

Electronic Supplementary Information Section

Application of redox-responsive hydrogels based on 2,2,6,6-tetramethyl-1-piperidinyloxy methacrylate and oligo(ethyleneglycol) methacrylate in controlled release and catalysis

Miriam Khodeir ¹, He Jia ¹, Alexandru Vlad¹ and Jean-François Gohy ^{1,*}

¹ Institute of Condensed Matter and Nanosciences (IMCN), Bio- and Soft Matter (BSMA), Université catholique de Louvain, Place L. Pasteur 1, B-1348 Louvain-la-Neuve, Belgium

* Correspondence: jean-francois.gohy@uclouvain.be

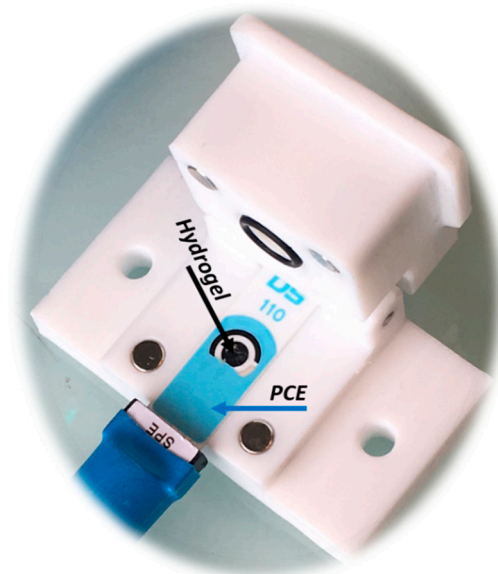


Figure S1. Experimental set-up for the electrochemical reduction of P(TEMPO⁺-*r*-OEGMA) hydrogels, swollen in aqueous NaClO₄ and loaded with aspirin using the printed carbon electrode method (PCE).

