

CONTENTS

ICWSE-2002 CONFERENCE'S SPONSORS.....	3
CONFERENCE TOPICS.....	4
ORGANIZING COMMITTEE AND INTERNATIONAL SCIENTIFIC ADVIZORY COMMITTEE.....	5
CONTENTS	6
PAPERS	11
<i>The Anatomy, Properties and Nondestructive Testing of Wood</i>	13
MECHANICAL BEHAVIOUR OF WOOD AT HIGH RATES OF STRAIN.by Jaroslav BUCAR, Libor SEVERA.....	15
EXPERIMENTAL STUDY CONCERNING THE EFFECT OF KNOTS ON THE PHYSICAL PROPERTIES OF SPRUCE by Mihaela POROJAN, Mihaela CÂMPEAN, Mihai ISPAS.....	21
STAND OF TRIALS FOR THE MAXIMUM DEFLECTION OF THE VENEERED PANELS CONTRACTION MEASUREMENT by Maria CISMARU.....	27
ANATOMIC STRUCTURE AND MORFO- PATHOLOGIC CHANGES IN CORRELATION WITH PHYSICAL AND MECHANICAL PROPERTIES OF SOFTWOODS RESULTED FROM WIND BREAKS by Ene NEAGU, Cornelia NUTESCU.....	31
PHISICAL CHARACTERISTICS INFLUENCE ON HEAT TRANSFER PHENOMENA by Maria Luminita SCUTARU, Ivan CISMARU.....	35
WOOD STRUCTURES AND WOOD-BASED SEMIPRODUCTS USED IN TIMBER WORK BASIC THERMAL BEHAVIOR by Maria Luminita SCUTARU, Ivan CISMARU.....	39
THE CORRELATION BETWEEN THE DYNAMIC ELASTICITY MODULUS AND THE MAIN PHYSICAL AND MECHANICAL PROPERTIES NON-DESTRUCTIVE TESTING METHOD OF WOOD BASED PRODUCTS by Gheorghe ZLATE, Radu Stefan GANEA.....	43
ESTIMAREA CALITĂȚII CHERESTELEI PRIN UTILIZAREA METODEI COMBinate A ULTRASUNETELOR ȘI CEA OPTICĂ by Lelioara IANCU, Raimond GRIMBERG, Adriana SAVIN.....	48
<i>Wood Drying and other Thermal Treatments of Wood</i>	51
STUDY CONCERNING THE DISTRIBUTION OF TEMPERATURE IN WOOD DURING A HEATING PROCESS by Mihaela CÂMPEAN, Mihai ISPAS, Ion MARINESCU.....	53
STUDY CONCERNING THE INFLUENCE OF THE DRYING SCHEDULE ON THE DRYING QUALITY OF BEECH WOOD by Ion MARINESCU, Mihaela CÂMPEAN, Virgiliu ISTRATE	59
<i>Gluing and Coating Materials and Technologies</i>	65
LA PROBLÉMATIQUE DES FINITIONS TRANSPARENTES POUR LA PROTECTION D'OUVRAGES EN BOIS EN UTILISATION EXTÉRIEURE. by Beatrice GEORGE , Andre MERLIN, Xavier.DEGLISE.....	67
THE INFLUENCE OF ACETYLATED WOOD FILLER ON SOME PROPERTIES OF POLYPROPYLENE COMPOSITES by Milanjka DJIPOROVIC, Jovan MILKOVIC, Eva DINGOVA.....	69
STUDY ON THE "ADEROM" THERMOPLASTIC ADHESIVE USE IN THE SPECIALS PLYWOODS MANUFACTURE by Aurel. LUNGULEASA, Alexandru. MITIȘOR, Silvia. PAȚACHIA, Ștefan. PATACHIA, Madalina. ZANOAGA.....	75
EFFECTS OF SOME INORGANIC ADDITIVES ON THE PROPERTIES OF LIGNO- CELLULOSIC COMPOSITES by Ileana MILOS, Luminita ENESCU.....	81
TESTING OF WOOD FOR OUTDOOR, ABOVE GROUND APPLICATIONS-A TRIAL OF A MODIFIED L-JOINT METHOD IN ROMANIA by Maria Cristina TIMAR, Emanuela BELDEANU, Octavia ZELENIC.....	87
