NUCLEAR ENGINEERING AND DESIGN
An International Journal devoted to all aspects of Nuclear Fission Energy

AUTHOR INFORMATION PACK

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DESCRIPTION

_Nuclear Engineering and Design_ covers the wide range of disciplines involved in the engineering, design, safety and construction of nuclear fission reactors. The Editors welcome papers both on applied and innovative aspects and developments in nuclear science and technology.

Fundamentals of Reactor Design include:
- Thermal-Hydraulics and Core Physics
- Safety Analysis, Risk Assessment (PSA)
- Structural and Mechanical Engineering
- Materials Science
- Fuel Behavior and Design
- Structural Plant Design
- Engineering of Reactor Components
- Experiments

Aspects beyond fundamentals of Reactor Design covered:
- Accident Mitigation Measures
- Reactor Control Systems
- Licensing Issues
- Safeguard Engineering
- Economy of Plants
- Reprocessing / Waste Disposal
- Applications of Nuclear Energy
- Maintenance
- Decommissioning

Papers on new reactor ideas and developments (Generation IV reactors) such as inherently safe modular HTRs, High Performance LWRs/HWRs and LMFBs/GFR will be considered; Actinide Burners, Accelerator Driven Systems, Energy Amplifiers and other special designs of power and research reactors and their applications are also encouraged.

AUDIENCE

Civil, mechanical and structural engineers working in the fission field; reactor designers.
IMPACT FACTOR

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Development of the TRACE state-of-the-art thermal-hydraulics code, advanced reactor analysis, and the NRC’s thermal-hydraulic test programs. He is currently leading the NRC’s efforts to model and simulate advanced non-light water reactors.

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Nuclear thermal hydraulics, especially CFD, and knowledge on system codes. Performed analyses for a large range of nuclear reactors, ranging from existing LWRs, to all Gen IV type reactors (except GFR) and ADS systems. Particular focus on Liquid metal cooled reactor thermal hydraulics.

Thomas Schulenberg, Karlsruhe Institute of Technology Institute for Nuclear and Energy Technologies, Eggenstein-Leopoldshafen, Germany

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Specializes in: (i)Modeling and analyzing the steady-state and transient behavior of power plants and steam supply systems—pressurized water reactors, boiling water reactors, gas-cooled reactors, and commercial steam supply systems; (ii)Verification and validation (V&V) of advanced thermal-hydraulic (TH) engineering numerical models—both systems analysis and computational fluid dynamics; (iii)Design, scaling, specification, and conduct of thermal-hydraulic experiments; and (iv)Evaluation of user-effect on application of advanced thermal-hydraulic software and best-estimate plus uncertainty techniques applied to advanced thermal-hydraulic software.

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INTRODUCTION
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