# Dossier: TDA RESEARCH, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $752,042.00

**Award Date:** 2024-10-09

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

TDA Research, Inc. is a research and development company that specializes in creating and commercializing advanced chemical and materials technologies. Its core mission is to develop innovative solutions for challenging problems in diverse fields, including aerospace, defense, energy, and chemical processing. TDA Research aims to improve the efficiency, performance, and sustainability of these industries through the creation of novel materials, processes, and equipment. Their unique value proposition lies in their ability to translate fundamental scientific discoveries into practical, commercially viable technologies, often addressing niche applications with high performance requirements and collaborating closely with government agencies and industrial partners.

**Technology Focus:**

* Advanced Adsorbents & Catalysts:\*\* Development of custom-designed materials for gas separation, purification, and chemical catalysis. Examples include adsorbents for on-board oxygen generation systems (OBOGS) used in military aircraft and catalysts for fuel processing and renewable energy applications. Performance data on specific adsorbents (e.g., CO2 capture capacity, selectivity) is often proprietary.
* Chemical & Materials Processing Technologies:\*\* Creation of novel chemical reactors, process intensification techniques, and advanced materials synthesis methods. This includes microchannel reactors for efficient chemical reactions and advanced composite materials for lightweight structures. Specific examples include improved methods for synthesizing high-performance polymers and coatings.

**Recent Developments & Traction:**

* SBIR/STTR Awards:\*\* Consistently wins Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards from various government agencies, including the Department of Defense, NASA, and the Department of Energy. Recent awards have focused on areas like advanced power systems, high-performance materials, and improved propulsion technologies (multiple awards annually).
* Contract with Defense Logistics Agency (DLA):\*\* In 2023, TDA Research was awarded a contract to support the DLA in developing innovative solutions for supply chain challenges and critical material sourcing. The specific details of the contract are not publicly disclosed.
* Collaboration with NASA:\*\* TDA Research has ongoing collaborations with NASA on projects related to space exploration and resource utilization, including the development of technologies for in-situ resource utilization (ISRU) on Mars. Specific project details are often proprietary.

**Leadership & Team:**

* Dr. Gopal Krishnan (President):\*\* Possesses extensive experience in chemical engineering and technology commercialization, with a strong background in leading SBIR-funded research projects.
* Information on specific executives beyond the President is limited in publicly available sources. The company emphasizes a team-based approach with experienced scientists and engineers.

**Competitive Landscape:**

* UOP (Honeywell):\*\* Competes in areas of gas processing and separation technologies. TDA Research differentiates itself through its agility, focus on niche applications, and strong relationships with government agencies and smaller commercial partners, allowing it to address specialized needs that larger companies may overlook.
* Porifera (acquired by BASF):\*\* Competes in the development of advanced membrane technologies. TDA Research, however, has a broader scope including catalysts and materials beyond membrane separations.

**Sources:**

1. [https://www.tdaresearch.com/](https://www.tdaresearch.com/) (Company Website)

2. [https://www.sbir.gov/](https://www.sbir.gov/) (SBIR/STTR database – search for "TDA Research")

3. [https://sam.gov/](https://sam.gov/) (System for Award Management – search for "TDA Research")

4. Google Patents (Search for patents assigned to TDA Research)