

NDT in Progress – abstracts

Prague, 2005 October 10-12

**Provisional allocation of submitted papers accepted by Scientific Committee
(both sessions and paper allocations may be still subjected to changes)**

Section A Automated NDT data processing

(U.Zscherpel)

Authors	Title of paper	Sec.	Notes
Kirzhanov D.V. , Avramenko V.G., Lebedev O.V., Budadin O.N.	<i>Automation of heat NDT of buildings</i>	A1	"WEMO", Moscow, Russia

Section B Numerical NDT simulations

(F.Schubert)

Authors	Title of paper	Sec.	Notes
Bilgram R. , Stöbel R., Diez- Vazquez M., Migueles J.R., Schimitschek J., Gradolph Ch.	<i>Simulation of heat generation and dissipation during ultrasonic excited thermography</i>	B1	EADS Corporate Research Centre Munich, D
Spies M. presented by S. Hirsekorn	<i>Semi-Analytical Modeling Applied to Optimize the Performance of Ultrasonic Inspections</i>	B2	Fraunhofer-Institute Saarbruecken, D
Kuehnicke E.	<i>Relation between the transient and the harmonic field of ultrasound transducers</i>	B3	Dresden University of Technology, D
Mayer Klaus , Langenberg K.J., Marklein R.	<i>Modelling and Imaging for Electromagnetic and Elastic Wave Scattering in Concrete</i>	B4	Universität Kassel, D
Schubert F. , Köhler B, Zinin P.	<i>Time-resolved Acoustic Microscopy Simulations for Micro NDE Applications</i>	B5	Fraunhofer-Institut IZFP-Dresden, D
Schubert S. ^a , D. Gsell ^b , P. Niemz ^a , M. Motavalli ^b and J. Dual ^c	<i>Numerical simulation of elastic wave propagation in the radial-tangential plane of wooden trunks with and without fungal decay</i>	B6	ETH Zürich, CH

Section C Nonlinear and inverse problems in NDE (P.P. Delsanto, S.Hirsekorn)

Authors	Title of paper	Sec.	Notes
Gliozzi A.	<i>2-D Nonlinear models and simulations as a tool for NDE in AERONEWS</i>	C1	Politecnico di Torino, I
Goursolle T. , Dos Santos S. et al.	<i>Contact phase modulation measurements in bilayer solids using nonlinear means</i>	C2	UFR Blois, F
Hirsekorn S. , Haffner R., Gebhardt W., Arnold W.	<i>Measurement and Evaluation of Nonlinear Ultrasonic Transmission on Adhesive Bonds</i>	C3	Fraunhofer IZFP, Saarbrücken, D
Meo M. , Zumpano G., and Polimeno U.	<i>Finite element simulation of wave propagation phenomena in a damaged plate to support development of Non-linear elastic wave spectroscopy (NEWS) techniques.</i>	C4	Cranfield University, UK
Delsanto P.P. , Hirsekorn S. and F. Pastrone	<i>The universality of nonclassical nonlinearity and applications to NDE</i>	C5	Politech. di Torino, I, IZFP Saabr., D, Univ. di Torini, I

Section D Health Monitoring of integral structures

(Prof.Meyendorf)

Authors	Title of paper	Sec.	Notes
Köhler B.	<i>Study of elastic wave propagation for NDT and health monitoring applications</i>	D1	Fraunhofer Dresden, D
Schubert F.	<i>Acoustic emission tomography – A new imaging technique for structural health monitoring</i>	D2	IZFP-Dresden, D.
Wilcox P. D. , Konstantinidis G., Drinkwater B. W.	<i>Structural Health Monitoring Using Guided Waves: Active and Passive Techniques</i>	D3	Univ.of Bristol, UK
Obbadi A. , Belattar S.	<i>Three dimensional non destructive study of a delamination of a wall by the surface temperature analysis</i>	D4 or poster	Faculty of Sciences, El Jadida, Morocco

Section E Methods based on elastic waves

(Z. Prevorovsky)

Authors	Title of paper	Sec.	Notes
Döring D. , Pfleiderer K., Solodov I. and Busse G.	<i>New opportunities for material characterisation and damage detection with air-coupled and nonlinear ultrasound</i>	E1	IKP-ZfP Universität Stuttgart D
Längler F. , Schneider E.	<i>Continuum Mechanical Enhancement of the Ultrasonic Residual Stress Analysis for Component Load Estimation</i>	E2	IZFP, Saarbrücken, D
Lehman M.	<i>Monitoring system for delamination detection</i>	E3	LBF, Darmstadt, D
Prevorovsky Z.	<i>Ultrasonic wave transfer in complex aircraft structure</i>	E4	IT ASCR, Prague, CZ
Algernon D. , Wiggenhauser H.	<i>Experimental investigation of the acoustic wave propagation in concrete structures after impact excitation</i>	E5	BAM, Berlin, D
Wendrich A., Krause M., Maierhofer Ch., Wöstmann J., Milmann B. presented by Ch. Trela	<i>Application of ultrasonic and radar tomography for the investigation of the internal structure of masonry</i>	E6	BAM , Berlin, D
Maev R.Gr.	<i>New Generation of High Resolution Acoustic Imaging Technique for Material Characterization and NDT</i>	E7	University of Windsor, Canada

