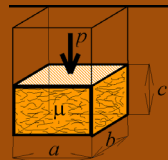
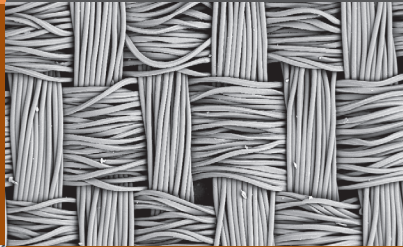
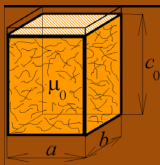


Pocket Programme

24th International Conference STRUTEX

Structure and Structural
Mechanics of Textiles

2. - 4. 12. 2024
Building B, 2nd floor
Liberec, Czech Republic



IN COOPERATION WITH



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Dear,

Welcome to the 24th International Conference STRUTEX at the Faculty of Textile Engineering, Technical University of Liberec. Faculty of Textile Engineering was established in 1960 as the second faculty of the Technical College.

Structure and Structural Mechanics of Textiles „STRUTEX“ conference is focused on presentation of textile structures and structural mechanics in modules: fiber layer, linear formations, 2D and 3D textile structures, description of special experimental methods for analysis of textile properties as well as textile structure, research and development of new 2D and 3D textile structures in the field of clothing and technical textiles.

We would like to wish you a pleasant stay at conference in Liberec.

Conference organizers.

Monday 2 December 2024

Building B

16:00 - 17:00 Registration & Welcome drink

(Room B5, 2nd floor)

Tuesday 3 December 2024

08:00 - 15:00 Registration

(Room B5, 2nd floor)

09:00 - 09:30 **Brzezina Miroslav** (Rector of Technical University of Liberec)
Bajzík Vladimír (Dean of Faculty of Textile Engineering TUL)
Neckář Bohuslav (President of the Conference)
Kolčavová Sirková Brigita (Head of KTT Department)

CONFERENCE OPENING

(Room B4, 2nd floor)

ORAL PRESENTATIONS

Chairman: **Bajzík Vladimír**

(Room B4, 2nd floor)

09:30 - 10:00 **Schweynoch E** (Invited Lecture)

TEXTILE HISTORY IN LUSATIA - AN OVERVIEW

10:00 - 10:30 **Kyosev YK** (Invited Lecture)

*MULTISCALE MODELLING OF SEWING SEAMS AND THE INTERACTION
BETWEEN THE TEXTILE FABRICS AND SEWING THREADS*

10:30 - 11:00 **Neckář B** (Invited Lecture)

*DEVELOPING OF THEORY OF STRUCTURE AND MECHANICS
OF TEXTILE FIBER PRODUCTS*

11:00 - 11:30 Coffee Break

(Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: **Tunák Maroš**

(Room B4, 2nd floor)

- 11:30 - 11:45** **Breen D, Wadekar P, Amanatides C, Dion G & Kamien R**
GEOMETRIC AND MECHANICAL MODELING OF WEFT-KNITTED FABRICS USING HELICOID SCAFFOLDS
- 11:45 - 12:00** **Sitotaw DB, Muenks D & Kyosev YK**
THE RESISTANCE OF FIBER-REINFORCED 3D PRINTED STAB-PROOF ARMOR ELEMENTS: MATERIALS, GEOMETRIES, DIMENSION AND ORIENTATION
- 12:00 - 12:15** **Zbončák R**
MODAL ANALYSIS OF A LAMINATE PLATE WITH 10 MM NOTCH FOCUSED ON THE EFFECT OF A FUNCTIONALLY ORIENTED FABRIC LAYUP WITH 20 MM WIDE CARBON STRIPS
- 12:15 - 12:30** **Barburski M, Lemmi T & Poniecka A**
PROPERTIES OF WOOL FIBERS REINFORCED COMPOSITES
- 12:30 - 12:45** **Ali A, Mahrukh, Ali A, Ijaz W, Fatima H, Rasool M & Iqbal A**
HYDROPHOBIC TREATMENT OF JUTE REINFORCEMENT AND ITS EFFECT ON MOISTURE ABSORPTION AND MECHANICAL PROPERTIES OF COMPOSITES
- 12:45 - 13:00** **Güler B, Kalkan IE, Çelebi Ş & Şahin UK**
INVESTIGATION OF THE EFFECT OF SOFTENERS ON COTTON KNITTED FABRIC STIFFNESS
- 13:00 - 14:00** **Lunch** (Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman:

Hes Luboš

(Room B4, 2nd floor)

