Supplementary data for article:

Prodanović, O.; Spasojević, D.; Prokopijević, M.; Radotić, K.; Markovic, N.; Blažić, M.;
Prodanović, R. Tyramine Modified Alginates via Periodate Oxidation for Peroxidase
Induced Hydrogel Formation and Immobilization. *Reactive and Functional Polymers* 2015, 93, 77–83. <a href="https://doi.org/10.1016/j.reactfunctpolym.2015.06.004">https://doi.org/10.1016/j.reactfunctpolym.2015.06.004</a>

Tyramine modified alginates via periodate oxidation for peroxidase induced hydrogel formation and immobilization

Supplemental Data

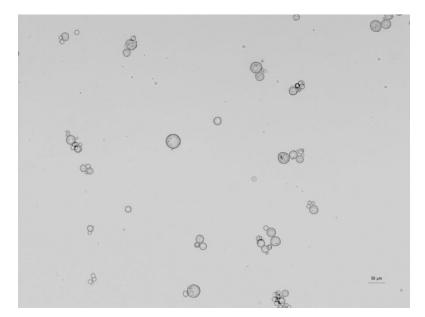


Figure 1 Micrograph of tyramide-alginate micro-beads obtained in enzymatic emulsion polymerization reaction. Average bead size was  $29\pm9$  µm and it was calculated by measuring size of 50 microbeads from micrographs obtained using Carl Zeiss Axio Observer Z1, Germany.

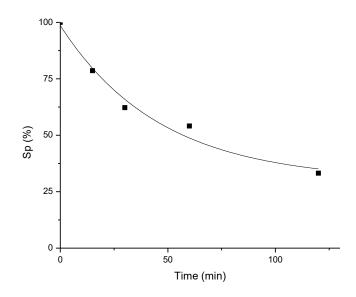
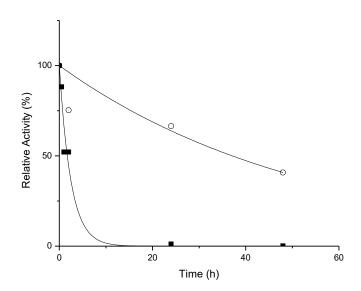
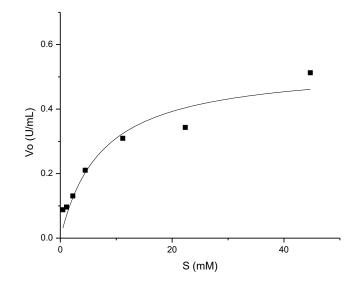


Figure 2. Residual activity of immobilized HRP at 70 °C versus time.



**Figure 3.** Dependence of residual enzyme activity on incubation time in 80% (v/v) dioxane at  $25^{\circ}$ C.  $t_{1/2}=1.7$ h for soluble HRP;  $t_{1/2}=37$ h for immobilized HRP.



**Figure 4.** Dependence of specific activity of immobilized enzyme on substrate concentration. Km=7.34 mM, Vmax=0.537 U/mL.