

Wednesday 18 April 2012

Time	Wednesday 18 April 2012								
	Hall 1AB Invited Overview Talks	MR11/A AFNDT Conference	MR11/B UT: Phased Arrays	MR12/A Transport : Railroad, Automotive	MR12/B Condition Monitoring	MR21/A Radiography	MR21/B Optical Methods	MR22/A Electromagnetic, Eddy Current Methods	MR22/B Material Characterization
	<i>Chair: K Balasubramaniam</i>	<i>Chair: Zergoug / Bakoura</i>	<i>Chair: BPC Rao</i>	<i>Chair: M Moles</i>	<i>Chair: I Jennions</i>	<i>Chair: P Willems</i>	<i>Chair: D Wamwangi</i>	<i>Chair: H Jansen</i>	<i>Chair: A Venter</i>
08.30-08.50			617 PP Nanekar Simulation Studies for Design of an Encircling and Annular Phased Array Probe for Ultrasonic Examination of	544 V Uchanin Eddy Currents Versus Magnetic Particles	664 Galar Decision Support System based on integration of Condition Monitoring and CMMS data		351 F Hernandez-Valle Scanning laser techniques for characterisation of different surface breaking defect geometries		454 J Schreiber New polarization interferometry Approaches for In-situ Process Control and Product Quality Assessment
08.50-09.10	608 Ward Rummel Nondestructive Inspection Reliability - History, Status and Future Path	xxx N Jarvis AFRA's role in NDT in Africa – past, present and future	619 S Starman Real Implementation of Ultrasonic Phased Array Technology Using Advanced Signal Processing Algorithms	495 MA Blanchet Benefits of Phased Array Imaging Capability for Laser Welded Blanks	479 P Kleczkowski Short-Time Fourier Transform Based Analysis Reveals the Dominance of Odd Harmonic Components in Clarinet Sound	223 V Klimenov Optimization of the main parameters for the development of software-hardware scanning systems of	379 KY Jhang Nonlinear Laser-generated Surface Wave Technique for Evaluation of surface damage	635 G Bechini Eddy current array technology for life extension of gas turbine rotor components	571 P Marty Advances in industrial Testing Machines for the Automated inspection of Aerospace Components
09.10-09.30		85 A Prins The Contribution of Numeric Modeling During Inspection Design and Inspection Qualification	636 N Hankinson Flexible Phased Array for Inspecting Curved Composites	466 D Stocco Inspection of Projection Welded Automotive Nuts through B-Scan Ultrasonic Acoustic Imaging	316 B Doubell Condition Monitoring of High Temperature, High Stress Components by Means of Core Sampling and Friction Weld	274 A Lange Edge Artifacts of Radiographic Images by X-ray Refraction	60 P Hess Pump-Probe Laser Scanning of Surface-Breaking Partially-Closed Cracks	502 M Lugg The first 20 years of the A.C. Field Measurement Technique	246 J Schreiber Surface Functionalization with Nanodiamond Particles for Corrosion Protection and Corrosion monitoring
09.30-09.50	591 Dr Christina Mueller Holistically Evaluating the Reliability of NDE Systems – Paradigm Shift	69 H Jansen Eddy Current Testing: Profiled eddy current probes for complex shape inspection	500 C Zheng Ultrasonic Phased Array Inspection on PE Pipe Heat Fusion Joint and Electro-Fusion Joint	460 O Brunke A New Concept for High-Speed AtLine and InLine CT for up to 100% Mass Production Process Control	492 Z Feng An Acoustic Method for Condition Classification in Live Sewer Networks	205 A Lange Straightforward Correction of X-Ray Detector Backlighting	521 B Mathe High temperature elastic modulus characterisation of Titanium alloys (TiC and TiCN) using surface Brillouin	543 V Uchanin New Hand-Held Eddy Currents Flaw Detector	105 P Tscheliesnig Corrosion and Fatigue Monitoring for Surface Transport Products
09.50-10.30	Tea/Coffee Break								
10.30-10.50		80 D Agostinho Advanced Ultrasonic Blade Root Examination	372 J Buechler Adaptive Phased Array Imaging Method	403 J Lin Development of Ultrasonic Testing System for Large Diameter Hollow Shaft	626 I Einav See the Invisible - Innovative technology to predict safety	199 I Parshin New X-ray Complexes Based on Transmission and Back Scattered Radiation	470 R Erasmus Optical Spectroscopy Techniques for the NDT of Hard Materials	539 GY Tian Application of Frequency Spectrum Behaviour in Pulsed Eddy Current NDE	478 H Gur Measuring the Surface Residual Stresses in Shot Peened Steel Components by Magnetic Barkhausen Noise
10.50-11.10	586 Dr B Venkatraman Frontiers of Total Quality Management with Emphasis on NDE	78 JH Cowan Radiographic testing: Increased detection sensitivity using optimum source to object distance	309 F Reverdy Advanced Ultrasonic 2D Phased-Array Probes	334 Y Zhang Application of Phased Array Ultrasonic Testing Technology on Inservice Wheel	389 S Heyns Vibration based condition monitoring under fluctuating load and speed conditions	624 Z Ai-Dong Three-dimensional reconstruction of serial industrial computed tomography images	392 K Jakata Investigation of the Isochronal Annealing of Argon Ion Bombarded GaAs with Surface Brillouin and Raman Scattering	476 R Ward Surface Inspection ABC Of Eddy Current Array Application	265 A Venter Characterisation of Residual Stresses Associated with the Production Steps of Cold Coiled Spring Steel Samples
11.10-11.30		173 A Bensitel Radiotracers Applications for Diagnosis in the Moroccan Industry	369 M Bokaba Demonstration of the Capability of Phased Array technique for Detecting Defects in Thick-Section welds	332 L Wang Research on Automatic Defect Localization Method for Mobile Wheel Ultrasonic Inspection system		62 S Burch The HOIS recommended practice for in-service computed radiography of pipes	371 D Wamwangi Stress relaxation of RF sputtered Cr3C2 thin films by surface Brillouin scattering		277 PS Sarmishtha Centre for Non-destructive Evaluation at CSIR-National Metallurgical Laboratory, Jamshedpur for Materials
11.30-11.50	603 Dr Philip W. Loveday Guided Wave Inspection and Monitoring of Railway Track	556 M Bakoura NDT Applications to Chad-Cameroon Pipeline				26 L Pick Wall Thickness Measurement Techniques Using Digital Radiography	472 J Kuria A flatbed scanner wavefront sensing unit for optics quality control		
11.50-12.00	Short Break								
12.00-13.00	Hall 1AB <i>Keynote Lecture</i> : 607 Dr Allan Rogerson. A Personal Perspective on the Early Developments in Inspection Qualification and Reliability Assessment in the UK Nuclear Industry <i>Chair: Manfred Johannes</i>								
13.00-14.00	Lunch Break								

