NES Colloquium

Wednesday, 14 Sept. 2016, 11:00 - 12:00, OSGA/EG06

Molten Salt Reactor: sustainable and safe reactor for the future?

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Nuclear reactors operated with liquid fuel have several remarkable advantages and features over reactors operating with solid fuel. The most developed reactor system in this category is the Molten Salt Reactor (MSR).

The intrinsic advantages of MSR are well known and this reactor was as such studied already during the pioneering era. In today's context of a safer and more efficient usage of nuclear energy, the MSR properties make it an ideal candidate for advanced utilization. It features an improved safety with reduced residual risk, an excellent neutron economy for a closed fuel cycle, and the possibility of actinides recycling without fuel fabrication.

The colloquium offers a brief history of the MSR, addresses its advantages, disadvantages and open issues, and presents the related international research and activities at PSI. Specific attention is brought to the inter-laboratory effort initiated within the NES during the past two years.