INFLUENCE OF SURFACE TREATMENT ON THE BEHAVIOUR OF WOOD IN OUTDOOR, ABOVE GROUND EXPOSURE. PART I by Emanuela BELDEANU, Maria Cristina TIMAR, Maria Daniela MIHAI.....	94
INFLUENCE OF SURFACE RESIN TREATMENT OF WOOD ON DIMENSIONAL STABILITY by Emanuela BELDEANU, Maria Cristina TIMAR, Maria Daniela MIHAI.....	99
EFFICIENCY OF COATED CARBIDE TOOLS BASED ON W-TI-N WHEN CUTTING WOOD PARTICLEBOARDS AND OSB by David PINHEIRO, Maria Teresa VIEIRA, J. Paulo M. DIAS	108
<i>Cutting Process</i>	112
CONTRIBUTION TO THE VIBRO-ACOUSTIC ANALYSIS OF WOOD PEELING PROCESS IN VIEW TO DEVELOP AN ON-LINE CONTROL SYSTEM by Louis-Etienne DENAUD, Laurent BLERON, Rémy MARCHAL, Robert COLLET.....	113
MEASUREMENT OF CUTTING FORCES, IN ROUTING WOOD AT VARIOUS GRAIN ANGLES. INITIAL RESULTS WITH DOUGLAS-FIR. by Giacomo GOLI ¹ , Laurent BLÉRON ² , Rémy MARCHAL ² , Luca UZIELLI ¹ , Martino NEGRI.....	123
MATHEMATICAL AND EXPERIMENTAL MODEL FOR DETERMINING THE CUTTING FORCES IN CIRCULAR SAW PROCESS by Loredana Anne-MarieBADESCU.....	131
LES LIMITES DE L'AVOYAGE POUR LES SCIES CIRCULAIRES by Loredana Anne-Marie BADESCU.....	139
MONITORING OF THE CUTTING PROCESS WITH CIRCULAR SAWBLADES by Wilhelm LAURENZI, Viorel POPA, Luminita BRENCI.....	145
STUDIES CONCERNING THE WORK ABILITY OF RESINOUS WOOD BY ROTARY MILLING by Mihai ISPAS, Mihaela CAMPEAN, Mihaela POROJAN.....	151
<i>Wood-Based Materials</i>	155
A NEW GENERATION OF CONTINUOUS PRESSES FOR WOOD COMPOSITES by Marius BARBU, Dieter HOEPNER, Karl LERACH, Helmut ROLL, Peter BECK, Ulrich KAISER.....	157
THE CHIPS QUALITY FOR BIG-AREA OF CHIPBOARD by Aurel LUNGULEASA	166
MULTI-STOREY WOOD BUILDING AS AN ALTERNATIVE TO CONCRETE AND BRICKWORK CONSTRUCTIONS by Florin ATANASIU , Adriana LUCHIAN , Gheorghe MIERTOIU , Constantin PRAUN ...	170
LIGNO – CELLULOSIC PERFORATED PARTICLEBOARD by Septimiu Sever VOINA.....	176
DENSITY REPARTITION WITHIN FLAKE CHIPBOARDS THICKNESS by Emilia STOIAN SALCA, Aurel LUNGULEASA	182
L'ANALYSE DES DONNES EXPERIMENTALES OBTENUES PAR L'ESSAI A L'USURE DE PANNEAUX EN PARQUET STRATIFIE by Ghiorghita-Nicolaie COMSA.....	186
<i>Design and Manufacture of Furniture and other Finished Wood Products</i>	190
FURNITURE AND WOOD PRODUCTS INDUSTRY IN ROMANIA OPPORTUNITIES AND DIRECTION by Ivan CISMARU.....	191
THE INFLUENCE OF VENEERS CONTRACTION ON THE STABILITY OF THE PLANE VENEERED PANELS by Maria CISMARU.....	197
EXEMPLES OF PARAMETRIC MODELING OF COMPLEX FURNITURE PARTS USING AUTOLISP LANGUAGE by Teofil MIHAILESCU.....	199
<i>Wood Preservation and Wood Modification</i>	204
