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Wake Flows and Air Quality in the Atmosphere

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Deadline for manuscript submissions:

closed (1 March 2020)

Message from the Guest Editors

Dear Colleagues,

In the present Special Issue, we are interested in this topic in the context of air quality. The expected contributions should include recent experimental (in situ, wind tunnel, etc.) and modeling (CFD, analytical) works, techniques, and developments dedicated to the understanding of related wake flows and their interaction with pollutant dispersion and air quality. Topics of interest include but are not limited to:

- Pollutant dispersion in the wake of cars, trains, and buses;
- Wake flow and flow topology applied to transportation systems;
- Interaction between vehicles;
- Pollution around buildings related to air quality;
- Urban flow and street network;
- Chimney and chemical release;
- Boundary layer and interaction with canopy;
- Dispersion modeling;
- Data from new field campaigns in cities and wind tunnel experiments;
- Estimation of pollutant infiltration in cabins and/or dispersion;
- Comparison between CFD models and experiments;
- Particle emissions.











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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!

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