Supporting information

An Air-Cathode Microbial Desalination Cell

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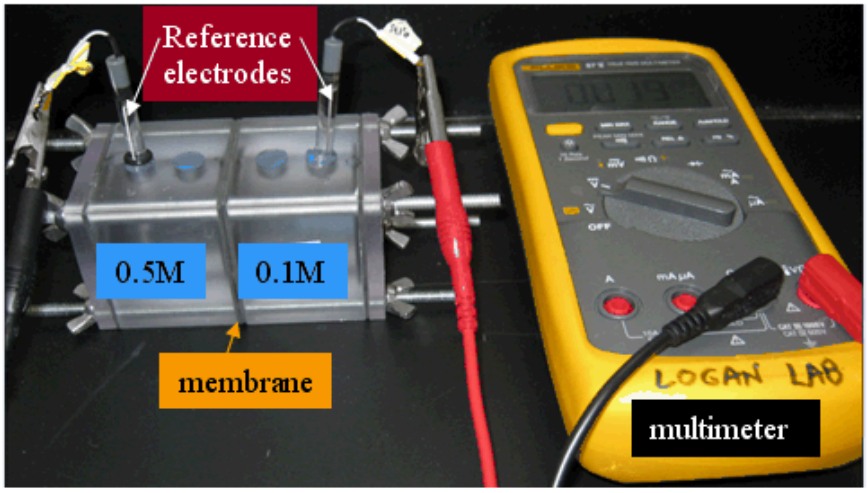

Fig. 1 Picture of the experimental device for measuring permeselectivity. Two 4 cm cubic reactor were separated by the membrane to investigate. The compartment to the left was

filled with a 0.5 M NaCl solution. The compartment to the right was filled with a 0.1 M NaCl solution.

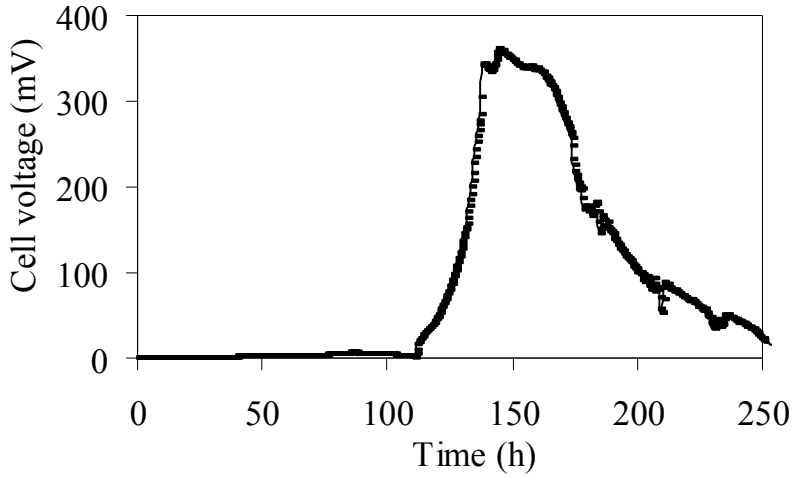

Fig. 2 MDCs performance's in first cycle after inoculation in the presence of the experimental membranes. The anolyte contains 2g/L acetate. The middle compartment contains 20g/L NaCl.

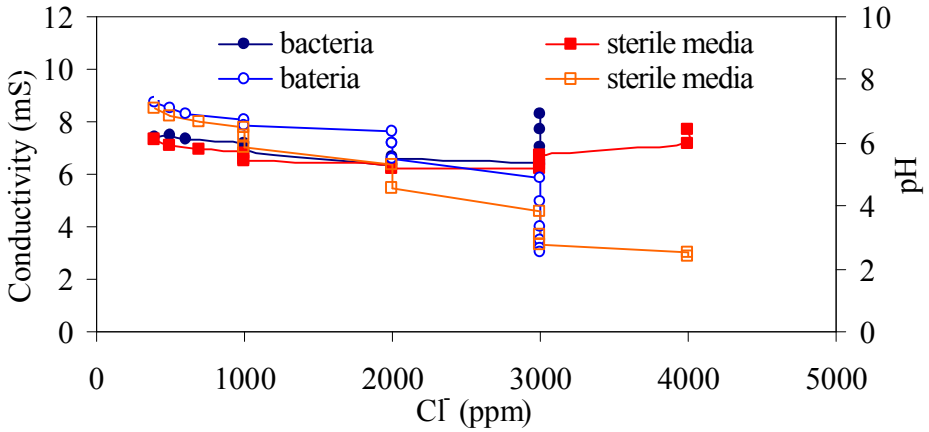

Fig. 3 Evolution of the conductivity and pH as a function of the chloride concentration.

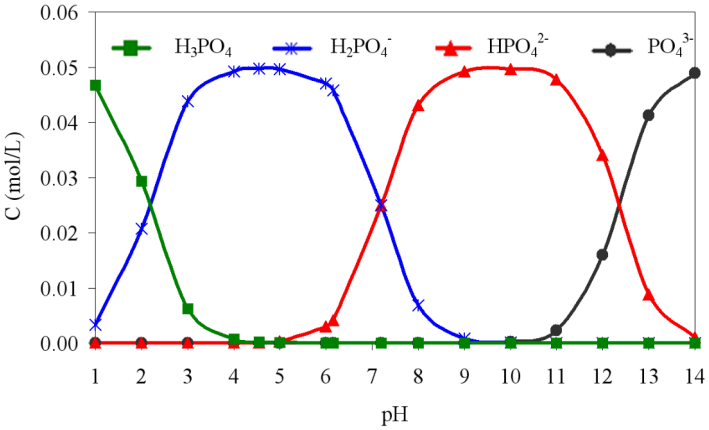

Fig. 4 Concentrations of the different phosphate species as a function of pH calculated for an initial concentration of 0.05 M phosphate buffer.

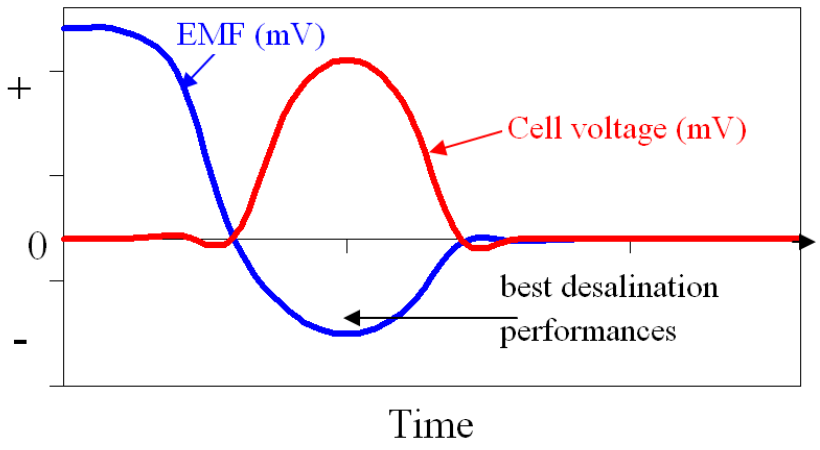

Fig. 5 Evolution of the electromotive force with time.