



## Life Cycle Modeling of Aircraft Propulsion Systems

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### Message from the Guest Editor

Dear Colleagues,

Life cycle modeling of aircraft propulsion systems is a key ability in the fields of aircraft propulsion system design, engine selection, fleet management, flight mission and maintenance planning, development of engine repair technologies, as well as spare part logistics. As one manifestation of whole system modeling, it involves abilities such as engine performance and controls, performance and structural deterioration modeling, modeling the effect of ingested fluid and solid particles, as well as modeling the aging of engine structures. A key aspect is the complex interaction of the deterioration mechanisms that leads to specific patterns of propulsion system deterioration. Consequently, it requires scientific methods with a wide range of spatial and time resolution.

Prof. Dr. Stephan Staudacher  
*Guest Editor*





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