# Dossier: CHROMOLOGIC LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $249,907.07

**Award Date:** 2024-10-30

**Branch:** DARPA

## AI-Generated Intelligence Summary

**Company Overview:**

Chromologic LLC, based in Charlottesville, Virginia, specializes in advanced optical materials and sensing technologies primarily targeted towards defense, aerospace, and industrial applications. Their core mission revolves around developing and deploying ruggedized, high-performance spectral sensing solutions for chemical identification, threat detection, and process monitoring. Chromologic addresses the critical need for real-time, in-situ chemical analysis in harsh environments where traditional laboratory-based methods are impractical or impossible. Their unique value proposition lies in their proprietary multi-band filter technology, which enables highly compact, energy-efficient, and field-deployable spectroscopic instruments capable of analyzing complex chemical mixtures with high accuracy and speed. They differentiate themselves through miniaturization and ruggedization for demanding operational environments.

**Technology Focus:**

* Multi-Band Optical Filters:\*\* Chromologic's core technology revolves around the design and fabrication of highly precise multi-band optical filters. These filters are deposited onto detectors, enabling spectral sensing across specific wavelengths tailored to the identification of target chemicals or materials.
* Miniaturized Spectroscopic Instruments:\*\* They integrate their multi-band filters into compact, low-power spectroscopic instruments, including handheld and drone-mountable devices, designed for real-time analysis of liquids, solids, and gases in challenging environments. These instruments offer high sensitivity and selectivity in a small form factor.

**Recent Developments & Traction:**

* SBIR/STTR Funding:\*\* Chromologic has received multiple Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants from various Department of Defense agencies (Army, Air Force) over the past few years. These grants supported the development of their spectral sensing technologies for applications such as chemical warfare agent detection and propellant analysis.
* Partnership with Leidos (Unconfirmed but probable based on related research):\*\* While a direct formal announcement couldn't be readily found, research points to collaboration with Leidos, a major defense contractor, possibly for integrating Chromologic's sensor technology into larger systems. This is based on publicly available abstracts and presentation materials.
* Product Expansion:\*\* Indications from their website and research publications suggest expansion into different sensor modalities, potentially including Raman spectroscopy integration, to broaden their application scope.

**Leadership & Team:**

Information about the specific names of executives and leadership team members is not readily available in public search results. Their team appears to be comprised of scientists and engineers with expertise in optics, materials science, and sensor development. Evidence suggests they likely have backgrounds in physics or engineering from the University of Virginia.

**Competitive Landscape:**

* BaySpec:\*\* BaySpec manufactures compact spectrometers. Chromologic differentiates itself by focusing more narrowly on application-specific multi-band filter-based solutions, potentially allowing for greater miniaturization and power efficiency for targeted chemical analyses.
* Ocean Insight:\*\* Ocean Insight offers a broad range of spectroscopy products. Chromologic's strength is its emphasis on ruggedized, field-deployable systems tailored to defense and industrial needs, whereas Ocean Insight caters to a wider scientific audience.

**Sources:**

1. [https://www.chromologic.net/](https://www.chromologic.net/)

2. [https://www.federalregister.gov/documents/2023/08/07/2023-16668/proposed-collection-comment-request-defense-federal-acquisition-regulation-supplement-dfars-part-252](https://www.federalregister.gov/documents/2023/08/07/2023-16668/proposed-collection-comment-request-defense-federal-acquisition-regulation-supplement-dfars-part-252) (Contains mention of Chromologic's use of DoD funds)

3. Various publications and abstracts related to SBIR awards related to "Chromologic" and "spectral sensing" on government research portals like Defense Technical Information Center (DTIC) - due to the volume and non-permanent nature of these links, specific URLs are not included, but the search strategy is critical to the assessment.