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EUROPEAN TECHNICAL TEXTILES MAGAZINE

SUMMER 2018

NEW TREND IN FASHION
Temperature sensitive patterns

SUN & WIND POWERED FABRIC
Generates electricity from movement

PLASTIC CLOTHING
Cools your skin inexpensively

DRY TEXTILE SLOPES
Summer in winter? Only with Mr.SNOW!

ISSN 2514-7463

TOP 10 ITEMS FOR SUMMER

EDITORIAL

Dear Readers,

Summer has finally come arrived! Hot weather, high temperatures, shining sun… Spending time indoor suddenly got boring! There are so many opportunities to spend free time now, so why not spend some time with our newest issue of Tetex Magazine?

We have prepared a light and fun version for you this time. In this issue you can find TOP 10 products for summer fun, trade fairs calendar, and many more interesting articles. If you want to spend some quality time, we highly recommend reading this issue as well as the previous ones. We would like to thank our readers for the support in issuing our magazine.

We hope you will enjoy it!

Dorota Sakowska-Hunt

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TOP 10
FOR SUMMER

WIBIT ISLAND 1

Inflatable modules of various shapes are connected with each other creating a path floating on water, also including obstacles and other attractions. In this way, even an ordinary swimming pool can become a mini-aquapark.

wibitsports.de

2 SLIP'N SLIDE

The toy is a long sheet of thin plastic, flanked lengthwise on one side by a heat-sealed tubular fold. The tube can be connected to any ordinary garden hose. It is definitely a lot of fun for children, teenagers and adults on a hot, summer day!

wham-o.com

OM SIGNAL 3

It captures biosignals through nearly invisible sensors that are imbedded in the apparel itself. A small detachable Bluetooth-enabled hardware module is clipped onto the apparel, and sends data in real time to a user's smartphone. It is splash- and sweat-resistant.

omsignal.com

INFLATABLE TENT 4

Are you going out of town with friends? Is being in the nature your passion and you love sleeping in a tent? This can be a great solution for you! The inflatable tent is not only comfy, all you need is an airpump and you're ready to have an adventure!

sportique.com

5 MOONPOD

A zero-gravity beanbag has been engineered to deliver a full-body weightless sensation for all-day stress relief and relaxation. If you appreciate good sleep and relax, this item is totally for you! Just sit down and make yourself comfrotable - as simple as that

kickstarter.com

FLEXPACK 6

The best functional anti-theft duffle & backpack. It is a result of combining security, storage, convenience, comfort, and beauty. You do not need to worry about a theft of your possessions with this innovative backpack!

kickstarter.com

MONSTER CASTLE 7

Kids definitely have the most fun in the summer, but teenagers and even young-souled adults can have fun in inflatable castles, because why not?! Inflatables are ideal for portable amusements because they are easy to transport and store.

eventindustrynews.com

8 LAZY BAG

Do you love to travel, spend time with friends and rest on the beach? Lazy Bag might be a great item for you then! It is an inflatable sofa, made of thick and weather-resistant nylon ripstop. Just fill it with air and chill wherever you are.

balipermatatour.com

HEATHER 9

A Swedish USB-Powered Heated Pad From I Heat You™. Keep warm with style. Summer nights can be cold sometimes, so do not hesitate and supply yourself with this heated pad. Spend your nights on the beach by the bonfire, under the stars, whenever you want!

kickstarter.com

INFLATABLE FLAMINGO 10

Do you love spending time with your friends by the water? Now you can have even more excitement! The Inflatable flamingo is a way to spend time with them even funnier. Just hop all of you on the flamingo and go conquer the mysterious waters anywhere you are!

odditymall.com

What should we know about high-transparency foils?

We have a wide selection of transparent films made of PVC, characterized by durability going hand, which goes hand in hand with the quality. Films are widely used in industry and agriculture. They are used as curtains for industrial gates, windows for tents, arbor walls, advertising banners, cabrio roofs, sports accessories - covers, bags, sachets, bumper ball, aquazorbing, etc.

Our products have high transparency and flexibility from 42 to 48 PHR (film hardness). They demonstrate resistance to ultraviolet radiation in accordance with ISO 4892-32006 and in the temperature range from -30°C to + 800°C. For applications where flame retardancy is a requirement, we can offer FWP 0.75 FR, which has a fire retardant certification (according to PN-EN ISO 6940 and PN-EN6941) and flame-retardant reinforced films with mesh sizes 3x3 and 9x9 mm and width of 250 cm.

theurbanlist.com

The new quality of our films is determined by two facts:

1) they comply with the EN 71-3 standard for diffeent types of coatings used on toys. Currently, each inflatable toy released on the European market should be tested for the content of paint, laminates, varnishes, etc. that were used to make it.

2) they do not have phthalates. Phthalates (so-called phthalate plasticisers) are organic compounds used, among others, in foils as softeners to give the materials flexibility. They are widely used in everyday products, which raises concerns about their impact on health.

Some phthalates are likely to increase the risk of developing asthma in children aged 5-11 if the mother breathes contaminated air during pregnancy. These substances can affect in some indefinite way the action of hormones, which ultimately leads to damage to the nervous system in children. Seven-year-olds whose mothers during pregnancy were exposed to air heavily contaminated with phthalates have an IQ score lower by about seven points than their peers whose mothers breathed relatively purer air. This seemingly small difference may greatly affect, such a difference may influence later achievements in school and professional success. Phthalates probably also have a negative effect on sperm quality in men. Since phthalates pose a potential health risk, it is recommended to reduce the exposure to these substances by avoiding the consumption of food packed in foil, heated in foil and heavily processed, avoiding perfumes, deodorants, air fresheners, some paper towels and avoiding contaminated rooms. In 2012, phthalates were added to the SVHC Candidate List, i.e. substances of very high concern. The teratogenicity, i.e. the toxic effects on the fetus, is given as the main reason. The creation of this list is one of the effects of the implementation of the EU REACH Regulation in 2008 (according to which our non-phthalate films are made), which aims to increase the protection of the environment and human health against hazards that may be posed by chemical substances.

