Vol No: 3 Issue No: 1 August 2017

LiveStylz Magazine

Vol No: 3 Issue No: 1 August 2017

LiveStylz

EDITORIAL BOARD

Front Page was Designed by V.Srilaja
III B.Sc CDF (Voc)

CONTENTS

3D SHOE MADE FROM OCEAN PLASTIC WASTE

- This latest footwear concept, showcased at the 21st session of the United Nations Conference of the Parties in Paris, demonstrated how the industry can rethink design and helps to stop ocean plastic pollution.
- The concept shoe uses yarns and filaments reclaimed and recycled from plastic ocean waste for the knitted upper shoe, combined with a 3D printed midsole, comprised of recycled polyester and gillnets, to create a new industry standard for athletic shoe production.
- Given the global ocean plastic pollution, ADIDAS plan is to bring the footwear/apparel industry together to create sustainable solution that solves big global waste problems.
- With companies like Adidas and Global Organization like Parely, ocean pollution may one day be a problem of the past.

S.PAVITHRA
II B.Sc.CDF

AYURVASTRA: HEALING TOUCH OF HERBAL TEXTILES

Herbal Textiles

Textiles dyed from the extractions of various herbs are called herbal textiles. The concept of herbal textiles has been derived from Ayurveda, an ancient Indian method of Vedic healthcare.

The making of herbal textiles

- Desizing
- Bleaching
- Dyeing
- Finishing
- Recycling
- Mordanting

Benefits of herbal clothing

- It depends on the theory of touch. The body loses toxins when it comes in contact with herbal clothing and this improves metabolism. Herbal clothing is also known to help fight against many common diseases.
- Human body heals itself when sleeping or meditating.

P.GOWRI
I M.Sc.CDF

THE TRUTH OF SHOPAHOLICS

The stereotypical shopaholic darting from store to store to pick up anything and everything while racking up a hefty credit-card bill is anything but stereotypical.

New research reveals while some super-shoppers spend to boost and band aid other perceived internal deficits, others carts are driven by plain-old materialism .Whatever the motivation, however, researchers mostly agree that buying behaviors can range from frivolous fun to serious addiction. Compulsive buying can be thought of as a chronic tendency to purchase products far in excess of a person's needs and resources.

There are some people who are just total rational consumers; they buy what's on sale, or what they need and nothing else. On the other end, there are compulsive shoppers who buy to their own financial ruin and to relationship problems.

Experts say, is that compulsive shopping is often viewed favorably rather than being treated as a problem. When it becomes our natural response to bad feeling or bad events in our life, to go shopping as a kind of retail therapy, it can really become a problem.

The consequences of compulsive shopping are far-reaching and could outlast the trendy pair of shoes or digital device you just purchased. Some excessive spenders cover up debt or purchases –similar to alcoholic hiding bottles-which can strain once-honest relationships.

Compulsive buyers have usually fairly irresistible impulses that they can't control, and it leads to some kind of harm, either financial or occupational or interpersonal or some combination. It's like having an itch and they have got to scratch it. And they don't realize that just like an itch, if they don't scratch it sooner or later the itch will go away.

S.SOWMIYA
I M.Sc.CDF

K.POORNAMBIKA
I B.Sc.CDF

DOCUMENTATION: PRESERVATION TECHNIQUE FOR TEXTILES

Textiles are the image of the cultural heritage of any place at a point of time, so it needs to be preserved for future generation. But textiles are fragile in nature and are going to deteriorate if proper care is not taken. Documentation is one of the alternatives. Analytical data reflecting to historical, technical and aesthetic of the craft must be covered in the documentation.

1. Textual Documentation

- Free text
- Check list

Free Text

It is an essay style form which records the conservation work in a sentence structure or a point form structure on an open page. This type is considered as ideal type of documentation as it gives the original picture of the document in narrative form.

Check List

The check list style of documentation form has become more popular in use for several reasons. This type of documentation is preferred when number of items of same class with similar characteristic needs to be documented.

2. VISUAL DOCUMENTATION

This type of documentation has the advantage of more clarity as the objects are being viewed by the person in its original form. This is recommended to address a large group.

- Photography
- Illustration
- X Radiography

Photography

Slides can be prepared for this type of documentation. The intention of photography can be: to illustrate the extent and location of damage to show details of new or old information contained in the object; to indicate the size of the entire object or the normal location of the object; to show the coloring of certain parts of the object or the entire object.

Illustration

Illustration is type of documentation done as pencil drawing with description of the object in detail which includes title, condition of the object, dates etc and signed by the documenter.

X-Radiography

To document the internal condition/structure of a complex object X-radiography is the best method.

3. AUDIO VISUAL DOCUMENTATION

- Film strips
- Discussion filmstrips
- Sound slide film

Film Strips

This type of documentation is effective for showing the process of particular artifact especially the dyeing process or specialized weaving process.

Discussion Filmstrips

It is a continuous strip of film consisting of individual frames arranged in sequence usually with explanatory titles.

Sound Slide Film

It is similar to film stripes but instead of explanatory title or spoken discussion, recorded explanation is audible which is synchronized with pictures.

Advantages

- These are compact, easy to handle and always in proper sequence.
- They are inexpensive when reproduction is required
- They increase understating and retention.
- They can stimulate the development of understanding and attitudes.
- They make documentation as an effective process and serve as preservation tools.

P.GOWRI
I M.Sc. CDF

TEIJIN FRONTIER'S POLYSTER TOWEL-LIKE FABRIC

- The Teijin has developed a highly comfortable and functional polyester material that achieves the pile structure of toweling.
- Made of 100 percentage polyester, the material offers excellent water absorbency, a soft texture, and a unique bulky- but-light weight feeling.

- Teijin frontier is developing a variety of applications for the new material, focusing on fall/winter sports wear, functional underwear and uniforms, as well as bedding and industrial products.
- The new material's pile structure, surface appearance, functionality and comfort remain durable after repeated washings.
- In addition, Teijin's towel like fabric structure is applicable for multi-seasonal products.
- Fabric advantages include water moves rapidly from human skin dry. Water diffusion is approximately five times faster than that of general fast-drying materials.
- Heat insulation is approximately three times greater than that of fleece due to its bulky fiber structure. Heat is retained even when the material is wet with water absorbency equivalent to 50 percentage of its fiber weight.

S.JEEVITHA
II B.Sc. CDF REG

ECO-FABRIC-STRANGE AND AMAZING TEXTILE INNOVATIONS

Fabric from fermented wine

A group of scientists at the University of Western Australia has produced fabric by letting microbes go to work on wine. The scientists culture the auto bacteria, the bacteria in vats of cheap red wine. The bacteria ferment the alcohol into fibers that float just above the surface. The fibers can be extracted and fashioned into clothing. Acetobacter produce vine gas as its end product so, the garment have a definite odour.

Hagfish slime thread

The slimy substance is a defensive attached to a hagfish, an eel-shaped bottom-dwelling animal of the deep seas that is the only known creature to have a skull, but no vertebral column. Scientists have discovered that proteins within this slime have mechanical properties rivaling those of spider silk and can be woven into high performance bio-materials.

Electroluminescent garments

For this unusual fabric in a collection by fashion designer Vega Wang, silk was printed with images of constellations and other space-

related themes, and then the fabric was lined with electroluminescent paper. Programmed controllers enable the paper to shine through the silk for a dreamy, ethereal effect.

Spider silk made from metabolically engineered bacteria

Known for its tremendous strength –three times stronger than both steel and Kevlar, yet thinner than a human hair-spider silk is a highly valuable material for textiles. But farming and harvesting spider silk is a definite challenge. Instead, geneticists have found way to chemically synthesize the silk gene and insert it into E-coli bacteria.

