



Gas Turbines Propulsion and Power

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Message from the Guest Editors

Dear Colleagues,

Gas turbines engines are extensively used in aviation because of their advantageous volume and weight characteristics. The engines are designed to offer cost-effective features such as high efficiency, reliability and availability. Understanding their aero-thermodynamic performance is a prerequisite for many developments in their cycle, components' design and maintenance techniques. Modelling and simulating the jet engine at a preliminary design phase is very important for minimizing the development cost and optimizing its performance. This goal calls for new tools and techniques for assessing engine's performance under a variety of configurations, alternative fuels or/and fluid flows. Variable geometry engines, open rotor and high by-pass turbofan are examples of different configurations. Particulate or multiphase flows such as water droplets and sand particles have an effect on engine's performance. Understanding engine's operation at a preliminary design phase is essential for any development.





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Message from the Editor-in-Chief

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