- 14:00 - 14:15** **Üzümcü MB, Sarioğlu E, Nacarkahya T, Satıl Ş & Sarı B**
ANALYZING THE EFFECT OF BLENDING RATIO AND SPINNING SYSTEM ON THE PROPERTIES OF BAMBOO/COTTON FABRICS DYED WITH ACORN DYESTUFF
- 14:15 - 14:30** **Şahin YD & Okur M**
THE TYPES OF TEXTILES USED IN THE FAÇADE AND ROOFING SYSTEMS OF STADIUM FACILITIES IN TÜRKİYE
- 14:30 - 14:45** **Tkacz-Szcześna B, Nejman A, Krzyżowska M & Cieślak M**
NON-WOVEN FABRICS FUNCTIONALIZED WITH BIOACTIVE SILANE SOLS WITH NANOPARTICLES
- 14:45 - 15:00** **Hu S, Wang D, Křemenáková D & Militký J**
MULTILAYER STRUCTURED METALIZED TEXTILE WITH ENHANCED EMI SHIELDING PROPERTY

15:00 - 15:30 **Coffee Break**

(Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: Wiener Jakob

(Room B4, 2nd floor)

- 15:30 - 15:45** **Kalkan İE, Çalışkan E, Şahin C, Balcı O & Kuvvetli Y**
DEVELOPING CNN-AUGMENTED MODELS TO PREDICT CIELAB OUTCOMES POST-BLEACHING OF DENIM GARMENTS
- 15:45 - 16:00** **Uslu O, Yılmaz S & Pektaş EA**
THE DEVELOPMENT OF STONE WASHING PROCESS FOR DENIM WITH ALTERNATIVE MATERIALS USING FOAM APPLICATION TECHNIQUE
- 16:00 - 16:15** **Ali A, Militký J, Tomková B, Khan MZ, Samiuddin, Nosheen S & Suleman I**
DESIGN OF ELECTRICALLY CONDUCTIVE, HIGHLY STRETCHABLE, HYGIENIC ELECTRODES FOR ELECTROTHERAPY

Culture Program and Banquet

17:00 - 21:00

(City Hall, Liberec)

STRING QUARTET

Mikolášková Marcela - 1. violin

Volíčková Olesia - 2. violin

Matejča Ištván - viol

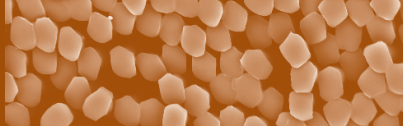
Kolafová Věra - violoncello

PROGRAM:

ANTONIO VIVALDI: SYMPHONY PER ARCHI ERVE 151, 146, 148

ARCANGELO CORELLI: CONCERTO GROSSO Č.10, F- DUR, ALLEMANDA





ORAL PRESENTATIONS

Chairman: Kůs Zdeněk

(Room B4, 2nd floor)

- 09:00 - 09:30** **Bueno MA (Invited Lecture)**
SKIN-TEXTILE CONTACT AND FRICTION
- 09:30 - 09:45** **Oztemur J, Ozdemir S, Tezcan-Unlu H, Cecener G, Sezgin H & Yalcin-Enis I**
EVALUATING BIODEGRADATION RATES IN NEAT PCL- AND PCL/PLA-BASED BIOCOMPATIBLE TUBULAR SCAFFOLDS
- 09:45 - 10:00** **Ozdemir S, Oztemur J, Yolgosteren A, Sezgin H & Yalcin-Enis I**
SUTURE RETENTION STRENGTH OF BILAYER VASCULAR GRAFTS MADE OF PCL, PLA AND THEIR COPOLYMER
- 10:00 - 10:15** **Dasdemir M, Serdar SG & Ibili H**
INVESTIGATION OF THE PRODUCTION OF TRICLOSAN/CHITOSAN NANOCAPSULES FOR FUNCTIONAL SURFACE APPLICATIONS
- 10:15 - 10:30** **Nejman A, Tkacz-Szczęсна B, Krzyżowska M, & Cieślak M**
TEXTILE MATERIALS WITH AIMED BIOACTIVE PROPERTIES
- 10:30 - 10:45** **Rashid S, Latif T, Ali M, Jamil A, Shahzad L, Tariq R, Sarwar A & Ali A**
ENHANCE THE ANTIBACTERIAL PROPERTIES OF SILVER PARTICLES COATED COTTON BANDAGES FOLLOWED BY NATURAL EXTRACTED DYE
- 10:45 - 11:00** **Arsoy R**
CUTTING ROOM SOFTWARE: ENHANCING EFFICIENCY IN GARMENT PRODUCTION
- 11:00 - 11:30** **Coffee Break** **(Room B5, 2nd floor)**

ORAL PRESENTATIONS

Chairman: **Chvojka Jiří**

(Room B4, 2nd floor)

