Supplementary Materials

for

Biocide coating from polydiallyldimethylammonium chloride. What molecular weight should we choose?

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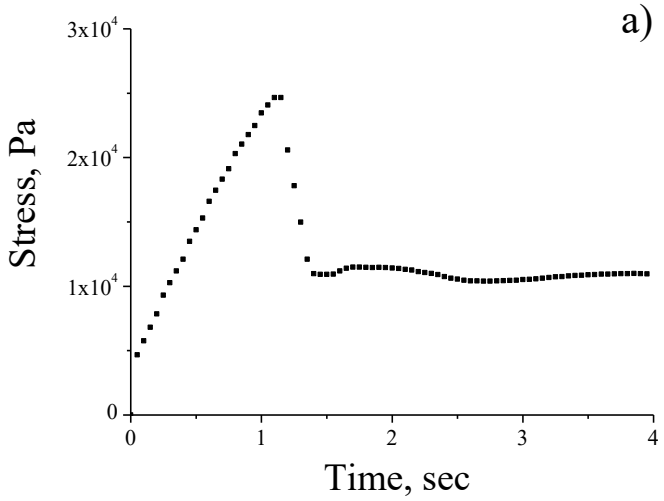
PDADMAC Coatings Adhesive Properties Analysis.

Freshly cleaned substrate (glass slide) with 19.76 cm^2 area was weighed. The aliquot of the 20 mg/mL solution of polymer was deposited on the substrate so that all the area was covered with the solution. Two minutes later, the polymer solution was removed and the substrate was washed with bidistilled water. Then, the glass slide was also covered with precleaned glass from above and dried for 24 hours. After complete drying, the adhesive properties of the polycations were evaluated by the stress required to separate the two glass substrates. The experiments were carried out at a relative humidity of 15-20%. The adhesive properties were evaluated by dynamometry on a tensile testing machine by Metrotest (Moscow, Russia). Typical stress versus time curves for the PDADMACs of different molecular weights are presented on Figure S1. The maximum value of the applied stress (peak value) was taken as the characteristics of the adhesive properties of the PDADMAC coating.



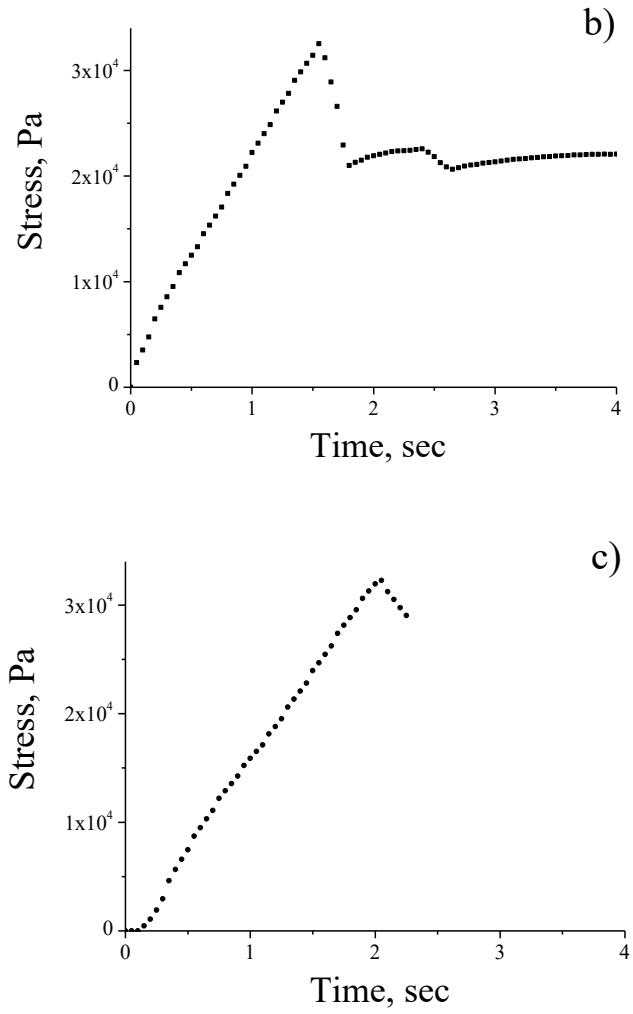


Figure S1. Typical stress versus time curve for PDADMAC coatings on glass- PDADMAC100 (a); PDADMAC200 (b) and PDADMAC400 (c).