



NES Colloquium

Wednesday, 30 March 2016, 11:00 - 12:00, OSGA/EG06

LNМ: Laboratory for Nuclear Material

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The laboratory for nuclear materials (LNM) is the Swiss national center of excellence for materials behavior and ageing in nuclear installations. LNM provides material-related academic R&D contributions and scientific services for the sustainability of current and future nuclear installations and for the performance improvement of nuclear research facilities. A special emphasis is given to the safe and long-term operation of the Swiss nuclear power plants by studying material integrity, safety and lifetime. To fulfill its missions, LNM operates a state-of-the-art computing infrastructure to run modeling tools in collaboration with internal and international partners. LNM also strongly benefits from PSI's unique large-scale facilities – Hotlab, SLS, SINQ and SwissFEL – to perform innovative experiments.

The presentation will give an overview of the three LNM research programs: (1) the advanced nuclear materials (ANM) project, which researches candidate materials for Gen-IV systems and for spallation systems (such as the SINQ facility at PSI), (2) the nuclear fuels (NF) project, which looks at fuel and cladding aspects of the current nuclear reactors, and (3) the INTEGER project, which investigates pressure boundary components and reactor internals of the current reactors.