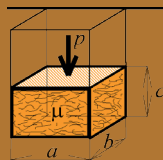
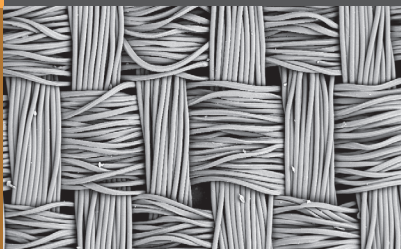
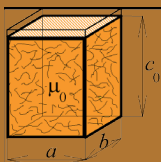


Pocket Programme

23rd International Conference STRUTEX

Structure and Structural
Mechanics of Textiles

30.11. - 2.12. 2022
Building B, 2nd floor
Liberec, Czech Republic





VLAKNA
TEXTIL
ISSN. 1335-0617

FIBRES AND TEXTILES

^ **Liberec**

Liberecký kraj

schoeller
the spinning group
An Indorama Ventures Company

 **KORDÁRNA**
KORDÁRNA PLUS A.S.
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RIETER

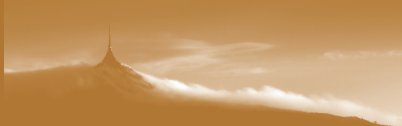
 **ADFORS**
SAINT-GOBAIN


Caledon
Textile factory

Stap

LHR

People.Health.Care.



Dear,

Welcome to the 23rd 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.

Wednesday 30 November 2022

Building B

- 13:00 - 17:00 **Registration & Welcome drink** (Room B5, 2nd floor)
- 13:00 - 17:00 **Final event of the project Hybrid Materials for Hierarchical Structures (HYHI)** (Room B5, 2nd floor)

Thursday 1 December 2022

- 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:** **Drašarová Jana** (Room B4, 2nd floor)
- 09:30 - 10:00 **Bourmaud A (Invited Lecture)**
MULTI-SCALE IMPACT OF FLAX FIBRES SPECIFICITY ON TEXTILE PREFORMS AND BIOCOMPOSITE PROPERTIES
- 10:00 - 10:20 **Pektaş K, Balcı O & Orhan M**
SOLUTION BLOWN OF PLA NANOFIBER CONTAINING OZONATED MORMODICA OIL AND ITS MICROCAPSULES TO OBTAIN ANTIBACTERIAL MEDICAL TEXTILES SURFACES
- 10:20 - 10:40 **Şarapnal D & Babaarslan O**
INVESTIGATION OF THE USAGE OF ALTERNATIVE NEW GENERATION ECO-FRIENDLY FIBER BLENDS IN SYNTHETIC BASED DENIM FABRICS

10:40 - 11:00 **Kocaman RC, Putzke E & Ficker F**
*WEAVEABILITY OF SPACER/DISTANCE FABRICS WITH HIGH PERFORMANCE
FIBERS ON A TECHNICAL DOUBLE RAPIER JACQUARD WEAVING LOOM USING
LANCETS*

11:00 - 11:20 **Coffee Break** (Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: **Čapek Lukáš** (Room B4, 2nd floor)

11:20 - 11:40 **Fang J, Kyosev YK, Li Y & Ma Y**
*SIMULATION OF THE SEGMENT FILLING INSERTION FABRICS
AT THE YARN LEVEL*

11:40 - 12:00 **Boňková K**
*NUMERICAL MODELLING OF TEXTILE STRUCTURES: POTENTIAL
AND LIMITS*

12:00 - 12:20 **İnce ME, İnanır S & Erdoğan EK**
*COMFORTABLE AND PROTECTIVE HYBRID WEFT-KNIT PLATED FABRIC
FROM GLASS AND WOOL/ACRYLIC YARNS*

12:20 - 12:40 **Liu H, Kyosev YK & Jiang G**
*PATTERN RELATED ISSUES IN THE MODELLING OF DEFORMED OVER
SURFACE WARP KNITTED STRUCTURES WITH LONGER UNDERLAPS*

12:40 - 13:00 **Poniecka A, Barburski M, Ranz D, Cuartero J & MiralbesR**
*NEW SOLUTIONS IN THE PRODUCTION OF COMPOSITES - MECHANICAL
PROPERTIES OF COMPOSITES REINFORCED WITH TECHNICAL
EMBROIDERY AND WOVEN FABRIC MADE OF FLAX FIBERS*

13:00 - 14:00 **Lunch** (Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: Chvojka Jiří (Room B4, 2nd floor)

- 14:00 - 14:20** **Özdemir S, Oztemur J, Sezgin H & Yalcin-Enis I**
*THE EFFECT OF POLYMER TYPE AND FIBER ORIENTATION
ON THE COMPLIANCE PROPERTIES OF ELECTROSPUN VASCULAR GRAFTS*
- 14:20 - 14:40** **Oztemur J, Özdemir S, Sezgin H & Yalcin-Enis I**
*A PRELIMINARY STUDY EXAMINING THE BURST STRENGTH
OF VASCULAR TUBULAR SCAFFOLDS*
- 14:40 - 15:00** **Palak H & Kayaoglu BK**
*FABRICATION AND CHARACTERIZATION OF ELECTROSPUN
ANTHOCYANIN-LOADED POLYLACTIDE NANOFIBERS*

