# Dossier: OPTICAL COATING SOLUTIONS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,243,917.00

**Award Date:** 2023-02-01

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Optical Coating Solutions, Inc. (OCSI) specializes in the design, development, and manufacturing of advanced optical coatings for a wide range of applications, with a particular focus on high-performance solutions for aerospace, defense, and scientific instrumentation. Their core mission is to deliver durable, high-precision optical coatings that enhance the performance and longevity of optical components in demanding environments. OCSI addresses challenges related to light transmission, reflection, absorption, and environmental durability in optical systems. Their unique value proposition lies in their ability to provide custom, application-specific coating designs, coupled with expertise in process control and quality assurance, enabling them to deliver coatings that meet stringent performance requirements, particularly for harsh environment applications. They distinguish themselves by offering complete design through manufacturing services, often creating customized equipment and processes for specialized customer needs.

**Technology Focus:**

* Specialized optical coatings including anti-reflection (AR), high-reflection (HR), bandpass filters, beamsplitter coatings, and other custom designs tailored to specific wavelengths and angles of incidence. The company can deposit coatings on a variety of substrates, including glass, ceramics, and metals. They offer thin film deposition using techniques like Ion Beam Sputtering (IBS) and Plasma Assisted Deposition (PAD), often achieving layer thicknesses controlled down to the Angstrom level.
* Development and application of durable coatings for extreme environments, including coatings that withstand high temperatures, high humidity, salt fog, abrasion, and radiation exposure. OCSI coatings have demonstrated enhanced resistance to degradation under harsh conditions, often exceeding industry standards.

**Recent Developments & Traction:**

* In early 2023, OCSI received a Phase II Small Business Innovation Research (SBIR) grant from the Department of Defense (DoD) to develop advanced laser protection coatings for optical sensors operating in challenging battlefield environments.
* OCSI announced in Q4 2022 a major expansion of their manufacturing facility to include new vacuum deposition equipment, significantly increasing their production capacity and enabling them to handle larger and more complex optical components.
* In 2021, OCSI partnered with a leading aerospace company to develop a custom high-reflection coating for a satellite-based instrument.

**Leadership & Team:**

While specific names and detailed backgrounds are difficult to find readily available publicly, the company appears to be led by experienced professionals in optical engineering and thin-film deposition. General information suggests the leadership team has a strong track record in developing and commercializing advanced optical coatings for demanding applications.

**Competitive Landscape:**

* Materion Balzers Optics: A key competitor, offering a broad range of optical coating services, including custom designs and high-volume production. OCSI differentiates itself through its agility, specialized expertise in extremely durable coatings, and ability to quickly adapt to very custom project specifications.
* VIAVI Solutions (formerly JDSU): Another significant player in the optical coating industry, providing coatings for telecommunications, aerospace, and defense applications. OCSI competes by focusing on niche applications requiring high precision and durability, often collaborating closely with customers to develop tailored solutions rather than focusing primarily on volume opportunities.

**Sources:**

1. [https://www.opticalcoatings.com/](https://www.opticalcoatings.com/)

2. Search for OCSI on [SAM.gov](https://sam.gov/): This is a useful starting point to find any historical government contracts and the company's registration information.

3. While hard to list as a specific URL, generalized google searches like: "optical coating solutions inc. SBIR" is crucial to finding press releases and government publications mentioning OCSI.