Our transparent foils are available in widths 135, 140 and 180 cm and the beam length of 50 running meter.

We invite you to familiarize yourself with the offer of Sako-Expo Techtextilplast on: sakoexpo.com.pl!

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✓ *Product presentation*

Product presentation: in our Tetex Magazine we publish information on recent scientific achievements, innovations and many more.

✓ *Social Media*

Social Media: our Facebook page has over 2500 followers and reaches about 10000 users. We offer graphic, video, carousel and sponsored posts.

✓ *Textile machinery trade*

We are currently looking for people who are interested in selling or buying second-hand or new machinery for technical textile. If you are interested in cooperation, please contact us.

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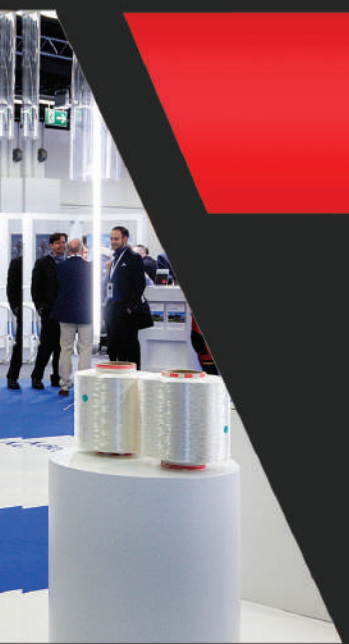

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Summer in winter? Only with Mr.SNOW!

The founders: Jens Reindl, Arndt Schumann and Felix Neubert combine the love for winter sports with summer temperatures. They are certified DSV snow sports instructors and like to push the edges into the slope, where Jens is in love with snowboarding, Arndt's telemarking has no competition and Felix's heart beats for cross-country skiing.

Alpine skiing

-Imagine a situation - you are waiting for snow all year long, anticipating for winter to come so you can brush the dust off your skis and conquer the slopes… And when winter comes, there is no snow at all. Do you feel disappointed just by imagining that? Yeah, so do we. But with Textile ski slopes made of particularly glidant, high-tech fabric it's now possible! Due to their special structure, MR. SNOW sliding mats provide best driving characteristics for skis and snowboards. The good grip It offers beginners as well as professionals a very good grip and best skiing without tilting! Moreover, ski school in the summer holidays, snowboarding in shorts and T-shirt – the Textile snow brings you new ideas.

Benefits of alpine skiing:

-Strengthens bones and joints. Your knees must endure the tension and weight from your body as you turn and move quickly downhill, so they are being strengthened when you ski. In addition to strengthening your knees, your bones become stronger due to

weight-bearing impact on your legs. So not only are you having a fantastic time gliding down the slopes, but you are preventing knee damage, osteoporosis and increasing your proprioceptive strength.

-Boosts your mood. Skiing not only boosts overall happiness and well-being, but it is beneficial to an individual's physical and mental health, despite the frequency or duration of the activity.

-Promotes deep sleep. You will feel exhausted in the best way after trying a new sport, especially one that engages your entire body. After hitting the slopes, we guarantee there will be no scrolling the Internet before bed or staying up late - you will hit the pillow and enjoy a good night of restful sleep.

-Improves flexibility. A flexible body is going to be a huge benefit when skiing. By building flexibility, you can avoid muscle strains and sprains. A thorough, regular stretching routine that focuses on the core muscle groups will strengthen the abdominals, obliques and hips that are used in downhill skiing.

Learning to ski works particularly well when we are young, adventurous kids. And so it is not surprising that every year thousands of them want to become experts on boards! Lucky for you, there is no need to rely on the weather, because with the sliding mats of MR.SNOW you can guarantee the lessons to your little ski champions, completely independent of Petrus' whims. We guarantee that not only your children but also you will have so much fun!

Nonwoven textile

Can nonwoven textile production methods be implemented to create a sustainable fabric for apparel? This was the research question posed by a Textile and Surface Design student Yolanda Leask, in her final degree project, Modern Felt‘ at Berlin Weissensee School of Art.

Wool felt is the original nonwoven fabric. However, in the last century many nonwoven technologies have been developed to bond synthetic fibres which do not felt on their own. Nonwoven production can offer various advantages: cost and labour savings, less waste, fewer processes involved, therefore quicker production time, and larger volumes can be produced in less time than requied for woven. These methods have generally been used to create cheap, disposable and functional products such as wet wipes, cleaning cloths and filters, and only 1% of nonwoven textiles are currently used in apparel, generally as an interfacing for collars and facings.

In this project, the original nonwoven material - wool, is combined with nonwoven technologies in an attempt to produce a fabric with increased drape, suitable for apparel. Wool fibre has fantastic properties and is an abundant, renewable, natural resource. In recent years, European farmers have been losing out due to the low price and lack of demand for wool. Our globalised economy means it is now cheaper to import wool from Australia or China than use the wool produced at our own doorstep. But if wool fibre is so cheap, why is a wool fabric relatively expensive? This is due to the many processes involved in producing a woven or knitted textile, processes which often take place in different countries. Nonwovens, on the other hand, do not require yarns to be spun, but instead process fibre directly into a cloth. Thus the implementation of efficient nonwoven methods could make it feasible to manufacture wool fabric in a transparent, local production chain, using European wool, technology and labour.

New sustainability quotas in the fashion industry mean that brands have to carefully consider the impact of their materials and products. Use of a sustainable nonwoven wool fabric such as this would help fashion companies meet targets, and potentially have widespread ecological and economic benefits.

Together with her business partner, London-based fashion designer, Martin Brambley, she has founded the company Doppelhaus Ltd, aiming to design and manufacture sustainable nonwoven fabrics. The project is currently being supported by the Start-Up Accelerator Design Farm Berlin.

PEACOCK FEATHERS INSPIRE DEVELOPMENT OF ENVIRONMENTALLY FRIENDLY DYES

"Fast fashion" might be cheap, but its high environmental cost from dyes polluting the water near factories has been well documented. To help stem the tide of dyes from entering streams and rivers, scientists report in the journal ACS Applied Materials & Interfaces a nonpolluting method to color textiles using 3D colloidal crystals.