15:00 - 15:30 **Coffee Break** (Room B5, 2nd floor)

POSTER (ORAL) PRESENTATIONS

Chairman: Tomková Blanka (Room B4, 2nd floor)

- 15:30 - 15:35** **Novotná J**
A STUDY – GENESIS OF FIBRE FRAGMENTS
- 15:35 - 15:40** **Kölsch L, Fischer H, Albe C, Heilos K, Schnock O & Kirchhöfer D**
*DEVELOPMENT OF MAGNETISABLE FIBRES FOR REORIENTING FIBRES
IN CARDED WEBS BY USE OF A MAGNETIC FIELD*
- 15:40 - 15:45** **İnce ME & Çelik E**
*TENSILE STRENGTH PROPERTIES COMPARISON OF PARTIALLY ORIENTED
MULTIFILAMENT YARNS (POY) FROM RECYCLED AND VIRGIN POLYESTER*
- 15:45 - 15:50** **Jirásková P & Moučková E**
*ANALYSIS OF MASS IRREGULARITY OF WORSTED RING AND COMPACT
STAPLE SPUN YARNS*

15:50 - 15:55 Krupincová G

THE INFLUENCE OF VARIOUS PORTION OF COTTON WASTE AND WAY OF CLEANING ON QUALITY OF OPEN-END ROTOR YARNS

15:55 - 16:00 Vyšanská M

USING OF THE CT IMAGES FOR YARN FOREIGN MATTER DEFINITION – TWO VARIOUS APPROACHES

16:00 - 16:05 Lenfeldová I

GEOMETRICAL MODELLING OF INLAID WEFT KNITTED FABRIC

16:05 - 16:10 Ezenwankwo JU, Zak J & Petrikova I

ON THE DEVELOPMENT OF A ONE-LAYER MULTISCALE UNIT CELL MODEL OF 3D WOVEN FABRIC TEXTILE

Culture Program and Banquet

17:00 - 21:00

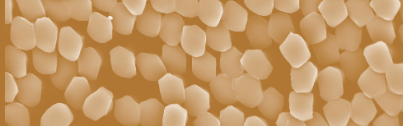
(City Hall, Liberec)

Marta Schäferová & Jan Zrostlík

violin

violin





ORAL PRESENTATIONS

Chairman: **Tunák Maroš** (Room B4, 2nd floor)

09:00 - 09:30 **Goldfeld Y (Invited Lecture)**
*SMART SELF-SENSORY TEXTILE REINFORCED CONCRETE STRUCTURES -
ACHIEVEMENTS & CHALLENGES*

09:30 - 09:50 **Kania A & Barburski M**
*IMPROVING LOCAL THERMAL COMFORT IN BUILDINGS: A STUDY OF
PROPERTIES OF HEATING TEXTILE COMPOSITES IN CONSTRUCTION
INDUSTRY*

09:50 - 10:10 **Aghadavoud R, Martinek R, Shahbaz Z, Kheiri T & Shanbeh M**
*DESIGN AND INVESTIGATION THE OPERATION OF TEXTILE BASED
ELECTRODES FOR ELECTROTHERAPY*

10:10 - 10:30 **Gaben M & Goldfeld Y**
*DETECTING DAMAGED ZONES ALONG SMART SELF-SENSORY CARBON
BASED TRC BY TDR*

10:30 - 10:50 **Yosef L & Goldfeld Y**
*INTELLIGENT TEXTILE AND FIBER REINFORCED MPC COMPOSITES
FOR SHM*

11:00 - 11:20 **Coffee Break** (Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: **Hes Luboš** (Room B4, 2nd floor)

11:20 - 11:40 **Sajjadih S, Safari F, Ghalebi B & Shanbeh M**
*EFFECT OF TENSILE FATIGUE CYCLIC LOADING ON PERFORMANCE
OF TEXTILE-BASED STRAIN SENSORS*

11:40 - 12:00 **Korkmaz A & Babaarslan O**
CHITOSAN ADDED COMPOSITE VISCOSE YARN AND ITS POTENTIAL APPLICATION FOR DENIM FABRIC DEVELOPMENT

12:00 - 12:20 **Arsoy R & Aslan S**
DESIGN OF ELECTRONICALLY CONTROLLED JACQUARD MACHINE FOR MULTI-SHED WEAVING MACHINES

12:20 - 12:40 **Lemmi TS & Barburski M**
THERMAL AGING EFFECT ON THE PHYSIO-MECHANICAL PROPERTIES OF TEXTILES USED FOR THE REINFORCEMENT OF CONVEYOR BELTS

12:40 - 13:00 **Soocheta AV & Bhundoo SS**
INVESTIGATING THE APPLICATION OF TERRA DYE ON COTTON KNITTED FABRICS

13:00 - 14:00 **Lunch** (Room B5, 2nd floor)

ORAL PRESENTATIONS

Chairman: Wiener Jakob (Room B4, 2nd floor)

