

# The InnovaTex 2014 – Conference on Technical and Specialised Textile Products and the InnovaTex 2014 – Fair of Technical Textile Products

were held on 16 – 17 October 2014, in Lodz, Poland

**Organisers:** Lodz University of Technology, Lodz International Fair Ltd.

## Programming Board of the Fair and Scientific Committee of the Conference

**Prof. Józef Masajtis, Ph.D. D.Sc., Eng.,** *Lodz University of Technology (TUL)*, **Prof. Izabella Krucińska, Ph.D. D.Sc., Eng.,** (TUL), **Prof. Marek Snycerski, Ph.D. D.Sc., Eng.,** TUL, **Renata Kotynia, Ph.D. D.Sc., Eng.,** TUL, **Danuta Ciechańska, Ph.D. D.Sc., Eng.,** *Institute of Biopolymers and Chemical Fibres, Lodz*, **Jadwiga Sójka-Ledakowicz, Ph.D. Eng., prof.,** *Textile Research Institute, Lodz*, **Małgorzata Zimniewska, Ph.D., Eng., prof.,** *Institute of Natural Fibres & Medicinal Plants, Poznan*, **Elżbieta Witczak, Ph.D., Eng.,** *Institute of Security Technologies MORATEX, Lodz*, **Joanna Grzybowska-Pietras, Ph.D., Eng.,** *Association of Geotextile Producers, Bielsko-Biała*, **Elwira Zaręba,** *Polish Textile Association, Lodz*, **Bogusław Woźniak, Ph.D., Eng.,** *Institute of Leather Industry, Lodz*, **Katarzyna Majchrzycka,** *Central Institute for Labour Protection – National Research Institute, Lodz*, **Zdzisław Marzec,** *Przegląd Włókienniczy, Lodz*, **Witold Sujka, Ph.D. Eng.,** *Tricomed S.A., Lodz*, **Mirosław Barburski,** *International Łódź Fair.*

The Innovative Fair is a new international event of Lodz International Fair Ltd. directed towards producers and customers of specialist textiles. The aim of the fair is to strengthen co-operation and integration between science and business

### The scope of the Fair:

- Fibres and yarns
- Woven and knitted fabrics
- Nonwoven
- Achievements of research centres, specialist units and universities
- Technologies, machines, equipment and production accessories
- Scientific, technical and economic specialist publications

An exhibition of specialist textile products will also be shown

The InnovaTex Conference is organised in 2014 under the motto  
'Fill your world with Textiles'.

It will be an experience exchange platform for representatives of science, producers and users, as well as nuclei of the creation of new research ideas for interdisciplinary areas of science.

### The following sessions are provided

**MEDTEX** – protection of humans' daily life, improving life comfort: medical and sanitary textiles, textiles for rehabilitation and recreation

**PROETEX** – protection of life and health in the working environment: textile products for individual protection, textiles for protecting the working environment

**BUDTEX** – a healthy house: textiles for building engineering, hometextiles, furnishing

**GEOTTEX** – save transport: textile equipment for transport means, geotextiles, textiles for road protection

**AGROTEX** – healthy food, water and air: textiles for plant and animal protection, textiles for protection of the natural environment.

**TECHTEX** – innovative technical textiles: textile products for composites, as well as the footwear and leather industry, and for special use.

### Papers

1. Electrostatic activation of polymeric composites for filtration; *Małgorzata Okrasa, Katarzyna Majchrzycka, Agnieszka Brochocka*
2. Anti-oxidation activity of flax and hemp; *Małgorzata Zimniewska, Barbara Romanowska*
3. Analysis of the influence of processing technology on selected properties of geononwovens; *Joanna Grzybowska-Pietras*
4. Barrier woven fabrics protecting against electromagnetic fields designated for interior rooms; *Barbara Filipowska, Edward Wilk, Joanna Koprowska*
5. Characteristic of selected usability parameters of seamless wear products containing wool; *Anna Pinar, Elżbieta Mielicka, Romualda Koźmińska*
6. Ergonomic and textile materials used for the protection of hands in the workplace environment; *Emilia Irzmańska*
7. Physico-mechanical desizing fibres of flax straw; *Wanda Konczewicz*

