

MARX Award Winner

Dr. William Stygar

Sandia National Laboratories

Albuquerque, NM, USA



Dr. Stygar won the 2015 Erwin Marx Award for seminal contributions to the physics and technology of superpower pulsed-power generators and to the realization of Z and ZR accelerators as precision scientific instruments, contributing to a revolution in pulsed-power-driven high energy density experiments. He was the principal designer for the vacuum power flow section of the Z and ZR facility, the world's most powerful laboratory pulsed-power generator. Dr. Stygar contributed more than any single individual to the successful operation of the facilities at peak electrical powers and peak reliability over the period of 1996-2014. Dr. Stygar is a very active researcher. He has a total of 180 journal and conference publications, and his work was cited over 3390 times. His pulsed power research efforts over the last 33 years culminated in his invention of a new petawatt-class pulsed power generator architecture. Dr. Stygar is a Distinguished Member of the Technical Staff at Sandia National Laboratory and is currently the manager of the Advanced Accelerator Physics Department.