Silk like fiber derived from spoiled milk

A company called Q-milch makes fabric from protein found in soured, secondary milk that's no longer suitable for human consumption, and would normally be thrown away. This zero-waste fabric requires no chemicals to make and uses less water; fabric requires no chemicals to make and uses less water in the production process than other milk-bared fabric.

New life polyester yarn made of recycled plastic bottles

New life is a polyester yarn made from 100 percentage post consumer recycled plastic bottles, which is processed by mechanical rather than chemical means. Made in Italy, the fabric is used in fashion, sportswear, underwear, medical garments and other clothes and furnishings.

Self –repairing textiles

Once a protective garment like a raincoat or lab wear is ripped or torn, it's useless. But the total loss of these garments may become a thing of the past with the creation of intelligent fabric that can heal itself. Researchers at SINTEF added microcapsules containing a glue-like substance to the plastic polyurethane that is applied to modern rainwear, so that if the garment snags, the capsules release a sealant that fills in the gaps and hardens with contact to air and water.

M.NIVITHA DEVI
II B.Sc. CDF REG

G.INDIRANI
I B.Sc CDF

TELIA RUMAL: RELIC TO CONTEMPORARY IKAT

Teliarumal is a design for the oil treatment. They originated from Chirala in Andrapradesh. It is an art of Ikat tradition using natural vegetable dyes. Some noted designers like Gajam Anjarah are popular for teliarumal designs. Double Ikat Telia Rumal is one such example. India, Indonesia and Japan are the only three places in the world where double Ikat is still manufactured.

Dyeing Telia Rumal

Alizarin dyeing, which is a mordant style of dyeing, is used to produce traditional red and black colour. It requires pre-treatment of yarn which, in turn, needs 15-16 days of processing before dyeing.

E.JANANI
I M.Sc. CDF

K.INDHUMATHI
III B.Sc.,CDF

NEW AGE KHADI

Khadi

Khadi is the only Indian feel good fabric as it gives employment to thousands as well as boosts the economy and sustains indigenous artisans.Khadi, as we call the hand woven fabric made legendary by Mahatma Gandhi, has been around since times immemorial.

- Gandhi chooses Khadi as a symbol of his dreams for India when he returned from South Africa.
- The making of Khadi is an interesting but laborious process.

Khadi wins

Khadi is handmade, handspun; hand-woven natural fabric which is eco-friendly breathes well and can be cool for summer and warm for winter. Blended with natural fibers, it has a whole new texture in fall and feel. A couple of washes removes the starch and makes it light and airy. Smaller runs in khadi with mixed materials in different permutations and combination is a dream come true for designers.

P.GOWRI
I M.Sc. CDF

TEXTILE AND 3-D PRINTING

The textile industry is mature and cost efficient global manufacturing industry. 3-D systems Rock Hill, South Carolina,is one such company which offer apps,software and hardware for 3-D printing solutions.

3D printing raw material

Thermoplastic polyurethane [TPU] is most common raw material in 3D printing as it is supple and flexible to offer wearing properties to fabric.

3D textile products:

In textile industry, robes, gowns, undergarments, men's and women's accessories, shoes etc...Their printer can sum out a pair of briefs just in 3 seconds, meaning a production of 10 million pieces can be done annually. The Belgium based 3D printing company has introduced a laser sintered thermoplastic polyurethane material TPU

92A-1,with flexible, durable, elastic, high tear and loading resistance. Dutch designer's 3D printed garments were adjudged best in 3D collection vintage show in Paris fashion week. Electro loom has produced a prototype of a 3D printed shirt-v neck and tank top.

Electrotherapeutic garments

Electrical modalities have been in use in physiotherapy and rehabilitation for years to help relieve pain, enhance healing of chronic wounds and ulcers and improve motion of limbs after muscular trauma or surgery.

S.SRI NIVEDHA
II M.Sc. CDF

S.SUVETHA
I B.Sc. CDF

DISPOSABLE OR SINGLE USE TEXTILES

Disposable textiles are gaining popularity in today's time due to their usability and cost effectiveness. One can find a wide range of disposable textiles used in houses, hospitals, hotels and restaurants.

- With new innovations, there is a variety of single use textiles available in the market. Moreover, specialty textiles are manufactured for health care purpose.
- Isolation gowns are lightweight, comfortable and best for visitors and staff members in a hospital which protects them from infection.
- Power free latex anti allergic gloves can be used with ease by both hands. To protect the floors from shoe borne infection, disposal overshoe covers are used.
- The diapers are hygienic and wearable because of the anti bacterial properties of nonwoven textile used in manufacturing.
- Disposable textiles are also used in manufacturing chemical coveralls used by military personnel, mine workers, industrial workers, etc.
- When there is threat to the life, chemical coverall with greatest level of skin protection is worn.
- There is a range of disposable kitchen dusters available in different size and design.
- The fabric used in the duster absorbs water quickly and neatly cleans the surface.

SHINING WITH METALLIC FIBRE

- The metallic fibers are the fibers that can be made of plastic-coated metal.
- The most popular and common choice of metallic fibers comprises of gold and silver, though, aluminum yarns including, aluminized nylon and aluminized plastic yarns are also used.
- The aluminum is used in between the two layers of acetate or polyester film.
- The resultant fiber are thinner more flexible, more durable and more comfortable metallic fibers are used in weaving and needlepoint embroidery. Metallic yarn fabrics cannot be wet cleaned it blended with silk or rayon.
- Metallic fibers have ruled the ramp in both men's and women attire.
- The choices that the designers are offering are also increasing.

- There are delicate pastels, high-shine textured, bold colors and mirrored effects that make metallic fiber special and always in demand.

P.GOWRI,
I M.Sc. CDF

T.HARENI
I B.Sc. CDF

NEW YARNS

1. Catalina
It appears to be one thickness on the ball; it creates thick-and-thin textural striping when knit.

2. Woolfolk Loft
A fresh combination of ultimate merino wool in an organic cotton cage this airy yarn is perfectly designed for summer and spring knitting. Loft may be bulky weight but you will love how Tight and Tonty it works up.

3. Dos Tierras
Means two lands, reflecting the sources of the two amazing fibers found in the ultra soft yarn. A luscious combination of 50% Uruguayan merino wool with 50% baby alpaca from Peru piled to create the weight yarn that is versatile as it is beautiful.

4. Hygge
Is the first foray into a bulky yarn. A blend of ultimate merino, superfine baby, alpaca and mulberry silk is melded together with a beautiful construction and finish worthy of these fine fibers.

5. Brooklyn Tweed
Yarns are born in the shadow of the Bighorn Mountains of north central Wyoming, where ranchers have raised their sheep for 150 years.

6. Loft
Fingering weight loft channels Tar ghee-Columbia wool's airy bounce into the feather-light lace, accessories, and garments. Loft is a woolen spun 2-ply yarn with a delicate twist, especially designed for unique lightness of hand. Once your garment is blocked, the stitches will cohere in a beautifully even and sturdy fabric.

7. Shelter
The shelter is a woolen spun, meaning the fibers remain in a lofty jumble that traps air and offers remarkable lightened. Its two plies are gently twisted to preserve that buoyant quality. It's a deal for sweaters of every variety, winter accessories, and blankets.

R.M.NANDHINI
II B.Sc. CDF

HISTORY OF NAIL ART AND NAIL POLISH

In ancient Egypt, color of nail indicated one's status, black for noblemen and green for common men. Around the same time, 3000BC, the first nail polish originated in ancient China. It was made from bees wax, egg whites, gelatin, vegetable dyes and gum Arabic.

