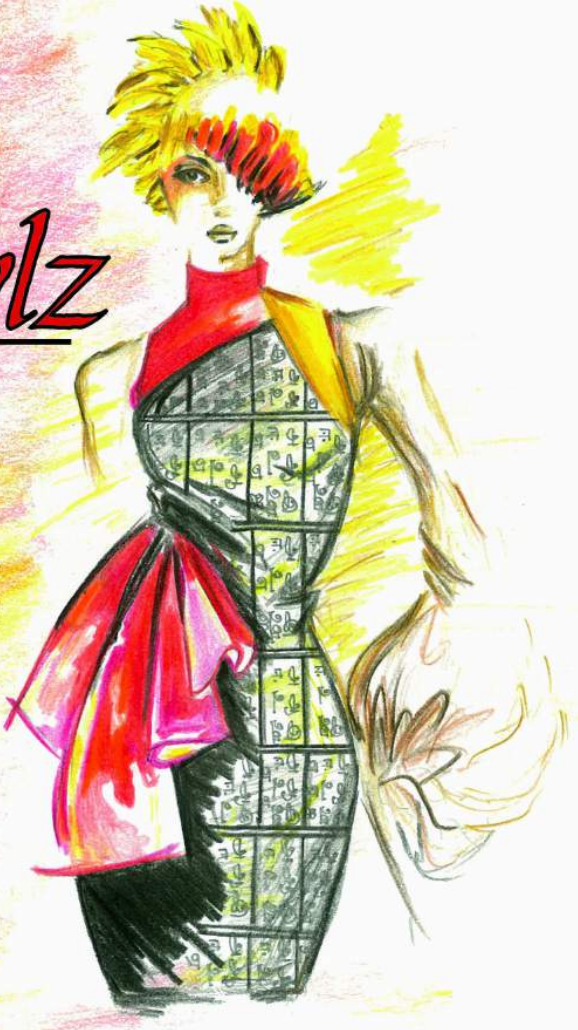
Vol No: 1 Issue No: 1 August 2015

LiveStylz

Magazine



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LiveStylz

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GUIDELINES FOR THE SELECTION OF INFANTS CLOTHING

Infant is the term which refers to the early childhood of a new born starting from the birth to six months. The period starting from 0-6 months is termed as the period of infancy. During this period the infants have only the sense of touch that functions perfectly from the birth. Infants skin being so sensitive, clothing materials selected must be soft and comfortable. As the infants are delicate, sensitive and are unable to express their uncomfortableness it becomes important to select the infants clothing with great care. Guidelines considered for the selection of infants clothing are as follows,

- Select soft and pliable woven cotton/knitted fabrics.
- For summer simple cotton vests and jablas are preferable. Cotton clothing such as cambric, poplin, voile has good absorbency and are also found to be most suitable for infants.
- For winter, cotton vest or cotton dress should be worn next to the skin with woollen over it. Woollen clothing never ever should be worn in direct contact with skin to avoid irritation.
- Clothing must be of simple designs and facilitate easy laundering.
- Colors such as white, any pale or pastel colors like pink, blue, yellow, etc.., must be chosen for infants.
- Infant clothes should open fully down to the back or to the front, which facilitate both ease and convenience to put and remove.
- Extra trimmings, elastics, decorations and bulky fasteners must be avoided.
- Clothing must be of simple styles with flat seams.
- Long strings at the neck line and use of safety pins must be avoided.
- Press buttons, small ties and Velcro are ideal fasteners for infants clothing.
- Crowded frills and laces may be best avoided.
- For decorative purpose dresses with small embroidery motif may add attractiveness to infant's clothing.

SECRET OF CTM

To maintain a healthy and beautiful facial skin complexion in our daily life, each one of us experience various changes and challenges which have an impact on our healthy complexion. Different stages of life, age, climate, stress, workload and other daily issues prevent our skin from

looking its best. Though our system and skin has remarkable abilities of self-presentation, that alone is not enough. It becomes very essential to reveal the secret of CTM to protect and prevent the skin from all the effects of environmental aging. To maintain a healthy and beautiful facial skin complexion, twice a day a daily regime of CTM is inevitable. CTM refers to cleansing, toning and moisturizing.

CLEANSING

Cleaning with cleansing milk is the first step. Cleansers deep cleans gently, by removing all the traces of make-up, excess of oil, dirt, bacteria and the effects of pollution. This cleaning process using cleansing milk which makes the skins breathable.

TONING

Toning follows the cleansing process. The toners such as rose water tends to remove the last traces of dirt and make-up. But the main role of toning is to balance and normalize the skin's PH.

MOISTURISING

Moisturizing is an important step in maintaining a healthy and facial skin complexion. Moisturizing with the help of moisturizer tends to hydrate, smoothen and protect the skin against moisture loss. Maintaining a healthy, radiant facial skin complexion is no longer a tedious, lengthy and a complex process. These cleansing, toning, and moisturizing are very simple, easy and convenient to put into practice.

Dr.S.Gomathi
Assistant Professor & Head, Department of CDF

NANOSILVER - AN EFFECTIVE ANTIMICROBIAL AGENT FOR FINISHING OF TEXTILES

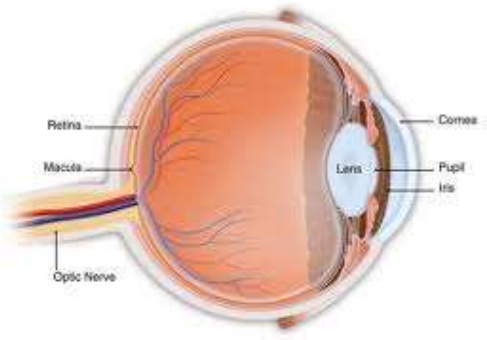
Textiles, by virtue of their characteristics and proximity to the human body provide an excellent medium for the adherence, transfer, and propagation of infection causing microbial species to proliferate. Natural fibers are more susceptible to bacterial attack than synthetic fibers due to their porous and hydrophilic nature. The use of elemental silver as an antimicrobial agent is nearly as old as the history of mankind. The ancient Egyptians mention the medicinal use of silver in their writings. Romans stored wine in silver urns to prevent spoilage. The courts of the Chinese emperors used silver chopsticks for better health.

Druids used silver to preserve food. American settlers put silver dollars in milk to stop spoilage. Silver leaf was used during World War I to combat infection in wounds. Silver has been in use since ancient times in the form of metallic silver, silver nitrate, silver sulfadiazine for the treatment of burns, wounds and several bacterial infections. Metallic silver in the form of silver nanoparticles has made a remarkable comeback as a potential antimicrobial agent. The silver nanoparticles show efficient antimicrobial property due to their extremely large surface area, which provides better contact with microorganisms. The nanoparticles get attached to the cell membrane and also penetrate inside the bacteria. The silver nanoparticles with their unique chemical and physical properties are proving as an alternative for the development of new antibacterial agents. The silver nanoparticles have also found diverse applications in the form of wound dressing, coating for medical devices, silver nanoparticles impregnated textile fabrics, etc. The advantage of using silver nanoparticles is that there is continuous release of silver ions thereby, enhancing its antimicrobial efficacy.

