



Join us on May 28, 2020  
for the next **GEN IV** webinar

## Performance Assessments for Fuels and Materials for Advanced Nuclear Reactors

A host of novel fuel and material concepts are being investigated as part of the GenIV reactor development initiative. While many of these candidates are rooted in historical programs from previous reactor development campaigns, most of these concepts were never fully evaluated for long-term performance in non-LWR facilities. The performance data that is needed for candidate material downselection, feasibility studies, and eventual qualification is, currently, very costly in terms of monetary cost and human capital. The use of an **'all of the above'** strategy for performance assessment is needed to reduce the cost of ushering materials through the qualification process. In this presentation, we will discuss the efforts that are currently underway, and those planned for the near future, to advance many of these candidates from concept to deployment.

*Free webcast*

May 28, 2020 at 8:30 am (EDT) (UTC -4)



Register NOW at  
<https://attendee.gotowebinar.com/register/3672551761706705677>

**Who should attend:** policy makers, managers, regulators, students, general public

### Meet the Presenter...

**Dr. Daniel LaBrier** is an Assistant Professor of Nuclear Engineering at Idaho State University. He earned his doctorate in nuclear science and engineering from ISU in 2013, with an emphasis in irradiated materials characterization. His research focuses on characterizing nuclear-grade materials that are exposed to extreme environments and nuclear reactor safety projects, including investigation of corrosion and erosion of structural materials relevant to LWR and advanced (SFR, MSR, HTR) systems. His research interests include development and qualification of fuels and materials for advanced reactor concepts, investigating thermal hydraulic effects on material performance, and used fuel recycling techniques. In the recent past, Dr. LaBrier has contributed to projects related to chemical effects testing for Generic Safety Issue (GSI)-191, materials testing capability development for the TREAT reactor restart, and design of advanced reactor testing systems. After serving as a post-doctoral fellow at the University of New Mexico and as a research professor at Oregon State University, Dr. LaBrier returned to ISU in March 2019 and maintains residence as a researcher at the Center for Advanced Energy Studies (CAES) in Idaho Falls, ID.



*The Generation IV International Forum invites you to attend web-based lectures on the next generation of nuclear energy systems and other cross-cutting subjects. Join internationally recognized subject matter experts and leading scientists in the nuclear energy arena for these short presentations.*

### Upcoming Webinars

- 24 June 2020 Comparison of 16 Reactors Neutronic Performance in Closed Th-U and U-Pu Cycles, Dr. Jiri Krepel, PSI, Switzerland
- 29 July 2020 Overview of Small Modular Reactor Technology Development, Dr. Frederik Reitsma, IAEA
- 26 August 2020 Overview and Status Update on Molten Salt Reactor Technology Development in the US, Dr. David Holcomb, ORNL, USA

For more information, please contact: Patricia Paviet at [patricia.paviet@pnnl.gov](mailto:patricia.paviet@pnnl.gov) or visit the GIF website at [www.gen-4.org](http://www.gen-4.org)