Dyes and pigments are chemical colors that produce their visual effect by selectively absorbing and reflecting specific wavelengths of visible light. Structural or physical colors — such as those of opals, peacock feathers and butterfly wings — result from light-modifying micro- and nanostructures. Bingtao Tang and colleagues wanted to find a way to color voile textiles with structural colors without creating a stream of waste.

The researchers developed a simple, two-step process for transferring 3D colloidal crystals, a structural color material, to voile fabrics. Their "dye" included polystyrene nanoparticles for color, polyacrylate for mechanical stability, carbon black to enhance color saturation and water. Testing showed the method could produce a full spectrum of colors, which remained bright even after washing. In addition, the team said that the technique did not produce contaminants that could pollute nearby water.

Distinguished from the chromatic mechanism of dyes and pigments, structural color is derived from physical interactions of visible light with structures that are periodic at the scale of the wavelength of light. Using colloidal crystals with coloring functions for fabrics has resulted in significant improvements when compared with chemical colors because the structural color from colloidal crystals bears many unique and fascinating optical properties, such as vivid iridescence and nonphotobleaching. However, the poor mechanical performance of the structural color films cannot meet actual requirements because of the weak point - contact with colloidal crystal particles. In this study, they show the patterning on voile fabrics with high mechanical strength on account of the periodic array lock effect of polymers, and multiple structural color output was simultaneously achieved by a simple two-phase self-assembly method for printing voile fabrics with 3D colloidal crystals. The colored voile fabrics exhibit high color saturation, good mechanical stability, and printable patterns printable. In addition, colloidal crystals are promising potential substitutes for organic dyes and pigments because colloidal crystals are environmentally friendly.

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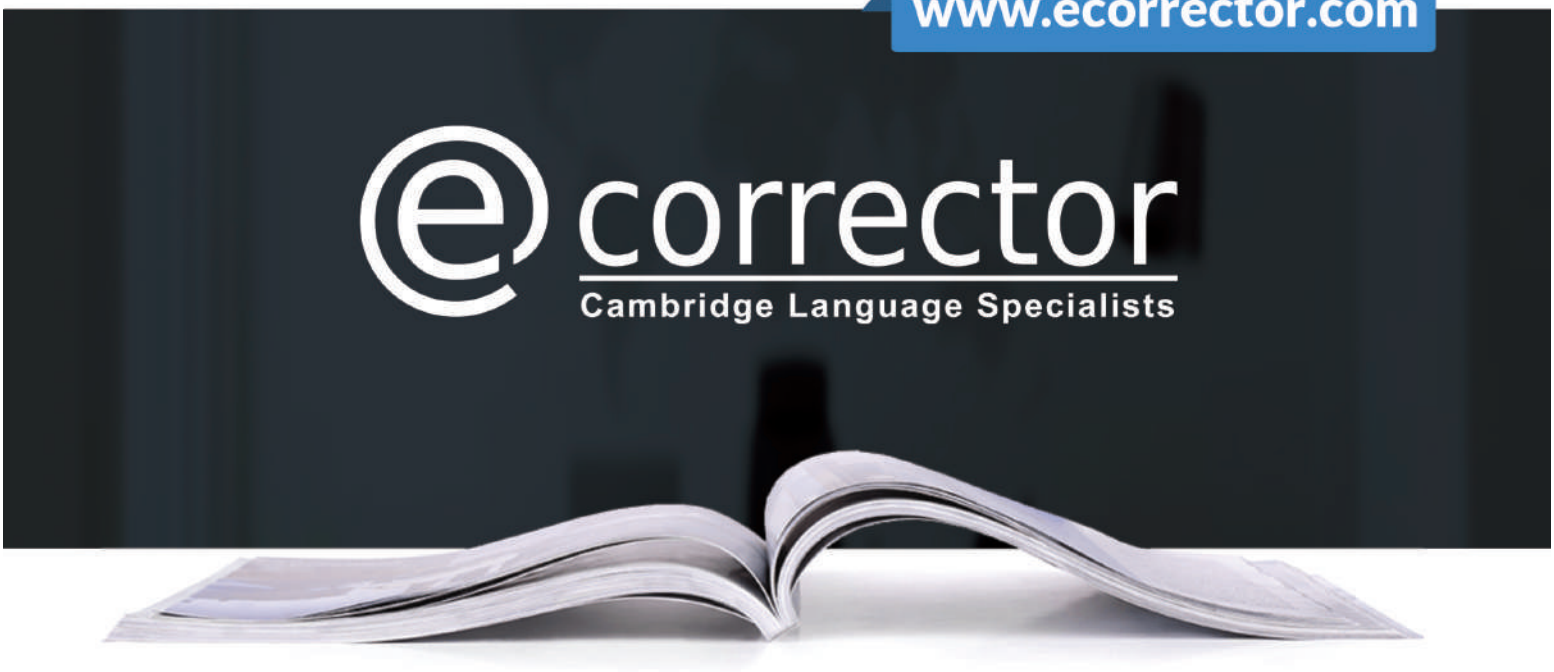

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New fabric uses sun and wind to power devices

Fabrics that can generate electricity from physical movement have been in the works for a few years. Researchers at Georgia Institute of Technology have now taken the next step, developing a fabric that can simultaneously harvest energy from both sunshine and motion.

Combining two types of electricity generation into one textile paves the way for developing garments that could provide their own source of energy to power devices such as smartphones or global positioning systems.

“This hybrid power textile presents a novel solution to charging devices in the field from something as simple as the wind blowing on a sunny day,” said Zhong Lin Wang, a Regents professor in the Georgia Tech School of Materials Science and Engineering.

To make the fabric, Wang’s team used a commercial textile machine to weave together solar cells constructed from lightweight polymer fibers with fiber-based triboelectric nanogenerators.

Triboelectric nanogenerators use a combination of the triboelectric effect and electrostatic induction to generate small amounts of electrical power from mechanical motion such as rotation, sliding or vibration. Fiber-based triboelectric nanogenerators capture the energy created when certain materials become electrically charged after they come into moving contact with a different material. For the sunlight-harvesting part of the fabric, Wang’s team used photoanodes made in a wire-shaped fashion that could be woven together with other fibers.

