

2011

KAIST INSTITUTE THURSDAY SEMINAR

■ TITLE

Noncontact laser scanning and embedded guided wave sensing for ground nondestructive testing and online condition monitoring of aging aircraft

■ SPEAKER

Prof. Hoon Sohn

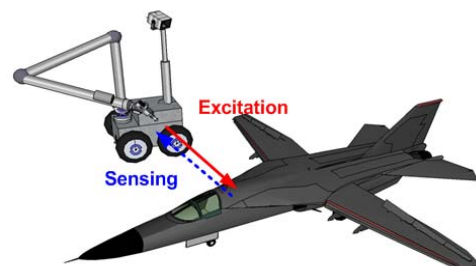
■ DATE & LOCATION

2011. 05. 12. (12:00 ~ 13:00) – (Lunch served)

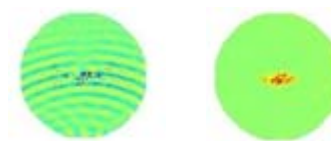
KI Building Lecture Room B (3F)

Abstract

In this seminar, an innovative noncontact laser ultrasonic scanning and embedded guided wave sensing system is introduced for ground nondestructive testing (NDT) and online condition monitoring of aging air vehicles and airplanes. This system can (1) generate and measure ultrasonic waves using noncontact scanning laser and/or embedded sensors, (2) create ultrasonic wavefield images with high spatial and temporal resolutions, making it possible to detect incipient defects. Image processing and pattern recognition algorithms can accentuate the effect of damage and to automate damage identification, localization and quantification.



Noncontact scanning system



Wave tomography & Image processing



Prof. Hoon Sohn

B.S. & M.S. Seoul National University, Korea, 1992, 1994

Ph.D. Stanford University, USA, 1999

Technical Staff, Los Alamos National Lab. USA, 1999~2004

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