

APR15-2015-020057

Abstract for an Invited Paper
for the APR15 Meeting of
the American Physical Society

DOE Response to the Fukushima Accident: Advancing the Science of Emergency Response

DANIEL BLUMENTHAL, Department of Energy/National Nuclear Security Administration

The US Department of Energy maintains specialized technical teams to respond to radiological/nuclear emergencies. They apply well-established laboratory nuclear measurement techniques in field environments, conduct rapid analysis, and deliver data products to government leaders in support of real-time public safety decisions. Meeting these requirements, often in the face of incomplete and imperfect information, takes a great deal of training and practice to effectively translate science into operations. Since large-scale emergencies are rare, the Fukushima nuclear accident in March 2011 provided an opportunity to employ these teams. Their timely support to both US and Japanese decision makers provides an excellent case study in the application of instrumentation, analysis methods, data presentation, and training to emergency response.