

Corrosion Degradation in Light Water Reactors

HBNI - INSTN Joint Course
(December 06 – 10, 2021)

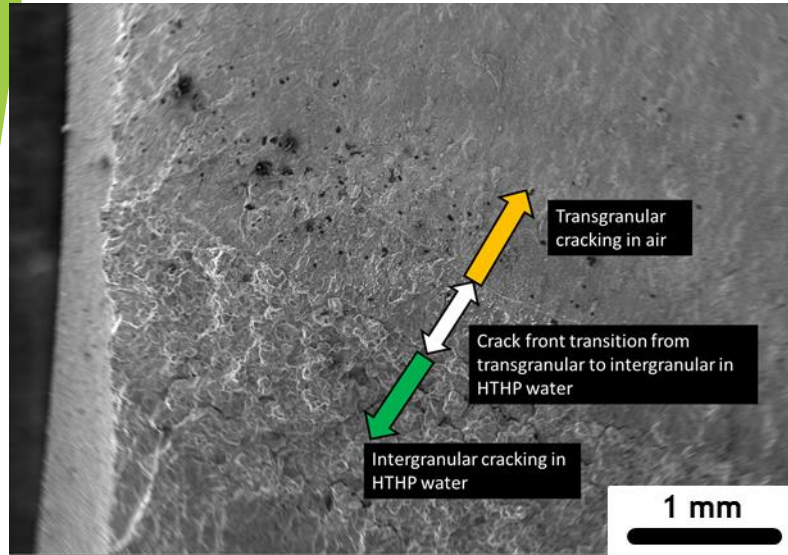
Course content:

- Materials of construction for main components of LWRs
- Introduction to corrosion problems in LWRs, water chemistry
- Stress corrosion cracking of austenitic stainless steels and nickel based alloys
- Intergranular corrosion of nickel based alloys
- Corrosion problems in zirconium alloy cladding
- Flow accelerated corrosion in carbon steel pipelines
- Water chemistry and its control to mitigate corrosion problems

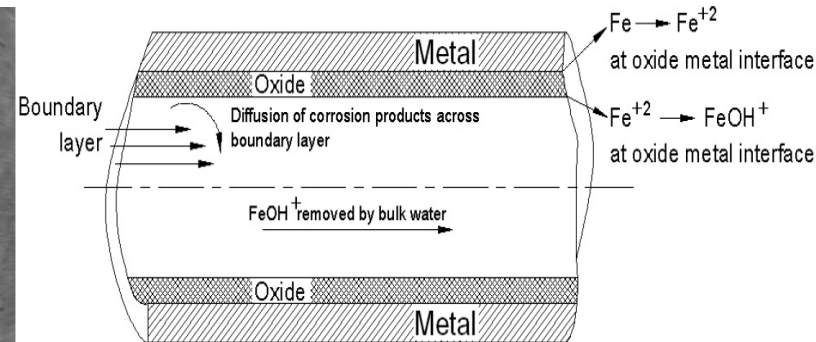
Who should attend?

Basic knowledge of corrosion degradation mechanisms and their mitigation methods covered in standard text books is a prerequisite for the participants. The course covers advanced knowledge and is suitable for the following:

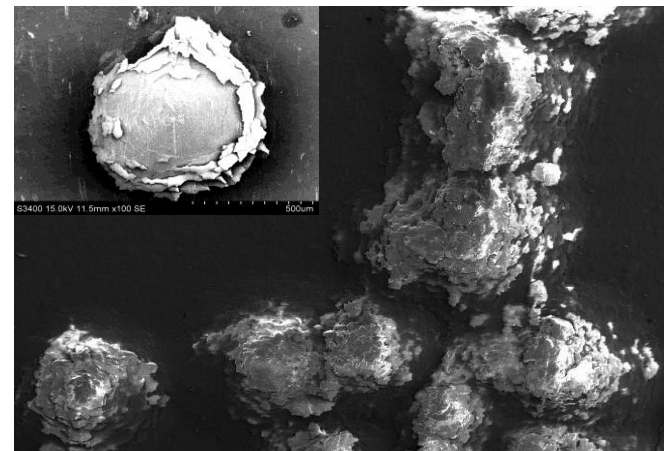
- Students pursuing Masters (2nd year)
- Ph.D. students
- Young Engineers/Researchers



Intergranular Stress Corrosion Cracking in SS 304L in simulated BWR environment



Mechanism of Flow Accelerated Corrosion on CS



Nodular corrosion in Zircaloy



- This course is jointly organised by Homi Bhabha National Institute(HBNI)-DAE, Mumbai, India and National Institute for Nuclear Science and Technology (INSTN)-CEA, France.
- The lectures will be delivered by international experts in the field, in hybrid (Offline + Online) mode, both from INSTN-CEA, France and HBNI-DAE, India.
- The course consists of 27 hours of lectures, spread over 5 days (each day 2 lectures of 3 hours each).
- Examination will be held at end of the course.

Registration Fee:

Participants from CI/OCC of HBNI - NIL

Student participant from any other institution than HBNI - Rs. 1000/-

Participant from other DAE Institutions - Rs. 3,000/-

Participant from Government Institutions other than DAE- Rs. 5,000/-

Participant from a Private Institution - Rs. 10,000/-

The registration fee would cover course material for all participants and tea & lunch for participants attending physically at HBNI.

Last Date of Registration: 30th November, 2021

For details about registration please contact:

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