

Abstract Submitted
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Commercialization of Backwashable Microfiltration Screens ANDREW DAVIS, NICHOLAS MORRILL, ROBERT DAVIS, RICHARD VAN-FLEET, Brigham Young University — Much of the applied research done in university laboratories is never developed into a usable product. Here I present on the process of commercialization applied physics research and particularly on the path that we have gone through in commercializing my undergraduate research. I've worked for 2 1/2 years as an researching microfiltration screens. Throughout the research process I have hoped that the research I was doing would have practical application. After initial testing on screens we developed, we began looking at commercialization potential of the technology. For the past 6 months we have been looking at different markets and variations on the initial fabrication technique in order to address needs in the 1-10 micron filtration space. We have found considerable traction with self-cleaning backwash filtration system manufacturers. In general these systems currently are only viable for filtration over 50 microns. Using our screen technology this could allow for filtration down to 1 micron. This would open up opportunities for use of these systems in frack water disposal and reuse. In these applications thousands of gallons of produced water are processed daily. Through using our high throughput backwashable screens maintenance and cost could be reduced.

Andrew Davis
Brigham Young University

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