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Advancement in Computational Fluid Mechanics and Optimization Methods

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Message from the Guest Editors

Computational fluid dynamics (CFD) is currently one of the most advanced and still-developing engineering tools. Transient flows around an airfoil at a large angle of attack, and complex flows in rotating machines are still a challenge for this approach. An interesting issue is combining CFD with the dynamics of construction. It can be used for the dynamics of both a rigid and deformable body. Knowing that CFD tools are getting better and better at being able to calculate the flow around an airplane or turbine in moderate angles, this makes an excellent opportunity for optimizing the shape of the wing, as well as the flight trajectory of the object.

This Special Issue on "Advancement in Computational Fluid Mechanics and Optimization Methods" focuses on the following issues:

- CFD fundamentals
- The use of CFD in renewable energy sources
- Dynamic stall
- Modeling of turbulence
- CFD applications in aeroelasticity
- Control and optimization methods

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Message from the Editor-in-Chief

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