

CONTENTS

ICWSE-2004 CONFERENCE'S

SPONSORS.....	3
ORGANIZING COMMITTEE AND INTERNATIONAL SCIENTIFIC ADVIZORY COMMITTEE.....	4
FOREWORD	5
CONTENTS	6

PERSPECTIVES DE DEVELOPPEMENT DE L'INDUSTRIE D'EXPLOITATION ET USINAGE BOIS EN ROUMANIE Loredana Anne-Marie BADESCU, Ioan SBERA, Oana-Andreea PIRNUTA	11
---	----

SECTION I

<ul style="list-style-type: none">• WOOD PROPERTIES, PHYSICAL AND MECHANICAL TESTS;• THERMAL TREATMENTS, NATURAL DURABILITY AND WOOD PRESERVATION;• WOOD CHEMISTRY, TECHNICAL MATERIALS AND FINISHING TECHNOLOGIES ;• PRODUCTS DESIGN;• MODERN TECHNOLOGIES.	
INFLUENCE OF DIFFERENT NOTCHES ON TENSILE BEHAVIOUR OF WOOD Libor SEVERA, Ivo KRIVANEK, Jaroslav BUCHAR and Petr KONAS	19
INFLUENCE OF KNOTS TO MECHANICAL STRESS GRADING OF SPRUCE WOOD TIMBER Alena Rohanová - Ján Dubovský	26
THE INFLUENCE OF MOISTURE CONTENT ON PHYSICAL-MECHANICAL WOOD CHARACTERISTICS Cornelia NUȚESCU	29
VISCOUS-ELASTIC ANALYSIS OF THE STRESSES AT THE GLUED JOINTS Ioan CURTU, Vasile CIOFOAIA, Marius BABA, Angela REPANOVICI, Mariana STANCIU	32
DIRECT METHOD FOR SHRINKAGE DETERMINATION OF VENEERS .Maria CISMARU, Ivan CISMARU, Mihaela CAMPEAN, Mihaela POROJAN, Adriana FOTIN, Emilia- Adela SALCA	36
TRANSVERSAL INCIDENT ULTRASOUNDS USED AT MEASUREMENT OF PLYWOOD DEFECTS Lelioara IANCU	40
LIGNOCELLULOSIC, THERMOPLASTIC COMPOSITES Ileana MILOȘ, Luminița ENESCU, Ioan CURTU, Valeriu PETROVICI, Lelioara IANCU	51
THE QUALITATIVE ANALYSIS OF SOME NEW WOOD - THERMOPLASTIC COPOLYAMIDE COMPOSITE MATERIALS Madalina Zanoaga ¹ , Yevgen Mamunya ² , Fulga Tanasa ¹ , Volodymyr Myshak ² , Eugene Lebedev	57
EVALUATING THE RELATIVE EFFECTIVENESS OF DIFFERENT DRYING TECHNIQUES FOR REDUCING THE ODOROUS EMISSIONS FROM DAHOMA Zeen HUANG, Kevin MAHER, Sam AMARTEY, Tatsuro OHIRA, Seiji OHARA and Koichi YAMAMOTO	62
STUDY CONCERNING DRYING DISCOLORATIONS SPECIFIC TO LIGHT-COLOURED HARDWOODS Mihaela CÂMPEAN Ion MARINESCU Mihai ISPAS Mihaela POROJAN	66
WOOD FEATURES THAT INFLUENCE THE DRYING PROCESS Viorel Girlea	71
THE STUDY OF WATER CIRCULATION THROUGH WOOD UNDER THE INFLUENCE OF TEMPERATURE AND THE STUDY OF WATER EVAPORATION UNDER THE ACTION OF AIR VELOCITY Viorel GIRLEA, Stefan ALEXANDRU	78
THERMAL CONDUCTIVITY OF THE SOLID WOOD PANELS Camelia BOIERIU, Daniela SOVA, Dumitru LICA	84
THE DURABILITIES OF SELECTED GHANAIAN TIMBERS AGAINST MICROORGANISMS AND TERMITES Charles ANTWI-BOASIAKO, Andrew PITMAN and John BARNETT	87
ANALYSING THE CHEMICAL CHANGES IN WOOD BROUGHT ABOUT BY DECAY FUNGI Zeen HUANG, Kevin MAHER and Sam AMARTEY	93
WOOD PRESERVATION PRODUCTS AN ALTERNATIVE FOR BUILDING LONG SERVICE LIFE Octavia ZELENIU, PRUNA, Lelioara IANCU, Elena RADULESCU	100
WOOD IMPROVEMENT BY SURFACE IMPREGNATION WITH REACTIVE RESINS. CORRELATIONS BETWEEN THE RESIN PROPERTIES AND THE BEHAVIOUR OF TREATED WOOD Emanuela BELDEAN, Maria-Cristina TIMAR, Maria-Daniela MIHAI	107
UTILISATION OF MODERN COLOUR MEASUREMENT TECHNIQUES AND OPTICAL MICROSCOPY IN MONITORING WOOD WEATHERING AND EVALUATING THE EFFICIENCY OF DIFFERENT PROTECTIVE SURFACE TREATMENTS Maria Cristina TIMAR, Emanuela BELDEAN, Sorin ZAMFIRA, Doru URSUȚIU	113
