# Dossier: OPTOXENSE, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,974.00

**Award Date:** 2023-07-17

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

OPTOXENSE, INC. is a technology company specializing in the development and commercialization of advanced photonic sensors and sensing systems designed for challenging environments, particularly within the defense, aerospace, and industrial sectors. Their core mission is to provide robust, reliable, and highly accurate sensing solutions for critical infrastructure monitoring, process control, and security applications where traditional sensors often fail due to electromagnetic interference (EMI), extreme temperatures, radiation, or corrosive environments. Their unique value proposition lies in their ability to leverage advanced fiber optic sensing technology to deliver real-time data in harsh conditions with high precision and immunity to external interference, offering superior performance compared to conventional electronic sensors.

**Technology Focus:**

* Fiber Optic Sensing (FOS) Systems: OPTOXENSE develops complete FOS systems based on Fiber Bragg Grating (FBG) technology. These systems enable real-time monitoring of temperature, strain, pressure, acceleration, and other physical parameters. Their solutions offer immunity to EMI/RFI, high sensitivity, and the ability to multiplex many sensors on a single fiber.
* Radiation-Hardened Sensors: OPTOXENSE specializes in creating radiation-hardened fiber optic sensors explicitly designed for use in nuclear reactors, space applications, and other high-radiation environments. These sensors maintain their accuracy and functionality even under intense radiation exposure, offering crucial monitoring capabilities where standard electronics would fail.

**Recent Developments & Traction:**

* January 2023: Secured a Phase II SBIR award from the Department of Energy (DOE) to develop a high-temperature, radiation-hardened fiber optic sensing system for advanced nuclear reactors.
* November 2022: Awarded a contract to supply fiber optic temperature sensors for monitoring critical components within a next-generation aircraft engine test facility.
* October 2021: Launched the OptoStrain-XR, a ruggedized fiber optic strain sensor designed for harsh industrial environments with enhanced durability and extended temperature range.

**Leadership & Team:**

* CEO: Not publicly available. Based on publicly available information, executive leadership details are limited. Further research into individuals appearing in press releases might yield further information.

**Competitive Landscape:**

* Luna Innovations Incorporated: Luna Innovations also specializes in fiber optic sensing technology. OPTOXENSE differentiates itself by focusing on specific applications, like radiation-hardened sensors and niche aerospace applications, offering highly customized solutions for extreme environments.
* FISO Technologies Inc.: FISO focuses on fiber optic pressure and temperature sensors for medical and industrial applications. OPTOXENSE has more apparent specialization in aerospace and defense-specific uses.

**Sources:**

* [https://www.optoxense.com/](https://www.optoxense.com/)
* [https://www.sbir.gov/](https://www.sbir.gov/) (Search results for Optoxense SBIR awards)
* [https://www.google.com/](https://www.google.com/) (Advanced search for news and press releases)