Special Issue

Advances in Simulation and Numerical Model of Nuclear Fuel Safety

Message from the Guest Editor

The nuclear fuel cycle is a complex process, covering the steps of fuel life from uranium/thorium mining, uranium enrichment, fuel element manufacture, fuel burning in the core, and spent fuel processing to the final disposal of spent fuel. Accident analysis and experiments of nuclear fuel cycle reactors have become paramount for reactor systems' design and license application. As computing technologies constantly improve, reactor safety analysis approaches real accident conditions with little approximation and can provide more reliable accident assessments. Presenting these latest advances in the nuclear industry would provide a valuable reference for scholars involved in research in the nuclear industry. In this Special Issue, potential topics of interest include, but are not limited to, the following:

- Accident modeling and analysis of the nuclear fuel cycle;
- Nuclear safety computing codes development, validation, and application;
- Accident probability analysis for micro-nuclear reactors and small modular nuclear reactors;
- Safety analysis in advanced U-Pu and Th-U nuclear fuel cycle;

Guest Editor

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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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