

Preface

Designs and developments are the aspirations of tomorrow's technologies for the aero as well as the auto industry to be alive in the competitive world where cost-effective solutions, improvements in greenhouse environment, longevity/life cycle, eco-friendly materials and manufacturing, certification, and government legislation demands are becoming stringent. Whether it is aerospace or automotive, the pulse and echo are similar in meeting the expected performances in air or on the road, respectively. Both the industries have come to symbolize the essence of a modern industrial society. Perhaps more than any other single icon, it is associated with a desire for independence and freedom of movement, an expression of economic status. For the next decades, they are marching toward new concept designs, analysis and manufacturing technologies, where more swing is for improved performance through specific and/or multi-functional linguistic design aspects to downsize the system, improve weight-to-strength ratio, fuel efficiency, better operational capability at room and elevated temperatures, reduced wear and tear, NVH aspects while balancing the challenges of beyond Euro IV emission norms, greenhouse effects, and recyclable materials.

The conference aims to address these issues of tomorrow where academia—industry—R&D partnerships, and collaborative programs can be shared and implemented.

The organizers of the *International Conference on Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering* (IDAD 2014) wish to provide a platform for deliberations on Design Engineering, Numerical Methods, Analysis/Optimization Techniques, Life Cycle Engineering, System Engineering, Configuration Managements, Advanced Materials, Novel Manufacturing/Prototyping, Vibration and Health Monitoring, Propulsion System and Quality and Reliability in the Aerospace and Automotive Field. The response to the conference was overwhelming on both national and international fronts. The submitted papers were reviewed by renowned experts in the field.

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