

Affiliation with MSE - teach CME319 (Materials Processing) lecture series on Nuclear Waste Vitrification.

David K. Peeler. Dr. Peeler is a Senior Fellow Engineer in the Environmental and Chemical Process Technology Directorate and leads the Glass Science Research Programs for the Savannah River National Laboratory. Dr. Peeler received his Ph.D. degree from Clemson University in Ceramic Engineering, MS in Ceramic Engineering from Alfred University, and BS in Ceramic Engineering from Clemson University. He joined Savannah River Nuclear Solutions (SRNS) in 1995 and for the past 14 years has focused primarily on glass formulation and process control strategies in support of the Defense Waste Processing Facility (DWPF) and several Department of Energy – Environmental Management programs (both national and international) regarding the optimization of waste loading, melt rate, and waste throughput for high-level and low-level wastes. His research interest include nuclear waste disposal, process control strategies, chemical durability of glasses, and the impacts of phase separation (crystallization and amorphous) on various glass properties.

Prior to his work at SRNS, Dr. Peeler was employed at Battelle, Pacific Northwest National Laboratory where he studied the effects of amorphous phase separation on the durability of high-level waste glasses and other composition – property relationships in multi-component glass systems. Dr. Peeler serves as an Adjunct Professor for Clemson University’s School of Material Science and Engineering where he teaches a course on Nuclear Waste Vitrification. Dr. Peeler is a Fellow of the American Ceramic Society and has served as Chair of the Nuclear and Environmental Technology Division. He currently serves as the secretary of the International Committee on Glass (ICG) Nuclear and Hazardous Waste Vitrification technical committee. He is the co-editor of two volumes in the “Environmental Issues and Waste Management Technologies in the Ceramic and Nuclear Industries” transaction series. Dr. Peeler has over 50 publications in peer reviewed journals, over 200 internal and technically reviewed reports, and 2 patents.