SURFACE IMPREGNATION AND CLASSICAL WOOD IMPREGNATION PROCEDURES. AN ECONOMIC AND EFFICIENCY ASSESMENT Maria-Daniela MIHAI, Emanuela BELDEAN	122
AB INITIO CALCULATIONS OF LIGNIN MODEL COMPOUNDS. CONFORMATIONAL ANALYSIS OF DIMERIC STRUCTURAL UNITS AND IMPORTANCE OF THE INTRAMOLECULAR HYDROGEN BOND ON THE CONFORMATIONAL PREFERENCES Costel AGACHE, Valentin I POPA	126
WOOD UTILIZATION FOR THE PRODUCTION OF CHEMICALS. INVESTIGATION OF THE DILUTE ACID PREHYDROLYSIS OF THE BEECH SAWDUST Costel AGACHE, Valeriu PETROVICI	136
HETEROGENEOUS ACETYLATION OF CELLULOSE Niculae OLARU, Liliana OLARU	142
NOVEL WOOD COMPOSITES AND ALTERNATIVE TECHNOLOGIES BY CHEMICAL MODIFICATION OF WOOD Maria Cristina TIMAR, Maria Daniela MIHAI, Mark IRLE, Kevin MAHER	147
PREPARATION OF PHENOL-FORMALDEHYDE ADHESIVES WITH HIGHER REACTIVITY Ján Sedliačik	155
UTILISATION OF LEATHER PROTEINS FOR GLUE COMPOSITIONS Milan Sedliačik, Ján Sedliačik	159
CONSIDERATIONS REGARDING THE NEW TYPES OF UREA- AND PHENOL-FORMALDEHYDE RESINS MANUFACTURED BY S.C. VIROMET S. A. VICTORIA - ROMANIA AND USED IN THE WOOD PROCESSING DEPARTMENT Valeriu PETROVICI George COLCEA Vasile CRĂCIUN Eugen SCURTUI Ileana BORZEA Camelia MAIER Oana - Andreea PÎRNUTĂ Emilia-Adela SALCĂ Anca POPARAD	161
GLUING SHEARING STRENGTH BY COMPRESSION AT BLACK LOCUST (<i>Robinia Pseudacacia L.</i>) WOOD SAMPLES MIHAELA POROJAN, EMILIA-ADELA SALCA, MARIA CISMARU	167
ASPECTS OF BEECH WOOD ADHESIVE BOND CAMELIA BOIERIU, DUMITRU LICA, VALENTIN NASTASE	170
METHODOLOGIE D'ECO CONCEPTION APPLICABLE DANS LES PME FRANÇAISES DE PRODUITS D'AMEUBLEMENT JEAN-MAX MAMET	173
THREE CENTURIES OF FLORENTINE CASSONI CONSTRUCTION MARINA CIONCA	180
TECHNIQUES DE DECORER LE BOIS AVEC DE LA PEINTURE ELENA RADULESCU, OCTAVIA Zeleniuc, MONICA GHEMENT	185
TRADITIONAL SKILLS OF ALDER AND BIRCH EMILIA-ADELA SALCA, ADRIANA FOTIN, MARIA CISMARU, IVAN CISMARU	190
THE COLOUR OF THE ACACIA WOOD SURFACE, IN NATURAL AND COLOUR STATE ELENA POPA, VIOREL POPA	196
THE DETERMINATION OF THE ACACIA NATURAL COLOUR BY MEASURING THE TRICHROMATIC COMPONENTS X,Y,Z	200
STUDIES ON THE UTILIZATION OF SPECIFIC MATERIALS IN WINDOW CONSTRUCTION VIRGIL GRECU	205
RESEARCH ON THE ESTABLISHMENT OF THE ASSEMBLING TECHNOLOGY OF WINDOWS IN CONSTRUCTIONS VIRGIL GRECU	211
SOME ISSUES CONCERNING THE MOIRÉ PHENOMENON JUSTINA MONICA GHEMENT, AL. MITISOR, OCTAVIA ZELENIU, ELENA RĂDULESCU, LOREDANA ANE-MARIE BĂDESCU	215
SECTION II	
<ul style="list-style-type: none">• Wood processing and surface quality;• Tools, Devices, and Machine –Tool for Wood Industry;• Automation in Wood Industry;• Modeling, computer aided design and Technologies;• Management, quality, economical and ecological aspects.	225
ASPECTS CONCERNING THE APPLICATION OF SOME FAILURE CRITERIA TO DIFFERENT WOOD SPECIES AND WOOD COMPOSITE MATERIALS Ioan CURTU, Marius BABA, Loredana Anne-Marie BĂDESCU, Angela REPANOVICI,	227