11:30 - 11:45 **Palak H & Kayaoğlu BK**

*ELECTROSPUN BIO-NANOCOMPOSITE WEBS BY CELLULOSE
NANOCRYSTAL (CNC)- LOADED POLYLACTIDE AND ITS BLENDS*

11:45 - 12:00 **Coetzee D, Aguilera JPP, Thekiso T & Wiener J**

*POLYVINYL ALCOHOL (PVA) AND POLYAMIDE 4,6 (PA 4,6)
DC ELECTROSPUN NANOFIBROUS COMPOSITE MATERIALS
FUNCTIONALIZED WITH EXPANDED GRAPHITE*

12:00 - 12:15 **Zhang X**

*THERMOELECTRIC BEHAVIOR OF COPPER -NICKEL COATED
POLYETHYLENE TEREPHTHALATE FABRIC*

12:15 - 12:30 **Hou W**

*THE EFFECT OF TIME, SOLUTION CONCENTRATION AND TEMPERATURE
ON THE DEPOLYMERIZATION OF POLYESTER IN SODIUM HYDROXIDE
SOLUTION*

12:30 - 12:45 **Usta C, Seyhan A & Gürarslan A**

*ADSORPTION OF METHYLENE BLUE DYE FROM AQUEOUS SOLUTION
USING BIO-WASTE POPLAR FIBER*

12:45 - 13:00 **Pechová M, & Dušek D**

*ENHANCING PEDESTRIAN VISIBILITY IN COMPLEX VISUAL SCENES
IN DAYTIME AND NIGHTTIME TRAFFIC CONDITIONS*

13:00 - 14:00 **Lunch**

(Room B5, 2nd floor)

POSTER (ORAL) PRESENTATIONS

Chairman: **Blanka Tomková**

(Room B4, 2nd floor)

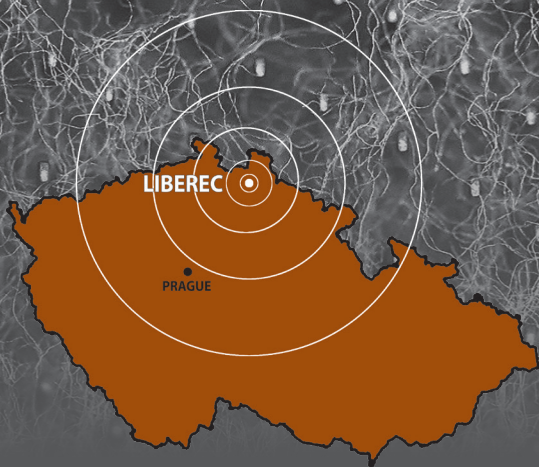
- 14:00 - 14:05** **Güler B, Kalkan İE, Şahin UK, Çelik M & Çöklü A**
EFFECT OF RECYCLED COTTON YARN CONTENT ON FINISHED KNITTED FABRIC PERFORMANCES
- 14:05 - 14:10** **Votrubeč V**
NUMERICAL SIMULATIONS OF 3D-DISTANCE FABRICS
- 14:10 - 14:15** **Melnyk L, Lenfeldová I & Kyzymchuk O**
ANALYSIS OF ELASTIC YARN POSITIONING IN THE KNITTED STRUCTURES
- 14:15 - 14:20** **Jirásková P & Moučková E**
EFFECT OF SIZE OF NEGATIVE AIR PRESSURE AND DRAFT ON THE COMPACT SPINNING MACHINE ON THE QUALITY OF YARNS SPUN FROM META-ARAMID FIBRES
- 14:20 - 14:25** **Lenfeldová I & Ryvolová M**
STUDY OF WARP-KNITTED DESIGNS SUITABLE FOR BIOMASS COLONIZATION FOR WATER PURIFICATION
- 14:25 - 14:30** **Khan MZ, Militký J, Wiener J & Ali A**
FLY ASH-BASED COATINGS FOR SELF-CLEANING AND UV PROTECTION APPLICATIONS
- 14:30 - 14:35** **Kalkan İE, İlketapar A, Temiz-Dişlioğlu F, Doğan J, Kaya H, Savaşkan T & Şahin UK**
EFFECTS OF PRINTING ON LUXURIOUS SCARF WITH SILK BLENDS
- 14:35 - 14:40** **Kalkan İE, Oral GA, İlketapar A, Temiz-Dişlioğlu F, Tiryaki N, Sahin S & Şahin UK**
SHOES WITH RUBBER/WOOD-SHAVINGS MIXED SOLE AND VEGETABLE TANNED LEATHER

**Chairman: Kolčavová Sirková Brigita
Neckář Bohuslav**

(Room B4, 2nd floor)

15:00 - 15:15 *AWARD „BEST POSTER OF CONFERENCE STRUTEX 2024“
AWARD „BEST PRESENTATION OF THE PHD DAY“*

CONFERENCE CLOSING



ADDRESS

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Faculty of Textile Engineering
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