Nail Art
"Nail art is a creative way to paint, decorate, enhance and embellish the nail. It is a type of art work that can be done on finger nails and toe nails, usually after manicures or pedicures. A manicure and the pedicure are beauty treatments that trim, shape and polish the nail.

Nail Polish

"Nail polish (also known as nail varnish) is a lacquer that can be applied to the human finger nails or toe nails to decorate and protect the nail plates. The formulation has been revised repeatedly to enhance its decorative effects and to suppress cracking or flaking."

Main Ingredients in the Nail Polish

DBP (dibutyl phthalate), a member of the phthalate family of chemicals is used in nail polish to minimize chipping.

Toluene is the nail polish ingredient used to create a smooth application and finish.

Formaldehyde
Formaldehyde resin
Camphor

Elements of Nail Polish

- Acetone (carbon, hydrogen, oxygen)
- Ethyl acetate-colorless, flammable liquid.
- Butyl acetate - production of lacquers.
- Aloe Vera - protects and conditions the nails.
- Glycerin-helps nail and skin from drying out.
- Acetyl acetate -skin conditioning agent and emollient.

CAREERS IN FASHION

- Costume designer
- Fashion designer
- Buyer and fashion merchants
- Marketing manager
- Fashion photographer
- Fashion journalist
- Stylist
- Fashion accessories and Jewellery designers.

K.HEMA VARSHINI
III B.Sc. CDF VOC

ELECTROSPUN NANOFIBRE TECHNOLOGY: STOPS BLEEDING INSTANTLY

`Healthcare is expanding at an astonishing pace all over the world. Quality medical assistance is one of the priorities. While the expertise of the medical practitioner's skill is vital to ensure quality treatment, it is also the use of medical technology and advancements that reap favorable results. Over the years, with rise in demand for developments like anti-

bacterial bandages, scaffolds for tissue culture and prosthesis for implants, medical textile has taken a new meaning. Medical textile's application in wound healing and infection control is appreciated for assisting rapid recovery. Professionals in life threatening work like fire fighters, military and police personnel benefit from advancements in medical textile. Hospital emergency rooms witness several critical cases every hour where medical textile can save a patient's life. One of the recent breakthroughs in medical textile is Nano Bleed- Stop Technology. Textile applications of Nanotechnology are already growing and the recent addition of nano bleed- stop technology will strengthen nanotech medical textile made from electro spun nano fiber technology.

Electrospun nano fibres

Electrospun nanofibre technology has revolutionized the medical industry. However, nanofibre net is delicate and cannot be used on its own, so conventional dressing are coated with electrospun nanofibre to harvest their full potential. Electrospun nanofibre dressing enhances moisture management and offers unmatchable barrier properties, besides assisting control of fluid drainage.

Electrospun nanofiber mats are used for burn wounds, as they exhibit good cellular compatibility and support cell attachment and proliferation. Electrospun nanofiber technology is applicable for regular medical care, Recent developments promise to further smoothen post – operative patient care.

China's breakthrough

Qiingdao university in China has developed electrospun medical glue hemostasis technology in agreement with the reconstruction of organ integrity theory .They have designed an electrostatic spinning device which has been used in an experiment to stop blood flow during surgical removal of animal liver .

The device electrospins medical adhesive into nanofiber and is accurately placed on the wound via an air guide. The device is expected to be safe, reduce surgery time and also medical care cost.

R.SANTHIYA
II B.Sc. CDF

DRIVE SAFE AND IN STYLE THROUGH TECHNICAL TEXTILE

Globally, the automobile sector consumes more than 4.5 tons of textiles, with approximately 2.2 percent of the overall weight of car comprising of textile material.

The role of textile is evident when one looks at the seats, carpets and other interior fabric, but the textile's involvement is more than what meets the eye. Apart from conventional uses as headliners, etc., textiles are also being used as tyre cord, fuel filters belts, air bags and as a reinforcement material for composites .An average car needs estimated 45 square meters of textile material.

There are several modifications that the modern automobiles have gone through. Today the headliners include driving mirrors, interior lights with wiring, assist handles, sun visors and sunroofs .The headliners not only contribute to the overall interior appearance, but are significant for sound vibration insulation.

The airbags have also seen major transition in recent years. The first air bags used nylon 66 and were covered by neoprene rubber, but in effort to make bags both lighter and thinner to fold up into a compact pack, silicon coatings were introduced. A small amount of nylon 6 is used which is softer, minimize skin abrasion and has better packing compactness.

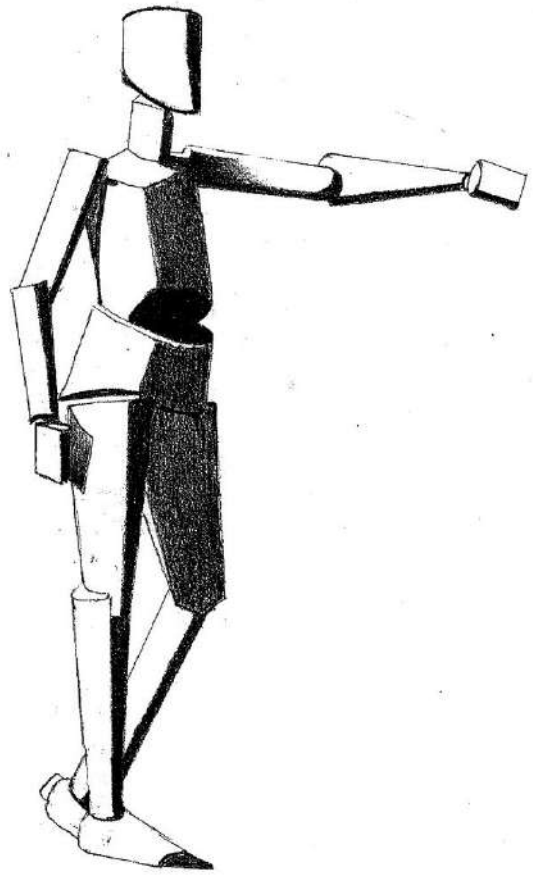
The textile/polyurethane foam laminate is almost invariably used on a door casing in combination with a film made from poly vinyl chloride (PVC). Parcel shelves that are also know as package trags are roofed with needle-punched non-woven mainly made from polypropylene or polyester.

The sun visors are fashioned from warp knit fabric or poly vinyl chloride (PVC). They are produced by injection moulding, or composed of metal frames and rigid foam or cardboard are also used. As sun visor is close to the windscreen therefore UV, light and heat resistance must be of highest standard.

The modern day tyres used in automobiles have replaced woven fabric by a unidirectional arrangement of cords. The cords are formed blending yarns together to build up a strong cord in two or three separate operates. The radial tyre comprises of about 4-7 percent of its total weight of textile material whereas cross-ply tyre contains about 21 percent of the same.

The future modification in the technical textile in automobile will be influced the safety of drivers and environment. The role of automobiles textile in protecting the environment comes to fore, as lighter weight fabrics can mean better vehicle performance. High – performance materials are also being developed by fiber and chemical companies, such as ultra- high-strength polyethylene fiber and the polyolefin foils.

P.GOWRI,
I M.Sc. CDF



N.SOWMIYA
I B.Sc CDF

COFFEE SHAPEWEAR

Be it food or clothing, people have started making wise choices regarding what they eat and what they wear. Creating fabrics from coffee is one of the recent additions to the list. Even though coffee infused shape wear was in controversy following its claims of triggering weight reduction and cellulite breakdown, shape wear with coffee continues to steal the show over regular shape wear.

