

Recovery of Cr(III) from Tannery Effluents by Diafiltration Using Chitosan Modified Membranes

Asmaa Zakmout, Fatma Sadi, Svetlozar Velizarov, João G. Crespo and Carla A. M. Portugal

Supplementary Materials

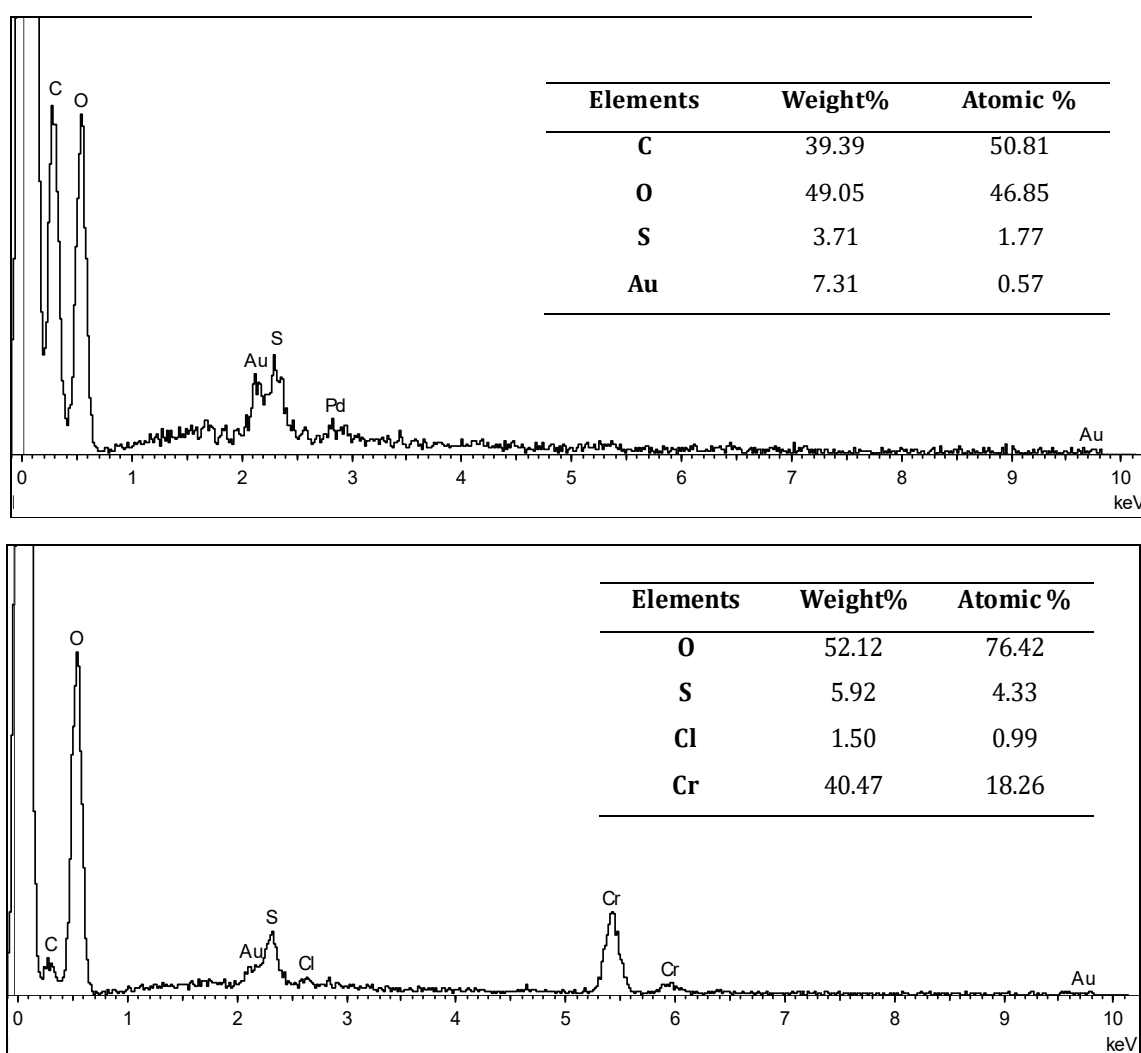


Figure S1. SEM-EDS analysis of the cs-PES MF022 membranes before (top spectrum) and after (bottom spectrum) filtration of synthetic tannery effluent at 20 bar, in concentration mode, showing the preferential adsorption of Cr(III) in reference to the other target compounds, i.e. Na, K, Ca, Mg, S, Cl and NH_4^+ , present in the effluent. The C, S, and O detected were due to the presence of these elements as part of the membrane composition, whereas Au and Pd were used to coat the membrane surface as required for the SEM-EDS analysis.

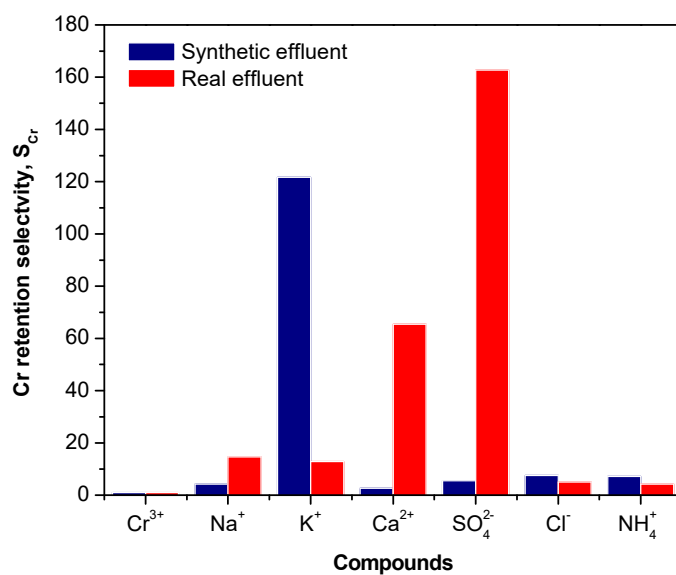


Figure S2. Comparative analysis between the selective retention of Cr(III), in reference to other species, by the cs-PES MF022 membrane, during diafiltration of the SW30 concentrate of a synthetic and real tannery effluent at 20 bar.