Ms.S.Manjula
Assistant Professor, Department of CDF

RECENT DEVELOPMENTS IN MEDICAL TEXTILES

Textile fibres have long played a vital role in the medical and health care sectors. However, the role played by fibre-based materials has advanced dramatically in recent years. For example, Bioglass fibres are now used in tissue engineering to create new bone structures and textile scaffolds are being used to promote cell growth and build cell structures. The small cylindrical tubes made from biocompatible materials, are helping to support and keep open veins and arteries

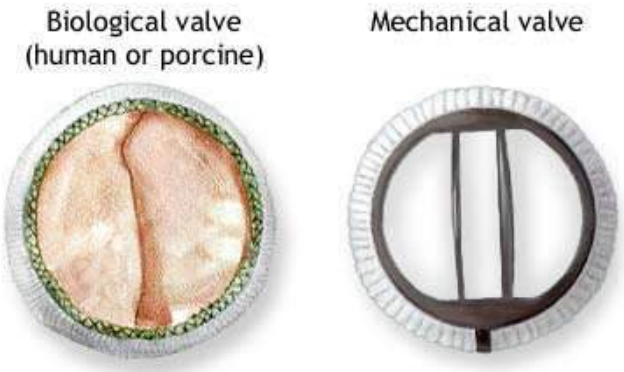


Artificial Eye Lenses

Cataracts are a problem faced by millions of people all over the world, many of whom will require surgical replacement of their own lens with an artificial one, known as a psuedophakos. These lenses come in many configurations, such as single-focus (like glasses for distance vision), multi-focal lenses (like bifocal glasses), and hi-tech variable-focus lenses (like real eyes).

Artificial Heart Valves

Artificial heart valves are implanted in the heart of the patients who need treatment for valve related diseases. The natural heart valve needs a replacement when two or more valves stop functioning properly. The mechanical heart valve consists of Ultra high molecular weight-polyethylene (UHMW-PE) disc, Low density polyethylene plastic with knitted polyester sewing ring and a metallic housing. The Sewing Ring is fabricated from extensively implant tested, 100% polyester material.



Artificial Vascular Grafts

Vascular diseases are characterized by variations to the geometry and structure of the walls of the blood vessels. Variations in the mechanical characteristics of the vessels result in multiple complications like Thrombosis, Aneurysm and Arteriosclerosis. In order to function effectively, the grafts need to have special characteristics like non-thrombogenic surface, elasticity and compliance, long-term tensile strength, bio-compatability and durability. Most textile grafts for large and medium artery replacement are made of either PET or PTFE

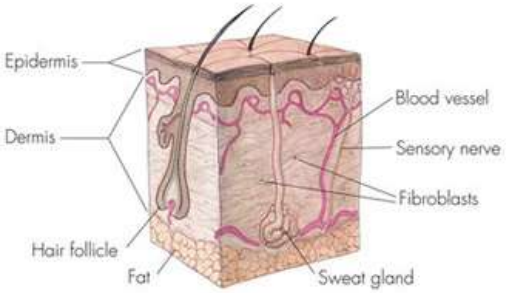
Artificial Tendon (Mesh)

Artificial Tendons or meshes are used in hernia repair and abdominal wall replacement, where mechanical strength and fixation are very important. Polypropylene, Polyester mesh is primarily used in hernia repair as it is resistant to infections.

Artificial Joints

The orthopedic joints are used for patients suffering from arthritis and accidental damage of joints. The technical textile component in joints is Ultra High Molecular Weight High Density Polyethylene (UHMWHDPE) material. The UHMWHDPE is a technical textile product which varies based on the product or type of joint replacement.

Artificial Skin



Skin grafting is the procedure of replacing dead skin with live skin. The artificial skin is used in the skin grafting process. Artificial skin consists of two layers. The bottom layer, which is designed to regenerate the lower layer of real skin, is composed of a *matrix of interwoven bovine collagen* and a sticky carbohydrate molecule called glycosaminoglycan, which mimics the fibrous pattern of the bottom layer of skin.

Artificial Kidney / Dialyzers

Kidney serves the filtering mechanism of the blood. The kidney has a mechanical substitute in kidney dialysis machine. The kidney dialysis machine is outside the body and purifies the blood using a filter called the haemodialysor. The haemodialysor is made primarily of polysulphone and polyacetate. The primary function of the artificial kidney is to purify the blood. The filtration medium used is hollow viscose or hollow polyester fibre. An external artificial kidney, a hemodialyser, is used which can perform many of the functions of a kidney. It is attached to the blood circulation via, an artery and a vein. It is made up from a bundle of hollow fibres through which the blood circulates.

Artificial Lung

Totally artificial lungs are not completely commercial. The artificial lung device is connected to the heart's right ventricle. It relies on the heart not a mechanical pump to send blood through the lung, where it receives oxygen (and off loads carbon-dioxide) as it flows through the arrays of microfibers or membrane oxygenators. Oxygen rich blood passes from the device into the left atrium and then to the rest of the body. The micro-fibers or the membrane oxy-generator are the technical textile component in the device.

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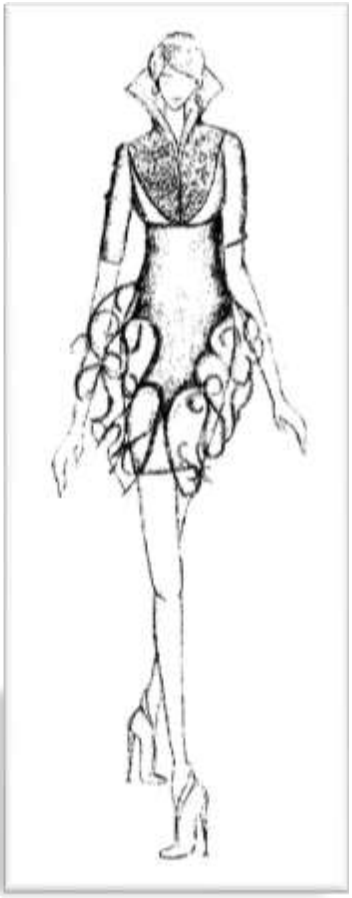

J.P.Akshaya
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2015 NEW INNOVATION

1. Fabric Out of Milk, Tea, and Coffee Beans!

Milk, tea and coffee tend to stick together but not like this. As the high-tech sector is taking off in making fashion more sustainable, other, more-humble, technologies are just as innovative and really, really cool. Food products being turned into wearable commodities. German microbiology-student-turned-designer Anke Domaske uses milk to make an "Eco Milk Fiber" called QMilch. High-tech sports clothing company Virus uses recycled coffee beans for their Stay Warm line of cold-weather performance apparel.

2. Dying with Air, Saving Gallons of Water

Developed in California by Colorep, AirDye works with proprietary dyes that are heat-transferred from paper to fabric in a one-step process. This can save between seven and 75 gallons of water in the dyeing of a pound of fabric, save energy, and produces no harmful by-products. The technology uses 85 percent less energy then traditional dyeing methods. The technology has become a signature element for the fabulous designing duo, Costello Tagliapietra and Gretchen Jones, just to name a few.

3. Plastic Bags and Bottles Finding New Life

Recycled synthetics, made with everything from plastic bags to beer bottles continue to make a splash. In much the same way that other materials and bamboo are transformed into thread, the upcycled synthetics are broken down into a fine particulate, melted, and extruded into fiber.

4. Bio-Filtering Wastewater

The comprehensive technology known as Sequencing Batch Biofilter Granular Reactor is innovative indeed. The process helps to remove the most toxic textile dyes components by breaking them down via ozone treatment, prior to the application of a wastewater bio-filtering technique. Unlike traditional biological systems, this innovative treatment filter relies on microorganisms growing in aggregates. The wastewater is poured over the microorganisms, which processes pollutants, and each aggregate holds up to 10 times more microorganisms than traditional

technologies, and produces 80 percent less sludge than conventional biological filter

5. New Standards

More of a concentrated movement than a tech innovation, the Global Organic Textile Standard (GOTS) is a comprehensive fiber certification program developed by leading standard setters in order to define internationally recognized requirements. It sets the stage for many of the new technologies being developed today. The standards ensure "organic status of textiles, from harvesting of the raw materials, through environmentally and socially responsible manufacturing up to labeling in order to provide credible assurance to the consumer." Because of the demand for unified processing criteria from the industry and retail sector it has gained universal recognition, enabling processors and manufacturers to supply their organic textiles with one certification accepted in all major markets. With the introduction of the logo and labeling system the GOTS is a milestone in the industry, and is making an impact from natural textile boutiques to the largest retailers and brand dealers.