STUDY OF WOOD ACETYLATION UN LATVIA by Andris MOROZOVS, Karlis SVALBE, Aivars ABOLTINS	205
CHANGE OF PROPERTIES OF SMALL WOOD SAMPLES DUE TO CHEMICAL MODIFICATION by Hannah EPMEIER, Charlotte BENGTSOON, Mats WESTIN	211
EFFECTIVENESS OF CCA PRESERVATIVES IN WOOD EXPOSED TO SEA WATER by Octavia ZELENIC, Maria MARZA, Mariana PRUNA	217
ON THE SUSCEPTIBILITY OF CELLULOSE ACETATE TO ENZYMATIC ATTACK by Liliana OLARU, Niculae OLARU, Valentin I. POPA	223
STRUCTURAL MODIFICATION OF CELLULOSE in cmc synthesis by Niculae OLARU, Liliana OLARU.....	229
COMPARATIVE STUDY ON THERMAL BEHAVIOR OF CELLULOSE ACETATE, CELULOSE ACETATE PHTHALATE AND CELULOSE ACETATE TRIMELLITATE by Niculae OLARU, Petru BUDRUGEAC, Liliana OLARU.....	235
BIOTECHNOLOGY IN WOOD CHEMISTRY, PRODUCTS AND PROCESSES by Valentin I. POPA, Carmen – Alice TEACA Ruxanda BODARLAU.....	241
CHEMICAL MODIFICATION OF WOOD A NEW ECOLOGICAL CONCEPT OF WOOD PRESERVATION by Maria Cristina TIMAR.....	246
AB INITIO STUDY OF LIGNIN METHYLATION. REACTIVITY OF MONOLIGNOLS by Costel AGACHE, Valentin I POPA, Valeriu PETROVICI.....	254
RESEARCHES INTO POPLAR, BEECH AND OAK WOOD BEHAVIOUR AT THE TREATMENT WITH SODIUM CARBONATE SOLUTION by Valeriu PETROVICI, Wilhelm LAURENZI, Costel AGACHE, Oana Andreea PARNUTA, Robert ZOLCEAG, Loredana IONESCU, Mona ANGHELESCU.....	260
<i>Wood Processing Machine-Tools</i>	266
THE INFLUENCE OF TECHNOLOGICAL STRUCTURES OF WIDE BELT SANDING MACHINES ON THE QUALITY OF PROCESSED WOODEN SURFACE by Nicolae TARAN, Nicolae BEGANU, Michael BOROS.....	267
THE ECONOMICAL CRITERION – A MAIN ELEMENT FOR CHOOSING A MACHINE-TOOL by Gavril BUDĂU, Mihai ISPAS, Mihaela CÂMPEAN.....	273
EXPERIMENTAL RESEARCHES CONCERNING ACOUSTIC EMISSIONS DURING THE FUNCTIONING OF BELT TRANSMISSIONS by Mihai ISPAS, Mihaela CAMPEAN.....	277
<i>Advances in the Construction of Wood processing Tools and Devices</i>	281
COMPUTER AIDED DESIGN OF MILLING CUTTER by Luminita - Maria BRENCI, Wilhelm LAURENZI.....	283
STUDIES AND RESEARCHES CONCERNING THE ELABORATION OF METHODODOLOGY AND VIRGIL.....	288
RESEARC CONCERNING THE DESIGN OF INSTALLATIONS FOR TESTING DOOR- LEAVES SUBJECTED TO REPEATED TORSIONS by Greco VIRGIL.....	291
<i>Computer Aided Engineering</i>	295
COMPUTER ASSISTED SELECTION OF ADHESIVES USED FOR SOLID WOOD GLUING by Camelia BOIERIU, Emilia STOIAN , Dumitru LICA	297
COMPUTER - AIDED PROCESS OF DESIGNING, PLANNING, SUPERVISION AND CONTROL (ERP) IN THE FURNITURE FACTORIES by Dana PODASCA, E. NECEA.....	301
PROBLEMS ENCOUNTERED IN DESIGN OPTIMISATION OF A MORTISE AND TENON JOINT by Teofil MIHAILESCU.....	308
