

Special Issue

Advances in Modelling for Nuclear Science and Engineering

Message from the Guest Editor

Computer models have played a central role in assessing the functioning of nuclear power facilities for decades. They have ensured that nuclear operations are efficient, but also safe to both the public and the environment. The field of nuclear engineering is complex and multi-physics in nature, spanning the fields of neutron transport, thermal hydraulics, structural mechanics, heat transfer, and chemistry. Robust, accurate, and validated models are essential to the areas of reactor design, operation and procedure analysis, fuel optimization, and lifetime extension, among others. Nuclear engineering research has been a significant contributor to the field of numerical analysis and modeling by advancing areas in predictive multi-physics modeling, sensitivity and uncertainty quantification, high-fidelity discretizations, reduced-order models, artificial intelligence, and HPC. This Special Issue aims to bring together studies describing recent advances in modeling methods for all areas in nuclear engineering applications. We welcome contributions from academia and industry in the aforementioned fields.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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