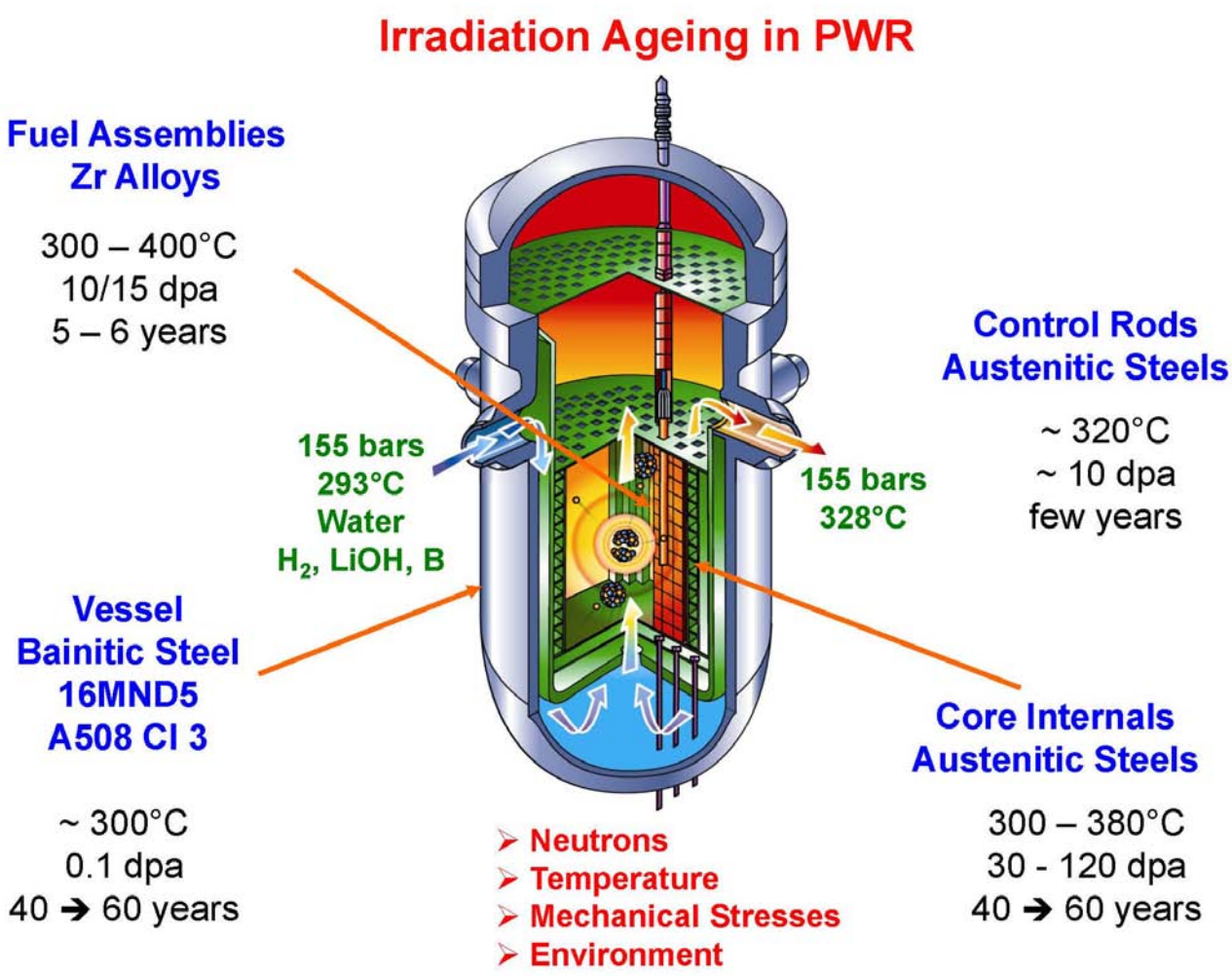
the materials ageing institute

MATERIALS DEGRADATION COURSE FOR ENGINEERS IN THE NUCLEAR INDUSTRY

Offered by:

The Materials Ageing Institute

www.themai.org



JUNE 5–8, 2012

VAIL CASCADE RESORT, VAIL, COLORADO, USA

This is the third offering of a successful course that has been given at the MAI in France since 2010 and by EPRI in the U.S. in years past. It is designed for the working engineer in the nuclear industry and addresses both PWR and BWR issues. This time it is offered in the U.S, with EPRI support, for geographically closer participants. MAI is a research facility founded in 2008 by EDF (France), the Electric Power Research Institute (EPRI, USA) and the Tokyo Electric Power Company (TEPCO, Japan). Its current members are EDF, EPRI, KANSAI (Japan), CGNPC (China), EDF-Energy (U.K), TEPCO, CRIEPI (Japan), MHI (Japan) and CEA (France). The main purpose of the MAI is to bring together scientific skills and research facilities to address ageing of materials used in electric power plants, particularly nuclear power plants and to exchange knowledge and transfer technology among its members.