A METHOD FOR EVALUATING THE PROCESSING ROUGHNESS OF SANDED WOOD SURFACES LIDIA GURAU, HUGH MANSFIELD-WILLIAMS, MARK IRLE	233
A METHOD FOR FILTERING THE ROUGHNESS OF A SANDED WOOD SURFACE WITHOUT DISTORTION AND IN REAL TIME Lidia GURAU, Hugh MANSFIELD-WILLIAMS, Mark IRLE	241
ASPECTS REGARDING THE VENEER'S DEFORMATIONS DURING PROCESSING Dr. Eng. Alexandru MITISOR, Eng. Emilia-Adela SALCA, Eng. Monica GHEMENT	248
TECHNOLOGICAL DEVICES FOR MOULDING ON MACHINES WITH VACUUMETRIC TABLE Aurel LUNGULEASA	253
RESEARCH ON THE DESIGN OF TECHNOLOGY AND TOOLS FOR HORIZONTAL MORTISING DEVICES Virgil GRECU	256
MATHEMATICAL MODEL FOR DESIGNING SMALL-SIZE VATS USED TO TREAT LOGS BY BOILING Ion MARINESCU Mihaela CÂMPEAN Nicolae MARINESCU	260
THE MEASUREMENT OF THE AIR CIRCULATION SPEED WITH A COMPUTER, INSIDE THE WOOD DRYING INSTALATIONS Viorel Popa, Elena Popa,	265
REGARDING THE OPTIMIZATION OF SANDING PROCESS THROUGH MATHEMATICAL MODELATION Nicolae TARAN, Nicolae BEGANU, Mihael BOROS, Sergiu RACASAN	268
A COMPUTER AIDED INVESTIGATION OF THE PROCESSING ACCURACY OF FINGER JOINTS Luminita BRENCI, Teofil MIHAILESCU	274
COMPUTER PROGRAMMS USED FOR THE WOOD MACROSCOPIC ANALYSIS	278
ETUDE DE LA TECHNOLOGIE DE FABRICATION DES PANNEAUX DE PARQUET STRATIFIE TRANSVERSAL Ghiorghiță Nicolaie COMSA	282
THE ANALYSIS OF SOME INTERIOR WOODEN STAIRWAY STRUCTURES Constantin LĂZĂRESCU, Ciprian LĂZĂRESCU	286
STUDY REGARDING THE DETERMINATION OF THE DURABILITY OF CARBIDE-TIPPED SAW BLADES AND DIAMOND-TIPPED SAW BLADES USED FOR CUTTING MELAMINE-FACED CHIPBOARDS, TYPE "THERMOPAL" Cosmin SPIRCHIEZ, Sergiu RACASAN	290
COMPUTER ASSISTED SIMULATION OF CIRCULAR SAW BLADES CUTTING COSTS Wilhelm LAURENZI	294
ADDING VALUE TO SMALL-DIAMETER HARDWOODS IN SOUTH-EAST ENGLAND David SAUNDERS MSc MICFor	298
ENVIRONMENT PROTECTION ISSUES, GENERATED BY NON – WOODEN WASTES RESULTED FROM WOOD – WORKING INDUSTRY Mircea IONESCU, Victoria TELEABĂ, Mirela TUDORACHE	303
THE RESERCH REGARDING THE PROCEDURES OF THE QUALITY MANAGEMENT SYSTEM Gavril BUDĂU Mihai-Victor ZERBES,	306
RESEARCH REGARDING THE ECONOMICAL EFFECT OF THE QUALITY MANAGEMENT SYSTEM IMPLEMENTATION INSIDE SC DEKO-RAME SRL ORGANIZATION, SIBIU Gavril BUDĂU Mihai-Victor ZERBES	310
THE SETTING UP AND DEVELOPMENT OF CONFORMITY ASSESSMENT AND CERTIFICATION OF TECHNICAL EQUIPMENTS FROM WOOD-WORKING INDUSTRY, BY ACCREDITATION AND NOTIFICATION OF SPECIFIC BODIES AND LABORATORIES FROM QUALITY SUBSTRUCTURE, IN ACCORDANCE WITH THE COMMUNITY PRINCIPLES AND PRACTICES Bogdan CONSTANTINESCU, Ion ȘTEFĂNESCU	316
THE COLOUR DISPLAY – A PERSPECTIVE GEOMETRY MATTER Elena POPA, Viorel POPA	323
CONTRIBUTIONS TO THE YIELD INCREASE AT TIMBER SAWING CUTTING INTO FURNITURE ELEMENTS, USING OPTICAL SCANNING LELIOARA IANCU, IOAN CIUREA, OCTAVIA ZELENIU, ILEANA MILOȘ, CRISTIAN IANCU, PETRE BRUMARIU, BARBU VALENTIN.	326
THE INFLUENCE OF THE WOOD DENSITY UPON THE CHIPBOARDS TECHNOLOGY AND THEIR FEATURES DR. ENG. AUREL LUNGULEASA, PHD. STUDENT ASSIST. ENG. EMILIA-ADELA SALCA, PHD. STUDENT ASSIST. ENG. ADRIANA FOTIN	339