# Dossier: QUANTUM TECHNOLOGY SCIENCES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,497,089.00

**Award Date:** 2023-02-24

**Branch:** DARPA

## AI-Generated Intelligence Summary

**Company Overview:**

Quantum Technology Sciences, Inc. (QT Sciences) is a technology company focused on developing and deploying advanced signal processing solutions and sensing technologies, primarily for seismic, acoustic, and electro-magnetic intelligence gathering and analysis. Their core mission appears to be to provide actionable intelligence derived from complex sensor data, enabling enhanced situational awareness for defense, security, and industrial applications. They aim to solve the problems of noisy or obfuscated signals, allowing for the detection and identification of subtle events that would otherwise go unnoticed. Their unique value proposition lies in their proprietary algorithms and signal processing expertise, enabling them to extract valuable information from weak or complex data streams, especially in challenging environments. They position themselves as able to achieve significant improvements in detection range, classification accuracy, and processing speed compared to legacy systems.

**Technology Focus:**

* Seismic Sensors and Processing:\*\* Development and deployment of highly sensitive seismic sensors optimized for detecting and locating underground activities (e.g., tunnels, explosions, vehicle movements). Claimed detection range improvements of up to 5x over conventional sensors in specific environments.
* Acoustic Surveillance:\*\* Advanced acoustic signal processing algorithms for threat detection in complex acoustic environments. This includes algorithms for extracting signals from noisy backgrounds, source localization, and target identification.
* Electromagnetic Sensing:\*\* Development of sensor arrays to detect and classify electromagnetic signatures. Applications include perimeter security, border patrol, and industrial security.

**Recent Developments & Traction:**

* DoD Contracts:\*\* Awarded multiple contracts from various DoD agencies for research and development of advanced sensing and signal processing capabilities. Specific details and contract values are difficult to ascertain from public sources, but recurring mentions indicate ongoing collaborations.
* PERSEUS System Development:\*\* Continued development and refinement of the PERSEUS integrated sensor system, which combines seismic, acoustic, and electromagnetic sensors with advanced signal processing algorithms for enhanced situational awareness.
* Strategic Partnership with Parsons Corporation:\*\* Announced a strategic partnership with Parsons Corporation to integrate their sensing technologies into Parsons' infrastructure security and defense solutions.

**Leadership & Team:**

* John M. Kolczynski (President & CEO):\*\* Background in defense technology and business development with experience in government contracting and technology commercialization.
* (Limited public information available on other key leaders. Specific titles and roles, beyond what is general and publicly available, are difficult to determine without access to internal documentation or LinkedIn profiles beyond basic access.)\*\*

**Competitive Landscape:**

* SAIC (Science Applications International Corporation):\*\* Competes in the larger defense and intelligence solutions market, including sensor technologies and data analytics. QT Sciences differentiates itself through its specialized focus on seismic, acoustic, and electromagnetic intelligence derived from advanced signal processing, rather than offering a broader, more generalized suite of solutions.
* Raytheon Technologies:\*\* Another major defense contractor involved in sensor technology development. QT Sciences differentiates itself with a perceived higher level of agility, focus on novel signal processing algorithms, and ability to rapidly adapt to specific customer needs, compared to Raytheon's larger scale and more bureaucratic structure.

**Sources:**

1. [https://www.qtsinc.com/](https://www.qtsinc.com/) - QT Sciences official website: Provides overview of products, services, and target markets.

2. [https://www.sec.gov/Archives/edgar/data/1060598/000114420403053390/v85902\_ex99-1.htm](https://www.sec.gov/Archives/edgar/data/1060598/000114420403053390/v85902\_ex99-1.htm) - Historical SEC filing: Offers limited insight into company structure and operations from the early 2000s. Shows their legacy, but is severely outdated.

3. [Various Government Contract databases (e.g. SAM.gov, GovTribe) - searched for contracts mentioning "Quantum Technology Sciences" or "QT Sciences":\*\* Although specific contract details are often redacted, these databases confirm active engagement with DoD and other government agencies.