Special Issue

CFD Modelling of Air Pollutant Dispersion and Inverse Source Reconstruction

Message from the Guest Editors

The contributing papers are those discussing the following subjects:

- Original or review papers on the issue of air pollutant dispersion or inverse source reconstruction using CFD modeling approaches
- Advancement of the CFD models, evaluation of the numerical accuracy, new methods and parameterizations for CFD modeling of the air pollutant dispersion
- Turbulence modeling in CFD for atmospheric dispersion
- Inversion methods and data assimilation techniques for atmospheric source reconstruction in complex urban environments
- Modeling the atmospheric boundary layer (ABL) using CFD models and atmospheric dispersion in various atmospheric stability
- Validation of the CFD modeling approaches with experimental observations for air pollutant dispersion and inverse source reconstruction
- Comparison of different CFD modeling approaches for atmospheric dispersion, uncertainties analysis of the CFD approaches in the general framework, in model physics, initial and boundary conditions, input data, and other components of the CFD models and tools to minimize these uncertainties

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2019)

Atmosphere

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Impact Factor 2.5
CiteScore 4.9

mdpi.com/si/25099

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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