Weaving Coffee Fabric

The process of making coffee fabric remains similar to making bamboo fiber. Lingerie companies in France, The United States of America and other countries are among leading brands producing coffee infused shape wear.

Coffee works its wonder

Various companies manufacturing coffee shape wear claim that it fights cellulite and firms the skin. Lingerie brand Simone perele of France launched a shape wear range making the same claim. The brand is selling lingerie which has slimming agents. Coffee is the main player. A more feasible claim by virus, a company in the United States of America, suggests that the fabric, termed "coffee charcoal," has extensive insulating properties and wearing it can pump up skin surface temperature slightly.

P.GOWRI,
I M.Sc.CDF

WEARABLE SOLAR PANELS

Solar panels can be placed on houses, on cars and even on roads. But on clothes? The designers have a range of clothing on which he has integrated solar panels. When not needed, the panels are well hidden and the dress looks just normal, with just a little bit more style than usual.

When the sun comes up the clothes unfurl to reveal solar panels while still managing to maintain style. The coat has 48 solar cells while the dress has 72 solar cells. After an hour in the sun, the clothes harness enough solar energy to charge your Smartphone.

This is amazing on so many levels. For one, the technology involved in integrating solar panels and clothing is just amazing. Secondly, the makers take the fight for a better and cleaner environment further and make it very personal.

S.DHANUSHYA,
III B.Sc.CDF

SEVEN THINGS YOU DID NOT KNOW ABOUT YOUR TUSSAR SILK SAREE

Tussar silk saris are also known by the Sanskrit name, Kosa silk saris. They are made from silk that is produced from silk worms that breed on wild forest trees, not mulberry trees.

A lot of Indian tussar saris production happens in Bhagalpur in Bihar. In fact the silk weaving industry in this region goes back over a country! Hence Bhagalpur silk saris are just as popular.

Tribal women who are trained in the art of tussar silk weaving can produced about 10 meters of the silk cloth in around three days.

Though cheaper than blueberry silk, a genuine Tussar silk saris will still cost you anywhere between Rs.3000 to Rs.4000.

While Tussar is more textured than mulberry silk, its short fiber makes it less durable. The porous fabric makes Tussar,a comfortable choice even in our warm Indian summers.

Tussar silk saris are delicate and need to be dry cleaned only.Store them in Muslin bags to allow the fabric to breath.

Tussar silk saris are tested by burning the edges slightly. If it smells like burnt hair rather than just leaving a solid residue, you know you have an original.

B.KAMALI,
II B.Sc.CDF

K.INDHUMATHI,
III B.Sc.CDF

AGRO TEXTILES-HIGH PERFORMANCE FABRICS WITH BIG POTENTIAL

Agricultural textiles fabric provide a huge range of woven, non-woven, knitted fabrics that are used for different purposes in forestry, agriculture, horticulture, landscaping, floriculture and aquaculture. Agro textiles play an important role in meeting the demand for production of food from limited sources, especially developing countries where the population is rising.

According to the United Nations' Food and Agriculture Organization (FAO) the global food production capacity will have to increase by 70 percent from the present level by 2050 in order to suffice the population. Features like ability to protect the crop from solar and ultra-violet radiation, micro-organisms, and water retention require being completely bio-degradable. The most common fiber of choice for Agro textiles is synthetic. Advanced nets such as these reduce the harvest time; improve handle ability, decrease the irrigation and maintenance cost.

Agro textiles are also being used for irrigating gardens and landscapes. The agro textiles as an industry is so developed that today non-wovens are used as an alternative to plastic films, glass and straw, which were originally used to keep the crops from freezing and providing early yields to farmers.

Such innovation and use of textiles in agricultural and farming has pushed the field of agro textiles to new limits and into a growing prospective business. Today, the farmers being burdened from the inflating costs of protection in avenues of protecting their agricultural produces.

P.GOWRI,
I M.Sc. CDF

CUT RESISTANT FABRIC

Cut – Tex Pro is an ultra high cut resistant fabric knitted from an innovative combination of Ultra-High molecular weight polythene and technical fibres at UK based ISO 9001:2008 quality standard accredited manufacturing facility.

It is primarily being used to create slash resistant clothing, effectively helping protect frontline professionals working within hostile environments such as prisons, correctional facilities, homeland and security and policing, from laceration, subsequent rapid blood loss and death.

Additional key sectors for cut resistant clothing made from cut-TEX PRO are flat glass handling, metal sheet pressing, and recycling, automotive and similar industries.

Cut Resistant fabric has become important in today's apparel, work wear and uniform manufacturing industry as it gives better protection for simplicity, engineered fabrics offering the wearer a high level of dexterity.

K.VISHNU PRIYA
II M.Sc CDF

SIX NEW INNOVATIVE FABRICS FOR SUSTAINABLE FASHION

1. **Crailar**

Crailar is a flax fiber that drastically reduces chemical and water usage. It was named a 100 % Bio preferred product by the USDA. In fabric form, it looks and feels almost identical to cotton.

2. **Q- Milch**

It is 100% natural and renewable fiber derived from a protein in sour milk. The result is a fabric similar to silk, but less expensive, while being durable enough to withstand wash and care. Q-milch is naturally antibacterial and can regulate temperature, making it ideal for sports and active wear.

3. **Recyclon**

Recyclon is a recycled nylon that uses pre-consumer and post- industrial nylon waste. While the makeup of the blend is not 100% recycled, the innovation has been widely celebrated by those who have been wanting a recycled nylon option since recycled polyester became available years ago.

4. **S.Cafe**

S. CAFÉ is a new fiber coming out of Taiwan that uses recycled coffee grinds. Big name like North Face, Puma, and Timberland are already using it, while coffee sellers like Star Bucks and 7-11 are said to be some of the suppliers. Apparently coffee grinds have natural odor-masking properties without making the entire garment smell like your morning brew. It's said that coffee grinds require less energy in the fiber-making process, making it an "earth-friendly" alternative to traditional fabrics.

5. Eco circle plan fiber

Eco circle plan fiber is a plant based PET (Polyester, the new fiber contains 30% sugarcane, which replaces 30% of the oil needed for traditional polyester).Teijin, the company behind the fiber, said it will have a closed-loop recycling system at the end of the fabric's life. Nissan is one of the first companies to use the fabric for the car upholstery in Nissan leaf electric car.

6. Evrnu

Evrnu is an innovative new technology that recycles cotton garment waste to create a premium renewable fiber. Evrnu emerged from a new way of thinking about the apparel and textile industry by textile specialties who love fashion. The Evrnu team is currently running an Indigo campaign to bring the technology to a larger scale.

M.RANGEELA
II B.Sc. CDF

HANDLOOM IN FASHION DESIGN

Fashion designers who have contributed to the handloom narrative of India are,

David Abraham & Rakesh Thakore, Delhi

Abraham & Thakore (A&T) are the handloom master class. The strong, graphic black and white IKat design that has seeped down to craft bazaars in an A&T signature. There is, of course, their work with Mangalgiri weaves, Jamdanis, and Banaras brocades. Patterns of vertical and horizontal checks were woven like a *'chatai'* (mat) for Banaras brocades, with Lurex instead of *'zari'*. Tussar was woven with brocade in Varanasi, with leopard-print patterns achieved through digital printing and embroidery.

Wendell Rodricks, Goa

An early proponent of eco-friendly, minimal design aesthetic, Rodricks started working with organic fabrics in the early 1990's. He is known for his efforts to revive the long-forgotten tribal GoanKunbi sari. The Eco Goa Roomin, his design space showcases clothes made with all-organic elements and natural dyes sourced from the Western Ghats.

