



Air Force Research Laboratory | AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

PROPULSION SCIENTIST NAMED SEM FELLOW



The Society for Experimental Mechanics (SEM) selected Dr. Chi-Tsieh (Jimmy) Lui (left), the Propulsion Directorate's recognized expert in solid rocket propulsion, as an SEM Fellow. Mrs. Lui (center) was on hand as Dr. Arun Shukla (right), President of the SEM and Dean of the Engineering School at the University of Rhode Island, presented the award.

The SEM annually selects individuals as Fellows who distinguish themselves in some field in which the society has interest, who are members of the society for at least 10 consecutive years, and whose contributions to the society and the technical community justify this honor. SEM, an international society established in 1943, has selected 101 Fellows since 1975.



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Accomplishment

SEM selected Dr. Liu as a Fellow for his distinguished work and expertise in the fields of solid rocket propellant fracture mechanics and service-life predictions. Within the solid rocket propulsion world, Dr. Liu is the expert that the Department of Defense and industry request for assessments and answers.

Background

Dr. Liu, a retired directorate researcher, is an Intergovernmental Personnel Act (IPA) appointee to the directorate's Propulsion Material Applications Branch. His appointment in 2001 is through the Material Technology Center of Southern Illinois University at Carbondale. The IPA program enables the government to utilize the expertise of professionals in many fields.

The initiation as a SEM Fellow adds to Dr. Liu's prestigious list of awards. Among them is one of the Air Force's top research awards, the Harold Brown Award, named for the former Secretary of the Air Force who later served as the Secretary of Defense. This award, presented by the Air Force chief scientist's office to researchers who have made a substantial improvement to the operational effectiveness of the Air Force, recognizes significant achievements in research and development.

Dr. Liu received the Harold Brown Award for his research in solid rocket propellant behavior and service-life predictions. Dr. Liu's research enabled and validated measures used to improve the lifetime of space boosters, Intercontinental Ballistic Missiles, and tactical missiles, preventing launch delays and replacement costs and saving the nation at least \$100 million.

Propulsion
Awards and Recognition

Additional information

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