

Air Force Awards 2-Year additional MURI Funding to ASU

The Department is pleased to congratulate MAE Professor Aditi Chattopadhyay on approval of the optional two years for her Multidisciplinary University Research Initiative (MURI) program on structural health monitoring. The MURI project is funded by the Department of Defense (Office of the Secretary of Defense -OSD) and administered by the Air Force Office of Scientific Research (AFOSR). Dr. Victor Giurgiutiu of the Aerospace, Chemical and Material Sciences Directorate (NA) at AFOSR is the Program Manager of the ASU MURI project. The renewal brings the total amount of funding to \$6 million over five years.

Dr. Aditi Chattopadhyay, Director of the Adaptive Intelligent Materials & Systems (AIMS) Center and Professor, School of Mechanical and Aerospace Engineering, is the Principal Investigator for the MURI. Dr. Chattopadhyay's Co-Principal Investigators are Dr. Antonia Papandreou-Suppappola, Professor, School of Electrical, Computer and Energy Engineering, and Dr. Pedro Peralta, Associate Professor, School of Mechanical and Aerospace Engineering.

The MURI awards often offer greater sustained support for the education and training of students pursuing advanced degrees in science and engineering fields critical to DoD, as well as for associated infrastructure such as research instrumentation. This grant award supports research efforts at the Ira A. Fulton School of Engineering. Professor Chattopadhyay's team is working to develop robust structural health monitoring and damage prognosis techniques for metallic aerospace systems.

The goal is to make a major advance in the ability to provide reliable life cycle estimates for current and future aircraft systems. Research concentration areas of the MURI team include development of damage diagnosis and prognosis technique through the introduction of a hierarchical framework of sensor data, information management, models and algorithms that span and integrate scales from microstructure to structural level. The interdisciplinary research team has specific expertise in material, structural, mechanical, electrical and systems engineering and with extensive experience in interdisciplinary collaborative research projects under DoD sponsorship. To ensure Air Force relevance, the team has engaged AFRL personnel to help identify crucial issues; the team is pursuing collaborations with DoD laboratory personnel during the project to optimize the understanding of crucial challenges, the use of available test data, and the likelihood of transitioning results from the project into DoD practice.