Sabyasachi Mukherjee, Kolkatta

He uses cotton, Khadi, Banarasi weaves and hand-woven fabrics in a luxe-bohemian way for pretty and bridal wear. For his 'Save the Sari' campaign, he created woven saris from craftsmen across India, packaged them in memorable tall tins and priced them without the designer mark-up.

Rohitbal, Delhi

India's most charismatic and famous couturier, who loves embellishment, embroidery and grandeur in his clothes and silhouettes, has been working with Varanasi looms for years and was one of the first group of designers chosen by the khadi and Village Industries Commission to create affordable, ready-to-wear Khadi garments. His Banarasi and Khadi saris, stocked at his stores, are never advertised, yet they're picked up rapidly by a loyal clientele before the word spreads.

Neeru Kumar, Delhi

A senior textile conservationist, Kumar's design-based, inventive interventional hand-woven Tussar took this Indian fabric in the form of various products to global stores and museum shops, from Japan to the US. She was one of the first designer minds to set up a successful handloom export business. She created ready-to-wear garments and unstitched drapes from multihued, softened and contemporary Khadi, getting hand-spun wool woven and giving Kantha embroidery on handloom fabrics a design language.

D.SUBASRI
II B.Sc. CDF VOC

ASAHIGUARD OFFERS SUSTAINABLE REPELLENT

AGC Chemicals Americas has developed AsahiGuard E- Series high-performance, PFOA-Free repellents with improved environmental and biological profiles for use in automotive interior components. Unlike traditional repellants that have the potential to breakdown and form perfluorooctanoic acid (PFOA) Or perfluorooctanesulfonate (PFOS), these repellents offer a more sustainable way to treat non woven fabric before they are fabricated into components.

Industry regulators have evaluated AsahiGuard E-Series repelling agents and determined them to be safe and effective for use in non woven auto motive applications. E-Series repellents are based on

AGC's patented short - chain C6 polymerization technology that supports industry environmental initiatives and provides a sustainable alternative to long – chain C8 technology.

'AGC leads the USEPA stewardship program to manufacture only high performance, sustainable products,' says Tim John, AGC business manager. When non woven is treated with AsahiGuard E-series repellents, they hold up at least twice as long as they would if they were untreated or treated with silicone repellents, without the adverse environmental impact of long chain fluoropolymers'.

Automotive applications for AsahiGuard - treated nonwovens include: under the hood noise dampening; acoustic and thermal insulation; oil, cabin, carburetor and air filters; seating fabrics and reinforcements; and much more

K.VISHNU PRIYA
II M.Sc. CDF

WORLD'S MOST HEAT RESISTANT MATERIAL

Scientists have identified materials that can withstand temperatures of nearly 4,000 degree Celsius, an advance that may pave the way for improved heat resistant shielding for the faster-than-ever hypersonic space vehicles.

Researchers from imperial college London discovered that the melting point of hafnium carbide is the highest ever recorded for a material.

Tantalum carbide (TAC) and hafnium carbide (HFC) are refractory ceramics, meaning they are extraordinarily resistant to heat.

Their ability to withstand extremely harsh environments means that refractory ceramics could be used in thermal protection systems on high speed vehicles and as fuel cladding in the super-heated environment of nuclear reactors.

However, there has not been the technology available to test the melting point of TAC and HFC in the lab to determine how truly extreme an environment they could function in.

The researchers developed a new extreme heating technique using lasers to test the heat tolerance of TAC and HFC.

They used the laser-heating techniques to find the point at which TAC and HFC melted, both separately and as mixed compositions of both.

They found that the mixed compound (Ta0.8Hf0.20C) was consistent with previous research, melting at 3,905 degree Celsius, but the two compounds on their own exceeded previous recorded melting points. The compound TAC melted at 3,768 degree Celsius, and HFC melted at 3,958 degree Celsius.

The findings may pave the way for the next generation of hypersonic vehicles, meaning space craft could become faster than ever.

K.VISHNU PRIYA
II M.Sc. CDF

CARPETS OF THE FUTURE ALERTS HOME OWNERS TO INTRUDERS

New research has revealed that Britans believe their carpets is where the future of in-home technology could lie, with many stating they could like a carpet that could detect and alert the owner to potential intruders, self - clean and repel pet hairs , interior brand Hillary's blinds reported. The design team at Hillary has created concept images of this carpet, which would alert homeowners on their smart phones when unusual activity/ weights are detected. 'Even the lightest – footed burglar is going to have big problems with a carpet that detects and tracks unwanted footfall,' said Helen Turnbull, spokesperson for the brand. The company created a series of concept images of the carpet of the future following a poll of 2,185 British home owners.

G.YOGESWARI
II M.Sc. CDF

INTERESTING FACTS ABOUT JEANS

- ✓ Orange thread that Levi-Strauss and Co uses for stitching of their jeans is trademarked.
- ✓ It is used as a distinguishable feature and to match the color of copper rivets.
- ✓ The oldest known pair of Levis 501s requires 37 separate sewing operations.
- ✓ The first jeans came in two styles indigo blue and brown cotton "duck".
- ✓ First name for jeans was "waist overalls".

- ✓ Name 'Denim' comes from the name of a sturdy fabric called serge, originally made in Nimes, France.

NASA DESIGN WOVEN FABRICS FOR SPACE

- Scientists at NASA are designing advanced woven metal fabrics for a range of uses in space.
- It is used for large Antennas and other deployable devices because the material is foldable.
- Another potential use might be for an icy moon like Jupiter's Europa, where these fabrics could insulate the spacecraft according to NASA.
- A technique called additive manufacturing known as 3-D printing on an industrial scale, is necessary to make such fabrics.
- The JPL team wants to try these fabrics in space and also wants to be able to manufacture in space

M. CATHARIN QUEENE
III B.Sc. CDF VOC

TOP LATEST FASHION FACTS

- ✓ False eyelashes were first invented in 1916 when Hollywood producer, D.W. Griffith decided to enhance the eyelashes of BEENA OWEN for his film 'Intolerance'.
- ✓ The skirt is considered to be the second oldest women's garment in the world after the loin cloth.
- ✓ A 'Grabatologist' is a person who loves collecting ties.
- ✓ During 15th century, designers used little dolls instead of females as models to show case their creations to the clients.
- ✓ The world's most valuable fashion brand is Louis Vuitton with worth of 23 billon dollars.

C.S KEERTHANA
III B.Sc. CDF VOC

INSPIRATION BEHIND VELCRO

Before the middle of 20th century, people lived in a Velcro- less world. That was until one lovely summer day in 1941 when an amateur – mountaineer and inventor decided to take his dog for a nature hike. The man and his faithful companion both returned home covered with burrs, the plant seed – sacs that cling to animal fur in order to travel to fertile new planting grounds.

He noticed his dog was covered in the stuff. He was Swiss engineer and naturally curious so he took a sample of the many burrs stuck to his pants and placed them under his microscope to observe the curious properties of the burdock plant that made it stick to certain surfaces. Perhaps, he thought, they can be used for something useful.

Upon the closer examination, it was the small hooks that enabled the seed – bearing burr to cling so stubbornly to the tiny loops in the fabric of his pants. GEORGE DE MESTRAL raised his head from the microscope and smiled thinking something along the lines of "I will design a unique , two -sided fastener, one side with stiff hooks like the burrs and the other side with soft loops like the fabric of my pants . I will call my invention 'VELCRO' a combination of the word velour and crochet.

He worked with a weaver from a textile plant in France to perfect a fastener that worked by experimenting with materials that would hook and loop in similar manner. Through trial and error, he realized that nylon when sewn under infrared light, formed tough hooks for the burr side of the fastener.

