

Biographical Information for Per F. Peterson

Per F. Peterson is a Professor in the Department of Nuclear Engineering at the University of California, Berkeley, and chairs the Energy and Resources Group, an interdisciplinary graduate group at the university. After joining UCB in 1990 as an Assistant Professor he received an NSF Presidential Young Investigator award, and most recently received the Fusion Power Associates Excellence in Fusion Engineering Award. He has worked on problems in energy and environmental systems, including advanced light water reactors, inertial fusion energy, high level nuclear waste processing, and repository safeguards. His research interests include topics in heat and mass transfer, fluid dynamics, and phase change. He currently works on mixing processes in high-level waste storage tanks and light water reactor containments, and he is a co-developer of TSUNAMI, the multi-dimensional code currently used to model gas dynamics and mass transfer in inertial fusion target chambers like the National Ignition Facility. His broader interests in energy and environment focus on nuclear technologies and nuclear materials management, and methods to enhance long-term proliferation resistance in the nuclear fuel cycle.