In one of their experiments, Wang’s team used a fabric only about the size of a sheet of office paper and attached it to a rod like a small colorful flag. By rolling down the windows in a car and letting the flag blow in the wind, the researchers were able to generate significant power from a moving car on a cloudy day. The researchers also measured the output by a 4 by 5 centimeter piece, which charged up a 2 mF commercial capacitor to 2 volts in one minute under sunlight and movement.

“That indicates it has a decent capability of working even in a harsh environment,” said Wang. While early tests indicate the fabric can withstand repeated and rigorous use, researches will be looking into its long-term durability. Next steps also include further optimizing the fabric for industrial uses, including developing proper encapsulation to protect the electrical components from rain and moisture.

New “dating site” for safer chemistry

Chemical producers such as Clariant, Chemours and Valspar are working with environmental NGO ChemSec to raise the visibility of alternatives to hazardous chemicals.

In recent years, the corporate drive to substitute hazardous chemicals in products and supply chains has increased dramatically. Unfortunately, the visibility of safer alternatives to more traditionally used toxic chemicals has been low – until now.

The chemicals expert NGO ChemSec announced the Marketplace – a website aimed at progressive companies looking to future-proof their chemicals management.

“There already exists a number of initiatives and projects that can guide companies in identifying problematic chemicals in their products, but very few of these show the way forward – what to replace the unwanted chemicals with. The Marketplace provides both a unique market opportunity for producers of safer alternatives as well as a one-stop shop for progressive companies looking to substitute hazardous chemicals in their products”, says Anne-Sofie Andersson, Executive Director at ChemSec.

The Marketplace will receive several updates as time goes by and feature everything companies looking for safer alternatives might need: global regulatory news, real-life events, step-by-step guides to chemical substitution and of course, information about safer alternatives.

Safer alternatives are offered in the form of ads created by companies. Some of the most forward-thinking chemical producers, such as Clariant, Chemours and Valspar, are already on board and have created product ads. More will follow as the Marketplace gains momentum.

“Sustainability and innovation are key building blocks in Clariant’s company strategy. Clariant proactively seeks to develop and offer safer and more sustainable solutions to the market to address the key trends of our time. The Marketplace provides us with an additional opportunity to highlight already existing solutions, to connect to new customers, and identify further opportunities for collaboration and innovation in promotion of sustainability and chemical safety”, says Lynette Chung, Head of Corporate Sustainability Strategy & Advocacy at Clariant.

“ChemSec’s Marketplace is a very unique digital forum for suppliers and purchasers to exchange interest in commercial products that represent technical alternatives that may meet their sustainability goals or other business needs. Valspar is honored to be one of the first companies to place an advertisement for the valPure® V70 food contact coating technology on the Marketplace. We hope that others share our commitment to transparency and innovation and will advertise their solutions as well”, says Flavio Marchi, Global Marketing Director Packaging at Valspar.

“As Chemours develops innovative, sustainable products like Zelan™ R3 for the Teflon EcoElite™ brand, we are excited that Chemsec Marketplace can be a positive place for industry to find sustainable solutions”, Bob Buck, Technical Fellow, The Chemours Company.

ChemSec invites all stakeholders that are involved with chemicals in products to visit the Marketplace website. Businesses that rely on chemicals have a lot to gain by contributing to its success.

These chemical producers currently featured on the Marketplace: Beyond Surface Technologies, EONCOAT, Valspar, Greenway Denmark, Bio Gen Active, Paxymer, Nordic Paper, OrganoComp, OrganoWood, Jerol, Rivertop Renewables, OrganoTex, Clariant, OrganoClick, The Chemours Company and jobaTEC.

SMART UNDERWEAR

PREVENTS BACK STRESS WITH JUST A TAP

menshealth.com

TV infomercials offer a world of potential solutions for back pain, but most of them have at least one of three problems - they're unproven, unworkable or just plain unattractive.

A team of Vanderbilt University engineers is changing that with a design that combines the science of biomechanics and advances in wearable tech to create a smart, mechanized undergarment.

Over half of all adults will experience low back pain in their lifetimes, and the condition is estimated to cost $30 billion in medical expenses and more than $100 billion in lost productivity in the U.S. annually. Karl Zelik, assistant professor of mechanical engineering and the principal investigator on the project, experienced back pain himself repeatedly lifting his toddler son, which he said got him thinking about wearable tech solutions.

"I'm sick of Tony Stark and Bruce Wayne being the only ones with performance-boosting supersuits. We, the masses, want our own," Zelik said. "The difference is that I'm not fighting crime. I'm fighting the odds that I'll strain my back this week trying to lift my 2-year-old."

The team's testing proves that the smart clothing offloads stress on the low back.

The device consists of two fabric sections, made of nylon canvas, Lycra, polyester and other materials, for the chest and legs. The sections are connected by sturdy straps across the middle back, with natural rubber pieces at the lower back and glutes.

The device is designed so that users engage it only when they need it. A simple double tap to the shirt engages the straps.

When the task is done, another double tap releases the straps so the user can sit down, and the device feels and behaves like normal clothes. The device also can be controlled by an app that the team created -- users tap their phones to engage the smart clothing wirelessly via Bluetooth.

Dr. Aaron Yang, who specializes in nonsurgical treatment of the back and neck at Vanderbilt University Medical Center, is a co-investigator. He stresses the focus of this new technology is not for treating those with existing back pain but focuses on prevention by reducing stress and fatigue on the low back muscles.

He has seen many back belts and braces and typically meets them with skepticism.

"People are often trying to capitalize on a huge societal problem with devices that are unproven or unviable," he said. "This smart clothing concept is different. I see a lot of health care workers or other professionals with jobs that require standing or leaning for long periods. Smart clothing may help offload some of those forces and reduce muscle fatigue."

PLASTIC CLOTHING

THAT COOLS YOUR SKIN INEXPENSIVELY

Stanford engineers have developed a low-cost, plastic-based textile that, if woven into clothing, could cool your body far more efficiently than is possible with the natural or synthetic fabrics in clothes we wear today.