S.Deepika.
II M.Sc CDF

RULES FOR MODELING

- Be on time. Please arrive at least 5 minutes early for a go-see; 30 minutes early for a fashion show; 15 minutes early for a photo session.
- Do not sit while modeling client's clothing.
- No scented perfumed or colognes when on a booking.
- Always wear under-arm shields when on assignment.
- Use a cosmetic hood, or scarf over the head and face during clothing changes.
- Should a garment become soiled or damaged, report it immediately.
- Always hang each garment back on the hanger with zippers zipped and buttons buttoned.
- Be professional; do not comment about the clothing you are asked to model. Do not socialize.
- Clean up yourself before leaving.

- If you damage a product, you must pay for it.
- Always ask before using anything that does not belong to you.
- Take a book along to pass the time while waiting.
- Always take your tote-bag.
- Watch your step while walking on or off the set.
- Do not chew gum (tobacco) in the studio or on a go-see.
- Only use the phone for emergencies; make all calls brief.
- Come prepared with a voucher for every assignment.
- Return your voucher within 24 hours after completion of assignment.
- Do not discuss fees with the client while on the job. All negotiations should be completed before the assignment.
- Know what your fees are before going on assignment.
- Do not leave a booking, even if something unusual occurs.
- Lunch breaks should be discussed with the client (or agency) before you report for the job.
- Look perfectly neat and clean at all times.
- The model must call the agency (if there is one) after every booking.
- If you choose to use an agency, never call a client or studio directly about work.
- Models and actors and their parents should never discuss interviews, jobs or earnings with other models or actors.
- Never give your home address or phone number to anyone.
- The pay rate for assignment is per hour per assignment.
- When working with an agency, make your business visits brief. Avoid the temptation to linger to socialize with other models.
- Agency phones are not for private use.
- When calling clients (or an agency if you use one) routinely identify yourself and state your reason for calling.
- Models and actors are responsible for all costs associated with locating suitable employment including the cost of mailing, overnight messengers, inner-city messengers, overseas phone calls, telexes, portfolios and composites.
- Never apologize for lack of experience, your physical appearance, etc.
- Never argue with the client.
- A model not showing for a booking or late for a booking, not only you are losing the hourly rate, you will also have to pay for the other models who have had to wait for you and you're liable for the day's full production costs.

- Not showing for a trip includes liability for all travel, flight and hotel costs, plus fees incurred by the client, photographers, stylist, other models, etc.

Once the commitment to modeling or acting is made, it helps to develop a measure of patience. It takes a while to become established and although you are ready to be discovered, the world must first find out who you are!

C.P.Sunmathi
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PEARLS

There is hardly any accessory that is as closely associated with the concept of lady like elegance as the pearl necklace. For generation of women, it has been an indispensable accessory of style that reflected well-groomed charm, good taste and a respectable background-or at least simulated it. The popularity of pearl necklace and it's amazing success story in the 20th century is linked to a discovery that enabled an extremely rare phenomenon in nature to become a planned process that could be reproduced thousands of time: the culture of pearls. While people depended on the discovery of natural pearls, these shimmering, round little objects remained the most precious jewelry anyone could own and they were even more expensive than diamonds. Pearls are full of mystery. It is known that pearls are found inside a certain type of mollusk, the so called pearl oyster and that they are formed of mother-of-pearl, but what induces an oyster to produce a pearl is not known.

R.Brindha
I B.Sc CDF

UV PROTECTED FABRICS

- UNI-AGRI FABRICS are Nonwoven Fabrics made from polypropylene; an economical and environment friendly polymer; by spinning the material into fine filaments and bonding them by heat without use of any binders.
- UNI-AGRI FABRIC is a modern textile which is neither a film or a conventional textile. It is very economical. The fabric has specialized UV absorbers incorporated in it which ensures protection against the sun's rays.
- UNI-AGRI FABRIC protects the plant from cold and frost. Upto 5°C, some circulating moisture is trapped by it and in the event of frost

this film freezes providing the plant with natural frost protection minimizes the dangers caused by hail, heavy rains and storms.

C.K.Vasuki
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CARBON NANOTUBE FIBRE

Carbon NANO tube fibers invented at Rice University may provide the best way to communicate directly with the brain. The fibers have proven superior to metal electrodes for deep brain stimulation and to read signals from a neuronal network. Because they provide a two-way connection, they show promise for treating patients with neurological disorders while monitoring the real-time response of neural circuits in areas that control movement, mood and bodily functions.

Pairs of carbon NANO tube fibers have been tested for potential use as implantable electrodes to treat patients with neurological disorders like Parkinson's disease. The fibers invented at Rice University proved to be far better than metallic wires now used to stimulate neurons in the brain.

New experiments at Rice demonstrated that biocompatible fibers are ideal candidates for small, safe electrodes that interact with the brain's neuronal system, according to the researchers.

They may also advance technologies to restore sensory or motor functions and brain-machine interfaces as well as deep brain stimulation therapies for other neurological disorders, including dystonia and depression.

The individual nanotubes measure only a few nanometers across, but when millions are bundled in a process called wet spinning, they become thread-like fibers about a quarter the width of a human hair.

"The brain is basically the consistency of pudding and doesn't interact well with stiff metal electrodes," KEMERE said. "The dream is to have electrodes with the same consistency, and that's why we're really excited about these flexible carbon nanotube fibers and their long-term biocompatibility."

Weeks-long tests on cells and then in rats with Parkinson's symptoms proved the fibers are stable and as efficient as commercial platinum electrodes at only a fraction of the size. The soft fibers caused little inflammation, which helped maintain strong electrical connections to neurons by preventing the body's defenses from scarring and encapsulating the site of the injury.

J.Vinitha
III B.Sc CDF

LATEST TECHNOLOGY AND DEVELOPMENT IN YARN INDUSTRY

Today lots of innovation comes in the market for yarn sector. Yarns are segregated based on their use. Lots of new innovations are under Research and Development. Some of the ongoing and upcoming yarn technology in the markets are,

Microfilament Yarn

Micro product line includes microfilament yarns composed of very thin filaments such as 0.3 dpf - 0.7 dpf, flat, textured and twisted until 3000 tpm. Counts from dtex 33/50 to 156/400, 304/512, and 608/1024.

UV Resistant Yarn

UV Resistant yarns have an excellent rate between cost and dyeing efficiency on all the colour shades, with permanent UV resistance-performances.

Skin Sun protection yarns

Skin Sun protection yarns offers a total UV protection thanks to their specific properties of high reflection and high absorption of UV radiation, so it is ideal for the production of fabrics for use in the constant external environment.

Odour control yarn

Yarns with odour-control functions are realized by adding an antibacterial agent during the melt spinning process that does not alter the yarn physical and mechanical characteristics.

Moisture Management yarn

Moisture Management yarns line makes the moisture transport easy, due to the modified section, allowing the garment to dry more quickly.

Bicomponent yarns

Bicomponent yarns are described as paired or *twinned*, this is because they are made from two generically similar polymers. Some authorities refer to these new textiles as the 'third generation'. Fabric structures made from polymer to fabric processes currently comprise about 40% of fabric manufactured and these fabrics are driving this growth area of the textile market. Bicomponent yarns constructed with a less absorbent core could be sheathed in a more absorbent fibre in order to increase comfort or increase dyeability

Celliant yarn

Hologenix company is the maker of Celliant yarn which is using for apparel, bedding and veterinary products. Celliant utilises a blend of thirteen minerals. According to Celliant, energy in the form of heat produced by the wearer is transferred into infrared light (IR), which is then absorbed by the tissues and muscles to increase circulation, which is said to lead to improved recovery and increased performance, according to the company.