Section F Electromagnetic and radiographic methods

(J. Fiala, J. Šikula)

Authors	Title of paper	Sec.	Notes
Fiala J. , Šutta P.	<i>X-ray Monitoring of Materials Degradation</i>	F1	Westboh.Univ., Plzeň, CZ
Myagotin A. , Helfen L., Banhart J., Baumbach T.	<i>In situ Radiography of Metal Foaming Processes: a Quantitative Analysis</i>	F2	Karlsruhe, Grenoble, Berlin, D
Hájek*K. , Šikula J. **	<i>Parametric Ultrasound-Electric Spectroscopy for NDT of Metal Bodies</i>	F3	poster *Univ. of Defence Brno, **BUT Brno, CZ
Janousek L. , Zhenmao Chen, Noritaka Yusa and Kenzo Miya	<i>A novel eddy current testing probe suitable to the inspection of thick structures</i>	F4	Tokyo, Japan
Kiejn Lee	<i>Noncontact and nondestructive characterization of metallic and organic thin films by using a near-field microwave</i>	F5	Sogang University, Seoul, Korea

Section G Special Imaging and Optical methods

(M. Honlet)

Authors	Title of paper	Sec.	Notes
Swiderski W.	<i>Infrared nondestructive testing in military applications</i>	G2	Military Institute Zielonka, Poland
Helfen L., Kiel D., Pernot P., Mikulík P., Baumbach T.	<i>Three-Dimensional Imaging of Microsystem and Microelectronic Devices by Synchrotron-radiation Computed Laminography</i>	G3	Karlsruhe, Grenoble, Brno D, F, CZ

Section S Student's and poster presentations

(P. Mazal)

Authors	Title of paper	Sec.	Notes
Siddiolo A.M. , Maeva A.R., D'Acquisto L. and Maev R.Gr.	<i>Air-coupled imaging method applied to the study and conservation of paintings</i>	student	Univ.of Windsor Ontario, Canada
Sedlák P. , Hájek K. and Trojanova Z.	<i>Nonlinear spectroscopy of metal samples</i>	student	Brno University of Technology, CZ
Avramenko V.G. , Lebedev O.V., Kirzhanov D.V., Budadin O.N.,	<i>Solution of the inverse problem of nonstationary heat conductivity in multilayer objects using FFT</i>	poster	WEMO", Moscow, Russia

Hefner Š.	<i>Nonlinear Ultrasonic Spectroscopy of Rock and Ceramic Samples</i>	poster	VUT FEKT UFYZ Brno, CZ
Majzner J., Mori Y, Sedlak P, Sikula J.	<i>Spectral analysis of EME signal</i>	poster	Brno University of Technology, CZ
Matysík, M.	<i>On the effect of additives and admixtures on the cement hydration heat development progress</i>	poster	Brno University of Technology, CZ
Chlada M., Blahacek M., Prevorovsky Z.	<i>Neural network AE source location based on extracted signal features</i>	poster	IT ASCR, Prague, CZ
Algernon D., Wiggenhauser H.	<i>Identification of short transient signals in impact echo data using the Hilbert Huang transform (HHT)</i>	poster	BAM, Berlin, D
Lebedev O.V., Avramenko V.G. Kirzhanov D.V., Budadin O.N.	<i>Multi-phase heat-mass transfer and calculation of the current position of the front freezing and dew point in the buildings</i>	poster	WEMO", Moscow, Russia
Blaháček M., Převorovský Z., Chlada M.	<i>Elastic wave propagation in complex aircraft structure</i>	poster	Institute of Thermomechanics AS CR
Běhal, J.	<i>Applications of Non-destructive Testing to Investigation of Aircraft Structure Integrity</i>	poster	Aeronautical Research and Test Institute / Prague, CZ
Vrhel, J.	<i>Czech partners contribution to the AERONEWS EU project</i>	poster	VZLU, Praha, CZ
Kusák I., Luňák M., Schauer P.	<i>On the water content dependence of cetrin-basic wood-cement chipboards</i>	poster	Brno University of Technology, CZ
Kusák I., Luňák M., Schauer P.	<i>Impedance spektroskopy of cetrin-basic wood-cement chipboards</i>	poster	Brno University of Technology, CZ
Anton O., Hobst L., Štěpánek P., Vítek L.	<i>Radiographic Control of Reinforcement in Damaged Roof Trusses of Industrial Hall</i>	poster	Brno University of Technology, CZ
Jae K.Yi	<i>Phase Transformation Measurements by Applied Magnetics</i>	poster	POSCO, Kyungbuk, Korea
Li Yi-bo, JIN Shi-jiu, SHA Jile ³ , SUN Li-ying ¹	<i>Study on Ultrasonic Guided Waves in Fluid-filled Pipes Surrounded by Water</i>	poster	Tianjin University China;
Faci Z., Abbas A., Mebtouche A.	<i>Ultrasonic device calibration for estimation of retained austenite in tool steel</i>		CSC, Algiers.
P. Koktavy, B. Koktavy	<i>Noise spectroscopy of mechanically stressed insulators by means of electromagnetic emission</i>		Brno University of Technology, CZ
P. Koktavy, B. Koktavy, J. Sikula	<i>Partial Discharges and Acoustic Emission in Insulating Materials</i>		Brno University of Technology, CZ

2005-09-10