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Thermodynamics of Non-Equilibrium Gas Flows

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Non-equilibrium gas flows exist in many industrial applications and scientific research facilities, including mass spectrometry, low-pressure environments, vacuum pumps, micro-electro-mechanical systems (MEMS), high-altitude vehicles, and porous media. A comprehensive understanding of the thermodynamics of non-equilibrium gas flows is essential for the design and operation of application systems, which are beyond the capabilities of conventional thermodynamics. These flows in engineering applications cover a wide range of time and length scales and represent a fundamental modelling and simulation challenge.

This Special Issue aims at collecting original papers on theoretical, computational and experimental studies of non-equilibrium, low- and high-speed gas flows with the goal of providing readers with an overview of the current research conducted in this field and the possible applications.

Dr. Xiaojun Gu
Guest Editor



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Special Issue



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Message from the Editor-in-Chief

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