Thermo insulation yarn

Thermo insulation yarn specially designed to conserve and maintain natural body heat, to keep wearers warmer and to protect from outside low temperatures. The complex structure of the coffee charcoal additive in this incredible yarn effectively captures body heat and keeps it in the garment, to keep wearers warm in any weather.

High tenacity wiring harness technical yarn

An innovative new high tenacity, coated, engineered yarn, specifically designed for vehicle harness wiring systems are used across sectors including automotive, marine and aerospace. Manufactured from high temperature resistant PVC polymer, it said to be able to withstand extreme mechanical stresses as well as contact with chemicals and fuels. High tenacity nylon core for strength and is designed to create the braided protective cover over vehicle harness wiring systems.

Cooling yarn

The yarn's cooling effect comes from a special cross-section, the insertion of an inorganic additive in the polymer itself and a unique texturing process. The combination is said to give fabrics very efficient ventilation

capabilities and UV protective properties and as a result, garments made with Nilit Breeze keep the wearer more comfortable during and after physical exertion.

Luxicool yarn

Luxicool is a light elastic monofilament which can be used in all standard textile technologies such as weaving, knitting and braiding. It is probably the only filament that evaporates and cools and really cools cooling filament in sportswear, work wear, military wear, protective clothing, medical bandages, sports bandages; burns wound treatments, hospital linen and shoe fabrics.

P.Sindhu Priya
II M.Sc CDF

3D PRINTING

3D printing is a process of making a three-dimensional solid object of virtually any shape from a digital model. 3D printing is achieved using an additive process, where successive layers of material are laid down in different shapes. 3D printing is considered distinct from traditional machining techniques, which mostly rely on the removal of material by methods such as cutting or drilling. The 3D printing technology is used for both prototyping and distributed manufacturing with applications in architecture, construction and industrial design. Automotive, aerospace, military, engineering, civil engineering, dental and medical industries, biotech (human tissue replacement), fashion, footwear, jewelry, eyewear, education, geographic information system, food and many other fields.

B.Madhan Kumar
III B.Sc CDF

SMART TEXTILES

"Smart textiles" are any kind of fabric that can sense stimuli and respond with some sort of action. For example, a fabric impregnated with LED lights and sensors might sense you have entered a dark room and would then illuminate itself.

APPLYING COLOR WITHOUT DYES

This dress hue is purely a trick of the light. Fashioned from Morphotex, the frock uses structurally colored fibre that mimics the microscopic structure of the Morpho butterfly's wings, which appear a shimmery cobalt despite its lack of pigment. Morphotex requires no dyes or pigments, nor the prodigious amount of water and energy used in conventional dyeing.

A LEATHER-LIKE TEXTILE MADE FROM PINEAPPLE LEAVES

A non-woven, leather-like textile derived from the fibers of the pineapple leaf, which is typically discarded after the fruit is harvested. It is prepared using a process that creates biomass as a byproduct. Breathable, pliable, and easily dyed for applications in the fashion, accessory and upholstery markets. Available in different thicknesses and finishes, all biodegradable.

T.Deepachandrika
I M.Sc CDF

FASHION INDUSTRY

The fashion industry is a product of the modern age. Prior to the mid – 19th century, most clothing was custom-made. It was handmade for individuals, either as home production or on order from dressmakers and tailors. By the beginning of the 20th century with the rise of new technologies such as the sewing machine, the rise of global capitalism and the development of the factory system of production, and the proliferation of retail outlets such as departments stores. Clothing had increasingly come to be mass produced in standard sizes and sold at fixed prices.

THE FASHION INDUSTRY CONSISTS OF FOUR LEVELS:

- The production of raw materials, principally fibers and textiles but also leather and fur.

- The production of fashion goods by designers, manufacturers, contractors, and others.
- Retail sales.
- Various forms of advertising and promotion.

D.Padhmavathi
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ARTIFICIAL UTERUS USING TECHTEXTILE

About 50,000 premature babies are born every year. Some of them need intensive medical care in incubators for weeks or even months. However, it has been known for some time that these premature babies miss the spatial confinement and prenatal sensory stimuli of the womb (uterus), the Institute reports. This lack can have significant consequences for these babies later on: many of the children go on to suffer from sensory or motor deficiencies as they develop, which have to be treated.

For this problem a team of experts at the Hohenstein Institute developed Artificial uterus using Techtextile. The world's first artificial uterus was designed to help premature babies to develop by providing sensory stimulation. With this *smart textile*, the Hohenstein researches are for the first time taking a new therapeutic approach to preventing developmental problems in premature babies by sensory-motor means.

Uterus can recreate the environment and sensory stimulation of a mother's womb in the incubator, according to a team of scientists. As part of a research project, the Hohenstein researchers have developed their first prototype. Acoustic stimuli like the mother's heartbeat and voice are transmitted to the premature baby, together with mechanical sensations like the gentle rocking experienced in the mother's body.

P.Sindhu Priya
II M.Sc CDF

SMART TEXTILES FOR HEALTHCARE APPLICATIONS

Health monitoring is one of the major concerns for the patients who require continuous medical assistance and treatment. Smart textile has a great deal to offer patient monitoring. Wearable sensing is an exploding new field of personalized healthcare enabling better care for

everyone. Smart textiles open the door for higher accuracy monitoring fashion-conscious apparels. Wearable systems help in monitoring of physiological parameters such as respiration, cardiac activity or temperature of the body. Smart textiles play a growing role in these developments since they are well suited for wear ability and wash ability that ensures the comfort for the user.

Smart textiles are considered to be a new niche for products with great potentials on the textile and apparel market. The vision of Smart Textile is to create textile products that interact by combining smart materials and integrated computing power into textile applications. Smart textiles for healthcare include textile sensors, actuators and wearable electronics systems embedded into textiles. Many research projects are dedicated to explore and develop smart textiles for medicine and healthcare. Some of the applications of smart textiles in health care include;

Smart hospital gowns

Use of electrodes register cardiac and muscle activity through detecting electrical potentials generated by the heart and muscles. Heart rate variability (HRV) analysis, electrocardiography (ECG) and electromyography of the patients are recorded along with blood pressure and pulse rate. The gowns worn by the patient consequently reads their blood pressure or monitors the heart rate; the information is transferred to a computer and read by medical staff.

Temperature monitors

Temperature sensors based on smart textile technology can provide evaluation of temperature changes on skin surfaces and in the near-body environment. These data can be used for such applications as physiological assessment, control and improvement of the patient's comfort, and monitoring of wound healing.

Textile sensors for kinematic analysis

Besides registration of physiological parameters, textile materials can assist in kinematic analysis, monitoring of body motion and positioning. Such approaches ensure wearable textile-integrated solutions for long-lasting monitoring of gait, posture, particular body units and joints, and general positioning or movement activity of a patient.

pH monitors

The pH level is a crucial parameter in assessment of wound healing processes and in sweat monitoring. Modern textile and engineering technologies offer several scenarios to develop such a sensor that ensures continuous pH monitoring in real-time.

Life Belt

Life belt is a trans-abdominal wearable device for long-term health monitoring that facilitates the parental monitoring procedures for both the mother and the fetus.

Smart socks

Smart socks are made with built-in pressure sensors that would alert the diabetic patients. It is found that about three quarters of diabetes-related amputations might be avoided with this kind of simple warning system.

Biosensors

Textile integrated sensors could measure a large variety of body fluids like blood and sweat and variables like blood glucose levels. Biosensor tattoos has been developed that help us to metabolite levels in sweat and monitor electrolytes. To access the biological health of the wearer, these wearable biosensors have been integrated with electrochemical sensors which help in monitoring lactate levels and pH in the sweat. The biosensor tattoos can be directly applied on skin or clothing.

