

ANCRISST Short Course on  
Practical Health Monitoring for Infrastructures  
Boston, USA, Jul. 29, 2009

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**COURSE COORDINATOR 1:**

PROF. SATISH NAGARAJAIAH, CIVIL ENG. & MECH. ENG., RICE  
UNIVERSITY, HOUSTON, TEXAS

**COURSE COORDINATOR 2:**

PROF. MING L. WANG, CIVIL & ENV. ENG., NORTHEASTERN  
UNIVERSITY, BOSTON, MASSACHUSETTS

**REGISTRATION FEE:**

REGULAR REGISTRATION: \$200

STUDENT REGISTRATION: \$100

THIS SHORT COURSE WILL FOCUS ON THE HEALTH MONITORING SYSTEMS FOR INFRASTRUCTURES IN SERVICE. PARTICIPANTS WILL LEARN THE STATE-OF-THE-ART IN HEALTH MONITORING INCLUDING SENSOR TECHNOLOGY, DATA ANALYSIS AND DIAGNOSIS, PROGNOSIS, AND PRACTICAL APPLICATIONS. DEMONSTRATION AND HANDS-ON EXPERIENCE WILL INCLUDE SEVERAL ADVANCED SENSOR TECHNOLOGIES AND PRACTICAL APPLICATIONS. THE FOLLOWING TOPICS WILL BE COVERED BY A TEAM OF EXPERTS

- **STRUCTURAL HEALTH MONITORING USING EM SENSOR TECHNOLOGY: PRACTICAL APPLICATIONS**  
BY PROFESSOR MING WANG, NORTHEASTERN UNIVERSITY
- **TIME -FREQUENCY METHODS FOR STRUCTURAL HEALTH MONITORING FAULT TOLERANT MONITORING & CONTROL: DETECTION FILTER TECHNIQUES**  
BY PROFESSOR SATISH NAGARAJAIAH, RICE UNIVERSITY
- **MULTIFUNCTIONAL MATERIALS FOR SMART STRUCTURES**  
BY PROFESSOR JERRY LYNCH, UNIV. OF MICHIGAN
- **WAVE BASED DAMAGE DETECTION USING PZT/WIRELESS SENSORS**  
BY PROFESSOR HOON SOHN, KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY/ CMU
- **PIEZOCERAMIC-BASED MULTIFUNCTIONAL SMART AGGREGATES FOR CONCRETE STRUCTURES**  
BY PROFESSOR GANG-BING SONG, UNIVERSITY OF HOUSTON
- **HARVESTING ENERGY FROM VIBRATION**  
BY PROFESSOR JEFF SCRUGGS, DUKE UNIVERSITY
- **DEMONSTRATION AND HANDS-ON EXPERIENCE INCLUDING SEVERAL ADVANCED SENSOR TECHNOLOGIES AND PRACTICAL APPLICATIONS**