8. Innovative polymeric materials designated for protection against nanoparticles; *Agnieszka Brochocka, Krzysztof Makowski*
9. Innovative method of bleaching with simultaneous disinfection of cellulose hygienic and medical materials; *Anetta Walawska, Jadwiga Sójka – Ledakowicz, Barbara Filipowska, Magdalena Kiwała*
10. Designing strength properties of composites on the basis of the structure of multilayer woven fabrics used for strengthening the composites; *Ewa Witczak., Iwona Krawczyńska*
11. Thermal mannequin – a unique tool for estimation of thermal insulation properties of protective clothing for premature babies; *Krzysztof Kowalski, Izabella Krucińska, Ewa Skrzetuska*
12. An optical method for porosity evaluation of knitted fabrics; *Zbigniew Mikołajczyk, Joanna Szmyt*
13. Methodology of designing knitted products for modelling and corrective with the application of the thermovision technique; *Zbigniew Mikołajczyk, Bogusław Więcek, Anita Butwicka*
14. Possibility of analysis of textile structures with computer tomography application; *Marcin Barburski, Stepan V. Lomov*
15. New design aspects of jacquard fabrics for black-out in relation to their application; *Joanna Szkudlarek*
16. Estimation of the total inner leakage of nanoparticles in purifying devices protecting the breathing system; *Krzysztof Makowski, Agnieszka Brochocka, Małgorzata Okrasa*
17. Optimisation of manufacturing technology of technical spatial knitted fabrics; *Andrzej Michalak, Zbigniew Mikołajczyk*
18. Optimising the strength properties of composite knitted fabrics on the basis of numeric experiments; *Katarzyna Piekłak, Zbigniew Mikołajczyk*
19. Susceptibility to deformation of woven textiles; *Magdalena Owczarek*
20. Commercialisation of the research work: "Barrier materials for protection against radiation in the ranges of vis, IR and ultra waves; *Ewa Obersztyn, Grażyna Redlich*
21. Resclo – protective clothes for mines – rescue staff; *Grażyna Bartkowiak*
22. Textronic resolutions and devices for monitoring the physiological parameters of fire-rescue staff members; *Izabella Krucińska, Ewa Skrzetuska, Iwona Nowak*
23. Textile structures modified by microcapsulated PCM for technical applications; *Alicja Nejman, Bogna Goetzendorf-Grabowska, Halina Królikowska, Małgorzata Cieślak*
24. Simulation of cyclic loading of composites designed for sports clothing by laboratory testing; *Katarzyna Kobiela-Mendrek*
25. Technology of plush knitted fabrics of low stretch ability for decorative interiors; *Bogdan Włodarczyk*
26. Woven textile materials for protection against electrostatic fields; *Iwona Krawczyńska, Ewa Witczak, Marek Lao, Stanisława Wróbel, Małgorzata Cieślak*
27. Textile science and production – a key branch for civilisation's development in the XXI century; *Marek Snycerski*
28. Influence of technological parameters on the properties of polylactide spun-bonded nonwovens; *Konrad Sulak, Michał Puchalski, Izabela Krucińska*
29. Use of fibrous plants for protection of the natural environment; *Jerzy Mańkowski, Jacek Kołodziej, Andrzej Kubacki*
30. Fibrous products from biodegradable aliphatic-aromatic polyesters modified by products obtained from bio-mass; *Krzysztof Twarowska-Schmidt, Sławomir Dutkiewicz, Konrad Sulak, Mirosława Szczęsna-Antczak*

#### Posters

1. Surface modification of nonwovens improving durability. A silicate layer deposited by the sol-gel method; *Dorota Kowalczyk, Małgorzata Cieślak, Irena Kamińska*
2. Application possibilities of exotic fibrous plants; *Małgorzata Zimniewska, Anna Kicińska-Jakubowska, Barbara Romanowska*
3. Research possibilities of the OASYS system from the point of view of estimation of the structure of technical yarns; *Paweł Swaczyna*
4. A new generation of geotextiles destined for protection of soil against erosion; *Jan Broda, Joanna Grzybowska-Pietras, Monika Rom, Stanisława Przybyło, Ryszard Laszczak*
5. New barrier materials protecting against UV radiation for protecting clothing and elements of room accessories; *Jadwiga Sójka – Ledakowicz, Wojciech Czajkowski, Joanna Lewartowska, Anetta Walawska, Joanna Olczyk, Teofil Jesionowski*
6. New textile barrier materials protecting against electromagnetic fibres; *Jadwiga Sójka – Ledakowicz, Joanna Koprowska, Halina Aniołczyk, Barbara Filipowska, Błażej Wiśniewski*
7. Nus – a mobile laboratory for detection of dactyloscopic traces; *Wojciech Błaszczak, Elżbieta Witczak, Longina Madej-Kiełbik, Lidia Osiewała-Just*
8. Seedling boxes manufactured from biodegradable polymers including agents protecting plants; *Małgorzata Izydorczyk, Izabella Krucińska, Danuta Ciechańska, Konrad Sulak, Agnieszka Gutowska*
9. Level of risk and designation of clothing of intensive visibility in relation to Standard PN-EN ISO 20471:2013; *Barbara Kosińska, Krzysztof Czerwiński*
10. Technologies of the key project POIG.01.03.01-00-004/08 – functional nano- and micro textiles materials – Nanomitex; *Małgorzata Cieślak, Dorota Kowalczyk, Stefan Brzeziński, Bogna Goetzendorf-Grabowska*
11. Woven fabrics for room accessories designated as the outer layer of acoustic systems; *Ewa Witczak, Marek Lao, Iwona Krawczyńska*
12. Transformation of the macromolecular structure and mechanical properties of micro fibres iPP/MWNT during drawing; *Katarzyna Kobiela-Mendrek, Janusz Fabia, Czesław Ślusarczyk, Andrzej Gawłowski, Tadeusz Graczyk, Jarosław Janicki, Anna Brzozowska-Stanuch*
13. Use properties of spun-bonded agro-nonwovens; *Joanna Grzybowska-Pietras, Iwona Gruszka*
14. Application of geosynthetics in building and water engineering; *Iwona Gruszka, Joanna Grzybowska-Pietras*
15. Envelope approach to improve sustainability and energy efficiency in multi-storey, multi-owner residential buildings; *Michał Smyczyński*

#### For more information please contact

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