

Abstract Submitted  
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**Characterization of Backwash Filtration Membranes** MARK

HALL, None — Backwash filtration systems are used to minimize filter maintenance but are only commercially available for filtering particles 50um and above. An experimental apparatus is set forth to characterize a membrane in a backwash filtration system for particles as small as 1um. By monitoring pressure, flow, and particle size data, we compare the performance of membranes by taking into consideration the open area of the membrane, flow per unit pressure, durability, and log removal of particles over thousands of cycles. Preliminary results have been obtained. Based on these results, future studies will focus on different materials and geometries of membranes. Finding a successful material/geometric combination would result in reducing the cost and waste of the current disposable solutions.

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None

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