

Dr. William Cousins **Fellow, Compression System - Operability**



Biographical Profile

William Cousins, Ph.D., is Fellow, United Technologies Research Center (UTRC), where he ensures the highest standards of technical excellence in turbomachinery design tools and testing methods are available to identify and realize business opportunities that will advance the innovation mission of UTRC. Specifically, Cousins provides leadership in project execution, technical direction, identification of strategic opportunities, leveraging of external relationships and staff technical guidance and mentoring.

Cousins joined UTRC in 2011 to support ongoing programs in the centrifugal compressor and embedded engine areas, and is currently acting as a principle investigator in the embedded engine program with NASA Glenn Research Center. Previously, he spent 10 years at Pratt and Whitney in the Performance Systems and Analysis Group – initially as an Engineering Fellow for System Operability. He was promoted to the position of Senior Fellow Discipline Lead in the Performance Systems Group in 2004. Cousins started his professional career in 1985 with Garrett Turbine Engine Company (now Honeywell – Engines and Systems) in the area of compression system design and operability.

An active member of the American Institute of Aeronautics and Astronautics (AIAA), American Society of Mechanical Engineers (ASME) and Society of Automotive Engineers (SAE) International, Cousins has sat on the Board of Governors of the ASME, serves as an advisor to the governing board of the ASME International Gas Turbine Institute (IGTI) and is the Director of the aircraft engine committee of the ASME-IGTI. He has published more than 25 peer-reviewed papers and holds 5 U.S. and international patents in the areas of compression system aerodynamics and flow control. Additionally, he serves as adjunct faculty professor at the University of Hartford and Rensselaer at Hartford Graduate Center, Hartford, Connecticut, and is an industry advisor to Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, Virginia, and the University of Hartford.

Cousins earned B.S., M.S. and Ph.D. degrees in mechanical engineering from Virginia Tech with extensive concentration in fluid mechanics and turbomachinery design, operability and stability.