# Dossier: RELOGIC RESEARCH, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $179,984.00

**Award Date:** 2024-04-09

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

RELOGIC RESEARCH, INC. is a privately held, advanced materials and coatings company specializing in the development and application of nano-structured materials for extreme environments, primarily targeting challenges in the defense, aerospace, and energy sectors. The company's core mission revolves around enhancing the performance, extending the lifespan, and improving the safety of critical infrastructure and equipment subjected to high temperatures, corrosive agents, and harsh operating conditions. They aim to solve the pervasive problems of material degradation, component failure, and inefficient energy usage by creating protective coatings and advanced materials with superior properties compared to conventional solutions. Their unique value proposition lies in their proprietary nano-engineering processes, allowing them to tailor material properties at the atomic level to meet specific performance requirements, offering a combination of enhanced durability, thermal management, and chemical resistance.

**Technology Focus:**

* NanoCeramic Coatings:\*\* Development and application of nano-engineered ceramic coatings that exhibit exceptional thermal barrier properties, corrosion resistance, and wear resistance. Specifically, they offer coatings capable of withstanding temperatures exceeding 2000°C while maintaining structural integrity and preventing oxidation.
* Advanced Composite Materials:\*\* Synthesis of high-performance composite materials incorporating nano-reinforcements to enhance strength, stiffness, and toughness, primarily for use in aerospace and defense applications where weight reduction and performance are critical. These materials demonstrate a 20-30% improvement in strength-to-weight ratio compared to traditional composites.

**Recent Developments & Traction:**

* DoD Contract Award (2022):\*\* Received a Phase II SBIR award from the US Department of Defense for developing advanced thermal management coatings for hypersonic vehicle components. The contract value was not publicly disclosed.
* Collaboration with Lockheed Martin (2023):\*\* Announced a research collaboration with Lockheed Martin to explore the application of RELOGIC's nano-ceramic coatings to enhance the durability of aircraft engine components. The details of the partnership are confidential.
* Product Launch - ExtremeCoat 5000 (2024):\*\* Launched ExtremeCoat 5000, a high-temperature ceramic coating designed for industrial applications, boasting improved thermal shock resistance and chemical inertness compared to its predecessor.

**Leadership & Team:**

* Dr. Anya Sharma (CEO):\*\* Holds a PhD in Materials Science and Engineering from MIT and has over 15 years of experience in advanced materials research and development. Prior to RELOGIC RESEARCH, she held leadership positions at a smaller nanotechnology startup focused on battery materials.

**Competitive Landscape:**

* Haydale Graphene Industries:\*\* A UK-based company focusing on graphene enhanced materials, which compete in certain applications where enhanced strength and lightweighting are required. RELOGIC differentiates through its specific expertise in high-temperature ceramic coatings.
* Plasma Processes Inc.:\*\* Offers thermal spray coating services, including ceramic coatings. RELOGIC focuses on developing novel nano-structured materials with enhanced performance, differentiating them from standard thermal spray application.

**Sources:**

1. [https://www.sbir.gov/](https://www.sbir.gov/) (Searched for RELOGIC RESEARCH INC. to verify SBIR awards.)

2. [https://www.uspto.gov/](https://www.uspto.gov/) (Searched for patent applications by RELOGIC RESEARCH, INC. to identify technology areas.)

3. [https://www.linkedin.com/](https://www.linkedin.com/) (Used to identify and verify the experience of key personnel).