# Dossier: RESODYN CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,979.95

**Award Date:** 2023-04-06

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Resodyn Corporation is a US-based company specializing in the development and manufacturing of acoustic mixing and processing equipment used across various industries, including aerospace, defense, pharmaceuticals, and materials science. Their core mission is to revolutionize mixing and processing through the application of resonant acoustic mixing (RAM) technology, enabling faster, more efficient, and more controllable processes compared to traditional methods. They aim to solve problems related to inconsistent material properties, long processing times, safety hazards associated with certain mixing techniques, and the inability to process sensitive materials. Their unique value proposition lies in their proprietary RAM technology, which offers non-contact mixing, enabling precise control over mixing parameters, reduced processing times, and the ability to handle viscous, sensitive, or hazardous materials with greater ease and safety.

**Technology Focus:**

* ResonantAcoustic® Mixing (RAM):\*\* Resodyn's core technology utilizes low-frequency, high-intensity acoustic energy to induce uniform motion throughout the entire mixing volume. This allows for rapid and homogeneous mixing of materials with vastly different densities, viscosities, or particle sizes. They claim RAM can achieve mixing times up to 10 times faster than traditional methods in certain applications.
* LabRAM & RAM Systems:\*\* They offer a range of mixing systems, from laboratory-scale (LabRAM) to industrial-scale, designed to accommodate varying batch sizes and processing requirements. These systems are configurable with features such as temperature control, vacuum capabilities, and inert atmosphere options.

**Recent Developments & Traction:**

* Awarded SBIR Phase II Funding (2023):\*\* Resodyn received Phase II Small Business Innovation Research (SBIR) funding from the US government for the development of advanced materials processing solutions for defense applications, specifically related to energetics and propellants. (Specific amount unavailable from general web search)
* Partnership with Universities:\*\* They have collaborated with several universities and research institutions to validate and expand the application of their RAM technology in areas such as battery materials, polymers, and nanocomposites. While specific partnership announcements are difficult to pinpoint without dedicated press releases, evidence from academic publications strongly suggests ongoing collaboration.
* Continued application in energetics manufacturing:\*\* Resodyn RAM technology continues to be implemented in the manufacturing of explosives and propellants, including insensitive munitions (IM).

**Leadership & Team:**

* Lawrence R. Dickinson (CEO):\*\* Information regarding his career background beyond his CEO role is limited in readily available online resources.
* Paul Lasko (CTO):\*\* Information regarding his career background beyond his CTO role is limited in readily available online resources.

**Competitive Landscape:**

* FlackTek, Inc.:\*\* FlackTek provides SpeedMixer centrifugal mixing technology. Resodyn differentiates itself through the non-contact nature of its acoustic mixing, which allows for superior control of mixing parameters and reduced contamination risk, particularly crucial in high-precision applications such as energetics manufacturing.
* IKA Works, Inc.:\*\* IKA Works manufactures a wide range of laboratory and industrial mixers, including overhead stirrers and rotor-stator mixers. Resodyn's RAM technology offers a fundamentally different approach to mixing, providing more uniform and rapid mixing compared to conventional methods, particularly when dealing with high-viscosity materials or complex formulations.

**Sources:**

1. [https://resodyn.com/](https://resodyn.com/) (Company website - for overview, tech details, and product lines)

2. [https://www.govinfo.gov/content/pkg/CHRG-116hhrg40732/html/CHRG-116hhrg40732.htm](https://www.govinfo.gov/content/pkg/CHRG-116hhrg40732/html/CHRG-116hhrg40732.htm) (Congressional record mentioning Resodyn and RAM in defense applications)

3. [https://www.defenseinnovationmarketplace.mil/](https://www.defenseinnovationmarketplace.mil/) (Defense Innovation Marketplace - search for "Resodyn" for project details – may require specific login/access)

4. Various Academic Publications (e.g., Google Scholar searches for "Resodyn" and "Resonant Acoustic Mixing") (Demonstrates collaboration and validation of technology)

5. [https://www.sbir.gov/](https://www.sbir.gov/) (SBIR database search - for funding information) - requires detailed search to locate specifics on Resodyn.