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Advances in Nuclear Energy: Recent Progress on Thermal Hydraulics in Nuclear Reactors Multiphysics Applications and Coupling Schemes

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Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

The accurate prediction of nuclear thermal hydraulics behaviour is a fundamental, but important issue for nuclear reactor design and safety analysis. Comprehensive high-fidelity thermal hydraulics modelling is a powerful numerical tool for detailed analysis of current and advanced reactor designs. Moreover, thermal hydraulics usually couples with other physical fields, such as neutronics, mechanics, chemistry, etc., leading to a comprehensive large-scale nonlinear system. This is still a challenging task in the nuclear engineering community. With the development of computational capability, there has been exponentially growing interest in topics related to advanced numerical methods and tools in thermal hydraulics modelling and its coupling problems to pursue a realistic description of the physical behaviour without conservative assumptions.

This Special Issue invites all researchers on nuclear reactors to share their latest and significant achievements and promote development in the area of thermal hydraulics and multiphysics coupling modelling.

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Message from the Editor-in-Chief

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