



Aero-Engines: A Quest for Lower Fuel Burn and Reduced Emissions

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Message from the Guest Editor

This Special Issue will cover two objectives:

1. It covers the quest for lower TSFC (or SFC). The new aero-engine cycles and related organization and architecture will be studied in detail, with focus on the different components that must be improved and vastly updated compared with the current aero-engine sub-systems. The Special Issue will go through the innovations needed in the design of the cowls and nacelles, fan blades for UHBPR engines, gearboxes of GTF engines, high-speed boosters, ultra-high pressure ratio's, and high speed LPT design, but also of the high-speed propellers with aft-mounted counter-rotating blade rows as open rotors (or unducted fans) or more classical propfans.
2. It covers the technological development required to reduce emissions of aero-engines: lower greenhouse gas emissions, lower NO_x, or new fuels as synthetic fuels or hydrogen, but also to reduced noise emissions at take-off and landing and during the climb.





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Message from the Editor-in-Chief

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