

## Supporting Information

Growth Kinetics of the Adsorbed Layer of Poly(2-vinylpyridine) – An indirect observation of desorption of polymers from substrates.

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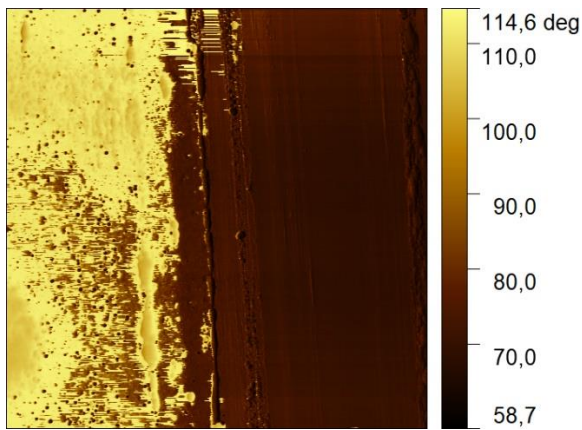


Figure S1: AFM phase contrast image for the adsorbed layer of P2VP solvent leached from a ca. 200 nm thick film which was annealed at 413 K (140 °C,  $T_g+42$  K) for 336 h.

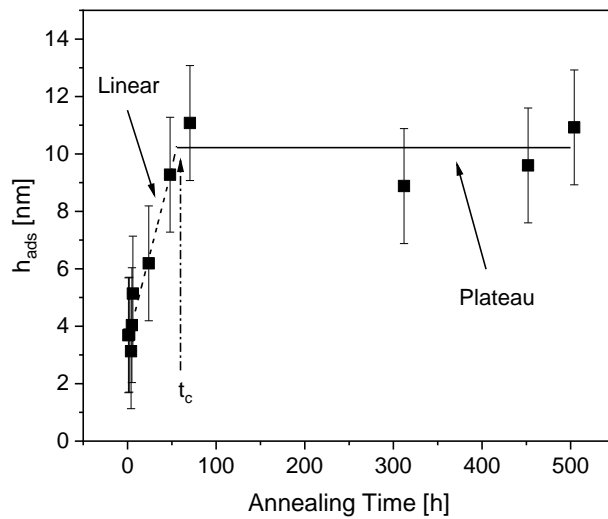


Figure S2: Time dependence of the thickness of the adsorbed layer for the annealing temperature of 383 K (110 °C,  $T_g+12$  K). The dashed line is a fit of the initial states of the growth kinetics with a power law  $\sim \left(\frac{t}{t_{growth}}\right)^\sigma$  as described in the manuscript with  $\sigma=1\pm 0.001$  and  $t_{growth}=(8.34\pm 0.2)$  h. The solid line is a guide for the eyes. The dashed-dotted arrow indicates how  $t_c$  was estimated.

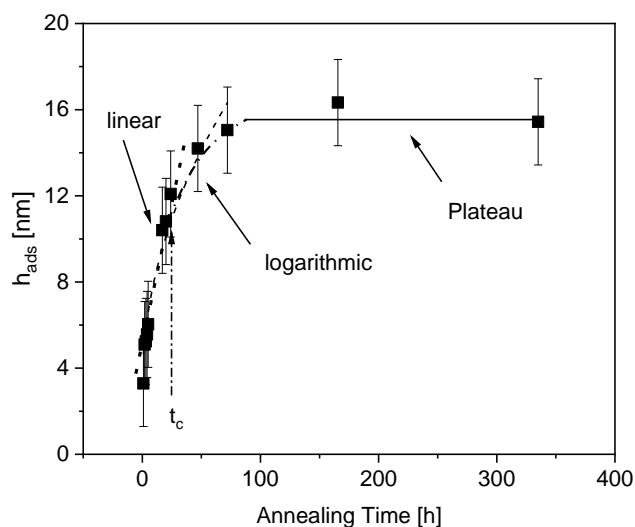


Figure S3a: Time dependence of the thickness of the adsorbed layer for the annealing temperature of 403 K (130 °C,  $T_g+32$  K). The dashed line is a fit of the initial states of the growth kinetics with a power law  $\sim (\frac{t}{t_{\text{growth}}})^\sigma$  as described in the manuscript with  $\sigma=0.49\pm 0.0503$  and  $t_{\text{growth}}=(0.367\pm 0.17)$  h. The dotted line indicates the linear growth regime. The solid line is a guide for the eyes. The dashed-dotted arrow indicates how  $t_c$  was estimated.

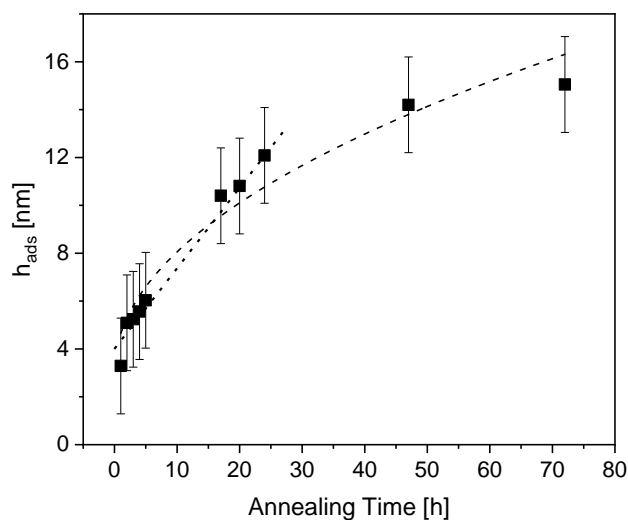


Figure S3b: Time dependence of the thickness of the adsorbed layer for the annealing temperature of the data given in Figure S3a in the time range from 0 to 80 h. The dashed line is a fit of the initial states of the growth kinetics with a power law  $\sim (\frac{t}{t_{\text{growth}}})^\sigma$  as described in the manuscript with  $\sigma=0.49\pm 0.0503$  and  $t_{\text{growth}}=(0.367\pm 0.17)$  h. The dotted line indicates the linear growth regime.