14:00 - 14:20 **Melnyk L & Kyzymchuk O**
NOVEL ELASTIC WARP KNITTED FABRIC WITH PERFORATION

14:00 - 14:20 **Sen K, Kaya A & Kanik G**
INVESTIGATION OF STRUCTURAL AND PERFORMANCE PROPERTIES OF HEMP-CONTAINING KNITTED FABRICS WITH DIFFERENT COMPOSITIONS

14:20 - 14:40 **Boguń M, Śledzińska K, Giełdowska M, Król P, Kamińska I & Magdziarz S**
POLYACRYLONITRILE NONWOVENS FOR THE PRODUCTION OF CARBON MATERIALS SUPPORTING THE REGENERATION OF BONE AND CARTILAGE TISSUES

15:00 - 15:30 **Coffee Break** (Room B5, 2nd floor)

POSTER (ORAL) PRESENTATIONS

Chairman:

Mazari Adnan

(Room B4, 2nd floor)

- 15:30 - 15:35** **Březinová H, Pechočiaková M & Grabmüllerová J**
IDENTIFYING THE MATERIALS IN ARCHAEOLOGICAL TEXTILES
- 15:35 - 15:40** **Fischer H, Sigmund I, Hartwig P, Dederer E & Maschinski A**
STANDARDISING THE SAMPLE PREPARATION FOR ANALYSIS OF FIBRES AND PARTICLES BY STATIC IMAGE ANALYSIS
- 15:40 - 15:45** **Soocheta AV & Roman MKS**
ARTISANAL EXFOLIATING SOAPS MADE WITH NATURAL FIBRES AND THEIR POTENTIAL FOR COMMERCIAL APPLICATION
- 15:45 - 15:50** **Frajová J, Vishwakarma A & Wiener J**
BACTERIAL CELLULOSE FOR TEXTILE APPLICATIONS
- 15:50 - 15:55** **Aghadavoud R, Ebadi A, Shakeri R, Shanbeh M & Martinek R**
THE PERFORMANCE OF TEXTILE BASED ELECTRODES DURING DIFFERENT DAILY ACTIVITIES FOR CONTINUOUS ECG MONITORING
- 15:55 - 16:00** **Havelka A, Zelová K, Glombiková V, Komárková P, Vik M, Tichý M, Pilíková M & Vrbová M**
APPROACH TO THE VISIBILITY INCREASING OF PEOPLE IN ROAD TRAFFIC AT NIGHT
- 16:00 - 16:05** **Perveen S, Wiener J & Šubrová T**
PREPARATION AND BASIC PROPERTIES OF LAMINATED POLYURETHANE MEMBRANESRING
- 16:05 - 16:10** **Kropidłowska P & Irzmańska E**
EVALUATION OF CUT RESISTANCE OF COATED TEXTILE MATERIALS WITH INORGANIC FILLERS – PRELIMINARY STUDIES
- 16:10 - 16:15** **Ali A, Militky J, Palanisamy S, Tomkova B & Ali S**
COPPER AND SILVER COATED COTTON FABRICS

16:15 - 16:20 Tomovska E & Hes L

SURFACE ROUGHNESS OF POLYAMIDE KNITTED FABRICS

16:20 - 16:25 Tören E, Mazari AA & Mazari FB

*PULLULAN/PVA/DOXORUBICIN CORE-SHELL ELECTROSPUN NANOFIBERS
DRUG DELIVERY SYSTEM FOR THE CHEMOTHERAPY AGAINST CANCER*

16:25 - 16:30 Barburski M

*SUSTAINABLE INDUSTRIAL DESIGN OF TEXTILE STRUCTURES
FOR COMPOSITES PROJECT*

16:30 - 16:35 Těšinová P

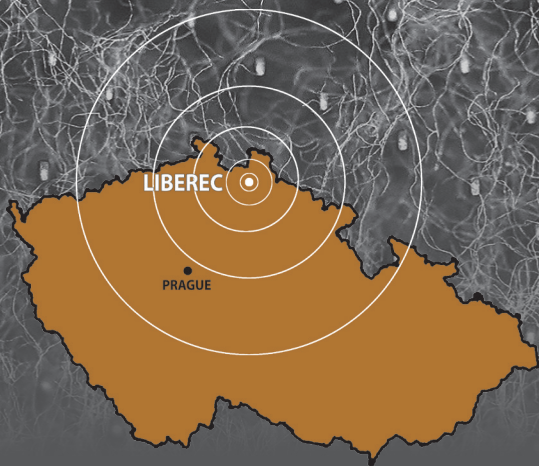
*ERASMUS+ PROJECT IN COOPERATION PARTNERSHIPS IN HIGHER
EDUCATION GREENTEX – SUSTAINABLE DESIGN AND PROCESS
IN TEXTILES FOR HIGHER EDUCATION*

Chairman:

**Kolčavová Sirková Brigita
Neckář Bohuslav**

(Room B4, 2nd floor)

17:00 - 17:15 *AWARD „BEST POSTER OF CONFERENCE STRUTEX 2022“
CONFERENCE CLOSING*



ADDRESS

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