Modeling and Numerical Analysis of Energy and Environment 2021

Guest Editor:

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Message from the Guest Editor

Energy and environment are both important topics nowadays in order to sustainably develop our world.

This Special Issue focuses on mathematical modeling and numerical simulation of the energy and environmental systems linked to different applications, such as renewable energy (onshore and offshore wind energy, thermosolar and photovoltaic energy, biomass, etc.), nuclear fusion and study of plasma, shallow water models, water, air or soil pollution, multiphase flows or energy balance models relevant in architecture. The mathematical models involved in those applications include heat and mass transfer problems, Navier–Stokes models, magneto-hydrodynamic (MHD) equations, Euler equations for gas dynamics, shallow water models or advection–reaction–diffusion equations, to name a few. With the aim of solving mathematical models, numerical schemes based on finite volume methods, finite element methods, finite difference techniques and the discontinuous Galerkin approach are interesting for this Special Issue.

Special Issue

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Message from the Editor-in-Chief

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