



Advances in Numerical Modeling and Applications in Energy and Environment

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Message from the Guest Editors

Dear Colleagues,

To name a few topics, we draw attention to studies focusing on environmental fluid mechanics involving some combination of numerical simulations, experiments, and theoretical analysis. We welcome topics that include but are not limited to the following:

- Numerical modeling and computational fluid dynamics simulation in environmental fluid mechanics;
- Optimization of parameters in the problems in the fields of environmental science, for instance: air, surface, and subsurface degradation or pollutions, atmospheric environment, buildings, urban and industrial environments, etc.;
- Application of latest developments in renewable energy converters (such as wind, solar, wave) using computational simulations;
- Visualization of complex flow in turbulent regimes;
- Fundamental understanding of thermodynamics/chemical/physical in environmental fluid flows;
- Unique numerical and experimental techniques in buoyancy-driven turbulent flows (bushfire enhanced wind, fire whirl/tornado, columnar or convection vortices, etc.);
- Current challenges in environmental fluid mechanics.





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Message from the Editor-in-Chief

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