

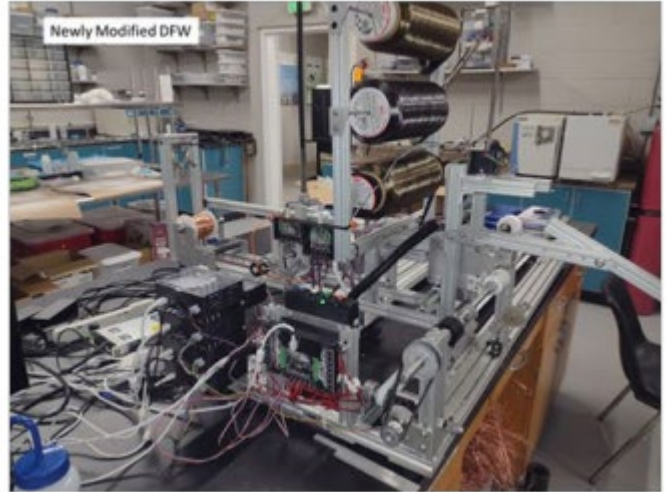
RADIATION SHIELD FOR HIGH TEMPERATURE LIQUID SODIUM PUMPS



TECHNOLOGY SUMMARY

HiFunda, LLC is developing technology for custom fiber-reinforced geopolymer-based materials and advanced filament winding and/or additive manufacturing (AM) processes for fabricating improved radiation shields. The technology is designed to enable electromagnetic pumps to operate while submerged at high temperatures and under irradiation during liquid metal reactor operations.

The final product will have a quantitative advantage over the current state of the art by simplifying the pump design, enhancing shield capacity, and improving operational efficiency in liquid metal reactors.



HiFunda's Custom Filament Winding System

FUNDING AND OPPORTUNITY

Our SBIR project is currently in Phase I and funded by the Department of Energy. Collaboration with potential end users would significantly enhance our project's scope and impact. We are seeking potential end users in nuclear reactor cooling systems, nuclear medicine, space electronics design, or liquid metal pump development to join us. This collaboration offers a chance to be involved in pioneering research and inform future federal investment.

Company Profile



Founded 2008



Salt Lake City, UT



9 Employees

CAPABILITIES

- Improved Shielding Capability (Gamma & Neutron Radiation)
- Enhanced Durability
- Reduced Volume & Structure
- Operable in High-Temperature Environments

APPLICATIONS/INDUSTRIES

- Liquid Metal Pumps
- Neutron and Gamma Imaging Systems
- Nuclear Fusion Reactors
- Space Electronics
- Nuclear Waste Management
- High Temperature Molten Salts

HiFunda, LLC

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