



Special Issue Introduction

Today there is a strong need for using advanced technologies to develop the state-of-the-art ultra light more efficient unmanned aircraft and missile systems. It requires integration of artificial intelligence and embedded systems in the modern designs. Experimental test facilities like trisonic wind tunnels, high altitude and arc-jet test facilities for high temperature material characterization etc. are needed. World-wide research on aircraft structures, design and analysis of aeroengine rotors, combustion phenomena and computational simulations as well as guidance and control issues are to be discussed in various research forums through-out the country to give more practical awareness among academic and industrial environments. Aerodynamics is now moving towards an interdisciplinary era that encompassing the topics such as rotordynamics, material science and metallurgy, control system and nonlinear structural engineering as well as fluid-dynamics.

In this line, a small attempt is made to provide a platform for discussing the various on-going research issues relating to modeling and analysis of such systems. This conference assimilates the latest developments in the field of aerodynamic systems and promotes interdisciplinary understanding of aerospace systems, underlying science and technology and their application to government and commercial endeavors. We received several technical papers relating to conference theme. After a preliminary scrutiny, they were classified under four headings: material issues, design of aircraft structures, aeroengine rotor dynamics and miscellaneous issues relating to aircraft components. I hope this event will enlighten the participants and authors in sharing various ideas relating

(Convener, AMAAS 2013)

