



## Perspective of Nuclear Engineering in XXI Century

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### Message from the Guest Editors

Nuclear energy, as a vital component of the world energy mix, plays an important role in medicine, industry, science, food and agriculture, as well as power generation. In the current century, according to public perception, the nuclear industry faces huge, very complex issues; the main one is the need to minimize risk and improve reliability, while data-driven investigations prove that the viability and availability of this technology should not be ignored. Concerns about climate change and air pollution, as well as a growing demand for electricity, have led many decision makers to reconsider their aversion to nuclear power, which emits little carbon dioxide and has built up an impressive safety and reliability record. Some countries reversed their phase-outs of nuclear power, some extended the lifetimes of existing reactors, and many developed plans for new ones. This Special Issue includes, but is not limited to

- Nuclear Fuel and Reactor Physics
- Thermal Hydraulic and Fluid Dynamics
- Structural and Material Analysis
- Safety and Risk Assessments
- Fuel Cycle and Radioactive Waste Management
- Stability and Reactor Control Design





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