

IXth International Workshop **NDT in Progress**

Meeting of NDT Experts

October 9 – 11, 2017

Hotel Meritum, Prague, Czech Republic

PRELIMINARY PROGRAM

Monday 9, Oct. 2017	
09.00 - 17.00	Registration
10:00 - 10:30	Workshop opening
10:30 - 12:30	Session 1 - chair: Z. Prevorovsky
10:30	CRACK LOCALIZATION BY NONLINEAR ULTRASOUND Jan KOBER , Zdenek PREVOROVSKY <i>Institute of Thermomechanics, Academy of Sciences of the Czech Republic, Prague, Czech Republic</i>
11:00	NDT IN ADDITIVE MANUFACTURING OF METALS Zdenek PREVOROVSKY , Josef KROFTA, Jan KOBER <i>Institute of Thermomechanics AS CR, Prague, Czech Republic</i>
11:30	MAPPING OF PROBLEMATIC REGIONS IN AE SOURCE LOCATION Milan CHLADA , Zdenek PREVOROVSKY <i>NDT Laboratory, Institute of Thermomechanics AS CR, v.v.i.; Prague, Czech republic</i>
12:00	NUMERICAL COMPUTATIONS LEADING TO LOCALIZATION OF ACOUSTIC EMISSION USING GEODESIC CURVES Petr GÁLIS , Václav KŮS <i>Department of Mathematics, FNSPE, Czech Technical University in Prague, Czech Republic</i>
12:30 - 14:00	Lunch
14:00 - 16:00	Session 2 - chair: S. Hirsekorn
14:00	MODELLING OF ULTRASONIC SCATTERING IN POLYCRYSTALS AIMING FOR TOOLS TO SIMULATE EXPERIMENTS IN NDT&E Sigrun HIRSEKORN , Dascha DOBROVLSKIJ, Martin SPIES <i>Saarbrücken, Germany</i>
14:30	A STUDY ON THE PROPERTIES OF TFM ULTRASONIC IMAGING USING SYNTHETIC DATA Pierric MORA , Martin SPIES, Hans RIEDER <i>Fraunhofer-Institute for Nondestructive Testing IZFP, Saarbrücken, Germany</i>
15:00	ON FINITE ELEMENT MODELLING IN TIME REVERSAL PROBLEMS Michal MRAČKO , Jan KOBER, Radek KOLMAN, Zdeněk PŘEVOROVSKÝ, Jiří PLEŠEK, Jan MASÁK, Alena KRUIŠOVÁ <i>Institute of Thermomechanics of the CAS, v. v. i., Prague, Czech republic</i>
15:30 - 16:00	Coffee break – preparing posters
16:00 - 17:20	Session 3 - Posters - chair: L. Pazdera
16:00	EXPERIMENTAL AND NUMERICAL ANALYSIS OF A TRANSDUCER FOR THE GENERATION OF THE GUIDED WAVES Marco ZENNARO , Alex HAIG, Dan J. O'BOY, Stephen J. WALSH <i>National Structural Integrity Research Center, Cambridge, United Kingdom</i>
16:20	APPLICATION ACOUSTIC EMISSION METHOD DURING CYCLIC LOADING OF CONCRETE BEAM Lubos PAZDERA , Libor TOPOLAR, Karel MIKULASEK <i>Faculty of Civil Engineering, Brno University of Technology; Brno, Czech Republic</i>
16:40	COMPARISON OF FATIGUE PROCESSES IN AISI9Cu3 ALLOY PRODUCED BY SELECTIVE LASER MELTING AND CASTING USING ACOUSTIC EMISSION METHOD Vendula KRATOCHVÍLOVÁ , František VLAŠIC, Pavel MAZAL <i>Brno University of Technology, Faculty of Mechanical Engineering, Brno, Czech Republic</i>
17:00	PASSIVE METAMATERIALS STRUCTURES USING IN MICROWAVE NONDESTRUCTIVE TESTING Dagmar FAKTOROVÁ , Adriana SAVIN, Peter FABO, Katarína ISTENÍKOVÁ, Nicoleta IFTIMIE, Rozina STEIGMANN <i>Faculty of Electrical Engineering, University of Žilina, Žilina, Slovak Republic</i>