“If you can cool the person rather than the building where they work or live, that will save energy,” said Yi Cui, an associate professor of materials science and engineering and of photon science at Stanford.

This new material works by allowing the body to discharge heat in two ways that would make the wearer feel nearly 4 degrees Fahrenheit cooler than if they wore cotton clothing.

The material cools by letting perspiration evaporate through the material, something ordinary fabrics already do. But the Stanford material provides a second, revolutionary cooling mechanism: allowing heat that the body emits as infrared radiation to pass through the plastic textile.

To develop their cooling textile, the Stanford researchers blended nanotechnology, photonics and chemistry to give polyethylene - the clear, clingy plastic we use as kitchen wrap - a number of characteristics desirable in clothing material: It allows thermal radiation, air and water vapor to pass right through, and it is opaque to visible light.

First, they found a variant of polyethylene commonly used in battery making that has a specific nanostructure that is opaque to visible light yet is transparent to infrared radiation, which could let body heat escape. This provided a base material that was opaque to visible light for the sake of modesty but thermally transparent for purposes of energy efficiency. Then they modified the industrial polyethylene by treating it with benign chemicals to enable water vapor molecules to evaporate through nanopores in the plastic, said postdoctoral scholar and team member Po-Chun Hsu, allowing the plastic to breathe like a natural fiber.

To test the cooling potential of their three-ply construct versus a cotton fabric of comparable thickness, they placed a small swatch of each material on a surface that was as warm as bare skin and measured how much heat each material trapped.

The researchers are continuing their work on several fronts, including adding more colors, textures and cloth-like characteristics to their material. Adapting a material already mass produced for the battery industry could make it easier to create products.

“If you want to make a textile, you have to be able to make huge volumes inexpensively,” said Cui. Fan believes that this research opens up new avenues of inquiry to cool or heat things, passively, without the use of outside energy, by tuning materials to dissipate or trap infrared radiation.

TEMPERATURE SENSITIVE

PATTERNS ARE THE NEW TREND IN FASHION

phys.org

inhabitat.com

Imagine a single-coloured piece of cloth that suddenly displays a colourful pattern when the ambient temperature changes.

Upon further temperature change, a completely different pattern shows up. Doctoral student Marjan Kooroshnia at the University of Borås has developed methods that enable just such changes.

“My research was conducted by undertaking a series of design experiments using leuco dye-based thermochromic inks, which resulted in various working methods and two pedagogical tools in the context of textile design,” she says. “Now I hope that other designers and researchers can further develop these methods. In my research, I have also prepared two educational aids that can facilitate communication regarding, understanding of, and design with thermochromic inks, but still we need to have both terminologies and a thermochromic colour system in order to understand how thermochromic inks behave in relation to other static pigments and varies temperatures.”

Marjan Kooroshnia began her research on already existing descriptions of leuco dye-based thermochromic inks; below their activation temperature they are coloured, and above their activation temperature they are clear or have a light hue. In addition, they are usually blended with static pigments, allowing them to change from one colour to another. After a lot of testing in the printing lab, she managed to mix the inks so that they looked similar when they were in a non-heated state and change to different colours as result of increasing temperature.

Then, she explored thermochromic inks with different activation temperatures in order to create a wide spectrum of colours that would appear at different temperatures. She used thermochromic inks with activation temperatures of 27, 37 and 47°C to create a dynamic pattern of colour changing effects that appear in sequence due to increasing temperature.

Marjan Kooroshnia has also created two educational tools that can facilitate communication regarding, understanding of, and design with thermochromic inks. One consists of different colour swatches printed with static pigment that can be placed along an artificial thermometer. Another are thermochromic colour sample spectra where thermochromic colour transitions are demonstrated step by step from non-heated to heated and back to a cooled state. In addition, she has begun to create a thermochromic colour system, which will be used to teach and study thermochromic inks. So far, one suggestion for the system in a shape of pyramid works the best, but it needs further development.


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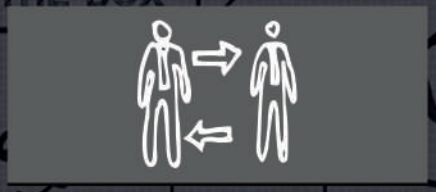

