

## Tim McJunkin Inducted into INL Hall of Fame

On Jan. 29, more than 250 guests descended on an Idaho Falls hotel to commemorate INL's 14th Annual Honors Banquet, a special night set aside to honor INL scientists, engineers and technicians for outstanding achievements during the past year.

The first awards of the night honored those who were named on U.S. patents in 2009. INL is the only national laboratory to recognize lifetime achievements for inventors who accrue five, 10, 15 and 20 U.S. patented inventions. This year's event recognized Timothy McJunkin, who was inducted into INL's "Hall of Fame" for being named on five U.S. patents.



Photo Courtesy of Hammon Photography

McJunkin's patents include:

- U.S. patent 6,484,584 – Method for the Concurrent Ultrasonic Inspection of Partially Completed Welds
- U.S. patent 7,094,989 – Welding Apparatus and Methods for Using Ultrasonic Sensing
- U.S. patent 7,259,369 – Dual Mode Ion Mobility Spectrometer and Method for Ion Mobility Spectrometer
- U.S. patent 7,518,105 – Ion Mobility Spectrometers and Methods for Ion Mobility Spectrometry
- U.S. patent 7,518,106 – Continuous Sampling Ion Mobility Spectrometers and Methods Thereof

Established in 2002, the INL Hall of Fame provides public recognition and monetary awards based on levels of creativity. So far, one inventor has been honored for 20 or more U.S. patents, 6 for at least 15 U.S. patents, 9 for 10 U.S. patents and 44 for at least five patents.

### Background

Timothy R. McJunkin is an electrical engineer with research and design experience in robotics and automated systems, nondestructive examination, mass spectrometry, and computer systems. Mr. McJunkin received Bachelor and Master of Science degrees in Electrical and Computer Engineering from Utah State University in 1992 and 1995. He received the Rocky Mountain NASA Space Grant Consortium Fellowship and completed thesis research on *Advanced Navigation for Planetary Vehicles Applying Approximate Mapping Technique* based on the NASA Mar's Pathfinder mission rover platform. From 1994-1999, Tim was with Compaq Computer Corporation's Industry Standard Server Group design team, in Houston, Texas, where he was the technical lead on the design of the Proliant ML 530 and 3000 servers. Joining Idaho National Laboratory in 1999, he has contributed to a variety of projects including the Yucca Mountain Waste Package Closure System as the technical lead for nondestructive examination development. Mr. McJunkin has been awarded eight patents, three with Compaq, in the areas of ultrasonic inspection of materials, ion mobility spectrometry, and computer system design. He has one copyright assertion for the data interpretation software, SIDIE©. Current research interests include the adaptive configuration of phased array ultrasonic sensors, novel designs in ion cyclotron resonance instruments, and large-scale robotics and automated systems development. Additional accomplishments include fourteen journal articles, one book chapter, and more than fifty conference publications.