Course Scope and Objective

Degradation of reactor components is a significant threat to the long-term economic viability of the existing fleet of light water reactors (LWR). The objective of this course is to start from the fundamentals and provide an integrated and up-to-date picture of LWR operations and materials used in the current fleet. Particular emphasis will be placed on corrosion-related degradation of components. Field experience and degradation management approaches will be described and linked to our current understanding of the degradation mechanisms of carbon and low alloy steels, stainless steels, nickel-base alloys, concrete and polymers under LWR service conditions.

Selected Topics to Be Covered By Industry Experts

- Design and operation of PWR and BWR plants
- LWR environment (water, temperature, radiation, stress)
- Materials used in various components and why, fabrication, welding
- History of corrosion and mechanical degradation in operating plants
- Fundamentals of metallurgy, plant chemistry, corrosion, mechanical damage, irradiation effects and nondestructive testing
- Reactor pressure vessel integrity issues, NDE, degradation, analysis and mitigation
- Steam generator integrity issues, NDE, Degradation analysis and mitigations, repairs and replacements
- Piping and nozzles degradation issues and flow assisted corrosion
- Degradation issues of other systems and components, service water, concrete and polymer materials
- Regulatory and Code requirements, industry organizations and self regulation
- Long term plant operation (LTO) challenges, 60-80 years plant life extension

Costs

Course registration fee is $1450 for EPRI and MAI members and $1950 for others. Participants are responsible for their own travel and lodging costs.

Venue, Schedule and Registration

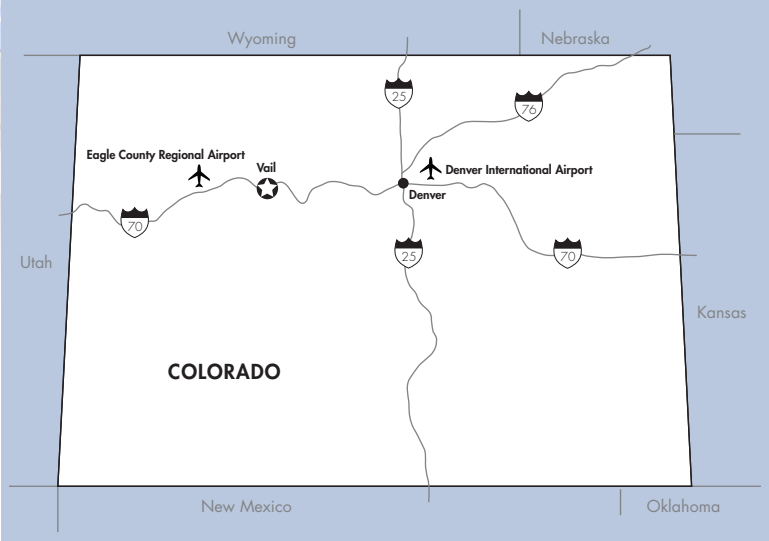
The course will be given at the Vail Cascade Resort in Vail Colorado, USA. Room rates start at $119 per night for one or two persons. These special rates are good for 3-days before and 3-days after the course. The course starts on Tuesday afternoon June 5th and ends on Friday noon June 8th. The registration cut-off date is May 14, 2012.

Vail Cascade Resort
1300 Westhaven Drive • Vail, CO 81657
800.420.2424 • ***www.vailcascade.com***
Parking: $0 (Self); $25/night (Valet)
Closest Airports: DIA or Eagle County Airport
Transportation: Airport shuttles from Denver International and Eagle County airports. Colorado Mountain Express (***www.coloradomountainexpress.com***)

For more information and to register, please visit the url below:
http://www.cvent.com/d/9cqjm5

Driving Directions

- **From Denver International Airport:** Take I-70 West. Exit 176 (main Vail). At end of ramp, enter roundabout and go to the left under the Interstate. Enter the 2nd roundabout and turn right onto South Frontage Road (toward Lionshead). Follow the frontage road signs that direct you to the 'Cascade Village.' The resort is approximately 1.75 miles on the left.
- **From Eagle County Airport:** Take I-70 East for approximately 40 minutes. Exit 173 (West Vail). Enter roundabout and follow signs to South Frontage Road/Vail Village/Lionshead. Follow the frontage road signs that direct you to the 'Cascade Village.' The resort is located one mile on the right.



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