Smart lens and brushes

A smart contact lens is used for measuring the glucose amount in tears which consists of a small glucose sensor and a wireless chip. This is used to help diabetic patients. A small pin size hole in the lens allows the tear fluid to go into the sensor to measure blood sugar levels. As the patient brushes teeth, sensors in the brush will help to detect the cavities in the mouth.

Smart pillow covers

These pillow covers made from smart technology record and analyze the sleep pattern.

Thus Smart clothing serves an important role in remote monitoring of chronically ill patients or those undergoing rehabilitation. It is found that

further investigations are going in textile electrode development for assessment of electrical activity of the brain.

N.Charanya Meenu
Assistant Professor, Department of CDF

HOOP SKIRT

A Hoop skirt is a women's undergarment worn in various periods to hold the skirt extended into a fashionable shape. Its Tudor name was 'Farthingale'. It originated as a modest-sized mechanism for holding long skirts away from one's legs, to stay cooler in hot climates and to keep from tripping on the skirt during various activities. Small hoops might be worn by farmers and while working in the garden. Hoops were then adopted as a fashion item, and the size and scale of the hoops grew in grandeur. Hoop skirts typically consist of a fabric petticoat sewn with channels designed to act as casings for stiffening materials, variously rope, osiers, whalebone, steel, or, from the mid-20th century, nylon.

Hoop skirts are called by various names in different periods:

- Farthingale 16th century (Spanish verdugado).
- Panniers or "side hoops" 18th century.
- Crinoline or crinolette (mid-19th century).

Light weight hoop skirts, usually with nylon hoops, are worn today under very full-skirted wedding gowns. They can sometimes be seen in the gothic fashion scene. Reproduction hoop skirts are an essential part of living history costuming, including American Civil War reenactment.

E.D.Jayasri
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MARSALA - COLOUR OF THE YEAR 2015

Pantone, an X-Rite company and the global color authority, today announced PANTONE® 18-1438 Marsala, a naturally robust and earthy wine red, as the Color of the Year for 2015.

Marsala, the hue embodies the satisfying richness of a fulfilling meal while its grounding red-brown roots emanate a sophisticated, natural earthiness. This hearty, yet stylish tone is universally appealing

and translates easily to fashion, beauty, industrial design, home furnishings and interiors.

The Versatility of Marsala

- Equally appealing to men and women, Marsala is a stirring and flavorful shade for apparel and accessories, one that encourages color creativity and experimentation
- Flattering against many skin tones, sultry and subtle Marsala is a great go-to color for beauty, providing enormous highlight for the cheek, and a captivating pop of color for nails, shadows lips and hair.
- Dramatic and at the same time grounding, the rich and full-bodied red-brown Marsala brings color warmth into home interiors
- An earthy shade with a bit of sophistication, texture is the story in print and packaging. A matte finish highlights Marsala's organic nature while adding a sheen conveys a completely different message of glamour and luxury.

Past colors include:

- PANTONE 18-3224 Radiant Orchid (2014)
- PANTONE 17-5641 Emerald (2013)
- PANTONE 17-1463 Tangerine Tango (2012)
- PANTONE 18-2120 Honeysuckle (2011)
- PANTONE 15-5519 Turquoise (2010)
- PANTONE 14-0848 Mimosa (2009)
- PANTONE 18-3943 Blue Iris (2008)
- PANTONE 19-1557 Chili Pepper (2007)
- PANTONE 13-1106 Sand Dollar (2006)
- PANTONE 15-5217 Blue Turquoise (2005)
- PANTONE 17-1456 Tigerlily (2004)
- PANTONE 14-4811 Aqua Sky (2003)
- PANTONE 19-1664 True Red (2002)
- PANTONE 17-2031 Fuchsia Rose (2001)
- PANTONE 15-4020 Cerulean (2000)

Ms.M.Kalaivani
Assistant Professor, Department of CDF

YOUNG FASHION DESIGNERS

Esteban Cortázar (29)

At the age of 17 Cortázar became the youngest ever designer to show at New York Fashion Week, and at 23 he was appointed as creative director of Parisian fashion house Emmanuel Ungaro. A dispute with management two years later over sharing creative duties with Lindsay Lohan turned out to be a blessing in disguise; Cortázar has now designed two capsule collections backed by Net-a-Porter, full of structured, athletic-inspired separates and fluid satin and stretch-cady dresses.

Dion Lee (27)

Australian designer Dion Lee makes a case for fashion as both art and science. Spring 2014 marked his New York Fashion Week debut, but prior to that he was stunning critics in London with his architectural silhouettes and technological prowess. His Spring 2013 collection used geothermal heat mapping to abstract the body's hot zones onto both sides of his fabric, which was then slashed and folded to give his clothes a third dimension.

Olivier Rousteing (27)

When Balmain's Christophe Decarnin abruptly departed the flashy fashion house in 2009, 25-year-old Rousteing was brought on as his replacement. As it turned out, the designer's vision for the brand was no less impressive than his Pharrell-rivaling cheekbones: After four years at the helm of the brand, he's ditched the trash factor and introduced more silhouettes for real human bodies, while simultaneously proving overalls and patchwork denim dresses

Katie Ermilio (27)

As the granddaughter of Grace Kelly's personal clothier, elegance is in her blood. She also put in the hard yards as a *Vogue* editorial intern, which is where she started designing her own dresses to wear to work. Since launching her own range of cocktail and wedding dresses she's caught the discerning eye of Barney's and become a go-to for industry insiders.

Sally LaPointe (28)

Sally LaPointe's star has risen in an exponential curve since she was thrust into the limelight by Lady Gaga in 2011. But she isn't just drawn to the fiercely futuristic – her latest collection, inspired by the decay of deli flowers, featured iridescent textiles and romantic shapes that girls will want to wear both now and in 2050.

Thomas Tait (26)

Thomas Tait was just 21 when he graduated with an MA from Central Saint Martins — the youngest person ever to do so, and the same age as Yves Saint Laurent when he was appointed head of Dior in 1957. With that in mind, it's surprising his collections don't generate more buzz than they do. But with Tait quietly building on his hyper-modern, athletic-inspired collections with a couture refinement, it won't be long before the world is noticing.

R.V.Shyla shree
II M.Sc CDF

SEA SILK FABRIC

Sea silk is an extremely fine, rare, and valuable FABRIC made from the long silky filaments or BYSSUS secreted by a gland in the foot of pen shells (In particular PINNA NOBILIS). The BYSSUS is used by the clam to attach itself to the sea bed.

Sea silk was produced in the MEDITERRANEAN region from the large marine BIVALVE MOLLUSC PINNA NOBILIS until early in the 20th century. These BYSSUS or filaments (which can be up to 6cm long) are spun and when treated with LEMON juice turn a golden colour, which never fades.

The cloth produced from these filaments can be woven even finer than silk, and is extremely light and warm; however, it attracts CLOTHES MOTHS, the larvae of which will eat it. It was said that a pair of women's gloves made from the fabric could fit into half a WALNUT shell and a pair of stockings in a SNUFFOX.

M.Keerthika
I B.Sc CDF

K.Kaviaparna
III B.Sc CDF Vocational

ART OF SAREE DESIGNING

Sari has been the most trendy and favorite Costume, preferred by most of the Indian Women forever. Besides sari being a formal dress, it has been a garment that adds beauty to an Indian Women. Different types of saris, different materials and designs are worn to suit each different occasion. Saris are categorized into different categories with respected to the material, design and texture.

DIFFERENT TYPES OF SARIS

- Cotton saris
- Chiffon saris
- Silk saris
- Designer saris and exclusive saris
- Wedding saris and bridal saris

COTTON SARIS

Cotton saris are preferred by women for daily use as a casual wear. Cotton saris are easily washable and light-weight.

