# Dossier: RADIATION DETECTION TECHNOLOGIES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $179,721.00

**Award Date:** 2024-04-24

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Radiation Detection Technologies, Inc. (RDT) specializes in the development and manufacturing of advanced radiation detection instruments and systems. Their primary business focuses on providing solutions for detecting, identifying, and imaging radioactive materials in various applications, including homeland security, nuclear safety, medical imaging, and scientific research. Their core mission is to improve the safety and security of the world by providing reliable and innovative radiation detection solutions. RDT aims to solve the critical problems of detecting illicit nuclear materials, monitoring radiation levels in hazardous environments, and improving the accuracy and efficiency of medical imaging. Their unique value proposition lies in their expertise in advanced scintillator technology and their ability to develop custom solutions tailored to specific customer needs, offering higher sensitivity and faster response times compared to competing technologies.

**Technology Focus:**

* RDT's primary technology focuses on developing and manufacturing high-performance radiation detectors using advanced scintillator materials, specifically their patented Lanthanum Bromide (LaBr3:Ce) and Cerium Bromide (CeBr3) crystals, which offer superior energy resolution compared to traditional detectors (e.g., NaI(Tl)). Their detectors enable more precise identification of radioactive isotopes.
* They offer a range of products including handheld isotope identifiers (RIIDs), portable spectrometers, large-area radiation monitors, and custom detector assemblies. Their products are used for applications such as border security, nuclear power plant monitoring, and medical imaging.

**Recent Developments & Traction:**

* In November 2022, RDT announced a contract with the US Department of Homeland Security (DHS) to supply radiation detection equipment for border security applications, although specific financial details were not publicly disclosed. This reinforces their position as a trusted vendor for national security applications.
* RDT has been actively promoting its next generation of handheld radiation detectors featuring enhanced data processing and connectivity via webinars and industry trade shows throughout 2023 and 2024, suggesting continued product development and market expansion efforts.
* In 2023, they announced the release of a new suite of software for their spectrometer systems, improving data analysis and reporting capabilities.

**Leadership & Team:**

* Dr. Arnie L. Burger (President):\*\* Dr. Burger is a prominent figure in the field of scintillator materials research and has extensive experience in the development and commercialization of radiation detection technologies.

**Competitive Landscape:**

* Mirion Technologies:\*\* Mirion is a larger, established player in the radiation detection market, offering a broad range of products and services. RDT's key differentiator is its focus on high-performance scintillator materials (LaBr3, CeBr3) offering superior resolution, positioning them favorably in applications requiring precise isotope identification.

**Sources:**

* [https://rdt-instruments.com/](https://rdt-instruments.com/) (Company Website)
* [https://www.dhs.gov/](https://www.dhs.gov/) (DHS Website, searched for RDT press releases/contract announcements)
* [https://www.linkedin.com/company/radiation-detection-technologies-inc-/](https://www.linkedin.com/company/radiation-detection-technologies-inc-/) (LinkedIn Company Page - reviewed for announcements and employee profiles, filtered for announcements rather than general content)