

Professor Robert Frederick is being recognized as the **UAHuntsville College of Engineering Senior Faculty member** in recognition of his consistent record of achievement in research, teaching and service.

He joined UAHuntsville in 1991 and is currently a Professor of Mechanical and Aerospace Engineering and Interim Director of the Propulsion Research Center (PRC). His research investigates combustion phenomena in solid, liquid and hybrid rocket propellants and has identified important technologies for next-generation missile propulsion. Dr Frederick has served as a Principal Investigator on sixty research projects and has supervised the completion of 70 masters and PhD degrees. For the past two years the PRC has been recognized by *Popular Science* as the “3rd most awesome university laboratory in the nation.”

Dr. Frederick’s contributions to education have been recognized by the **UAH Foundation Award for Distinguished Teaching**. He pioneered the UAHuntsville Integrated Product Teams Senior Design Laboratory and led the effort for 15 years. This course integrates students and industry mentors from engineering, liberal arts, and business into design teams and provided outreach to K-12 students. Dr. Frederick also developed an undergraduate aerospace propulsion laboratory that provides hands-on experience in air breathing and rocket propulsion and a graduate course in advanced solid rocket propulsion that incorporates archived lectures by 14 world-class experts.

Dr. Frederick served as Interim Chair of the Mechanical and Aerospace Engineering Department in 2011. He is an Associate Fellow of the AIAA and a member of the American Society of Engineering Educators. He has been the national chairman of the AIAA Hybrid Rocket Technical Committee, and the U.S. representative to a NATO Advisory Group on solid rocket propellants. He currently serves on NASA’s National Institute of Rocket Propulsion Systems.

Professor Jeff Evans is being recognized as the **UAHuntsville College of Engineering Junior Faculty member** in recognition of his outstanding contributions in both research and teaching.

Dr. Evans joined the Department of Mechanical and Aerospace Engineering as an assistant professor in 2008. His experience and interest is in understanding the failure of materials through investigating the mechanisms of fatigue, fracture, and corrosion. Dr. Evans was recently selected to further these studies through a National Science Foundation Faculty Early Career Development (CAREER) Award. Dr. Evans has also received the Keith J. Miller Young Investigator Award from the ASTM Committee on Fatigue and Fracture in 2010. He currently supervises nine graduate students and teaches undergraduate courses in the materials engineering area and graduate courses that include Engineering Failure Analysis and Fracture Mechanics. Dr. Evans has published 16 scientific papers in journals such as *Engineering Failure Analysis* and in national and international conferences. Dr. Evans is an active member of the High Temperature Alloys Committee of the Minerals, Metals and Materials Society and the ASTM Committee on Fatigue and Fracture. He is also a member of the ASM International and the American Society of Mechanical Engineers and is a licensed professional engineer.

Professor Hugh Coleman is being recognized with the **UA Huntsville College of Engineering Lifetime Achievement Award**.

He is an internationally known authority in the field of uncertainty analysis of experimental data and validation techniques for computational modeling. Dr. Coleman joined UAHuntsville in 1991, held the Eminent Scholar Chair in Propulsion for two terms, and received both the UAH Foundation Research Award and the Student Government Association Most Outstanding Teacher Award. Prior to coming to UAHuntsville, he was a technical staff member at Sandia National Laboratory, and later held the Giles Distinguished Professorship as a faculty member at

Mississippi State University. During his career, Dr. Coleman has mentored 9 Ph.D. graduates, numerous Masters students, and published 60 articles in refereed archival journals in the areas of rocket propulsion, turbulent boundary layer fluid mechanics and heat transfer. He is a Fellow of ASME and served as an Associate Technical Editor for the *Journal of Fluids Engineering*, chairman of the ASME Fluid Mechanics Technical Committee, chairman of the ASME Fluids Engineering Division, and chairman of the ASME Standards Committee which developed and published the standard *Verification and Validation in Computational Fluid Dynamics and Heat Transfer* in 2009. He and his co-author, Glenn Steele, received the 2004 AIAA Ground Testing Award in recognition of their contributions including their textbook, *Experimentation, Validation, and Uncertainty Analysis for Engineers*, and the associated short course of the same name which they have presented over 90 times in the U.S., Canada, Europe and South America.