CHIFFON SARIS

A Light-weight fluffy kind of material that provides us elegant floating appearance commonly used as an evening wax.

SILK SARIS

Silk sari is a sign of royalty and wealth, used for South Indian Wedding. Silk saris are very heavy compared to other sari materials and difficult for cleaning.

DESIGNER SARIS AND EXCLUSIVE SARIS

Designer saris are saris which are not in mass scale production. These are limit to just a few pieces and women option to wear these for parties and special occasions.

WEDDING SARIS AND BRIDAL SARIS

Sari worn by brides on their engagement or wedding with heavy hand work and embroidery.

C.S.Keerthana
I B.Sc CDF Vocational

FASHION TERMINOLOGY

Allure - The quality of being powerfully and mysteriously attractive or fascinating.

Basque- The extension below the waistline of a fitted bodice or jacket.

Blucher - A type of oxford (shoe that closes) in which the tongue and vamp (the front part of the shoe) are cut in one.

Bonnet - Although colloquially people may refer to any type of hat as a "bonnet," this term is usually applied specifically to headcoverings for women and children that cover the back and top of the head and usually tie under the chin.

Bretelles - A diagonal band of fabric or trimming similar to a turned back collar or revers that runs from the center of the waist to the outer edges of the shoulders.

Cheongsam – A Chinese garment that has a high, standing collar, short sleeves, a diagonal front closing with buttons or cloth frogs, a body-hugging fit, and a side slit that may reach as high as the thigh.

Cloche - A woman's close-fitting bell-shaped hat.

Frumpy - Dowdy and old-fashioned.

Garter - A band worn around the leg to keep a stocking or sock up.

Godet - A type of braid that has a heavy central core covered by a more decorative outer layer of fiber that is arranged into a design on the surface of a garment, sewn into place, and forms a raised decorative area

Havelock - Cap, usually with a visor, that has a piece of fabric that extends from the back edge of the cap to the base of the neck

Intricate - very complicated or detailed.

Leotard - A close -fitting one-piece garment, made of a stretchy fabric, which covers a person's body from the shoulders to the top of the thighs, worn by dancers or people exercising indoors.

Loafer - Moccasin-style classic slip on shoe that has a slotted strap at the front.

Minaudiere - A small, decorative handbag without handles or a strap.

Outrageous - Very bold and unusual and rather shocking.

Passe - No longer fashionable; out of date.

Panniers - Hoops that perch on the hips and hold skirts out at the sides.

Peplum - A ruffle or flared section in the construction of a jacket or blouse that extends a short distance below the waistline.

Polonaise - Skirt style in which an overskirt is pulled to the side, looped up, puffed out, and draped over an underskirt.

Shibori - A method of ornamenting fabric by stitching and forming gathers in the fabric before it is dyed.

Tatting - A kind of knotted lace made by hand with a small shuttle, used chiefly for trimming.

Watteau back - The back of a garment in which box pleats are placed at the center back and the fabric released by these pleats falls loosely to the bottom of the garment.

P. Vaira Muthu
II M.Sc CDF

NATURAL COLOUR SILK

Researchers from the INSTITUTE OF MATERIALS RESEARCH and ENGINEERING (IMRE) in Singapore have discovered a way to create "intrinsically colored" silk by stuffing the worms with a mixture of mulberry leaves and fluorescent dyes. The dye molecules become part of the silk filaments, the luminescent hues that result are permanent.

Day Glo-colored silk may be a novelty, but the researchers insist that the technique has environmental advantages, as well. Pre-dyed silk curtails the use of water and chemicals associated with the DYEING PROCESS.

S.Kiruthika
III B.Sc CDF

SCOPE FOR BANANA FABRIC

Banana fiber is of high strength, it can be blent with cotton or other synthetic fiber to produce blended fabric and textiles.

Banana fiber also finds excellent for use in high quality security/ currency paper, good packing material being moisture proof, high quality ropes, etc..,

Banana fiber offer excellent potential in terms of its eco-friendly nature in the properties compared to other synthetic fibres.

The cost of processing / production of 587 kgs of dried quality fiber from 1 hectare of banana pseudostem including labour cost, power cost and interest on fixed assets is Rs 26,717.00 when sold at Rs. 85 per kg the gross income works out to be Rs 49,895.00 there fore net income of Rs 23,178.00 from 1 hectare of banana pseudostem which will be additional income

E.Keerthana
II M.Sc CDF

THE LATEST APPLICATION OF MICROFLUIDIC TECHNOLOGY ON WATERPROOF FABRICS

The new fabric works like human skin, forming excess sweat into droplets that drain away by themselves. One area of research in Pan's Micro-Nano Innovations Laboratory at UC Davis is a field known as microfluidics, which focuses on making "lab on a chip" devices that use tiny channels to manipulate fluids. These can be developed by the systems for applications like medical diagnostic tests. A new textile microfluidic platform using hydrophilic (water-attracting) threads stitched into a highly water-repellent fabric. They were able to create patterns of threads that suck droplets of water from one side of the fabric, propel them along the threads and expel them from the other side. We intentionally did not use any fancy micro fabrication techniques so it is compatible with the textile manufacturing process and very easy to scale up.

It's not just that the threads conduct water through capillary action. The water-repellent properties of the surrounding fabric also help drive water down the channels. Unlike conventional fabrics, the water pumping effect keeps working even when the water conducting fibers are completely saturated, because of the sustaining pressure gradient generated by the surface tension of droplets. The rest of the fabric stays completely dry and breathable. By adjusting the pattern of water-conducting fibers and how they are stitched on each side of the fabric, they can control where sweat is collected and where it drains away on

the outside. Workout enthusiasts, athletes and clothing manufacturers are all interested in fabrics that remove sweat and let the skin breathe.

Ms.R.Dhivya
Assistant Professor, Department of CDF

FASHION FACTS

- The word 'JEANS' comes from the cotton pants worn by "GENES", the local term for Genoan sailors.
- The average American owns 7 pairs of blue jeans.
- The four major fashion capitals of the world are NEW YORK, LONDON, MILAN, and PARIS. Each city holds fashion shows twice, in February and September.
- It was not acceptable for women to wear shorts in public until World War II.
- The first fashion magazine was published in Germany in 1586.
- American households spend about 3.8% of their income on clothing, which equated to about $1,700 per person. By comparison, Americans spent 11% of their income on clothes in 1950.
- Over a lifetime, an American woman will spend $125,000 on clothes. 3,000 items- 271 pairs of shoes, 185 dresses, and 145 bags.
- The most common clothing materials are linen, cotton, polyester, and rayon.
- Cotton is the most widely used clothing material, but it only became common in mid-1800, when ELI WHITNEY's, cotton gin made it easy to separate the cotton fibers from the seeds.
- Evidence for the first clothes dates somewhere between 100,000 to 500,000 years ago.
- Simple needles made out of animal bone first appeared about 30,000 years ago.
- Children dressed identically to adults until the mid-1800 when the concept of children's clothing took off.
- More than 2 billion t-shirt are sold each year.
- Dresses and skirts are commonly seen as women's clothing in the West, but in other parts of the world, men wear them as frequently as women do.

- Both the pencil skirt and the A-line skirt were designed by Frenchman Christian Dior, who is singlehandedly credited with inspiring 1950's fashion.

B.Madhan Kumar
III B.Sc CDF

LASER FADING OF DENIM

The laser fading process is a very strong physical and chemical process used to give aged-worn look on denim. The laser is a source of energy which can be directed on desired objects and whose power and intensity can be easily controlled. It is possible to transfer certain designs onto the surface of textile material by changing the dye molecules in the fabric and creating alterations in its colour quality by directing the laser to the material at reduced intensity. In terms of both colour and mechanical properties, it is found that 100 and 150µs pulse times are suitable for laser fading process of denim fabrics.