	1A/B Invited Overview Talks	MR11/A AFNDT Conference	MR11/B Guided Waves	UT: MR12/A Reliability in NDT	POD MR12/B Education	MR21/A Radiography	MR21/B Optical Methods, Terahertz	MR22/A Acoustic Emission	UT: MR22/B Meeting	APCNDT
	<i>Chair: M Spies</i>	<i>Chair: F Herelli / S Edibiri</i>	<i>Chair: P Cawley</i>	<i>Chair: C Mueller</i>	<i>Chair: B Beetge</i>	<i>Chair: U Ewert</i>	<i>Chair: J Gryzagoridis</i>	<i>Chair: H Vallen</i>	<i>Chair: L Dick</i>	
14.00-14.20			106 M Shoji Ultrasonic Guided Wave Testing of Cylindrical Bars	408 R Mabuza Numerical Analysis of Probability of Detecting Defects in Engineering Materials	486 M Moles Phased Array Training in Olympus NDT	284 K Osterloh Ways of Digital Image Processing to Obtain Fast and Unbiased Results				
14.20-14.40	589 Dr Pierre Calmon Trends and Stakes of NDT Simulation	191 SE Abdallah NDE scope, Comparison between ASME section 1 and Chinese standard DL 5007, lessons learned from	126 A Volker Guided Wave Tomography for Bends	310 M Pavlovic Safe Product Design - The Role of the NDE Reliability Analysis	413 H De Wet The Challenges between the Older Generation and New Era Level 3s	232 VA Klimentov Mobile System of Digital Radiography for Nondestructive Testing of the Pipelines of Big Diameter	320 T Weinberger Advances in High Accuracy Measurement In Remote Visual Inspection	414 H Vallen Intrinsically safe acoustic emission equipment opens the door to permanent monitoring applications in the oil and gas		
14.40-15.00		46 K Bouaziz Advanced NDT techniques: A New NDT Method for LPG Storage Tanks Inspection in Tunisia.	128 A Volker Experimental Assessment of the Performance of Guided Wave Travel Time Tomography	262 G Persson Synthetic Non-Parametric POD for Large Defects	55 R Alijah The Different Qualification Systems For NDE Personnel 20 Years Of Experience	317 M Sauer Schnig Industrial X-ray Generation: New Technologies for expanding Application Spaces	130 G Jonusauskas Real-time Full-field In-depth Polymer Tomography Using Ultrafast Laser	528 D Wilkinson Acoustic Emission - Multiple Non Destructive Methods For Inspecting Mobile Elevated Work Platforms		
15.00-15.20	609 Prof. Ryszard Sikora Artificial Neural Networks and Fuzzy Logic in Nondestructive Evaluation	437 M Zergoug Analysis of Stress Behaviours of Steel heated and submitted to the charge by NDT methods	135 R Ernst Multiple Defect Detection by Applying the Time Reversal Principle on Dispersive Waves in Beams	269 G Persson Effects and Consequences of Structural Noise on POD Curves	644 A Mahomed NDT Training, working with Generation X	335 U Zscherpel X-ray endoscopy for inspection of tube to tube sheet welds in heat exchangers	340 M Johannes A comparative study into the capability of Shearography and Active Infrared Thermography in detecting simulated	656 P Sreedhar Acoustic Emission monitoring of Lube Oil Condition in Large IC Engines		
15.20-16.00	Tea/Coffee Break									
16.00-16.20		238 A Benahmed Development of new hardware system for gamma scanning	314 B Chapuis Simulation of ultrasonic guided wave inspection in CIVA software platform	512 L Schaefer Putting MAPOD to work - Aero Life Management experiences in reducing MAPOD concepts to practice	628 K Sahaimi Quality Management System in NDT Training Center	338 C Bellon Reliability Investigations of Radiographic Testing Using aRTist as a Simulation Tool	453 J Schreiber Laser-Speckle-Photometry - a Method for Non-Contact Evaluation of Material Damage, Hardness and	526 P Cole Corrosion Detection & Monitoring		