E. KANIMOZHI,
III-B.Sc. CDF VOC

K.JEEVIKA,
I-B.Sc. CDF

DESIGN PROCESS

The costume design process involves many steps and though they differ from genre to genre a basic method is commonly used.

1) **Analysis:** The first step is an analysis of the script, musical composition, choreography, etc. Costume parameters for the show are established and a rough costume plot is created in which scene, when the actors change, and what costumes are mentioned in the script.

2) **Design Collaboration**: An important phase in the process where all of the designers meet with the director. There must be a clear understanding of where the show is headed. The designers get on the same page with the director in terms of themes for the show and what message they want the audience to get from the show.

3) **Costume Research**: Once the director and designers are on the same page, the next step is for the costume designers to gather research. Costume designers usually begin with world of the play research where they find research to establish the world where the play takes place. This helps the designers establish the rules of the world and then in turn understand the characters better. The designer will then go into broad research about each character to try to establish their personalities though their costume.

4) **Preliminary Sketching and Color Layout**: Once enough information is obtained, Costume designers begin by creating preliminary sketches. Beginning with very quick rough sketches the designer can get a basic idea for how the show will look put together and if the rules of the world are being maintained. The costume designer will then go into more detailed sketches and will figure out the specific costumes and colors for the character. Sketches help see the show as a whole without them having to spend too much time on them.

5) **Final Sketches:** Once the costume designer and the Director agree on the costumes and the ideas are fully flushed out, the designer will create final sketches. These are called rendering and are usually painted with watercolors or acrylic paints. These final sketches show what the designer wants the character to look like and the colors of the costume.

P. DINESH KUMAR,
I B.Sc. CDF REG

STREET FASHION

STREET FASHION is fashion that is considered to have emerged not from studios, but from the grassroots street wear. Street fashion is generally associated with youth culture, and is most often seen in major urban centers. Magazines and newspapers like the "NEW York Times" and "Elle commonly" feature candid photographs of individuals wearing urban, stylish clothing. Japanese street fashion sustains multiple simultaneous highly diverse fashion movements at any given time. Mainstream fashion often appropriates street fashion trends as influences. Most major youth subcultures have had associated street fashion. Examples from the 1950s, 1970s, 1980s, 1990s, 2000s and 2010s include:

- Hippies
- Teddy boys
- Punk fashion
- Skin heads
- Gothic fashion
- Preppy
- Hip hop fashion
- Hipster or indie
- Rasta
- Greaser
- Urban
- Feminine

K.MADHU SHALINI
II B.Sc. CDF

FAMOUS QUOTES ON FASHION

- "Fashion is not necessarily about labels. It's not about brands. It's about something else that comes from within you." — *Ralph Lauren*
- "What you wear is such an expression of who you are. That's like someone picking out who I'm going to date!" — *Diane Kruger.*
- "Fashion is not something that exists in dresses only. Fashion is in the sky, in the street, fashion has to do with ideas, the way we live, what is happening. — *Coco Chanel*
- "Style is very personal. It has nothing to do with fashion. Fashion is over quickly. Style is forever." — *Ralph Lauren*
- "Women think of all colors except the absence of color. I have said that black has it all. White too. Their beauty is absolute. It is the perfect harmony."
  — *Coco Chanel.*

- “Buy less, choose well and do it yourself!”
  — *Vivienne Westwood*
- "Don’t be into trends. Don’t make fashion own you, but you decide what you are, what you want to express by the way you dress and the way you live."
  — *Gianni Versace*
- "I don't design clothes. I design dreams."
  - Ralph Lauren
- “Shoes transform your body language and attitude. They lift you physically and emotionally.”
  —*Christian Louboutin*
- “Fashion is what you’re offered four times a year by designers. And style is what you choose.”
  —*Lauren Hutton*

K.INDHUMATHI
III B.Sc.CDF

THE FIVE MOST INNOVATIVE ECO-FRIENDLY FIBERS

1. Silver

Silver is commonly used in the medical and healthcare fields due to its known healing properties, but is slowly making its way into consumer markets, particularly in undergarments and athletic wear. Silver is a conductive element, which means it is naturally antimicrobial, thermally conductive, and electrically conductive. “The silver particles attach to the microbes and short-circuit them. Silver is generally applied or woven into a fabric in three principal ways and not all silver fibers are created equally.

- Nanoparticle finishes
- Extrusion process
- Embedded elemental silver

2. Morphotex

The biomimetic fabric refracts light like the wings of the Morpho blue butterfly, completely eliminating any need for pigment or dyes, which has always been a challenge for sustainable designers who love and want color. All the color seen on the fabric’s surface is created by the strength and angle of the light refraction against the material. Though extra dye is not used in the fabric, the material itself is made out of 85 percent polyester and 15 percent nylon.

3. Rubber

Natural rubber is obtained by the same mechanism as it was over a thousand years ago. By making horizontal incisions into trees and letting the sticky white sap drip into containers, which is an inefficient system. Today, the world gets most of its natural rubber from Asia. The continent accounts for around 94 percent of the total output. New forms of rubber for products both from naturally-derived sources and recycled/reclaimed rubber.

4. Nettle

Fabric from nettle has been used for thousands of years, but it fell out of favor as cotton became the fabric-of-choice. Nettle has many properties similar to linen, but it's long staple can provide for some interesting fabrications if proper technology and scale is brought to the industry. Currently Camira Fabrics has begun producing some nettle fabrics for interiors and The Natural Fiber Nepal supplies handspun organic nettle.

5. Victimless Leather

The "victimless leather" is grown out of cell lines, which when cultured, form a living layer of tissue supported by a biodegradable polymer matrix to form a coat.

7 TIPS TO CREATE WINNING WINDOW DISPLAYS

1. Tell a story

2. Think in visual planes

3. Surprise customers

4. Use bold shapes and colors

5. Keep it clean

6. Update your displays

7. Use lighting to stand out

M.CATHARIN QUEENE
III B.Sc. CDF VOC

IMPORTANCE OF WINDOW DISPLAY

- Window display is just a display of wares and it is a unique form of advertising.
- It is the first contact point between the store and the customer.
- It defines the store and gives an idea of what the store is all about to the customer.
- It determines whether the customer will walk into the store or walk away from it.
- It is an effective tool to use when the image of the store needs to be changed.
- Window display can be used as a means to portray seasonal merchandise.
- Window display can convey what age group or income group of customers the store caters to.
- This has, in turn, led to tough competition among the retailers.
- It is essential for all kinds of stores in the modern times, ranging from the smallest to the largest.
- In other words, window display acts as a filter. Only those customers enter the store that have a fair idea of what products it stocks and are interested in buying them.
- A lot of time and energy of the salesmen is saved as they need not concentrate on customers who might not be potential buyers.
- Window display makes the decision making process of the customer rather simple.
- Based on the window display, the customer can easily decide whether he wants to enter the store or not.
- There is no substantive evidence to indicate that window display leads to an increase in sales.
- The window display should be designed in a way that attracts customers, rather than looking like a piece of art.

C.S.KEERTHANA
III B.Sc. CDF VOC

METTALIC SPACE FABRIC HAS MULTIPLE FUNCTIONS

- Woven metallic fabrics for use in space are being developed by engineers at the US National Aeronautics and Space Administration (NASA)'s Jet Propulsion Laboratory (JPL) in Pasadena, California, USA.
- One side of the fabric reflects light, while the other absorbs it, acting as a means of thermal control. It can fold in many different ways and adapt to spaces.

