Special Issue on
Advances in Fluid Dynamics of Turbomachinery

CALL FOR PAPERS

Turbomachinery has found wide applications in petrochemical industries, power engineering, ventilations, and many other fields. The demand for high performance turbomachinery and related new applications is always the motivation for the development in analyzing the complicated internal flows, reducing noise emission level, and altering or controlling the characteristics. In recent years, much progress has been made with regard to advanced optimization algorithms, gas-solid or gas-liquid complex flows, and new types of turbomachinery.

We invite researchers and scientists to contribute their original research articles as well as review articles that will stimulate efforts to optimize the aerodynamic design via new models or algorithms, to address the challenges inherent in turbomachinery by developing new theories or proposing new engineering concepts, and to minimize the energy losses by using active or passive control approaches. We are also interested in articles addressing advanced methods and practical applications for energy-saving and emission reduction in the industry.

Potential topics include but are not limited to the following:

- Recent advances in aerodynamics, aeroacoustics, noise reduction methods, and noise testing technologies in fans, compressors, pumps, and wind turbines
- Multidisciplinary design and simulation optimization methods
- Experimental studies on internal flow fields of turbomachinery
- Design and retrofitting for special purpose, ultra-large, or ultra-small turbomachinery units
- Technology discussions on related international standards in turbomachinery
- Reviews: summary, conclusion, discussion on the background, research state of the art, and development trend of certain technology of turbomachinery which is of great research value

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/ijrm/atdc/.

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

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