

## Special Issue on **Advances in Aeroengines Technology**

# CALL FOR PAPERS

With the inevitable increase in fuel prices and mounting environmental restrictions, the aviation industry is under pressure to decrease both the operating cost of aircraft and their environmental footprint. Significant improvements in aircraft engine technology are indispensable in addressing these challenges. Gas turbine engine technology has greatly evolved from its inception in the 1930s and will likely remain the basis of aircraft propulsion in the near future. Large reductions in engine fuel consumption, noise, and NO<sub>x</sub> emissions were achieved in the decades following the introduction of gas turbine technology to commercial aviation. However, further improvements have become harder to achieve as the technology matures. Major advances in gas turbine aeroengine technology will be required to provide a step improvement in operating economics and environmental impact for the next generation of aircraft engines.

The aerodynamics and aerothermodynamics associated with aircraft engines have always been arguably the most complex aspect of aeronautics. They constitute a rich and challenging area of research for academics and engineers in which technological advances are key to major improvements in aeroengines. As such, this special issue aims to highlight the latest studies in gas turbine technology that can provide a step improvement in aeroengine performance. Topics of interest include but are not limited to the following: active and passive flow control, methods in aeroelasticity and aeroacoustics, noise reduction technology, low-emission combustor technology, novel propulsion configurations and conceptual design optimization, propulsion system performance integration, novel measurement techniques, and advanced diagnostics/prognostics and control. High original research articles as well as review articles which describe the current state of the art are also welcomed.

Potential topics include but are not limited to the following:

- ▶ Intake technology
- ▶ Compressor and fan aerodynamics
- ▶ Combustor technology
- ▶ Turbine and nozzles aerothermodynamics
- ▶ Innovative aeroengine cycles/configurations and system performance

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ijae/aaet/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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### **Submission Deadline**

Friday, 8 December 2017

### **Publication Date**

April 2018