

W19 Molten Salt Reactors: Rethinking the Fuel Cycle

Fluid-fueled molten salt reactors pose new and unique challenges and the associated fuel cycle is no exception. This session will highlight the unique attributes of the molten salt reactor fuel cycle, both at the front and back ends. Technical issues and considerations related to the management of molten salt reactor salt fuels before reactor operations, including activities related to fresh fissile material preparation (enrichment and fabrication) and transportation to a reactor site, will be discussed. The management of novel waste streams, including gaseous and volatile fission products, and the need to immobilize hygroscopic salt wastes will also be presented.

SESSION CHAIR(S):

- John McKirgan, Deputy Director, Division of Engineering, RES/NRC e-mail: John.Mckirgan@nrc.gov

SPEAKER(S):

- [Introductory Remarks](#)
[John McKirgan](#), Deputy Director, Division of Engineering, RES/NRC
- [Technical Considerations for the Molten Salt Reactor Fuel Cycle](#)
[Raj Iyengar](#), Chief, Reactor Engineering Branch, Division of Engineering, RES/NRC
- [Opportunities and Challenges of MSRs in closing the Nuclear Fuel Cycle](#)
[Patricia Paviet](#), National Technical Director of the Molten Salt Reactor Program, Pacific Northwest National Laboratory
- [MSR's & Closure of the LWR Fuel Cycle: Turning Liabilities into Assets](#)
[Ed Pheil](#), Chief Technology Officer and Founder, Elysium Industries
- [A Regulatory Perspective on the Impact of Molten Salt Reactors](#)

[Melanie Rickard](#), Director, Advanced Reactor Assessment Division, Canadian Nuclear Safety Commission

SESSION COORDINATOR(S):

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