Materials Science & Engineering Graduate Seminar

Wednesday, January 29, 2020, 4:10-5:00 PM, FASB 295

Prof. Glenn Sjoden

Professor, Energy Solutions Presidential Endowed Chair, Nuclear Engineering Program, Dept of Civil and Environmental Engineering, University of Utah

Radiation Transport Tools Supporting Computational Simulations in Nuclear Engineering at the University of Utah

Abstract: Dr. Glenn Sjoden will present several computational tools for deterministic and Monte Carlo radiation transport calculations supporting isotope production, flux foil irradiations for reactor profiling, dosimetry simulations for radiation damage, detector efficiency characterization, neutron radiography, and reactor physics/criticality studies.

Bio: Dr. Glenn Sjoden joined the University of Utah in August 2019, following a long career of military, faculty, and US Government service, recently retiring in July 2019 as Chief Scientist (DISL) of the Air Force Technical Applications Center (AFTAC), to become the new Energy Solutions Presidential Endowed Professor of Nuclear Engineering. Glenn has more than 30 years of experience, spanning a broad range of science and engineering applications serving in numerous capacities—professor, chief scientist, technical director, nuclear research officer, lead design engineer, author, and licensed engineering consultant. Glenn is an expert in non-proliferation, reactor research, and power engineering. He also has significant treaty monitoring technical experience in nuclear, biological, and chemical (NBC) arms control, with work on advanced technology defense programs for the US Government; he has served as a technical expert and research lead for critical reviews supporting the Limited Test Ban Treaty (LTBT), the Intermediate-range Nuclear Forces (INF) Treaty, and numerous classified defense projects. He is an expert in particle transport, and is the principal developer of the PENTRAN 3-D Sn Parallel Particle Transport Code. He performs cross-cutting research in nuclear systems analysis. In 2018, Glenn was awarded the Presidential Rank Award for superior accomplishment in public service by President Donald Trump.