Tuesday 10, Oct. 2017

09:30 - 12:30	<i>Registration</i>
09:00 - 11:00	Session 4 - chair: J.V. PIMENTEL
9:00	EXPERIMENTAL GAUSSMETER FOR CIRCULAR MAGNETIZATION Pavel STANĚK , Zbyněk ŠKVOR, Miroslav ROXER <i>Faculty of Electrical Engineering, Czech Technical University in Prague, Praha, Czech Republic</i>
9:30	ELECTRO-MECHANICAL AND ACOUSTICAL CHARACTERIZATION OF PIEZOCERAMIC ELEMENTS AND NDT ULTRASOUND TRANSDUCERS BY USING DIFFERENT TYPES OF EXCITATION SIGNALS Antonio PETOŠIĆ , Petar FRANČEK, Ana MAMIĆ, Petar VEJIĆ, Davor VOLARIĆ, Marko BUDIMIR <i>Department of electroacoustics, Faculty of Electrical Engineering and Computing, Zagreb, Croatia</i>
10:00	MONITORING CRACK FORMATION IN METAL STRUCTURES WITH A PERCUSSION-INSPIRED DETECTION METHOD Joao Vitor PIMENTEL , Rolf KLEMM, Munip DALGIC, Andree IRRETIER, Hans-Werner ZOCH, Karl-Ludwig KRIEGER <i>Institute of Electrodynamics and Microelectronics (ITEM), University of Bremen; Bremen, Germany</i>
10:30 - 11:00	Coffee break
11:00 - 13:00	Session 5 - chair: P. Dokládál
11:00	AUTOMATIC DETECTION OF CRACKS AND DELAMINATIONS IN THERMAL IMAGES Robin ALAIS , Petr DOKLADAL, Etienne DECENCIERE, Bruno FIGLIUZZI <i>Center for Mathematical Morphology, MINES ParisTech – PSL Research University; Fontainebleau, France</i>
11:30	AN ALGORITHM FOR 2D LASER ULTRASONIC TOMOGRAPHY OF BODIES WITH PIECEWISE LINEAR SURFACE Vasily ZARUBIN , Anton BYCHKOV, Alexander KARABUTOV, Elena CHEREPETSUKAYA <i>National University of Science and Technology "MISiS", Moscow, Russia</i>
12:00	ULTRASONIC DETECTION OF PLASTIC DEFORMATION Tomáš ZAVADIL <i>Advanced Technology Group Ltd. (ATG), Prague, Czech republic</i>
12:30	APPLICATION OF PHASED ARRAY Sranislav STARMAN <i>STARMANS Electronics, Ltd., Prague, Czech Republic</i>
13:00 - 14:00	Lunch
14:00 - 16:00	Session 6 - chair: A. Savin
14:00	ULTRASONIC BIOPOLYMER CHARACTERISATION BY HYSTERESIS QUANTIFICATION Jana ZATLOUKALOVÁ , Daniel TOKAR, Karolína KOPECKÁ, Zdeněk PŘEVOROVSKÝ <i>Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, Prague, Czech Republic</i>
14:30	DEVELOPMENT OF NOVEL NON-CAVITATIONAL, NON-THERMAL ULTRASOUND TRANSDUCERS FOR CLINICAL THERAPY Peter A. LEWIN <i>School of Biomedical Engineering, Science and Health Systems, Drexel University, Philadelphia, USA</i>
15:00	MONITORING TECHNIQUE FOR NANOCRYSTALLINE STABILIZED ZIRCONIA FROM SOME MEDICAL PROSTHESIS Adriana SAVIN , Mihail-Liviu CRAUS, Vitalii TURCHENKO, Alina BRUMA, Sylvie MALO, Tatiana E. KONSTANTINOVA, Valerii V. BURKHOVETSKY <i>Nondestructive Testing Department, National Institute for Research and Development for Technical Physics, Iasi, Romania</i>
15:30 - 16:00	Coffee break

16:00 - 18:00	Session 7 – chair: A. Petošić
16:00	ESTIMATION OF IMPACT ON MECHANICAL PROPERTIES OF AUSTENITIC STEEL WELDING CAUSED BY POROSITY Elizaveta SEDANOVA , Michael KROENING, Dmitry SEDNEV, Yana SALCHAK <i>National Research Tomsk Polytechnic University, Tomsk, Russia</i>
16:30	STRUCTURAL HEALTH MONITORING OF WIND TURBINE BLADES USING DIFFERENT NONDESTRUCTIVE TESTING METHODS Adriana SAVIN , R.STEIGMANN, D.ROSU, M.D.STANCIU, D.FAKTOROVA, G.S.DOBRESCU,D.E.HUSARU, P.D.BARSANESCU <i>National Institute of R&D for Technical Physics, Nondestructive Testing Department, Iasi, Romania</i>
17:00	ULTRASONIC IMAGE RECONSTRUCTION METHOD FOR RELIABLE QUALITY ASSURANCE Vladislava ABRAMETS , Michael KROENING, Dmitry SEDNEV, Yana SALCHAK <i>National Research Tomsk Polytechnic University, Tomsk, Russia</i>
17:30	INTER-LABORATORY PROFICIENCY TESTING OF NDT LABS ACCORDING TO ISO 17043 AS A TOOL FOR CONTINUOUS IMPROVEMENT PRINCIPLE ACCORDING TO ISO 9001 Tomáš ZAVADIL <i>ATG Ltd., Prague, Czech Republic</i>
19:30 - 22:00	Social dinner

Wednesday 11, Oct. 2017	
9:30- 13:00	
9:30	General discussion & Workshop closure
10:30 - 13:00	EXCURSION to the INSTITUTE of THERMOMECHANICS of the Czech Academy of Sciences and/or SIGHTSEEING TOUR IN PRAGUE
13:00	WORKSHOP END