Automotive Industry Advancements with NDT
An ASNT Topical Conference

11-12 May 2009
Hyatt Regency Greenville
Greenville, SC, USA
Don’t miss this dynamic industry focused event.

This conference is designed to bring together the automotive manufacturers and their suppliers to discuss advancements with NDT technology in the automotive industry. Owners, managers, researchers, engineers, quality and manufacturing personnel will provide insight into the latest developments for implementation, inspection, training and quality control of NDT processes in production.

Program Chair:
Dr. Mohammed A. Omar
Clemson University - International Center for Automotive Research CU-ICAR

Program Committee:
Dr. Andreas Obieglo
BMW Group, Research and Technology

Dr. Kah Wah Long
Chrysler LLC, Durability Analysis & Development

Tomokazu Okuno
Toyota Motor & Engineering of N. America TEMA, Advanced Engineering Division

Junichi Nakagawa
Nippon Steel Corp.
Technical Development Bureau

Anton Thomas
Michelin Americas Research & Development - MARC

Program Co-sponsored by: CU-ICAR

Plan to attend. Register now.
Online at www.asnt.org
By Fax 614.274.6899
By Phone 800.222.2768 or 614.274.6003

EXHIBITORS
As of March 9, 2009

Bruker AXS Handheld
415 N. Quay Street, Bldg. A, Suite 1
Kennewick, WA 99336
248/478-9490
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www.brukerhandheld.com

Imperium, Inc.
1738 Elton Road, Suite 218
Silver Spring, MD 20903
850/377-7780
301/431-0200 fax
www.imperiuminc.com

Envision Product Design
7800 King Street
Anchorage, AK 99518
907/563-1141
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www.cmosxray.com

Olympus NDT
48 Woerd Avenue
Waltham, MA 02453
781/419-3900
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Foerster Instruments, Inc.
140 Industry Drive, RIDC Park West
Pittsburgh, PA 15275
412/788-8976
412/788-8984 fax
www.foerstergroup.com

ibg NDT Systems Corp.
20793 Farmington Road, Suite 8
Farmington Hills, MI 48336
864/208-0480
864/208-0484 fax
www.rohmann.com
9:00 am

**KEYNOTE ADDRESS**

*Production Challenges in an International Environment*

Josef Kerscher, President of BMW Manufacturing, Spartanburg

10:00 am

**Weld Inspection and Process Feedback Using Ultrasonic Phased Arrays**

D. Hopkins, Bercl, Inc.

10:30 am

**Recent Developments in Advanced Acoustic Imaging Inspection Technology and Methods for Resistance Spot Welds in Automobile Manufacturing**

R. Maev, A. Denisov, L. Barsnati, Tessonics, Inc.

11:00 am

**Ultrasonic In-Line Spot Weld Monitoring System**

A. Chertov, R. Maev, P. Kustron, W. Regalado, A. Karloff, University of Windsor

11:30 am

**Penetrant Testing of Standard Parts, Practical Examples of Process Optimization**

K. Alward, K. Lessmann, PFINDER KG

12:00–1:30 pm

Lunch Break

1:30 pm

**Acoustography: A Potential Solution to Fast Ultrasonic Inspection of Automotive Composite Structures**


2:00 pm

**Eddy-current Analysis of Cast Defects and Silicon Distribution in Hyper-eutectic Aluminum Liners of Automobile Crankcases**

W. Wagener, BMW AG; D. Griem, Rohmann LP; L. Lindecke, Rohmann GmbH

2:30 pm

**Paint Color Effect on the Performance of Infrared Seed Inspection System for Automotive Applications**

B. Gharaibeh, N. Akafuah, K. Saito, Institute of Research for Technology / University of Kentucky; R. Maddux, R. Alloo, Toyota Motor Engineering and Manufacturing

3:00 pm

**Nondestructive Ultrasonic Inspection of Cylindrical Butt Laser Welds Using Acoustic Microscopy Methods**

F. Severin, R. Maev, University of Windsor

3:30 pm

**Robotically Applied “Best Fit” Method for Assembling Closure Panels**

S. Rhoads, BMW Manufacturing Co.

4:00 pm

**Use of Eddy Current Method in Heat Treated Component Production Lines for 100% Testing of Material Properties and to Detect Surface Flaws**

