



**THE AMERICAN SOCIETY FOR
NONDESTRUCTIVE TESTING**
Cleveland Section Monthly Meeting Notice

NOVEMBER, 2013

DATE & TIME: MONDAY - NOVEMBER 18, 2013

Social Hour: 6:00 p.m.
Dinner: 6:45 p.m.

SPEAKER: Dr. Neil Goldfine President and Chief Engineer
JENTEK Sensors, Inc., 110-1 Clematis Avenue, Waltham, MA 02453-7013
Phone: 781-642-9666, Email: jentek@jenteksensors.com

TOPIC: Next Generation Eddy Current Array Technology for Aerospace & Defense and Oil & Gas Applications

LOCATION: St. Paul Hellenic Center 440-582-1083
4548 Wallings Road, North Royalton, Ohio -- 3.6 miles west of I-77

COST: \$17.00 per person for ASNT members
\$15.00 per person for TRI-C- Students
\$22.00 per person for non-ASNT members

RESERVATIONS:
Please call Monique Whiteing 216.642.0100 by November 15, 2013.
Email: Monique Whiteing mwhiteing@Xritesting.com

Speaker & Topic Bio

Dr. Goldfine founded JENTEK Sensors in January 1992. He was a Research Affiliate at the M.I.T. Laboratory for Electromagnetic and Electronic Systems for the last two decades. He was also an Associate Technical Editor of the ASNT Materials Evaluation Magazine from October 1996 to July 2005.

Prior to starting JENTEK Sensors, Dr. Goldfine worked as a Financial and Market Analyst at H & Q Technology Partners (a management consulting and investment banking firm founded by former Secretary of Defense, William Perry). Dr. Goldfine is widely published in the NDT SHM fields. Dr. Goldfine has contributed to over 50 patents. He has both a Master's Degree and Ph.D. in Mechanical Engineering from M.I.T., as well as two Bachelor's Degrees in Mechanical and Electrical Engineering from the University of Pennsylvania.

This presentation will describe recent advances in eddy current array technology including instrumentation and Multivariate Inverse Methods (MIMs). New applications and capabilities of the MWM-Array inductive sensing element technology and the MR-MWM-Array magnetoresistive sensing element technology will be described. These applications include: (1) high frequency eddy current methods for rapid inspection of engine components using numerous channels and increased scan speeds, (2) internal and external imaging of corrosion for up to half-inch thick steel pipes through two inches of insulation and weather jacket, (3) crack depth measurement for stress corrosion crack colonies, and (4) very early stage fatigue detection for landing gear steels.