



# Radiochemistry Webinars

## Nuclear Fuel Cycle Series

The NAMP cordially invites you to attend web-based lectures on specific topics developed in cooperation with the EPA and other Federal agencies, and our university partners. The selected topics are designed to strengthen the participant in the areas of professional engineering practice identified by the nuclear industry or national laboratories, including but not limited to actinide chemistry in the environment and in the nuclear fuel cycle. Short (1½- to 2-hour) webinars on specific radiochemistry topics are presented by renowned university professors and leading scientists in radiochemistry.

Please plan to join us for the next radiochemistry webinar on

## Nuclear Fuels & Fuel Fabrication

### Who Should Attend:

Laboratory technicians  
Regulators

Chemists  
Managers

Geochemists  
Students

**Lecture Overview:** This webinar presents a broad overview on fuel compositions and fuel properties depending on the application within the nuclear fuel cycle. The presentation primarily focuses on the fabrication of ceramic oxide fuels for GEN III nuclear reactors, but it also outlines fabrication and properties of TRISO and metallic nuclear fuel types. This webinar provides an understanding of basic information on nuclear fuels in general and fuel fabrication, as well as fuel properties and performance, to an audience of a rather diverse background.

**Free Webcast:** Thursday, September 25, 2014, at 1:00 pm Eastern Time, 12:00 pm Central Time

**Register at:** <https://foodshield.connectsolutions.com/nuclearfuelfabrication/event/registration.html>

For more information, please contact: Berta Oates at [boates@portageinc.com](mailto:boates@portageinc.com) or visit the NAMP website at [www.wipp.energy.gov/namp](http://www.wipp.energy.gov/namp)

## Meet the Presenter...

*Dr. Thomas Hartmann*

Dr. Thomas Hartmann is an Associate Professor in the Mechanical Engineering Department of the Howard Hughes College of Engineering at the University of Nevada - Las Vegas (UNLV), where he leads the Nuclear Materials Group within the Radiochemistry Program. He is also a joint appointee with the Idaho National Laboratory (INL). Dr. Hartmann is an internationally recognized expert in X-ray crystallography and nondestructive analysis of solid matter. He received his Ph.D. in Mineralogy in 1995 from the Ruprecht-Karls University, Heidelberg, Germany. For his PhD thesis, he investigated the ternary Pd-Rh-Te metal system in the vitrification process of radioactive high-level liquid waste concentrates at the Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany. His current research focuses on the characterization of metallic and oxide nuclear fuels, as well as on the fabrication and properties of ceramic waste forms to immobilize fission products such as Sr-90, Tc-99, and fission lanthanides. His research is supporting the INL program on the fabrication and modelling of advanced metallic fuels and the characterization of fuel plates for the RERTR (Reduced Enrichment for Research and Test Reactors) program.



UNLV



### Watch for These Upcoming Webinars

October 23, 2014  
November 20, 2014  
December 18, 2014

Overview of Nuclear Reactors  
Chemistry and Radiochemistry of the Reactor  
Coolant System  
The PUREX Process