

Jonathan K. Witter, Ph.D.
Chief Engineer, Advanced Technology Programs
BWX Technologies, Inc.



Biography:

Jonathan Witter is the Chief Engineer for BWXT's Advance Technology Programs. In this role he currently serves as the technical engineering lead for the NASA GCD Nuclear Thermal Propulsion (NTP) project with a focus on the reactor core design and analysis and the fuel mechanical development and testing. Dr. Witter has past experience with space nuclear programs where he served as a reactor physics design lead for the Project Prometheus/Jupiter Icy Moon Orbiter fission power system in the early 2000's while working at the Knolls Atomic Power Laboratory and did his PhD work at Massachusetts Institute of Technology under a NASA Space Grant working on nuclear thermal propulsion under the Space Exploration Initiative in the early 1990's. He received his B.S. (1982) and Masters (1983) in Nuclear Engineering from Rensselaer Polytechnic Institute. After that he spent 6 years in nuclear industry learning the operations of naval propulsion and commercial nuclear power plants. Wanting to realize goal of getting his Ph.D. after physical operational experience, Jonathan went to MIT dove in head first into the unique propulsion system of a nuclear rocket engine and graduated from the Nuclear Engineering Dept. in 1993. After MIT, Dr. Witter worked 13 years in fields of reactor physics and fuel materials science for advance concepts at Knolls Atomic Power Laboratory. In 2006, Jonathan left to work for AREVA (now back to Framatome) in Lynchburg, VA for the USEPR commercial nuclear power plant design certification application process, where he branched out the fuel performance, plant systems safety analysis, and reactor I&C, culminating with development new methodology for control rod ejection safety analysis. Before transitioning to NTP project with BWXT, Jonathan's tenure at BWXT began with the engineering efforts of the Small Modular Reactor mPower project, where he lead systems integration and design analysis in areas that had tightest interface of operational performance and I&C controls for safety and monitoring.