

Al-Malack, MH; Anderson, GK. 1997. Use of crossflow microfiltration in wastewater treatment. *WATER RESEARCH* 31 (12):3064-3072.

**Abstract:** Implementation of crossflow microfiltration in the held of wastewater treatment was investigated. The membrane used throughout the research was made of multifilament polyester yam woven in the form of a double interleave cloth with a pore size of 20-40  $\mu\text{m}$ . Secondary effluent and primary settled sewage, from Blyth Sewage Treatment Plant, were used in the investigation. The study showed that the permeation rate (flux) was linearly affected by the crossflow velocity (CFV) in the case of treating secondary effluent. Permeate quality was also found to be affected by the crossflow velocity values. In addition, the effect of feed suspended solids concentration was found to proceed according to the concentration-polarization phenomena. Using the crossflow microfiltration process in treating primary settled sewage, without pretreatment, was found to be impractical due to the low flux values.