

**SUBMITTED BY: EZEMENARI M. OBASI, PH.D., VICE PRESIDENT FOR RESEARCH & INNOVATION**

**UNIVERSITY SUBAWARD FROM A COMPANY WHICH IS  
PARTIALLY OWNED BY A  
COLLEGE OF ENGINEERING FACULTY MEMBER**

**RECOMMENDATION**

The Administration recommends the Board of Governors authorize the President or her designee to contract with Signal-Wise, LLC to further develop intellectual property F-VAC (Forced-Vibroacoustic Component) Analysis. This contract will be to perform services under a National Science Foundation Small Business Technology Transfer Program Phase I entitled, "*AI- and Laser-assisted Targeted Noise Control.*"

**Background**

This NSF STTR Phase I project awarded to Signal-Wise, LLC, owned by Sean Wu, Ph.D., distinguished professor of Mechanical Engineering at Wayne State University, will produce a disruptive technology that enables engineers to perform targeted suppression of unwanted structure-borne sound radiation, much like a surgeon performing a complex procedure on a patient with a much higher precision, flexibility, and control than conventional techniques. It enables engineers to identify the precise location to enhance stiffness, damping, mass, etc. without redesigning the entire structure and increasing the weight, making a structure quieter and lighter. Using this new technology, engineers will be able to drastically cut production cycles, slash production costs, meet the target milestones, enhance the competitiveness, and increase the profitability for U.S. manufacturing industries, especially the auto industry.

Michigan Conflict of Interest law requires specific sunshine procedures in order for a University employee, or a company owned by a University employee, to contract directly or indirectly with the University:

- (A) The employee must disclose any pecuniary interest in the contract to the Board and the disclosure must be made a matter of record in the Board's proceedings.
- (B) The contract must be approved by a vote of not less than two-thirds of the full membership of the Board in open session.
- (C) The Board's minutes must report:
  - (i) The name of each party involved in the contract.
  - (ii) The terms of the contract, including duration, financial consideration between the parties, facilities or services of the public entity included in the contract, and the nature and degree of assignment of employees of the public entity for fulfillment of the contract.

- (iii) The nature of any pecuniary interest.

If the Board approves this Recommendation, the minutes will report as follows:

The Board of Governors authorized the President, or her designee, to enter into a contract with Signal-Wise, LLC totaling \$83,000.00 to Wayne State University.

- (i) The parties involved in the contract are Wayne State University and Signal-Wise, LLC.
- (ii) The contract will provide:
  - a. Scope: Test facilities and equipment at the Acoustics, Vibration, and Noise Control (AVNC) Laboratory in the College of Engineering at Wayne State University will carry out the R&D activities required by the NSF STTR Phase I project.
  - b. Duration: The contract will have an initial term of twelve (12) months, with an estimated start date of May 1, 2024.
  - c. The place used to execute these experiments will be the AVNC Laboratory through the research team led by Dr. Sean F. Wu, distinguished professor of mechanical engineering at Wayne State University.
- (iii) The pecuniary interest is based on that Professor Wu ownership of Signal-Wise, LLC. Professor Wu's share of Signal-Wise, LLC is 100%. Dr. Wu will therefore have the potential to financially benefit from the commercial success of the company. Dr. Wu has filed a Financial Conflict of Interest with the Office of Research Integrity.