



SBIR

Success Stories

IMPROVED BIOFILTERS FOR RECIRCULATING AQUACULTURE SYSTEMS

Aquaculture Systems Technologies, LLC.
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Small Business Innovation Research (SBIR)

INNOVATION

Improved water filters for aquaculture operations through the manipulation of the shape and size of the filter material or media.

ACCOMPLISHMENTS

- ▶ Developed a new PolyGeysers Bead Filter that maximizes the performance of Enhanced Nitrification Bead Media (EN Media) for a wide range of recirculating aquaculture applications.
- ▶ Achieved efficiencies with EN Media 35-50% greater than standard filters. An additional 15-25% efficiency is obtained when the PolyGeysers Bead Filter and EN Media are used together.
- ▶ Upgraded filter performance through automated filter cleaning systems.



COMMERCIALIZATION

- ▶ Marketed EN Media as an option in both Propeller-Washed and Bubble-Washed Bead Filters.
- ▶ Sold over 400 rotationally molded PolyGeysers Bead Filters.
- ▶ Exceeded \$1 million in sales of PolyGeysers Filters and Enhanced Nitrification Bead Media.

IMPACTS

- ▶ Lowered investment costs in filtration and pumps and increased profitability for aquaculturists through superior filter efficiency.
- ▶ Improved filter performance and efficiency for public aquariums, large outdoor ponds/water gardens, research systems, hatcheries, and fish nurseries.
- ▶ Increased sales of EN media filters with nearly half of the filters by Aquaculture Systems Technologies now sold with this technology.

SBIR COMPETITIVELY AWARDS SMALL BUSINESS GRANTS FOR INNOVATIVE RESEARCH THAT HAS THE POTENTIAL OF SOLVING IMPORTANT AGRICULTURE AND RURAL DEVELOPMENT PROBLEMS.

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