R.Dharani
I M.Sc CDF

BIOMIMETICS IN TEXTILES

Biomimicry or biomimetics is a new way to think of how we may be producing new materials in the future. Biomimicry is derived from the Greek word 'bio' meaning life and 'mimesis' meaning 'mimic.'

Although this particular science is relatively new, the idea is not. We can look at many aspects in history such as Leonardo da Vinci's "helicopter" reflecting a bird or even a camera that mimics the human eye. We have been transforming our environment using it as a template to create technologic gadget to suit our needs an efficient design process.

According to Janine Benyus, author of 'Biomimicry: Innovation Inspired by Nature', biomimicry's three approaches are:

- Using nature as an inspiration to solve human problems
- Using nature as a judge or measure of the 'rightness' of our innovations
- Using nature as a mentor, looking metaphorically at us designing with values and perspectives present in the natural world.

Several designs inspired through this process include, Stomatex, Freeskin, and Bio-Couture.

- Stomatex Neoprene is a high-performance fabric made from a lightweight, ultra-thin, non-porous polyester membrane that is weatherproof and highly breathable. It was made to mimic the transparency of a leaf.
- Neoprene is used extensively in the water sports, soft orthopedic, sportswear, footwear, equestrian, and thermal protective equipment sectors. The fabric has a unique pumping action that flexes with the body. It pumps body heat and perspiration out-whilst bringing in cool air.
- Freeskin mimics the skin of water mammals, such as sharks and dolphins that minimizes the friction. Instead of a wax or a slimmy water resistant layer, there are sharp, sandpaper like, scales on the exterior of these mammals. These scales are not just water resistant, they are water dynamic- by reducing the drag. Another similar innovation is FATSKIN FSII, and LZR Racer Suit.

"Biocouture's long term ambition is to grow seamless".

Ms.K.Gomathi
Assistant Professor, Department of CDF

SMART TAILORING

Direct Panel on Loom (DPOL) technology, also called Smart Tailoring was created by Indian designer Siddhartha Upadhyaya as a way to increase fabric efficiency (by 15 percent) and reduce lead-time (by 50 percent) to manufacture high-end garments.

By using a computer attached to a loom, data such as color, pattern and size related to the garment is entered, and the loom cranks out the exact pieces which then just need to be constructed. Weaving, fabric cutting, and patterning happen all at once. Not only does DPOL minimize immense waste of fabric, it also helps in saving energy and water by 70 to 80 percent

DPOL technology adds new dimension to designing and opens up doors of creativity to the designer. The technology is one of its kind and patent has been acquired by its promoters and designer.

Using DPOL one can produce ready to stitch shaped woven garment components. These components are finished at the edges by selvedge. This considerably increases fabric efficiency by approx. 15%-

22% and reduces lead time by approx. 50%. The DPOL technology can be used to manufacture high quality fashion garments with mitering and design continuity at various panels with respect to one another in a garment.

The garments produced using DPOL technology depict perfect blend of textile technology, garment engineering and fashion designing. Fabric is especially designed and manufactured for its particular end use. The garments are unique and are difficult to copy as their fabric is especially woven by the designer using particular yarns as desired, and fabric is not available in the market.

Surface ornamentation is imparted at the time of fabric manufacture, it's neither printed nor embroidered and adds to the richness to the design. The design is imparted to the garment components at the right places at the time of their manufacture in DPOL process, so as to get aesthetically appealing products once the components are assembled to make a complete garment

B.Dhanu Bharathi
II M.Sc CDF

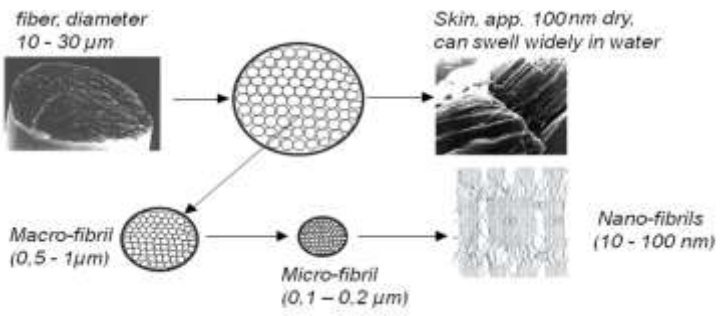
TENCEL – THE NEW AGE FIBER

The consumers are now increasingly aware of the hygienic life style and there is a necessity and expectation for a wide range of textile products finished with eco-friendly antimicrobial properties. Eco textiles gain utmost importance as one of the most useful resources that help promote new innovations, in an eco-friendly manner

Tencel's smooth fibre surface feels soft and supple against the skin and its incredible wicking abilities keep the skin dry, making Tencel a great fabric for sensitive skin.Due to its moisture management, Tencel is also anti-bacterial

Tencel fabric is an amazing eco friendly fabric that represents a milestone in the development of environmentally sustainable textiles. Like other cellulosic fibers, Tencel is breathable, absorbent and comfortable to wear in conditions of high humidity because it is cellulosic which causes moisture to be wicked away from the skin

The Structural Model of Tencel Fiber



A Tencel fiber consists of countless hydrophilic, crystalline nano-fibrils which are arranged in a very regular manner. Water absorption occurs only in the amorphous domains and capillaries between the crystalline fibrils. A Tencel fiber therefore is a unique hydrophilic nano-structure which is the reason for the special water management, comfort and other positive features of Tencel.The growth of bacteria can be restricted completely naturally without chemical additives. A test demonstrates that the growth of bacteria on tencel is greatly reduced. In synthetic fibers, on the other hand, the number of bacteria increases by up to 2000 times.

Moisture Transport Properties of Tencel Fiber

TENCEL® deals with moisture like no other. The fiber absorbs moisture completely and naturally and then releases it to the outside TENCEL® has a unique fibril structure. Fibrils (extremely small hairs) are the tiniest components which make up the fiber. Submicroscopic channels between the individual fibrils regulate absorption and release of moisture. Thus, these tiny fibrils assure the optimum transportation of moisture

Tencel®

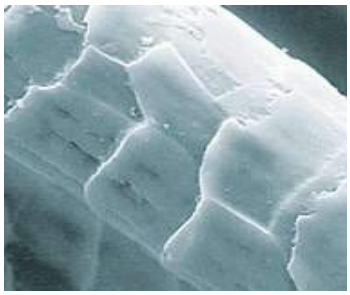
Polyester

Cotton

Compared to synthetic fibers, the optimum moisture transportation of TENCEL® is unique. The fibril structure of the fiber helps create an optimal skin climate due to the superior moisture absorption.Synthetic fibers do not absorb any moisture as the comparison shows.However, TENCEL® really stands out when compared

with cotton. Compared to cotton, TENCEL® absorbs the moisture in a controlled and regular manner. With TENCEL® a 50 % improvement in moisture management was measured.

TENCEL®



Wool

Cotton

Smooth and softness

Since the textile has a smooth surface, the softness is appreciable and prevents irritations to the skin. Thus, TENCEL® promotes an optimal skin feeling thanks to the smooth fiber surface. Rough fiber surfaces can cause skin irritations. Compared to the fiber surfaces of cotton and wool, it is clear that TENCEL® is much smoother and softer on the skin**.**

Ms.M.Kalaivani
Assistant Professor, Department of CDF

ANSELL INTRODUCES NEW RANGE OF ULTRA LIGHT CUT-RESISTANT GLOVES

Ansell, a leader in health and safety solutions, has collaborated with DSM Dyneema, a developer of *Dyneema Diamond Technology* material, to produce *HyFlex 11-318*, a new ultra-light cut-resistant range of safety gloves.