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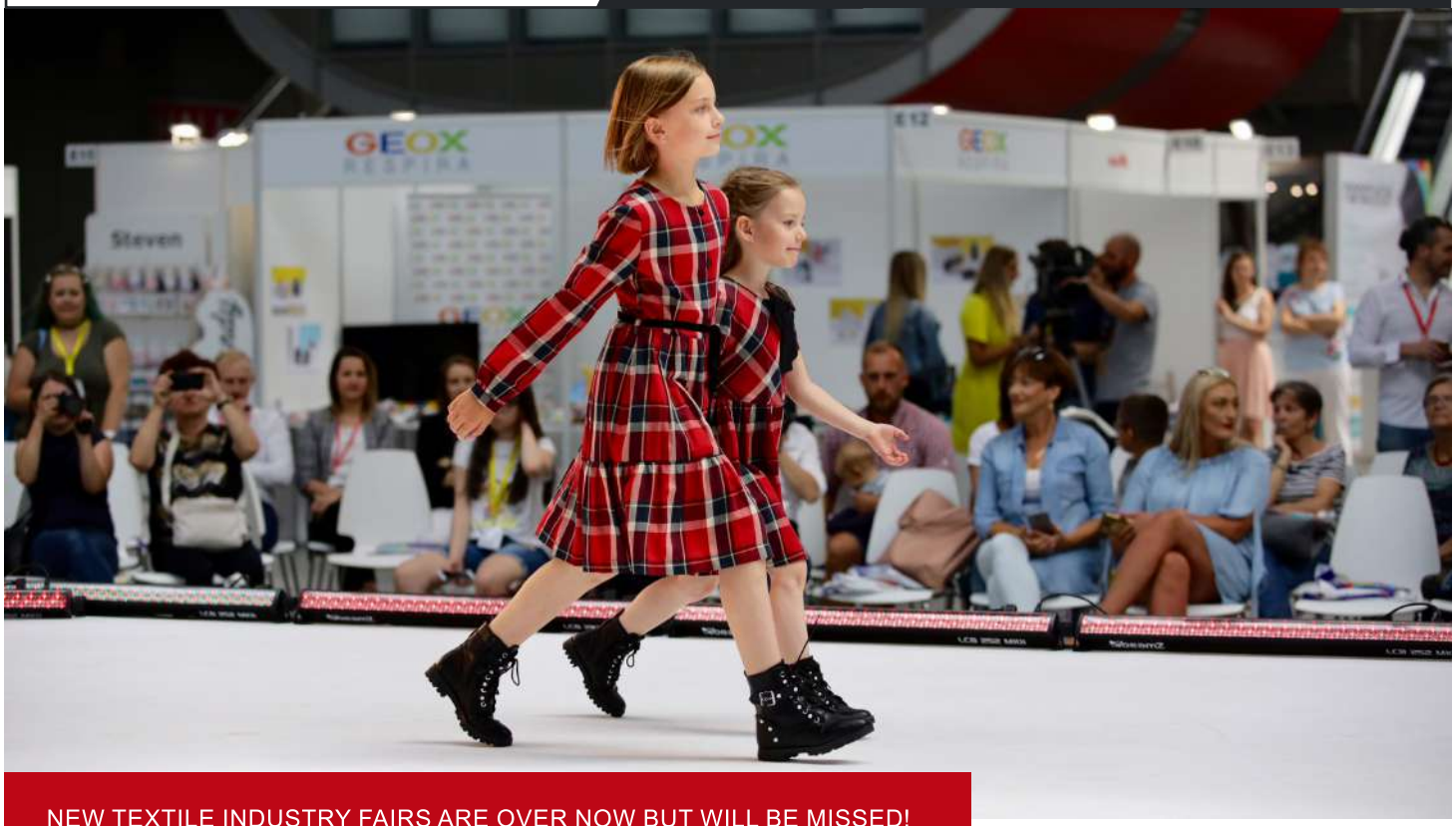


NEW TEXTILE INDUSTRY FAIRS ARE OVER NOW BUT WILL BE MISSED!

Summer in Kielce began under the auspices of fashion. The premiere of the Fashion for Kids Fashion and Textile Fair was host to visitors from Poland and around the world, lots of new products from manufacturers, presentations by top textile brands for children and interesting meetings.

The exhibition, which took place from 28 to 29 June in Targi Kielce, gathered companies from seven countries around Europe: Belgium, Denmark, Italy, Spain, Great Britain, France and Turkey. The two-day event dedicated to children's fashion took place in the largest market hall, Pavilion E. A professional catwalk was created for young models to present individual collections for different seasons. The offer of producers and distributors was attended by nearly 500 visitors from the children's fashion industry, including those from Germany, Ukraine, Russia, Slovakia, Romania, the Czech Republic, Bulgaria, the Democratic Republic of Kongo and Canada.

The creators of the well-known Kids' Time fair knew from the beginning that this new event on the European children's fashion industry map would be a success. Ismail Hakki Kiraz, from the Turkish company Kimpeks Tekstil, said, "We are satisfied with the participation in the Contracting Fair of Children's Clothing and Textiles. We came to the Kielce trade fair for the first time this year, for another event dedicated to toys and children's articles. We are very pleased with both participation in Fashion for Kids and Kids' Time. Participants and exhibitors emphasized the international dimension of the fair." Danijela Pantic of MiniMignon from France commented that "Companies from all over Europe were present during the exhibition. Next to us were stands from Denmark, I also saw stands from Spain and Italy."

LITTLE FASHION ON THE CATWALK

The main attraction of the Fashion for Kids event were the fashion shows. For two days of the fair, over sixty children aged 3 to 10 years walked the catwalk and professionally presented the latest trends. Danijela Pantic (MiniMignon), praised the shows: “Fashion shows were interesting at Fashion for Kids. We could admire small talent, and this is not often the case in this type of exhibition. The shows were very professionally organized. In my opinion, it was the strongest point of the fair.”

The companies boasted collections for the seasons autumn/winter 2018 and spring/summer 2019. In addition to clothing, there was footwear and various accessories, including umbrellas, hair ornaments, jewelry handbags and backpacks. All children also had so much fun modelling and consider it as an unforgetable adventure.