W. Buschur, ibg NDT Systems Corporation; H. Baumgartner, ibg Prufcomputer GmbH

4:30 pm

**Advancements in Production X-ray Scanning of Automotive Castings**

J. Pursley, Envision Product Design LLC

5:00–7:00 pm

Welcome Reception

Program schedule is subject to change without notice.
9:00 am
KEYNOTE ADDRESS
The Role of Technology in Advancing the Automotive Parts Manufacturing
David Stafford, COO Michelin Americas Research Company

10:00 am
Challenges of Spot-weld Inspection in Coated Steel: Conclusions of a Multi-year Study
D. Hopkins, Bercli Inc.; C. Dasch, General Motors Corp.; G. Harmon, Chrysler; B. Ghaffari, A. Wexler, Ford Motor Co.

10:30 am
Integration of the Ultrasonic In-Line Spot Weld Monitoring System
L. Barsanti, A. Chertov, R. Maev, Tessonics, Inc.; J. Geer, Magna Drive Automotive

11:00 am
Research and Development of an Advanced Sensing Technology based on Non-stationary Inverse Heat Conduction Problem for Reducing Base Load Energy & 12288
J. Nakagawa, T. Ito, Nippon Steel Corporation; M. Yamamoto, The University of Tokyo

11:30 am – 1:00 pm
Lunch in Exhibit Hall

1:30 pm
Nondestructive Evaluation of Adhesive Bonds in Various Combination and Properties Sheet-Metal Automotive Assemblies by a Portable 20 MHz Ultrasonic Pulse-echo Adhesive Bond Inspection System (ABIS)
S. Titov, R. Maev, University of Windsor

2:00 pm
Laser Ultrasonic Inspection of Adhesives Used in Auto Body Manufacture
M. Klein, H. Ansari, Intelligent Optical Systems

2:30 pm
Magnetic Induction and Eddy Current Techniques for Heat Treatment Verification and Surface Flaw Detection of Components
H. Muthuswami, Foerster Instruments, Inc.

3:00 pm
Inline Automotive Stamping Process Control Using Vision Based Systems
M. Omar, Clemson University – International Center for Automotive Research CU-ICAR

3:30 pm
Operator Qualification and Certification in Today’s Quality Programs
P. Sansieri, Odyssey Technology Corp.

4:00 pm
Present & Future Challenges of Personnel Certification
Neural Network
B. Potter, Metal Finishing Co.; Incoming ASNT Certification Management Council Chair

4:30 pm
Dimension Estimation of Rectangular Cracks Using Impedance Changes of Eddy Current Probe with Neural Network
A. Babaei, A. Salemi, A. Suratgar, Iran Arak Azad University

Don’t miss Automotive Industry Advancements with NDT.

There are 2 easy ways to register:
Register online in the events section of www.asnt.org.
Fax the enclosed registration form to 614.274.6899.
Exhibit Hours
Monday 11 May
5:00–7:00 pm: Welcome Reception

Tuesday 12 May
11:00 am–2:00 pm: Exhibits Open
11:30 am–1:00 pm: Lunch in Hall

Accommodations
HYATT REGENCY GREENVILLE
220 NORTH MAIN STREET
GREENVILLE, SC 29601- USA

Please make your room reservations by calling the hotel's reservation department at (864) 235-1234 or (800) 233-1234. To receive the group rate of $129 single/$129 double, you must identify yourself as a member of the ASNT Automotive Conference. The deadline to receive this rate is 4/20/2009.

Greenville, South Carolina
Set among the foothills of the Blue Ridge Mountains in the northwest corner of South Carolina, Greenville is conveniently located between Atlanta and Charlotte along Interstate 85. With 117 automotive companies located in Greenville and its surrounding region, it is a hub for innovative automotive research and education.

ASNT’s Mission
ASNT exists to create a safer world by promoting the profession and technologies of nondestructive testing.