- Three fabrics have been manufactured so far: one from stainless steel; one from titanium; one from carbon fiber-reinforced polyamide.
- The work of NASA systems Engineer Raul Polit-Casillas. The fabrics are manufactured using a three-dimensional (3D) printing (also known as additive manufacturing) process.
- He says: We call it '4D printing 'because we can print both the geometry and the function of these materials. If twentieth-century manufacturing was driven by mass production, then this is the mass production of functions.
- According to Andrew Shaprio-Scharlotta of JPL, an Early Stage Innovation Manager whose office funds research for nascent technologies such as the space fabric.
- He says that adding multiple functions to a material at different stages of development could make the whole process cheaper. It could also enable new designs.

K.VISHNU PRIYA
II M.Sc CDF

K.PADMAWATHI
I B.Sc CDF

ECO VERO, NEW ECO – FRIENDLY VISCOSE

- The environmental awareness of consumers has been growing steadily over the last decade, more recently in the fashion and textile industry.
- Achieving low environmental impact requires eco-friendly raw materials and sustainable manufacturing process.
- Lenzing address this unmet market need for more sustainable viscose by launching EcoVero fibers that new industry standard in sustainable viscose based on three pillars: the use of sustainable wood sources (FSC or PEFC certified),an ecological production process (significantly lower emissions and water impact than conventional viscose),and full supply chain transparency by identifying EcoVerofibres in the final product .
- EcoVerofibres are made from wood, natural and renewable raw materials. The wood comes from sustainable forestry plantations that are certified by industry-leading associations such as Forest Stewardship Council.
- Lenzing has a comprehensive wood sourcing policy that goes above and beyond the call of duty to ensure that the most sustainable wood sources are used for viscose production.
- Thus, retailers and brands are fully assured that they are indeed incorporating the eco-friendly viscose."

S.DIVYA
II M.Sc. CDF

P.DHANAGOPAL
III B.Sc. CDF VOC

PERFORMANCE SHOE MADE FROM AMSILK'S BIOSTEEL FIBER

The world's first performance shoe made using biosteel fiber-a replication of natural silk at the biofabric. The Adidas future craft biofabric prototype shoe features an upper made from 100% biosteelfibre, a nature-based and completely biodegradable high-performance fiber, developed by the German Biotech Company AM Silk. The material offers a unique combination of properties that are crucial in performance, such as being 15% lighter in weight than conventional synthetic fibers as having the potential to be the strongest fully natural material available.

K.HEMAVARSHINI
II B.Sc. CDF VOC

'PFOA-FREE' REPELLENT FOR MEDICAL NONWOVENS

Medical products including surgical gowns, masks, drapes and packaging must be able to repel fluids, oil and alcohol, and quickly release stains when laundered. These properties are often achieved by coating nonwoven fabrics with repelling agents before they fabricated into clothing .However, issues surround these repelling agents as they have the potential to break down, forming Perfluorocotanic acid (PFOA).

Perfluorocotanic acid, also known as C8, is a synthetic perfluorinated carboxylic acid and fluoro surfactant. Long chain Perfluoro alkyl acids (PFAAs), including PFOA, have been detected globally in the environment and in a wide range of living organisms. They have toxicological properties of concern, with some studies nothing that PFOAs affect the liver, and are known hormone distributors.

Today a shift notably in textile and apparel industries fuelled by high profile Greenspeace campaigns, is towards using chemistries that contain shorter Perfluoro alkyl as well as nonfluorinated solutions.

R.NARMATHA
II M.Sc. CDF

MEDICAL SUTURES

GORE-TEX sutures, is a unique, micro porous nonabsorbable monofilament made of expanded Polytetrafluoroethylene (PTFE), the same proven material used in other GORE Medical products. This unique material offers the benefits of both monofilament and multifilament sutures with the excellent material properties of PTFE including:

- Soft and supple for excellent handling and minimizing the irritation caused by knots
- No out of package memory
- Available 1:1 needle to thread ratio to minimize needle hole bleeding at anastomoses
- White color is highly visible in the surgical field
- Minimal biological tissue response with cellular ingrowth
- Easy to use packaging is industry best.

Common applications include:

- Vascular grafts for vascular access and peripheral vascular disease
- Aorto-bifemoral vascular grafts
- Endarterectomy
- Ventra hernia repair

G. YOGESWARI
II M.Sc. CDF

G. MANIKANDAN
II B.Sc. CDF VOC

ALUMINIUM FABRIC SKIN WRAPS HILLSIDE HOME

The home, a project of OOZN+, is located on hillside in the exclusive suburb of Lorong Pantai. The flowing, pearlescent aluminum skin creates a cloud like wrap around the home that suggests an image of floating boxes. The perforated surface responds to changing light conditions, screens the inside of the home from the hot, tropical sun and still allows those inside to look out.

The design challenges the idea of a metallic material thought to be hard and cold, but now used as a lightweight fabric wrap. With the entrance pavilion sitting 3.5 meters above simple landscaping, the combination makes the structure appear to be floating above its surroundings.

J.PRASANTH
II M.Sc. CDF

G.KEERTHANA
III B.Sc. CDF VOC

WOOLMARK, MAX MARA DEVELOP WOOL DENIM

Max Mara and the Woolmark Company have together developed an innovative wool denim line. Max Mara has utilized innovative 100 percent wool denim fabrics that replicate the look and style of traditional denim-retaining the traditional 3/1 weave - but have added benefits thanks to the natural qualities of Merinowool, including increased softness, warmth and resistance to wrinkles. The twisted, strong wool yarns have been dyed with ecological dyes to imitate natural indigo and have been tested against the guidelines to gain woolmark certification.

Max Mara has always chosen Merino wool as the fiber of excellence for this collections and this has pushed the boundaries on the traditional uses of wool –such a fine tailoring, heavy coats and knitwear-to showcase a different approach for the fiber and celebrate its innate versatility.

M.VASANTHA
II M.Sc. CDF

BEST FABRICS TO EXCLUDE DUST MITES

A clinical study looked at the effectiveness of 53 anti-dust mite pillow protectors or pillowcases purchased from different countries. The aim was to the help manufacturers to produce medical textiles of quality and to provide consumers with a suggested standard when reviewing anti-mite packing information. The major finding of the study was the plastic, and a selection of tightly weaves covers, completely prevented mite penetration and blocked more than 99% of allergen movement through the fabric.

House dust mites, a major cause of disease worldwide, are tiny, barely visible creatures living indoors in colonies in damp, dark, and still conditions. The most common methods for controlling mites and their allergens involve physical means such as covering bedding with anti-mite covers. Several products claim 'mite-proof' protection but very few have been evaluated for their anti -mite properties. To help in this respect scientists from Thailand and the USA put various anti-mite pillow protectors through rigorous tests to report on their efficacy and to note fabric wear and tear.

STRETCHABLE ABRASION-AND-FLAME RESISTANT FABRICS

Mount Vernon is expanding its range of abrasion and flame resistant (FR) FlexTex fabrics, which are capable of stretching to increase comfort and

mobility for their wearer. The range now includes six denim four piece dyed FR fabrics, the weaves of which include twill, canvas and oxford. Visual effects can be added to these fabrics by mimicking vintage appearances and through the use of slub effects. Mount Vernon of Trion, Georgia, USA, says that most FlexTex fabrics can stretch to up to 12-15% of their size, but these latest FR fabrics incorporate TreFlex yarn, which enables the fabric to stretch by as much as 20% of its size.

TreFlex is a hybrid yarn that provides high stretch and good shrinkage control. It supplied by McMichale Mills of Madison, North Carolina, USA, and is made from cotton, polyester (PES) and elastane fibers.

