# Dossier: ALCHLIGHT, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,250,000.00

**Award Date:** 2024-09-05

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

ALCHLIGHT, LLC, appears to be a company focused on developing advanced sensor technology for defense and aerospace applications. Based on available information, their primary business involves creating miniaturized, low-power, high-performance chemical sensors. The company aims to solve the critical problem of detecting and identifying trace amounts of hazardous materials, explosives, pollutants, and chemical warfare agents in complex environments. Their value proposition rests on their ability to produce sensors that are significantly smaller, lighter, more sensitive, and consume less power than existing solutions, enabling integration into a wide range of platforms, including drones, wearable devices, and distributed sensor networks for enhanced situational awareness and threat detection. The ability to potentially integrate into existing weapons systems seems to be a critical long-term goal.

**Technology Focus:**

* Miniaturized Chemical Sensors: Develops high-sensitivity sensors based on novel materials and microfabrication techniques for detecting trace amounts of chemicals. They reportedly focus on specific applications like detecting explosives or specific chemical warfare agents.
* Low Power Consumption: Designs sensor systems that minimize power requirements, enabling integration into resource-constrained platforms such as unmanned aerial vehicles (UAVs) and remote sensor deployments.

**Recent Developments & Traction:**

* SBIR/STTR Funding:\*\* ALCHLIGHT has received multiple Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants from government agencies, including the Department of Defense (DoD), suggesting successful early-stage technology validation and government interest. Recent awards appear on government grant websites.
* Development Contracts:\*\* Public records suggest the company has been awarded development contracts with government agencies for specific sensor applications; however, details are scarce and likely confidential.

**Leadership & Team:**

Due to the limited publicly available information on ALCHLIGHT, LLC, specific leadership roles (CEO, CTO, President) and their backgrounds are difficult to ascertain without proprietary data sources. More detailed information would require accessing company filings or other non-public resources.

**Competitive Landscape:**

Identifying direct competitors is challenging without deeper proprietary research. However, potential competitors could include companies specializing in chemical sensor technology such as Smiths Detection or similar defense contractors focusing on CBRN threat detection. Alchlight's differentiator, if substantiated, likely lies in its superior miniaturization, lower power consumption, and potentially higher sensitivity.

**Sources:**

1. SAM.gov (for federal contract information)

2. SBIR.gov (for SBIR/STTR award data)

3. Company website (if available, not found in preliminary search)

4. Patent databases (for patent filings, which may provide technological details, not found in preliminary search)

5. Online news articles or press releases (if available, not found in preliminary search)