

Tech Hubs Strategy Development



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In October of 2023, the Michigan State University Research Foundation, Michigan State University (MSU), and a consortium of their research partners were selected for a Tech Hubs Strategy Development award from the U.S. Department of Commerce's Economic Development Administration (EDA). The Strategy Development Grants are planning awards that amount to approximately \$500,000 (including \$100,000 of in-kind support), allowing the consortium to further develop its efforts and propose against any potential additional funding should the EDA continue to expand the program.

The Hub for [Materials Advancement and Research Solutions \(MARS\) Strategy Consortium](#), focuses on transforming the Lansing Region's economy based on expertise and competitive advantages in advanced materials science, specifically the manufacturing of specialized synthetic diamonds and rare isotopes. These synergistic advanced materials are driving groundbreaking improvements in semiconductor chips, defense and space electronics, advanced manufacturing, medical imaging, sensing, quantum computing, power electronics, and other applications essential to U.S. national and economic security. Michigan State University and the Research Foundation have deep expertise in this domain.

The EDA Tech Hubs Program is an investment in the future of the United States and was created as part of the CHIPS and Science Act of 2022. The program is designed to drive effective commercialization partnerships by strengthening a region's capacity to scale manufacturing while creating good jobs for American workers.



Success requires a strong ability to bring together public, private, and academic partners into an effective consortium focused on creating opportunity for all.

The MARS Hub is led by the MSU Research Foundation, a 501(c)(3) non-profit organization dedicated to advancing research and economic development objectives. MARS Consortium members include:

- MSU Research Foundation
- Michigan State University
- Fraunhofer USA
- Lansing Community College
- Great Lakes Crystal Technologies
- Michigan Department of Labor and Economic Opportunity
- Capital Area Michigan Works!
- Michigan Economic Development Corporation
- Lansing Economic Area Partnership
- The Lansing Regional SmartZone
- LIFT (Manufacturing USA Institute)
- Melanated Business Alliance
- Red Cedar Ventures

The goal of the grant funding is to identify and address key inhibitors to the region's global competitiveness in synthetic diamond and rare isotopes. Currently, there is an absence of an applied research and commercialization platforms that marshals assets and capabilities to help advanced materials companies scale. The MARS vision is to leverage unique expertise and assets to develop a suite of coordinated programs, including corporate innovation, business incubation and more.

There are four key activities included in the approved *Scope of Work* to be completed between November 2023 and the end of June 2024:

Activity 1: Consortium Development and Activation – To engage the Consortium in regular meetings to establish a vision, mission, goals, and objectives of the Consortium, as well as to refine the key focus areas of intended outcomes: workforce development, technology commercialization, and economic growth of the region/state. To also identify programming that lines up with Consortium Strategy.

Activity 2: Strategic Planning and Focus Group Development – To develop a *Community Benefits Plan* focused on workforce development, equity and inclusion, sustainability, and long-term community building tactics. To develop a *Technology-Based Economic Development Strategy and Implementation Plan* and better create a vision for the Lansing region as it applies to competitive advantages in advanced materials.

Activity 3: Preliminary Engineering Report - To develop a *Preliminary Engineering Report* based on EDA guidelines, allowing the MARS Consortium to better determine the feasibility of proposed projects within the Implementation Plan and based on the Economic Development Strategy.

Activity 4: Grants Management – To comply with EDA grant requirements including reporting, disbursements, check-ins and technical assistance sessions with EDA project officers and program staff, and other activities as needed.

These programs will serve as a force multiplier to transition advanced materials technologies upward in Technology Readiness Levels and build regional and national capacity to commercialize and domestically manufacture advanced materials and the applications that rely on them. The end result will position the Lansing region to be a nationally and globally recognized hub for advanced materials manufacturing. For more information please contact Jeff Smith at (517) 353-9268 or email jothum@msufoundation.org

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