A.ABINAYA
II.M.Sc. CDF

SEASILK/ BYSSUS FIBRES IN TEXTILES

Silk is usually made from the cocoons spun by silkworms- but there is another much rare cloth known as sea silk or byssus, which comes from calm. Byssus is a bundle of filament secreted by many species of bivalve mollusk that function to attach the mollusk to a solid surface. Byssus filaments are created by certain kind of marine and freshwater bivalve mollusks, which use the byssus to attach themselves to rocks, substrates, or seabeds. In edible mussels, the inedible is commonly known as the “beard”, and is removed before cooking.
Byssus often refers to the long fine silky threads secreted by the large Mediterranean pen shell, Pinna nobilis. The byssus threads made from this pinna species can be made up to 6cm in length and have historically made into cloth. Many species of mussels secrete byssus threads o anchor themselves to surfaces, with families including Arcidae, Mytilidae, Anomiidae, Pinnnidae, Pectinidae, Dreissenidae, and Unionidae.

S.SRINIVEDHA
II.M.Sc.CDF

MARVEL’S RANGE OF INDUSTRIAL GLOVES

Marvel gloves offer a wide range of industrial gloves for varied industries. Polycotton and polyester fibers enables soft and convenient to wear decreases the tiredness of user’s hands for longer working hours. It has good abrasion resistance. It is used in glass industry, material handling, refuse collection, shipping and receiving, construction, general maintenance and wood work.

Latex Coated Gloves

Polycotton or polyester or nylon knitted gloves combined with unique flexible crinkled latex coating to provide greater grip and secure antislip handling in dry and wet conditions.

Nylon Gloves with Crinkled Latex Coating

- Stretch nylon or polyester yarn makes the gloves lighter and elastic too. It also makes it exceptionally comfortable and reduces hand fatigue. The back open allows breathability.

Nylon Gloves with Sandy Latex Coating

- The gloves made from nylon or polyester yarn makes the gloves lighter, flexible and comfortable to reduce hand fatigue. The natural latex double coating in sandy finish offers superior grip in wet, dry and oily conditions.

G.YOGESWARI
II M.Sc. CDF

G.MANIKANDAN
II B.Sc. CDF VOC

M.KEERTHIKA
III B.Sc. CDF VOC

STRONGEST NYLON-6, 6 STAPLE FIBRES

For five decades, Invista's Cordura brand has been shaping the world of military gear, work wear and outdoor apparel. This intensive two-year-long research and design process resulted in a state-of-the-art, patent-pending high tenacity fiber designed to enhance the core strength of Cordura fabrics. Already adopted by a major international military, CoduraNyco (nylon/cotton) fabric blends based on new Invista T420HT high tenacity fiber are undergoing extensive wear trialing for next generation combat uniforms. Invista T420HT fiber has a mission to create a new generation of durable, yet lightweight fabrics- such as CorduraNyco Extreme and CorduraNyco Exteme and CorduraNyco Tactical fabrics to be used in many applications like military uniforms, outdoor apparel and work wear.

M.SHIBIYA
II M.Sc. CDF

FIBERS MADE FROM NON-FOOD MILK

Germany based Qmilk, a producer of 100% natural casein milk fibers and renewable raw materials made using a patented, specially designed up-cycling process, promoted its message at the fair. It aims to provide an alternative to the use of conventional plastics or phenolic resins in textile products. Compostable and light weight, Qmilk fibers are made from milk that cannot be used for food and is currently expensively disposed as unused secondary waste, resulting in 2 million tons thrown away each year in Germany alone.

The company offers a range of products for technical, home and fashion applications. The Qmilk film has Qmilk barrier properties due to the casein and thus is particularly suitable for applications in the food industry, the company reports. Qmilk biopolymer is also set to be naturally anti-bacterial, flame retardant and skin friendly.

K.VISHNU PRIYA
II M.Sc. CDF

TEXTILE THAT CAN PLAY MUSIC

We recently learned of a table cloth developed by Swedish company Smart textiles that can play music. A drum kit and piano keys have been printed onto the fabric which is brought to life by conductive fibers that can carry current and convert it into signals. The brains behind the musical tablecloth of the project were to combine textiles and sound in a fun way, adding that the most challenging part was connecting the soft

material with hard electronics. The problem today is very much where you get this change from actual fabric to some kind of electronics, from soft flexible things to rigid hardware, and of course, the electricity, the batteries. They are difficult to make from actual textiles, but we have projects that try to look into that. To make them more flexible, lighter, and so on. In future smart fabrics with embedded sensors will become commonplace.

G.YOGESWARI
II M.Sc. CDF

ORGANIZING YOUR CLOSET

Organizing options:

By Season:
-If you have the luxury of space, it's ideal to rotate your clothes seasonally. Not only is this healthier for the clothes, it also makes it easier for you to keep everything neat and sorted.

By Color:
- If your color bar goes from pink to black, then an arrangement by color lets you select your wardrobe quickly and easily. It also allows for easy upkeep.

By Type:
- Shirts with shirts, pants with pants, and so forth is pragmatism in motion.

K.VISHNU PRIYA
II M.Sc. CDF

LET US KNOW SOMETHING

Ambi
Floral embroidery motifs used to decorate the front borders of coats from Kashmir.

Bebali
Ceremonial clothes for gods and men worn in Bali.

Chikan Kari
White embroidery on white fabric from Dacca; with predominantly floral design executed on fine cotton with undesigns executed on fine cotton with untwisted threads of white cotton or silk.

Happi
Short tunics worn by Japanese merchant's workers with the name of the shop painted on the back, collar and breast.

Leba
Sacred tunic in bark- cloth decorated with hand- paintings; worn by women from Sulawesi.

Pag
Tie-dye printed cotton muslin turbans worn by men in Rajasthan.

Sheyraz
Woven or embroidered silk galloons sewn on borders of central Asian coats (khalat)

J.PRASANTH
II M.Sc. CDF

PATTERNS CRAZY

Pattern, that speaks style, is deliberate. The width and repeat of a stripe is a measure that either works, or fails to inspire.
POLKA DOTS…

- Dot candy- on paper rolls
- Ladybugs(0 to 20 dots)
- Dalmatians
- Dice (no fewer than 12 dots)
- Dotted Swiss
- Spectator shoes
- Leopard("never changes his spots")
- Dominoes

STRIPES IN THE WORLD…

- The American flag
- Zebras
- Rugby shirts
- Barber shop poles
- Candy canes
- Hockey stripes
- Breton sweaters
- Poor boy shirts
- Crosswalk
- Black-and – white striped
- Bumblebees

G.YOGESWARI
II M.Sc.CDF

IMPORTANCE OF COLOR FORECASTING

- Brand's marketing strategy.
- Success rate or the profit of the company.
- Color has an emotional connection with the consumers.
- Helps the brand to connect with consumers.
- When 80 percent of human experience is filtered through the eyes, the choice of color is critical.
- Provides time for product planning & development.
- Offers the right products at the right time.
- Helps to meet consumer desires & expectations.
- Ensures your products will compliment other product areas.

METHODOLOGY FOR COLOR FORECASTING

- Systematic methodology
- Statistical theory method
    - FPV method
    - Rough set theory
- Historical data analysis

A.SANDHYA
II B.Sc. CDF

Do not wait for anybody or anything.
Do whatever you can. Build your hope on none..

–Swami Vivekananda

Department of Costume Design and Fashion

KONGU ARTS AND SCIENCE COLLEGE

(Autonomous)

Affiliated to Bharathiar University, Coimbatore
Approved by UGC, AICTE, New Delhi & Re-accredited by NAAC
(An ISO 9001:2015 Certified Institution)

Nanjanapuram, Erode - 638 107.

Since 1994