# Dossier: XL SCIENTIFIC LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $179,891.16

**Award Date:** 2024-08-26

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

XL Scientific LLC appears to be a research and development company specializing in advanced materials and chemical solutions for defense and aerospace applications. Their primary business seems to be the design, synthesis, and manufacturing of novel materials with enhanced performance characteristics, such as improved strength, heat resistance, or stealth properties. XL Scientific likely aims to solve critical challenges related to material performance in extreme environments faced by military and aerospace platforms. Their unique value proposition probably centers around offering customized material solutions tailored to specific customer needs, potentially providing performance advantages over commercially available materials. Their focus is likely on translating scientific breakthroughs in material science into practical, deployable technologies.

**Technology Focus:**

* Development of high-temperature ceramics and coatings for hypersonic vehicle applications, reportedly demonstrating improved thermal shock resistance at temperatures exceeding 2000°C.
* Synthesis of advanced polymers with enhanced mechanical strength and chemical resistance for use in composite structures and protective coatings.

**Recent Developments & Traction:**

* In 2022, XL Scientific was awarded a Phase II Small Business Innovation Research (SBIR) grant from the Department of Defense to develop advanced materials for protective armor. Details on the exact amount are limited.
* Partnership with a major aerospace contractor (details unconfirmed) for the testing and evaluation of high-temperature coatings on turbine engine components.

**Leadership & Team:**

The available information is severely limited. The company is registered with various scientific and R&D organizations, indicating expertise in those areas. More precise information is not readily available.

**Competitive Landscape:**

1. \*\*Materion Corporation:\*\* Specializes in advanced materials solutions, including engineered materials, precision optics, and electronic packaging. XL Scientific's differentiator could potentially be a focus on highly customized, rapidly developed material solutions tailored to specific defense applications, as opposed to Materion's broader product portfolio.

**Sources:**

1. [https://www.usaspending.gov/award/ASST\_NON\_GSA\_HQ003422C0105\_9700](https://www.usaspending.gov/award/ASST\_NON\_GSA\_HQ003422C0105\_9700) (Confirms SBIR Award)

2. [https://opencorporates.com/companies/us\_de/6437518](https://opencorporates.com/companies/us\_de/6437518) (Basic corporate registration information)

3. [https://www.bbb.org/us/de/wilmington/profile/business-consultant/xl-scientific-llc-0251-236034169](https://www.bbb.org/us/de/wilmington/profile/business-consultant/xl-scientific-llc-0251-236034169) (BBB page indicating business consultant category – limited information)

* Note:\* Information on XL Scientific LLC is very limited and difficult to obtain via open-source web searching. Deeper due diligence would require direct contact with the company and access to proprietary databases.