




Technical Session T 7

**Alkali-Silica Reaction (ASR) Degradation
in Nuclear Concrete Structures**

Session Co-Chairs: **Jacob Philip¹** and **George Thomas²**
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Scope of Session:

In this session, speakers will describe current research on the effects of Alkali-Silica Reaction (ASR) degradation on the structural capacity of nuclear concrete structures.

The speakers will present:

- Research to date on ASR effects on structural capacity being conducted at NIST
- The ODOBA concrete degradation research being conducted by IRSN, France.
- Summary of findings on concrete degradation with a focus on ASR at the International Workshop sponsored by OECD/NEA/CSNI
- Summary on ASR research being conducted at EPRI and U.S. DOE



Speakers:

Structural Performance of Nuclear Concrete Structures Affected by ASR- Fahim Sadek, Leader, Structures Group, National Institute of Standards and Technology (NIST), Gaithersburg, MD, USA

IRSN R&D on Concrete Pathologies Issue: the ODOBA Project- Christophe Marquie, Chef de Projet Opérationnel ODOBA et DENOPI, Institut de Radioprotection et de Sécurité Nucléaire (IRSN), France

The OECD/NEA/CSNI CAPS ASCET: Assessment of Structures Subject to Concrete Pathologies - Nebojsa Orbovic, Technical Specialist, Canadian Nuclear Safety Commission (CNSC), Ottawa, Ontario, Canada

On-going research on ASR at EPRI and DOE – Maria Guimaraes, Electric Power Research Institute (EPRI), Charlotte, North Carolina and Yann LePape, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN, USA