

Special Issue

Nuclear Power Instrumentation and Control

Message from the Guest Editors

Nuclear power plants are clean, baseload power sources. While intermittent renewable energies, such as wind and solar energy, are strongly dependent on geographical location, climatic conditions and a large land footprint, nuclear plants are able to provide a consistent, clean power supply with a small land footprint. Nuclear power practices have been adapted over the years to balance the supply and demand of power, and are able to increase nuclear renewability, offering significant support for the realization of worldwide carbon neutrality. Instrumentation and control (I&C) is a key technology that is used to enhance the stability, reliability and efficiency of nuclear plants by providing advanced functions, such as plant coordinated control, smart measurement, reliable protection, control optimization, as well as sufficient monitoring, diagnosis and prognosis. By developing advanced I&C techniques, the operating cost of nuclear power plants can be further reduced, which is significant for strengthening the economic competitiveness of nuclear power.

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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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