A.N.T. International Academy
ONLINE EDUCATION

CRUD in PWR/VVER Coolant – Vol. I

COURSE DESCRIPTION

The purpose of this course is to provide insight into different types of phenomena, like solubility, transportation, deposition and release of crud that helps to better understand the crud behaviour under PWR/VVER/CANDU operating conditions. There is an associated course which describes in detail the mitigation tools for adequate crud control. The information given in this and the associated course:

- Can support the plant chemists to establish their coolant chemistry strategy to achieve the plant specific goals.
- Is valuable for fuel vendors and plant fuel engineers to understand the influence of coolant chemistry on fuel performance.

The content is described more in the *Appendix*.

AUTHORS/LECTURERS

The authors/lecturers of the reports and lectures, World Class Experts in their fields, are as follows:

Dr. Suat Odar

Read more about the Experts

COURSE DURATION

- Total time: around 8 hours
- Reading: 3 h
- Lectures: 5 h

The listed time for the lectures is the actual running time. More time may be needed to digest the information provided in this course.

CERTIFICATE

You will automatically receive an email with your certificate that you can print or share on social media. If you need a printed certificate, please don't hesitate to contact us and we can send it to you via regular mail. You reach us at *support@antinternational.com*.

TRY THIS COURSE FOR FREE!

All of our currently available courses have selected content you can access completely free of charge. Click the button to the right, select the course you would like to try out and sign up!

CLICK HERE TO SIGN UP

CONTACT

For more information and/or an offer welcome to contact us at *sales@antinternational.com*
Please also visit our website for the latest updated information, *www.antinternational.com*

SUBSCRIBE TO OUR MAILING LIST

No spam, only useful information to our customers about new products, special offers and more!

SUBSCRIBE HERE!

Appendix: Course outline and topics covered

1) SOURCES OF CRUD

- » Composition and thickness of the oxide layers
- » Influence of design and structural materials (PWR, VVER and CANDU plants)

2) RELEASE AND TRANSPORTATION OF CRUD IN THE COOLANT

- » Interaction of oxide layers with coolant
- » Particulate, colloidal and dissolved
- » Distribution, composition

3) FUEL DEPOSITION

- » Mechanism
- » Composition, morphology and distribution on fuel assemblies
- » Consequences of fuel crud deposits (cladding corrosion, AOA)

4) CORE CRUD RELEASE AND RADIATION BUILD-UP