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Advances in Aerodynamics of Railway Train/Tunnel System

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Deadline for manuscript submissions:
closed (31 August 2023)

Message from the Guest Editors

Dear Colleagues,

With the continuous development of subways, high-speed trains, and Maglev, associated aerodynamic issues have attracted extensive concern from both engineers and scientists. Aerodynamic drag is critical for the running efficiency of high-speed train/Maglev, while the unsteady lateral and lift forces directly threaten its running stability and safety. The slipstream around an operating train induces a significant impact loading on trackside structures and persons. Besides, the aeroacoustics caused by an operating train is also an environmental threat. All of these issues become extremely complex when the train runs through a tunnel. Recently, new experimental and numerical simulation techniques were successfully applied in train aerodynamics and produced valuable results.

The Special Issue of the journal Applied Sciences, entitled "Advances in Aerodynamics of Railway Train/Tunnel System", aims to attract novel contributions covering a wide range of research on train aerodynamics.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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