TRACTION TEST OF SOLID WOOD DOWEL JOINTS THEORETICAL MODELLING by Camelia NEGREANU, Valentin NASTASE, Mircea Gheorghe MUNTEANU.....	313
TRACTION TEST OF SOLID WOOD DOWEL JOINTS EXPERIMENTAL STUDIES by Camelia NEGREANU, Valentin NASTASE, Mircea Gheorghe MUNTEANU.....	318
THE BEHAVIOUR OF SOLID WOOD JOINTS USING DESTRUCTIVE TESTING by Camelia NEGREANU, Valentin NASTASE.....	326
<i>Environment-Friendly and Energy-Saving Technologies</i>	334
ENVICUT- PROJECT, HOW TO REDUCE THE AMOUNT OF DUST AND NOISE IN by Pasi HEMMILA, Christian GOTTLÖBER.....	335
ENVIRONMENTALLY DEGRADABLE POLYMER MATERIALS CONTAINING LIGNIN by Georgeta CAZACU, A.I. KOWARSKI, Lenuta PROFIRE, Mihaela Cristina PASCU, Cornelia VASILE.....	345
<i>Quality Control and Management in Wood Industry</i>	351
ORGANIZATION FOR PRODUCT CERTIFICATION (MACHINERY, EQUIPMENT, PLANTS) FOR WOOD INDUSTRY. INL-U-CERT. A COMPONENT PART OF NATIONAL SYSTEM OF QUALITY INFRASTRUCTURE, EVALUATION AND CERTIFICATION, FOR SPEEDING UP THE INTEGRATION IN THE SPECIFIC EUROPEAN SYSTEM by Bogdan CONSTANTINESCU Ion, STEFANESCU.....	353
POSTERS	359
MICROSCOPIC WOOD STRUCTURE INFLUENCE ON HEAT TRANSFER PHENOMENA by Maria Luminita SCUTARU, Ivan CISMARU.....	361
A NEW ALTERNATIVE IN TIMBER DRYING by Mihaela CÂMPEAN.....	364
INFLUENCE OF WOOD EXTRACTIBLES ON THE GLUING QUALITY IN OAK LVL by Mariana SVORADOVÁ, Laurent BLÉRON, Rémy MARCHAL, Giacomo GOLI, Fabrice COTTIN.....	370
CUTTING TESTS OF LAMINATED PARTICLE BOARD REGARDING WORK OF FRACTURE AND CHIPS PLASTIC DEFORMATION by Piotr BEER, Christopher EDE, Milojka GINDL , Stefanie STANZL-TSCHEGG	379
UNCONVENTIONAL DECORATING TECHNOLOGIES FOR FURNITURE by Gavril BUDĂU, Mihaela CÂMPEAN, Mihai ISPAS, Radu-Mihai POPESCU.....	385
THE EUROPEAN APPROACH OF WOOD PRESERVATION by Maria Cristina TIMAR.....	389
THEORETICAL STUDY OF BOND DISSOCIATION ENERGY IN LIGNIN MODEL COMPOUNDS AB INITIO CALCULATIONS FOR β -O-4, β -5, β -1, 4-O-5 UNITS by Costel AGACHE, Valentin I POPA, Valeriu PETROVICI.....	395
ASPECTS CONCERNING CIRCULAR SAW BLADES STRESSES by Ciprian LAZARESCU, Ioan CURTU, Loredana Anne-Marie BADESCU.....	401
INCREASED USE OF ENERGY FROM WOOD AND IT'S MANAGEMENT; A NEW WAY IN THE IMPROVEMENT OF ROMANIA INDUSTRIES AND A GRATE HELP IN THE EFFORT FOR EUROPEAN INTEGRATION OF ROMANIA by Olga GIUREA.....	406
GENERAL CONDITION REGARDING THE RATIO BETWEEN THE TECHNOLOGY AND THE TECHNICAL ENDOWMENT IN THE FABRICATION PROCESS OF FINISHED WOODEN PRODUCTS by Niculae BEGANU, Nicolae TARAN	416
INDEX Autori	423