Supplementary Information

Stable star polymer nanolayers and their thermoresponsiveness as a tool for controlled culture and detachment of fibroblast sheets

Barbara Mendrek,[1] Iwona Żymełka-Miara,[1] Łukasz Sieroń,[2] Agnieszka Fus,[2] Katarzyna Balin,[3,4] Jerzy Kubacki,[3,4] Mario Smet,[5] Barbara Trzebicka,[1] Aleksander L. Sieroń,[2] Agnieszka Kowalczuk,[1*]

[1]*Centre of Polymer and Carbon Materials, Polish Academy of Sciences, M. Curie-Sklodowskiej 34, 41-819 Zabrze, Poland, * akowalczuk@cmpw-pan.edu.pl, +48 32 271 60 77*

[2]*Department of Molecular Biology and Genetics, School of Medicine in Katowice, Medical University of Silesia, Medykow 18, 40-752 Katowice, Poland*

[3]*A. Chelkowski Institute of Physics, University of Silesia, Uniwersytecka 4, 40-007 Katowice, Poland*

[4]*Silesian Center for Education and Interdisciplinary Research, 75 Pulku Piechoty 1A, 41-500 Chorzów, Poland*

[5]*Department of Chemistry, University of Leuven, Celestijnenlaan, 200F, B-3001 Leuven (Heverlee), Belgium*

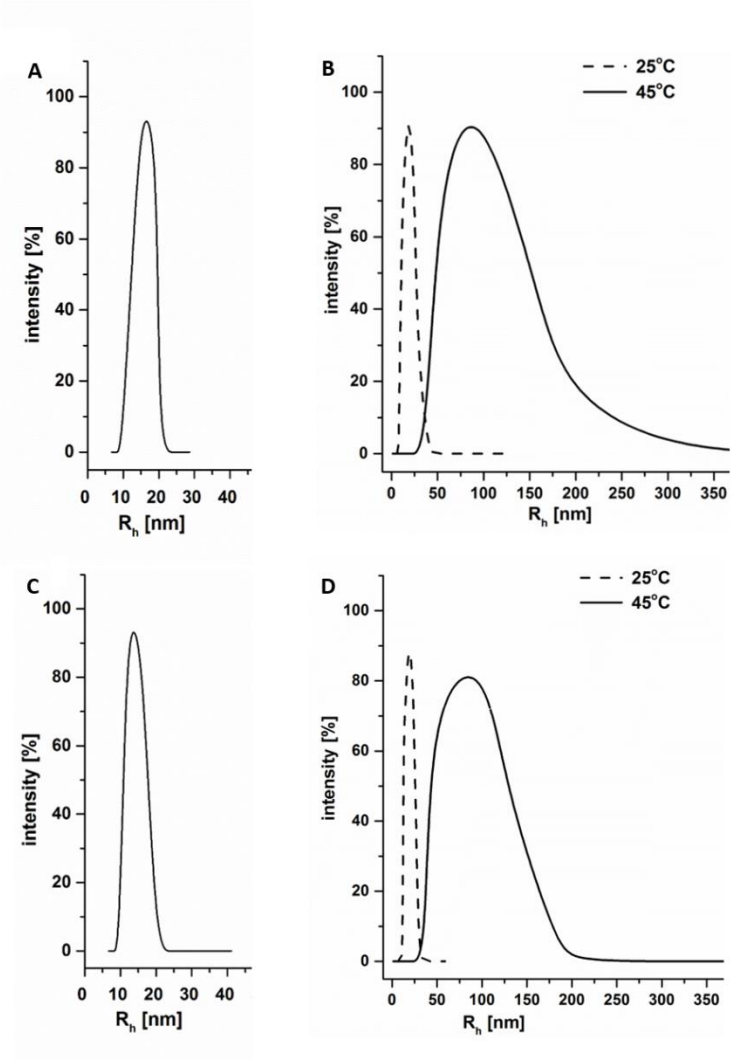

Figure S1. Distribution of hydrodynamic radii of A) star GP1 in acetone B) star GP1 in water below T_{cp} and above T_{cp}, C) star GP2 in acetone, D) star GP2 in water below $T_{cp,}$ and above T_{cp}, measured at angle $\theta = 90°$. The concentration of polymer is 1 g/L.

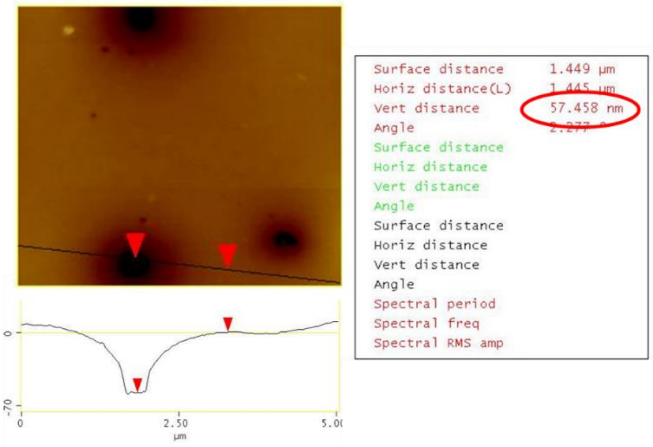

Figure S2. Exemplary image of the hole in the star polymer nanolayer used for the determination of the average thickness by AFM.

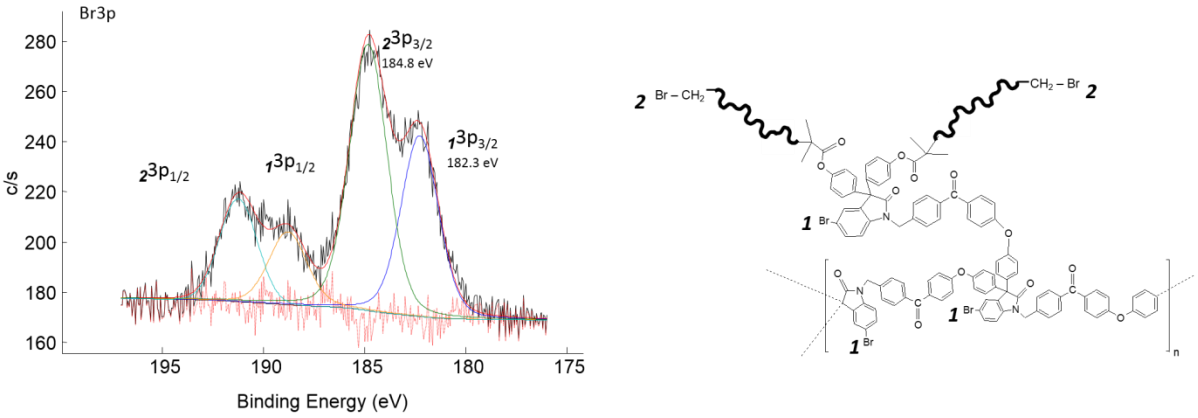

Figure S3. The core level Br 3p spectrum of star polymer layer