

# INFLUENCE OF CULTIVATION MEDIA ON HALOBACTERIA

## II. POLYSACCHARIDES PRODUCTION

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**Abstract:** The production of extracellular polysaccharide (EPS) at the cultivation in flasks of halobacterium *Haloferax mediterranei* is investigated. The influence of concentration of three compounds (glucose,  $Mg^{2+}$ ,  $PO_4^{3-}$ ) is analysed by following a factorial experimental design of cultivation media. The model obtained for the EPS production fits well with the experiments. The EPS formation is influenced principally by glucose and all three compounds combined. The graphically analysis of the model shows that for the tested concentrations of the three variables the maximal yield is 3.4 mg/l EPS.

Keywords: *Haloferax mediterranei*, polysaccharides, experimental design

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