భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

Seminar on

An overview of research activities at FCAAP/FAMU-FSU College of Engineering

Agenda

- Overview of aerospace research at Florida Center for Advanced Aero-Propulsion
- Flow behavior and shear layer formation during weapons bay operation
- Turbulence and acoustic instabilities in the cavity environment
- Impact of unsteady flow on pressure fluctuations and store separation

Speaker

Prof. Rajan Kumar, Professor and Chair of Mechanical and Aerospace Engineering,
FAMU-FSU College of Engineering,
Florida State University

Date & Time

09-09-2025,11:00-12:00, Conference room – 102, MAE

Brief Bio

Dr. Kumar's research interests are high-speed experimental aerodynamics, vortex-dominated flows, hypersonic flows, and hybrid flow control. Dr. Kumar has 30+ years of combined R&D experience at National Aerospace Laboratories and Florida State University. At the national lab, Dr. Kumar worked on several projects involving projectile aerodynamics, high-angle-of-attack aerodynamics, and high-speed weapon integration programs. At FSU, he worked extensively on unsteady aerodynamics involving flow and noise control, inlet aerodynamics, cavity flows, separated flows, and flow diagnostics. Dr. Kumar led the design, development, and commissioning of a polysonic wind tunnel at FSU. Dr. Kumar has been a faculty advisor for 10 post-doctoral, 20+ Ph.D., 20+ MS, and 100+ undergraduate students. He has published 130+ technical articles in major aeronautical and aerospace journals and conference proceedings. His research has been supported by ARO, AFOSR, ONR, AFRL, NASA, NSF, DOE labs, UCAH, Lockheed Martin, Northrop-Grumman, FAA, and multiple DoD SBIRs and STTRs.