







## Asian American Most Promising Engineer of the Year

## Dr. Rian Mustafa Bahran

Research and Development Engineer Los Alamos National Laboratory

## Citation of Accomplishments

Leading the development of transformative nuclear engineering and technology solutions to the ever-increasing dynamic threats of nuclear proliferation and terrorism, while simultaneously integrating vital aspects of next generation human capital development into these technical efforts.

Dr. Rian Bahran is a Research and Development Engineer at Los Alamos National Laboratory (LANL), where he leads research and training efforts for nuclear nonproliferation, international safeguards, security, and criticality safety. He is currently part of the Critical Experiments Team within the Nuclear Engineering and Nonproliferation Division Advanced Nuclear Technology Group, where he leads several large experimental campaigns with large quantities of nuclear material, creating novel work that supports a handful of graduate students and postdocs, addressing vital criticality safety and nuclear threat reduction issues. In addition to his day-to-day research and mentoring duties, he also leads several major training efforts at LANL including a) a unique nuclear nonproliferation student summer program and b) various international training engagements across multiple continents.

Prior to his current position at LANL, Rian worked on predictive radiation transport simulation capabilities as a postdoc in the X-Computational Physics Division at Los Alamos, and before that on nuclear data measurements as a PhD candidate at Rensselaer Polytechnic Institute (RPI) where his work was funded by Naval Nuclear Laboratory. During his time at RPI, Rian was both the founder of the Departmental Student Advisory Council, and President of the American Nuclear Society (ANS) student chapter. He has continued his involvement within several professional societies, mostly as an organizer of technical meetings, sessions and conferences. He is the incoming Chair of the Nuclear Nonproliferation Policy Division of the ANS and is the co-founder and current Technical Program Co-Chair for the 2018 Advances in Nuclear Nonproliferation Technology and Policy Conference (ANTPC 2018). He also serves as an Associate Editor for the Institute for Nuclear Materials Management (INMM) Journal.

Rian received his Ph.D. in Nuclear Engineering and Science from RPI in 2013 and received a dual B.S. in Nuclear Engineering & Engineering Physics from the same university in 2006. He holds a non-salaried adjunct faculty appointment in the Mechanical, Aerospace, and Nuclear Engineering Department at RPI where he continues to foster technical and educational collaborations between his home institution and his alma mater.