



The Materials Ageing Institute Offers

Materials Degradation Course For Engineers in the Nuclear Industry

September 11-13, 2018, MAI, EDF Lab Les Renardières 77818
Moret-sur-Loing Cedex - France





The Materials Ageing Institute (MAI) will host a Materials Degradation Course for Engineers in the Nuclear Industry, from September 11th through 13th, 2018 at MAI facility located in EDF Lab les Renardières, 77818 Moret-sur-Loing cedex, France.

Course Scope

Degradation of reactor components is a significant challenge for the long-term operability and economic viability of the existing fleet of light water reactors (LWR) including BWR, PWR and VVER. The objective of this course is to start from the fundamentals and provide an integrated and up-to-date picture of materials management in the current LWR 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 degradation mechanisms of carbon and low alloy steels, stainless steels, nickel-based alloys, concrete and polymers under LWR service conditions.

Selected Topics to Be Covered By Industry Experts

- Design and operation of PWR and VVER 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
- Reactor pressure vessel internals 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

Target Audience: The course is suitable to the engineers and researchers who are new to the plant materials degradation issues, and to the managers who do not have a background in nuclear power plant materials. The course will also be suitable to anyone who wants to refresh the knowledge related to materials aging managements.



Contact

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Venue, Schedule and Registration

The course will be given at the EDF Ecuelles quarters:

EDF Lab Les Renardières - Building 34, Room Amphitheater 77818 Moret-sur-Loing Cedex - France.

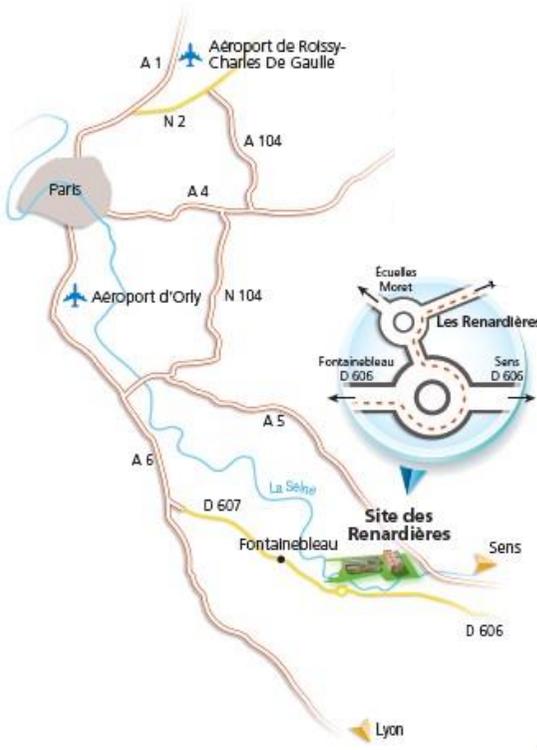
Fees

EPRI and MAI Members Event Admission Fee:	€ 600
All Others:	€ 800
No Refunds	

Registration

www.thema.org or www.epri.com





Access by car

On the A6 motorway, take the Fontainebleau exit.
In Fontainebleau, bypass the town by taking the D607 (N7) up to "Carrefour de l'Obélisque". Take the D606 (N6) towards Montereau/Sens. Continue on the D606 (N6), for 12 km.
At the "Carrefour Saint-Lazare" roundabout, take the 2nd exit onto the D302 towards Écuilles.
At the next roundabout, take the 1st exit on the right, towards "Pole d'activités des Renardières" and follow this road for 1 km.

Access by train

The Moret-Veneux-Les-Sablons station is accessible from Paris Gare de Lyon. EDF R&D shuttle bus to les Renardières : take the "Veneux" exit.

The Materials Ageing Institute is a utility-oriented research center founded by EDF in 2008 and co-financed by EPRI (US), KEPCO (J), CGN (CN), REA (RU), EDF Energy (UK), TEPCO (J), MHI (J), CRIEPI (J), CEA (F) and AREVA (F). The main purpose of this collaborative effort is to bring together scientific skills and research facilities to address ageing of materials used in electric power plants, and particularly in nuclear power plants.



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