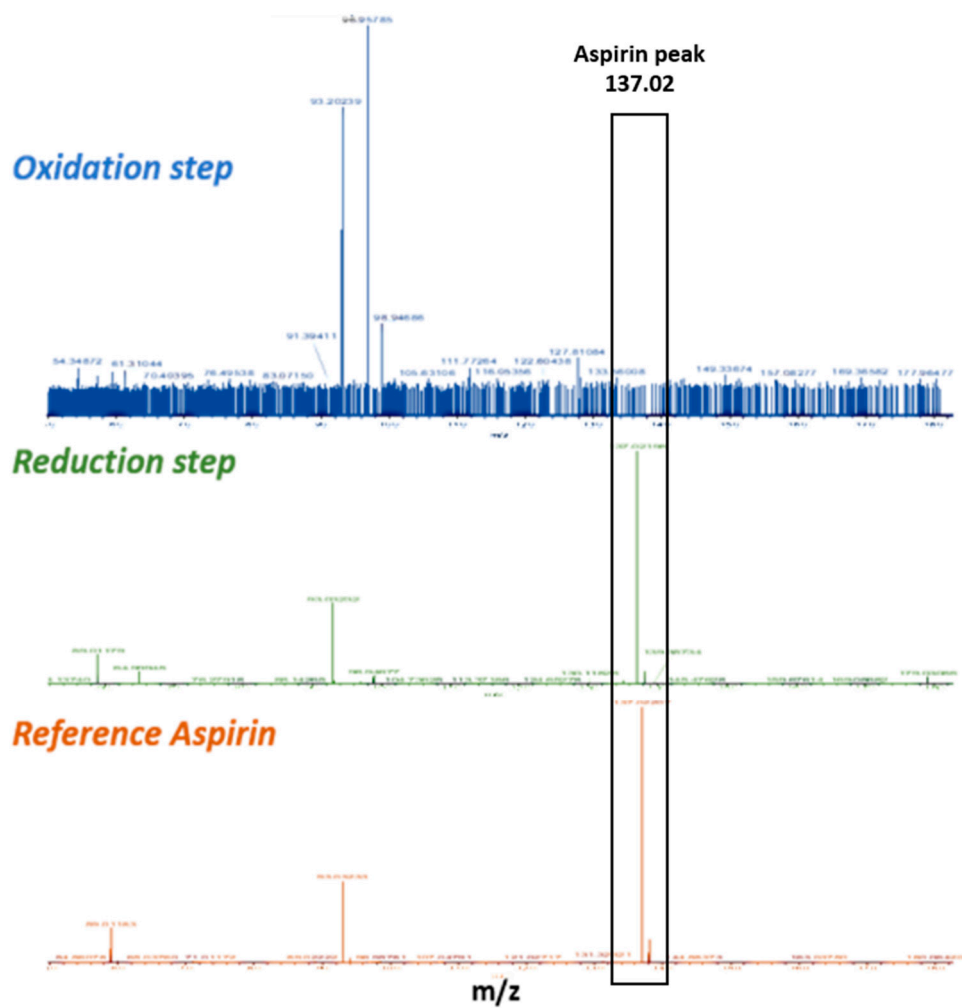


Figure S2. Mass spectroscopy analysis of the supernatant for the oxidation step (blue curve), reduction step (green curve) and the aspirin reference molecule (orange curve).

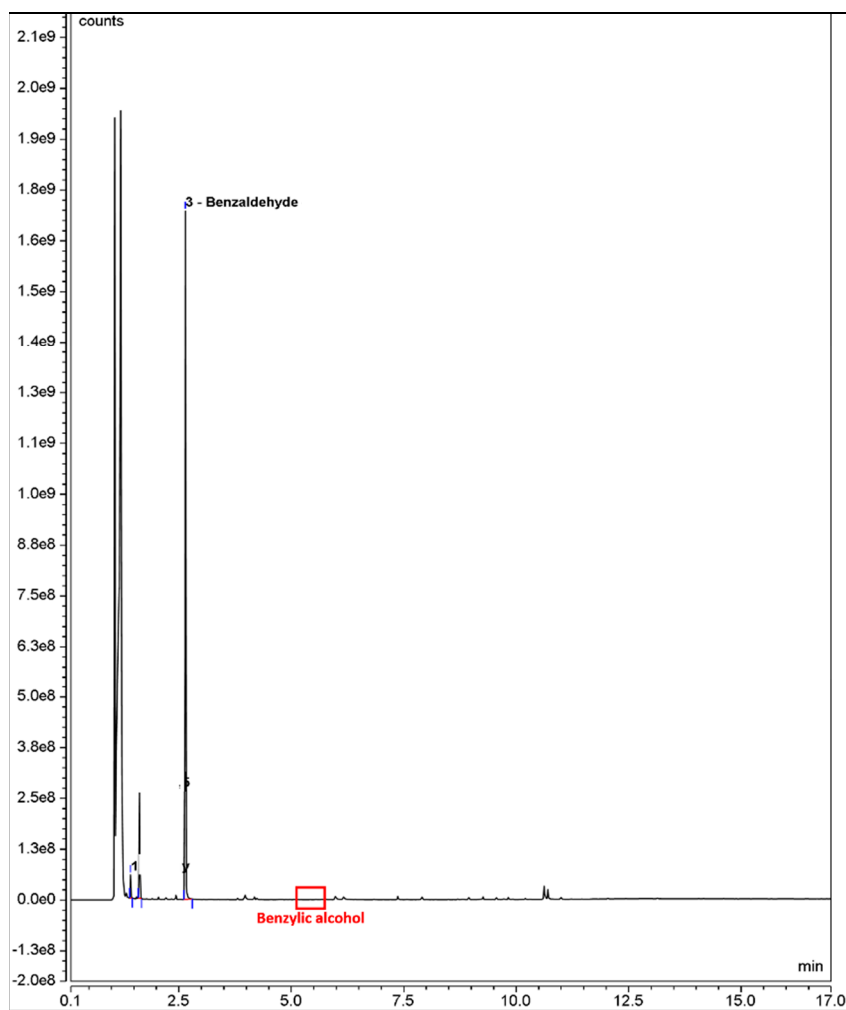


Figure S3. GC-MS spectrum of the solution obtained after oxidation of benzylic alcohol into benzaldehyde.