

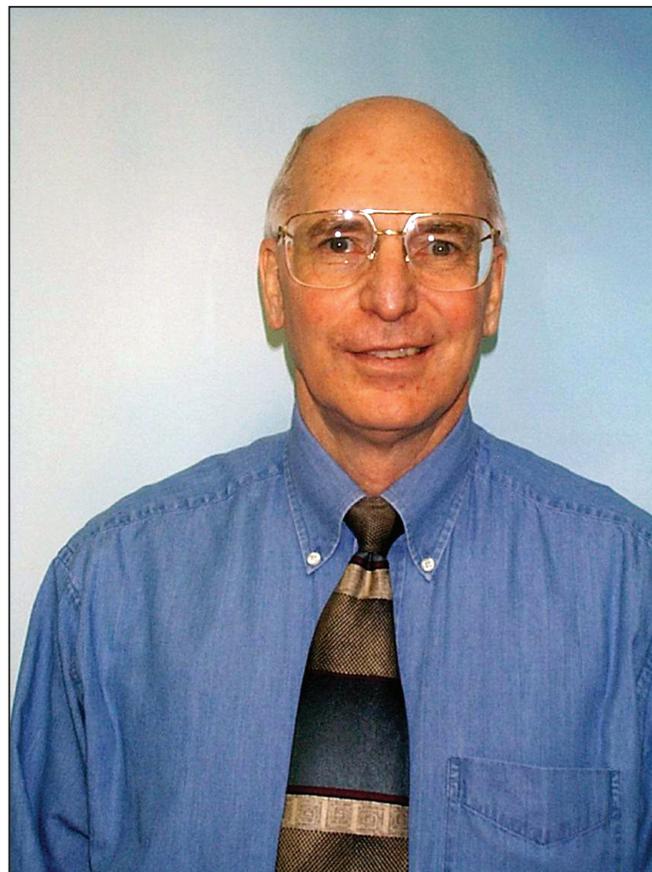


Air Force Research Laboratory | AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

PROPULSION SCIENTIST WINS PRESTIGIOUS AIAA AWARD



The American Institute of Aeronautics and Astronautics (AIAA) is the world's largest professional society devoted to the progress of engineering and science in aviation, space, and defense. The AIAA award honors outstanding technical contributions to aeronautical or astronautical combustion engineering.



Air Force Research Laboratory
Wright-Patterson AFB OH

Accomplishment

Dr. Melvyn Roquemore, senior combustion scientist in the Propulsion Directorate, was recently named an AIAA Propellants & Combustion Award winner. The AIAA honors aerospace engineers and scientists for making notable contributions to the arts, sciences, or technology of aeronautics and astronautics. Dr. Roquemore was recognized for his many groundbreaking achievements during a distinguished 38-year Air Force career.

Background

Dr. Roquemore devised novel concepts like the trapped vortex combustor and the interturbine burner. These concepts increased the operating limits and power output of advanced gas turbine engines and pioneered the development and application of advanced combustion laser diagnostics. He also guided the technical effort resulting in the fielding of JP-8+100 fuel, which reduced the maintenance of gas turbine engines, and was responsible for fostering the development and use of computational fluid design models that reduce the time and cost of developing new combustion systems.

Dr. Roquemore directs experimental and computational research in fundamental combustion and jet fuel thermal stability processes. He also directs the development of laser diagnostics and advanced combustor concepts. Dr. Roquemore authored more than 150 papers and has lectured at universities and symposiums all over the world.

Propulsion
Awards and Recognition

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (04-PR-02)