16.20-16.40	600 Dr Sigrun Hirsekorn Atomic Force Microscopy - What is it All About, and What Does it Tell us About the Microstructure of Metals?	225 MHA Elbadaw The evaluation of the sonic attenuation in different microstructures	349 K McAughey Ultrasonic Thickness Measurements of Sub-millimetre Thickness Samples	196 D Kanzler Bayesian Approach for the Evaluation of the Reliability of Non-Destructive Testing Methods	411 H Fourie Closing the Gap between Customer Expectations and NDT Services Being Provided	346 K Bavendiek New measurement methods of focal spot size and shape of X-ray tubes in digital radiological applications in	291 D Fratzscher Computed THz - Tomography	527 P Cole Acoustic Emission - Advanced Acoustic Methods for On-stream inspection		
16.40-17.00		620 MA Adegbite Functional Inspection Industry in Nigeria: An Imperative for Sustainable Development	530 P Rajagopal Transverse bends and plate guided ultrasonic waves	76 A Rosell Comparison of Experimental and Model Based POD in a Simplified Eddy Current Procedure	634 GP Batov Implementation of new national standard SDOS 05-2010 "Regulations on Strain Stress State Personnel	455 J M Gomez Field Radiography Utilizing Advanced Digital Detector Arrays (DDAs): Improving Safety and Speed	357 M Breit Advantages, risks and prospects of the usage of UV-LED sources for fluorescence stimulation in NDT			
17.00-17.20	606 Prof. J M A Rebello New Challenges for NDT Techniques as Brazil Goes Deeper in Oil Production	77 E Motukisi Magnetic Particle Inspection: Characterisation of the magnetic field for various magnetization techniques	457 K Balasubramaniam Higher Order Modes Cluster (HOMC) Guided Waves Technique for Corrosion Detection	329 J Kurz Probability of Detection (POD) determination using ultrasound phased array for considering NDT in	538 S Fewell ICNDT Workshop For Qualification & Certification Of NDT Personnel	396 M Firsching Method for Dual High Energy X-ray Imaging with Flat Panel Detectors				
17.20-17.40		662 J Nkuna Parallel classification of rolling element bearing faults based on fuzzy logic and Kohonen's Self-Organising Maps	501 M Evans Guided Wave Inspection of High Temperature Pipe-work	194 M Bertovic Human Factors Approach to the Acquisition and Evaluation of NDT Data: Introduction to Human Factors and	665 V Radko Qualification and Certification of NDT Personnel in Ukraine in Compliance with Requirements of International	448 S Abdul-Majid Imaging Corrosion Under Insulation by Gamma Ray Backscattering Method		Gold Sponsor Satellite Symposium Sherwin Babbco 1) PT and MT - the environmental approach in Brazil 2) RADIOGRAPHIC SKILLS		
17.40-18.00	670 Prof. BPC Rao Recent Trends in Electromagnetic NDE Techniques and Future Directions			198 M Bertovic Human Factors Approach to the Acquisition and Evaluation of NDT Data: Examples of Experiments						

18.00-
19.00

Hall 1A/B *Plenary Address:* **645** Professor Harold Kroto: Research as a Key Stimulus of Economic Development
Chair: Giuseppe Nardoni