FASHION FOR KIDS EDUCATIONALLY

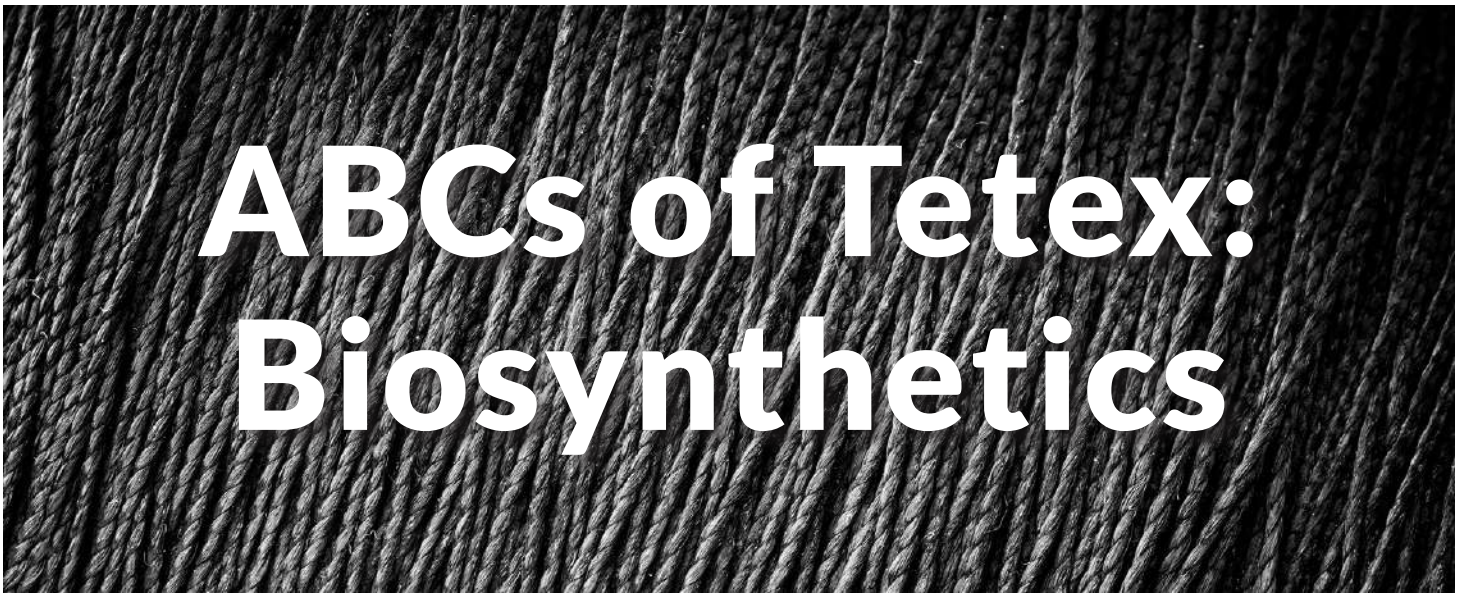
The children’s textile industry is developing very dynamically, and one of the most exciting new markets is Russia. As part of the meeting with Elena Pismenskaja, the participants discussed how to enter the children’s clothing market in Russia, as well as which marketing trends dominate in the East. Pismenskaja emphasized in her lecture that Fashion For Kids is a great opportunity to gain new contacts and expand knowledge about foreign markets. Agnieszka Socha, a specialist in management and logistics in small commercial companies, talked about planning the purchase of goods for her own business. Dagmara Habier, who has been implementing training projects for many years, also took part in the fair and led lectures and workshops on visual merchandising, advising that “Sometimes it is worth giving up showing the whole store display and focusing on the most important elements for our client.”

DSIGNER AND INFLUENCERS

Special Zone A was created for designers, stylists and influencers. Organizers of the Clothing Trade Fair and Children’s Textiles have created an opportunity to establish business contacts between exhibitors, designers and bloggers.

“We can exchange experiences and look at children’s fashion with fresh eyes. The fair is a great opportunity to establish business relations. I met with positive reactions and attitudes of exhibitors present at Fashion for Kids,” emphasized designer Joanna Jończyk.

On the second day of the exhibition, a dozen bloggers from all over Poland came to Kielce to see the first children’s clothing fair and start new collaborations. During meetings with exhibitors, they were acquainted with the latest products from companies from the children’s industry and their market hits.



ABCs of Tetex: Biosynthetics

What are Biosynthetics? A biosynthetic fiber consists of polymers made from renewable resources, either wholly or partly. Biosynthetics are emerging as a potential alternative to conventional synthetic products. The main difference between biosynthetic fibers and conventional synthetic fibers lies in the raw materials used. Conventional synthetics, such as polyester, nylon and acrylic, use raw materials derived from fossil fuels - petroleum, natural gas and coal. Biosynthetic fibers can be made from 100 percent biobased as well as partially biobased resources.

When oil prices are low, biobased polymers are typically more expensive than petroleum-based polymers. However, brands should consider looking at biobased polymers as new materials with new and different features (i.e. more sustainable, lower carbon) rather than comparing them to petroleum - based materials.

PLA (Polylactic Acid)

After harvesting, the starch is separated from the other plant components and converted into dextrose (glucose). The dextrose is fermented into lactic acid, which is then dehydrated to produce lactide. The lactide is then polymerized using one of two methods, with the Ring Opening Process being the favored option today. The polymer is then extruded into polylactide chip. The chips are shipped to the manufacturer for fiber production or plastic molding.

Biobased PTT (Poly Trimethylene Teraphthalate)

Utilizing two raw materials, a sugar produced through photosynthesis usin a petroleum-based oil, makes partially biobased PTT. The end polymer is extruded via a melt spinning process. DuPont™ uses a proprietary polycondensation polymerization process in the production of Sorona.

Undertaking strategic development work now will also ensure economies of scale and a diversified commercial portfolio for a time when oil prices increase and petroleum-based polymers costs also increase.

A diverse range of textile products is already being made from biosynthetic fibers. Products range from home and fashion to outdoor and technical textiles. Biosynthetic fibers can be found in more and more products. For the textile industry, the shift from fossil - based synthetic fibers to biobased is in its infancy, with biobased polyester being the best developed. Biobased alternatives for polyamides (nylons) are also being developed, along with entirely new synthetic materials such as artificial spider silk. Scaling production is currently underway. Biobased alternatives include:

Biobased Polyamide 11 (PA11)

PA11 is produced from castor oil. It is produced by polymerization of 11-aminoundecanoic acid. From the castor oil, Amino 11 monomer is synthesized by the amination of undecenoic acid, this is dehydrated, then polymerized and extruded into polyamide 11 pellets. As with other nylon polymers, these pellets can be turned into fibers or molded components through standard processes

Biobased Polyamide 10,10 (PA10,10)

PA10,10 is also a polyamide, a bioplastic and a member of the nylon family of biobased polymers. It is a long-chain AABB type polyamide, made from castor oil. It is produced by the polymerization of sebacic acid and decamethylene diamine.

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October, 18–19 2018

Moscow Congress center Technopolis

basaltforum.com

From the depth
of the Earth
to the tops
of the world

October 18-19, the congress center of Technopolis “Moscow” International Basalt Forum 2018

On October 18-19, the International Basalt Forum 2018, which is the main international event of the basalt segment of the composite industry, will be held on the platform of the Technopolis Moscow Congress Center. The event is held with the participation and support of the Ministry of Industry and Trade and the Ministry of Construction of Russia.

Today, Russia is a leading global producer and supplier of high quality basalt fiber as well as the most advanced technologies for its production and use in composite materials in various industries.

