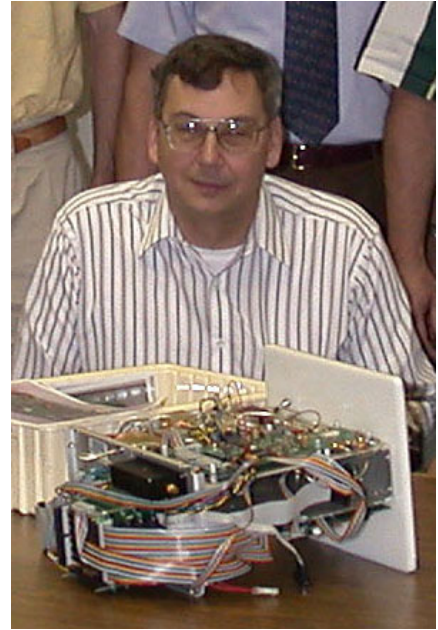


**Tom Petersen** Thomas L. Petersen has 32 year of experience with measurements and testing in harsh environments. The first 15 years were involved with development and fielding of instrumentation and control systems for plasma fusion experiments in LANL's Controlled Thermonuclear Research Division, as a Senior Technologist. In 1986 he went back to school on a LANL sponsored program to get his BSEE and completed it in 1989. He was promoted to Technical Staff Member and worked on the command and control system for a 1.2 Giga-joule motor-generator pulsed power source. The next body of work for Tom was directing the operation of a large data acquisition recording facility for Underground Nuclear Testing at the Nevada Test Site on prompt (very fast) diagnostics. This lead to developing and fielding diagnostic systems for explosive pulsed power experiments both here in the USA and in Russia. These experiments generated 20 to 100 Meg-Amps and several hundred Kilo-Volts. He also developed and fielded a multi-giga Hertz single pulse gamma ray measurement system for the high power NOVA laser at Lawrence Livermore National Laboratory. His current endeavor is Principal Investigator for High Explosive Radio Telemetry (HERT) in the Weapon Technology Division. HERT measures the quality of an explosive event with 10 nano-second resolution while the test article is in free flight. This data is transmitted to ground or open ocean receiving stations while the test article is destroyed by the explosion. This provides LANL with a new and innovative data set that contributes to the certification of our nuclear deterrent.



**Contact Information:**

Tom Petersen  
MS P953  
Los Alamos National Laboratory  
Los Alamos, NM 87545  
Phone: 505-665-2786  
[tpetersen@lanl.gov](mailto:tpetersen@lanl.gov)