"Applied Nuclear Physics at the Intersection of Science, Technologies, and Society"

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The events at the Fukushima Dai-ichi Nuclear Power Station (FDNPS) about 10 years ago remind us about the importance to develop enhanced and smarter radiation detection and mapping technologies to prevent and to better respond to such events and to support the decontamination, decommissioning, and the remediation of nuclear facilities and their environments. In addition to technological advancements, we also have to recognize the need to engage with communities and society more broadly to establish trusted scientific resources that citizens and media can refer to in order to minimize the detrimental impact driven by misperception of and misinformation about radiation. In our Berkeley Applied Nuclear Physics Program we combine research and training of the next generation of students with a wide range of activities to engage with schools and communities utilizing the unique opportunities provided by UC Berkeley and LBNL and to serve as a trusted scientific resource. In my talk, I'll focus on some of our research and outreach activities to prevent, prepare, and better respond to FDNPS type events now and in the future.