

Bio sketch - Alireza Haghghat
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Dr. Haghghat is professor and Director of the Virginia Tech Nuclear Engineering Program, Mechanical Engineering Department. He is also the Director of Nuclear Science and Engineering Lab (NSEL) and the Mechanical Engineering Program at the National Capital Region (NCR) Campus, Arlington, VA. He is the former (2001-2009) Chair of the University of Florida (UF) Nuclear & Radiological Engineering (NRE) Department and former (2008-2010) Director of UF Training Reactor. Prior to Florida, Prof. Haghghat was a faculty member at the Pennsylvania State University for 15 years.

Prof. Haghghat is a fellow of the American Nuclear Society (ANS). He leads the Virginia Tech Theory Transport Group (VT³G). Over the past 31 years, Prof. Haghghat has been involved in the development of novel particle transport methodologies and large computer codes for modeling and simulation of nuclear systems including reactors, nuclear security and safeguards systems and medical devices. His efforts has resulted in the development RAPID (Real-time Analysis spent fuel Pool In-situ Detection), and a web application, VRS RAPID, that enables real-time neutronics calculations in a virtual reality environment, allowing input preparation, computation, and 3-D visualization (<https://www.youtube.com/watch?v=1Q2ytjBrmXc>).

He has published over 250 papers, received several best paper awards, and presented numerous invited workshops, seminars and papers nationally and internationally. In Dec 2014, he published a textbook entitled 'Monte Carlo Methods for Particle Transport', CRC Press Taylor & Francis Group

He is recipient of the 2011 Radiation Protection Shielding Division's Professional Excellence Award, and recognition award from Office of Global Threat Reduction for his leadership & contributions to design and analysis for the University of Florida Training Reactor HEU to LEU fuel conversion, 2009.

For further detail on his scholarships and professional contributions, visit <http://nuclear.ncr.vt.edu>.