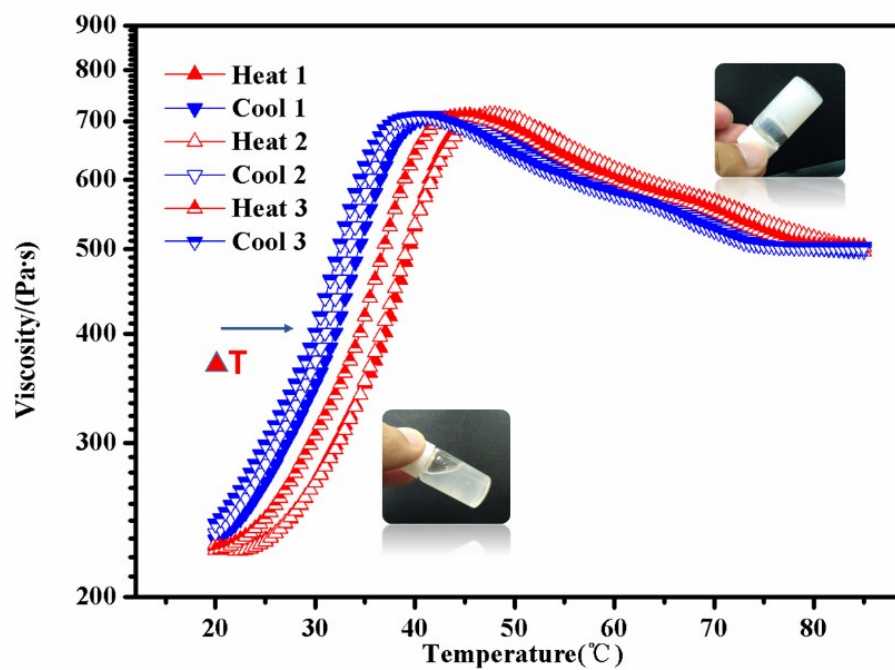


Fig. S4 Repetitive sol - gel curves of PMMA-*b*-PDMAEMA-*b*-PNIPAM triblock copolymer at pH=4 and 3wt. %. The viscosity and temperature of the concentrated solutions were read on a viscometer.

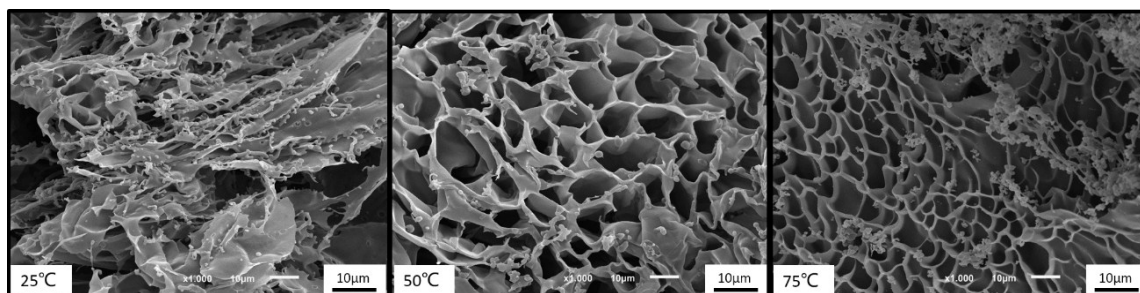


Fig. S5 SEM images of gelation behaviour at different temperatures at pH=4.

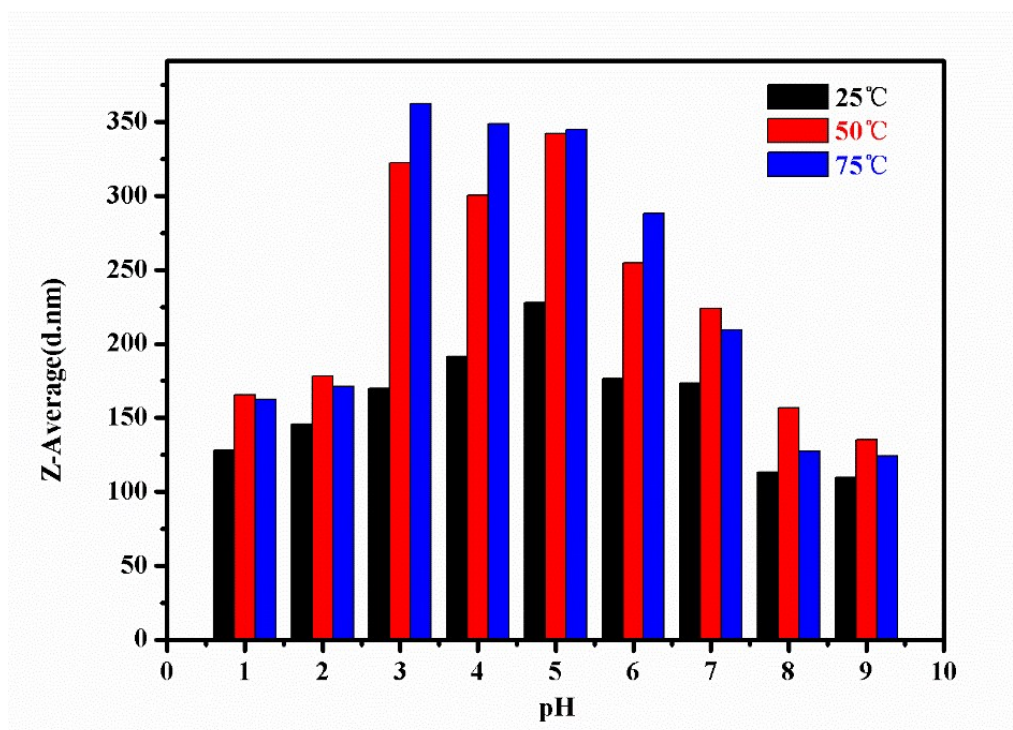


Fig. S6 Z-Average diameter as a function of selected temperature in a DLS study of 0.3 mg mL^{-1} PMMA-*b*-PDMAEMA-*b*-PNIPAM solution at different pH.

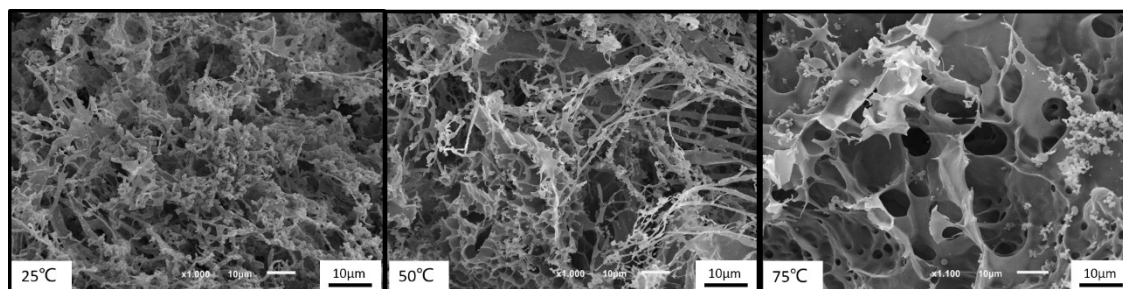


Fig. S7 SEM images of gelation behaviour at different temperatures at pH=9.