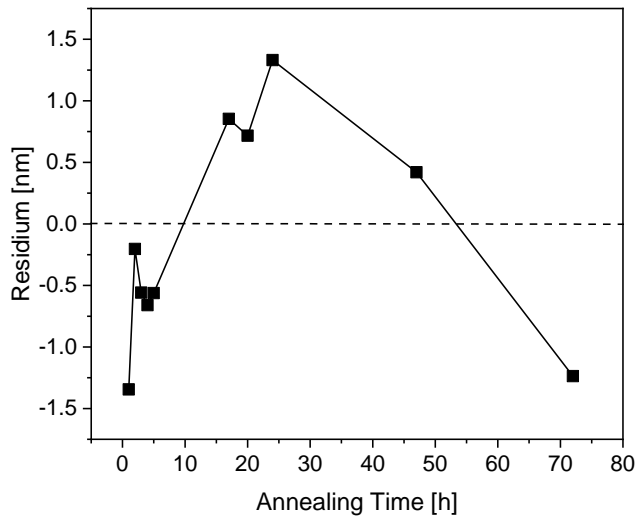


Figure S3c: Residual plot for the power law fit given in Figure S3b.

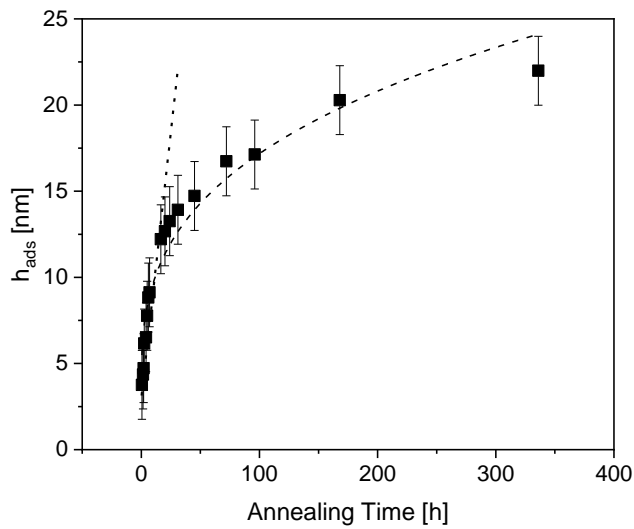


Figure S4a: Time dependence of the thickness of the adsorbed layer for the annealing temperature of 413 K (140 °C,  $T_g+42$  K). The dashed line is a fit of the initial states of the growth kinetics with a power law  $\sim(\frac{t}{t_{growth}})^\sigma$  as described in the manuscript with  $\sigma=0.328\pm 0.0185$  and  $t_{growth}=(0.0311\pm 0.0185)$  h. The dotted line indicates the linear growth regime. The solid line is a guide for the eyes.

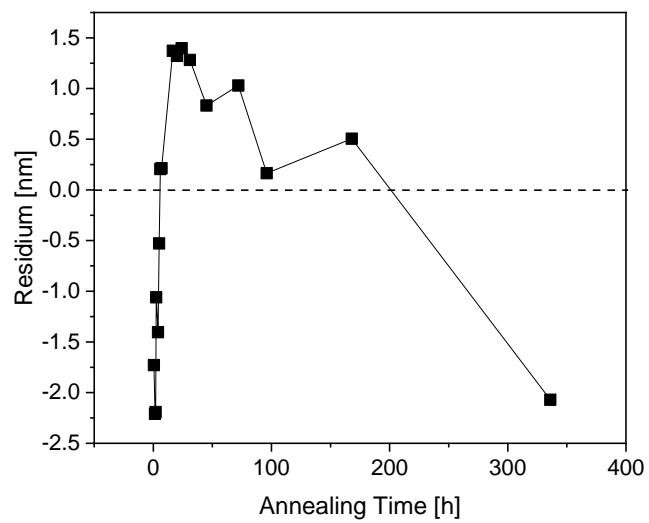


Figure S4b: Residual plot for the power law fit given in Figure S3a.

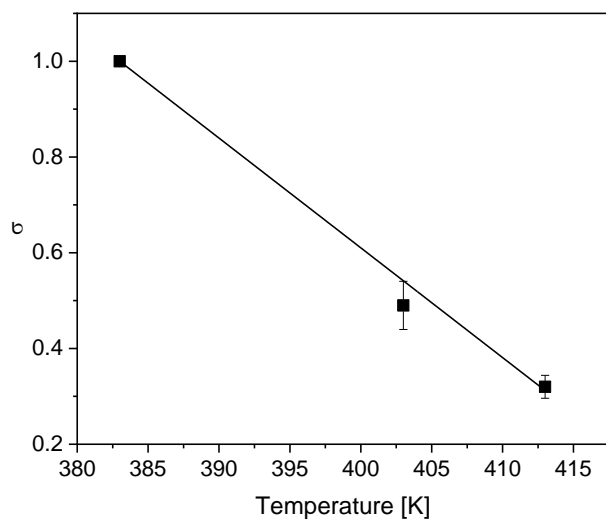


Figure S5: Power exponent  $\sigma$  versus temperature. The line is a linear regression to the data.