# Dossier: SURFACE OPTICS CORP.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $999,982.00

**Award Date:** 2024-06-13

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Surface Optics Corporation (SOC) specializes in developing and manufacturing advanced materials and coatings that control and manipulate light, heat, and radio frequency (RF) energy. Their core mission is to deliver innovative solutions for challenging optical and thermal management problems, enhancing the performance and survivability of defense, aerospace, and commercial systems. They aim to solve problems related to signature management (reducing detectability), thermal management (dissipating heat efficiently), and optical performance enhancement (improving sensor accuracy and clarity) in extreme environments. Their unique value proposition lies in their ability to tailor material properties at the micro and nano-scale to achieve highly specific optical and thermal performance characteristics, often providing solutions that cannot be achieved through traditional materials.

**Technology Focus:**

* Signature Management Coatings:\*\* Development of spectrally selective coatings that control thermal radiation and reduce optical and RF signatures for stealth applications. This includes coatings with precisely engineered emissivity, reflectivity, and absorptivity across various wavelengths.
* High-Performance Thermal Management Materials:\*\* Creation of lightweight, high-conductivity composite materials and coatings for efficient heat dissipation in electronics and other high-heat-generating components. They offer materials with thermal conductivities exceeding 500 W/mK.
* Advanced Optical Coatings:\*\* Fabrication of durable, high-performance optical coatings for lenses, mirrors, and other optical components, improving their transmittance, reflectance, and resistance to environmental degradation. This includes coatings with anti-reflective properties, enhanced abrasion resistance, and spectral filtering capabilities.

**Recent Developments & Traction:**

* July 2023:\*\* Awarded a contract from the US Navy to develop advanced coatings for improved radar signature management on naval vessels. (Specific contract value not publicly available in accessible sources, but the award was mentioned in multiple defense industry publications).
* October 2022:\*\* SOC announced the development of a new family of high-emissivity coatings designed for next-generation satellite thermal control applications. The new material is able to drastically decrease thermal radiation and increase system efficiency.
* 2021:\*\* Surface Optics received multiple Phase II SBIR awards from the Department of Defense for continued development of advanced materials for defense applications. Specific award details (amounts, agencies) require access to proprietary SBIR database.

**Leadership & Team:**

* Dr. Greg Olson, CEO:\*\* Dr. Olson has extensive experience in materials science and engineering, having previously held leadership positions in materials research and development companies.
* Information on CTO and President were less readily available through public web searches, suggesting they maintain a lower public profile, or it may be a smaller organization structure.

**Competitive Landscape:**

* Lancer Systems:\*\* Offers advanced weapon systems and coatings for signature management. SOC differentiates itself through a stronger focus on broad-spectrum optical and thermal control applications beyond just weapon systems.
* Materion:\*\* Produces advanced materials, including optical coatings. SOC differentiates by concentrating on highly customized, application-specific solutions optimized for challenging environments, rather than a broader catalog of general-purpose materials.

**Sources:**

1. [https://surfaceoptics.com/](https://surfaceoptics.com/) - Official company website.

2. [https://www.defenseworld.net/news/35315/Surface\_Optics\_Corporation\_SOC\_Secures\_US\_Navy\_Contract\_for\_Advanced\_Coatings](https://www.defenseworld.net/news/35315/Surface\_Optics\_Corporation\_SOC\_Secures\_US\_Navy\_Contract\_for\_Advanced\_Coatings) - Defense industry news article detailing the Navy contract.

3. [https://www.kmimediagroup.com/magazine/issue/jcd-2022-october/article/surface-optics-corporation-to-discuss-high-emissivity-coatings-for-satellite-thermal-control](https://www.kmimediagroup.com/magazine/issue/jcd-2022-october/article/surface-optics-corporation-to-discuss-high-emissivity-coatings-for-satellite-thermal-control) - Industry publication article highlighting thermal coating development.

4. [https://www.sbir.gov/](https://www.sbir.gov/) - U.S. Small Business Administration SBIR website (used to confirm SBIR awards, though specific award details are not always publicly accessible without a registered account).