For the third time, the Forum will bring together key market participants of basalt composites from all continents. Within the framework of the event, technological solutions and projects with their practical successful implementation will be demonstrated. Among the Forum’s residents are leading companies representing not only end-producers, but also the entire industry chain, including research institutes, suppliers of raw materials, equipment manufacturers, along with investors, non-profit organizations and government representatives.

The business atmosphere and context of the event are specially adapted for a successful B2B dialogue, which will result in both the development of existing business and the achievement of agreements on the organization of new projects. Separately, a unique opportunity to get acquainted with the industry is offered by the organizers of the International Basalt Forum 2018 for young professionals, organizing a job fair at the site for direct meetings with major employers.

The key areas of the program of the International Basalt Forum in 2018 will be specialized sections of the business program and round tables to discuss the most pressing issues:

- Increase in the share of use of basalt-composite materials in civil, industrial and road construction;
- Prospects for the application of basalt-composite materials in high-tech industries and the military-industrial complex;
- Prospects for the use of basalt-composite materials in the field of composite shipbuilding as well as infrastructure projects for the development of the Arctic territories;
- Production and application of materials based on thin basalt fiber;
- Equipment and raw materials for the production of basalt fiber and basalt composites;
- Instruments of financial and non-financial support of the industry.

Registration for the event is open on the official website International Basalt Forum 2018 - www.basaltforum.com. The Forum is organized by the Basalt Industries Development Union and Group of companies “Basalt projects”.

При поддержке

EVENTS CALENDAR

THE MOST IMPORTANT EVENTS

FROM THE TECHNICAL TEXTILE INDUSTRY

Cinte Techtextil China

SEPTEMBER 4 - SEPTEMBER 6

SHANGHAI

Cinte Techtextil China is Asia's leading biennial trade fair for technical textile and nonwoven products. It covers twelve application areas which comprehensively span the full range of potential uses of modern textile technologies.

Texworld USA

JULY 23 - JULY 25

NEW YORK

Texworld USA is a sourcing event on the East Coast for apparel fabric buyers, R&D specialists, designers and merchandisers. This platform offers a wide product range covering the entire innovative fabric spectrum.

Heimtextil Russia

SEPTEMBER 18 - SEPTEMBER 20

MOSCOW

The leading players of the international textile business gather on the Russian textile Trade Fair to present their best collections of fabrics and wall coverings. Learn the latest trends in interior design, exchange experience and find new business partners.

IFAI Expo

OCTOBER 15 - OCTOBER 18

DALLAS

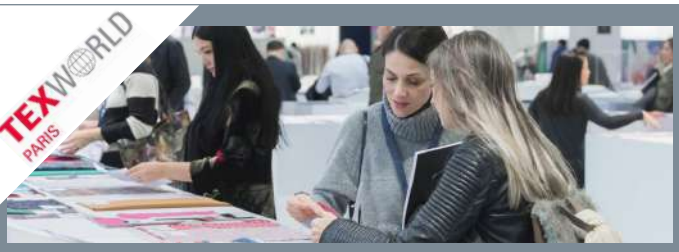
IFAI is a leading industrial fabrics expo in North America and a place to see new and innovative products, learn from the experts, meet influential industry leaders and so much more.

Interfabric

AUGUST 27- AUGUST 30

MOSCOW

This Exhibition showcases products like fabrics for clothing, knitted fabrics, yarn and thread, decorative and interior fabrics, home textiles, fittings, accessories, finishing materials, auxiliary and related products, parts, textile raw materials and much more.



Texworld Paris

SEPTEMBER 17 - SEPTEMBER 20

PARIS

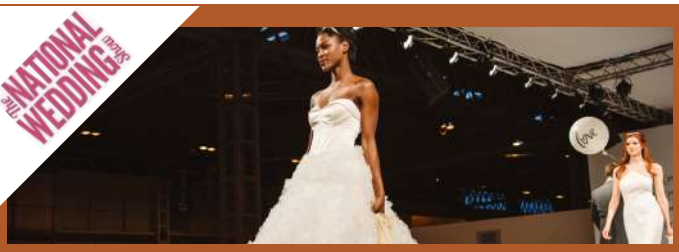
Texworld's aim was to develop a new approach, a different way of exploring the aisles and discovering the trends, creating a true call to the senses. Indeed, the show looks to suffuse its visitors and exhibitors with the latest trends, to have them touch and feel the materials for an ever-more-lively visit.

Kyiv Fashion

SEPTEMBER 05 - SEPTEMBER 07

KIEV

The Kyiv Fashion festival provides an opportunity to view and analyze fashion industry development both at national and international levels. The exhibition continues to be the most prestigious event in fashion industry of Ukraine and positive project dynamics proves that.

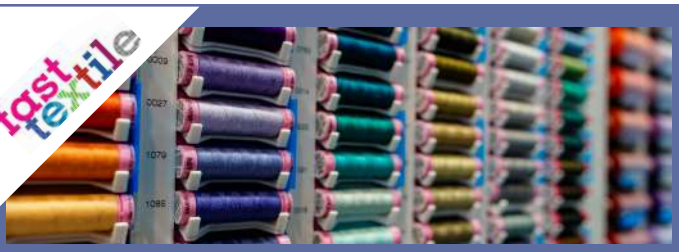


The National Wedding Show

SEPTEMBER 28 - SEPTEMBER 30

LONDON

Serving the UK wedding market for over 15 years, the show truly represents an outstanding opportunity for all exhibitors and partners involved. With over 25 years of experience in the industry, the show is the best in the market when it comes to delivering quality, premium wedding exhibitions.



Fast Textile

NOVEMBER 22 - NOVEMBER 24

WARSAW

The Fast Textile International Textile Fair was created in response to the market's needs and is an excellent opportunity to have a direct talk with current and potential clients, enter the market and promote new products and services.

Techtextil Russia 2019

MARCH 19 - MARCH 22

MOSCOW

Get insight into the Russian market, meet with partners, establish important contacts to decision-makers, discover latest developments, make contracts and place orders - all this is much easier when the trade fair is visited by industry experts. Techtextil Russia includes 12 areas of application for all modern technical textiles and textile technologies. This is why industry professionals choose Techtextil Russia.

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