The HyFlex 11-318 glove, featuring an ultra-fine 18-gauge knit construction, is made with Dyneema Diamond Technology fibre, providing it with EN Level 3 cut protection.

Durable and comfortable

Durable and comfortable, the HyFlex 11-318 is designed to offer an ideal hand protection solution for workers in the automotive, aerospace, electronics and white goods segments of industry.

Applications

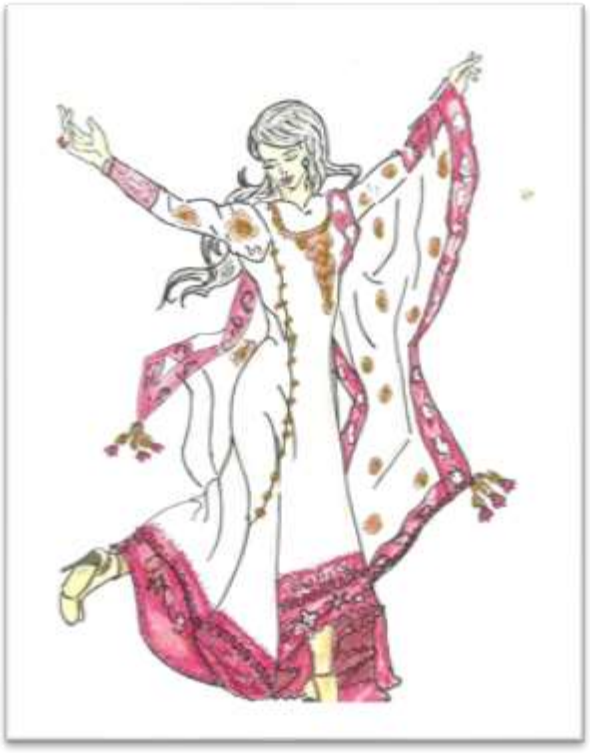
The uncoated design is particularly suited for applications where touch and flexibility are important Uncoated gloves, such as the HyFlex 11-318, also are cooler than coated gloves, providing extra comfort and reducing perspiration. This also taps into the trend for gloves that not only protect the user, but also the product they are handling.

Dyneema Diamond Technology

Dyneema Diamond Technology fibre is an enhanced version of Dyneema ultra-high molecular weight polyethylene (UHMWPE) fibre, incorporating micro-particles for extra cut resistance in each filament.

G.Kokilavani
I M.Sc CDF

T.Varanambigai
I B.Sc CDF



B.Aseena
I.B.Sc CDF Vocational

10 TIPS FOR YOUR NAIL

- Remove old nail polish with an acetone free product. Rinse nails immediately, as the solvent will out your nails.
- Soak nails in a small basin filled with warm soapy water to soften cuticles.
- Rinse hands and dry them by patting, rather than rubbing.
- Gently push back cuticles using a stick designed for the purpose, don't tear the cuticles; if you must, trim them with a nail clipper.
- When an emery board, file each nail down to the shape of your choice (square-tipped or rounded). File by pulling the board from outside edge of the nail towards the centre and not with back and forth movements.
- With a nail buff, gently buff the surface of each nail to remove scratches and ridges.
- Apply a base coat containing keratin to protect your nails. Allow to try.
- Apply two thin coats of colour, making sure to leave about one millimeter around the edge of the nail. Allow to dry.
- Apply a protective Varnish. Allow to dry.
- With some moisturizing oil or cream, gently massage nails and cuticles.

A.S.Nivethetha
III B.Sc CDF

BIRTH OF BARBIE

The first Barbie doll appeared in FEBRUARY 1959. It was made by Ruth and Elliot Handler, Co-founders of American toy manufacturers Mattel, and they named the doll after their daughter Barbara. The doll was dressed in a black and white striped swimsuit, with sunglasses, high heels and gold hoop earrings. In the first year a total of 351,000 Barbie's were sold at $3 each. The doll went on to become one of the best-selling toys of all time.

R.Brindha
I B.Sc CDF

MAKING SPIDER SILK WITHOUT THE SPIDERS

Bolt Threads was founded in Emeryville, California some five years ago by three PhDs who were obsessed by the idea of "making spider's silk without the spiders." The process of mimicking the protein that spiders use to make silk, offers a technology that can be modified to create any performance aspect we want. We know that spiders produce six completely separate types of silk to do different jobs in spinning their webs. One of these proteins is extremely strong; another is stretchy to let themselves down. The silk that catches and entraps insects is sticky, and they have a soft one used to line their egg sacs. When you think about one protein that we can replicate with slight modifications to its sequence, that's incredibly exciting.

The aesthetics of silkworm silk, spider silk, and protein fibres, but we don't yet know where we're going to land amongst these characteristics. As a pure protein fibre, it should have a lot of the aesthetic characteristics of natural silk fibres.

Spider silk polymers be potential material for 3D printed garments/apparel. Spider silk spinning in relation to the spinnerets used for synthetic fibres is used in 3D printing.

N.T.Hari Krishnan
I M.Sc CDF

TEXTILE ENVIRONMENT DESIGN

Recycling & Upcycling Recycling is the reuse, remanufacturing, or reprocessing of a material or product with the aim of reducing waste. There is a huge amount of textiles which end up in landfill every year in the world and recycling is one of the most easily understood and effective ways to address this. In terms of textiles, recycling can cover many different areas.

Firstly, there is the recycling of clothing as whole garments. This could be through charity shops or via the vintage clothes market or through the reuse of clothing items which have been reworked, printed over or re-cut, to be resold.

Secondly, there is the recycling of materials in a more industrial context. This could include the production of recycled yarn where textiles are unraveled and re-spun into new fibres. Or it could include the reuse of waste textiles as fillings for upholstery or as cleaning wipes for industrial purposes. Along side this, is the sort of reuse that mainly occurs in a domestic setting.

The 'make-do and mend' approach is either extending the useful life of an item or product, for example by darning some old wool socks, or reusing a material or product and giving it another function, such as turning old curtains into a garment.

By up-cycling textiles in this way, we can offer garments a second life and prevent them from ending up in landfill. Upcycling refers to reuse of a garment where its quality remains the same or is increased by the process, attempting to counter the common problem of recycling practices reducing the quality of the original materials, as occurs when glass is recycled.

Facts

- Over one million tonnes of textiles are discarded annually, mostly from domestic sources, of which 25% are recycled.
- This breaks down in the following way: 70% second hand clothes and shoes 8% fibre reclamation 9% filling materials 7% industrial wiping cloths, 6% waste (bags, zips etc)
- It is estimated that up to 95% of the textiles that are land filled each year could be recycled.
- Over 70% of the world's population use second hand clothes. There are about 3,000 textile banks nationwide, but clothes banks are only operating at about 25% capacity.
- The average lifetime of a garment is about three years.

N.Suganya
II M.Sc CDF

SMOCKING

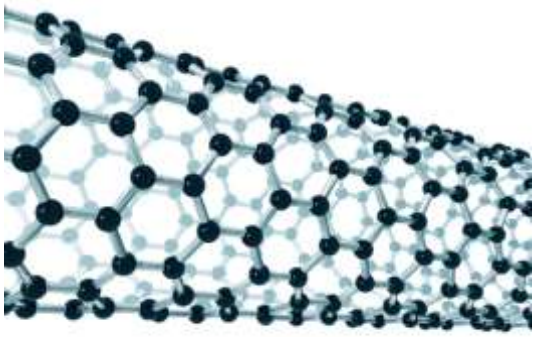
This is a decorative method of controlling an area of fullness, as the method and tension of work is not rigid, it provides for elasticity nd ease of movement.

The allowance of fabric required is usually four times the finished width of smocking on very fine fabrics, a greater allowance may be needed and a small piece of fabric should be gathered and drawn up to check this. It is advisable to check all fabrics in this way as the amount required does vary according to the fabric and depth of pleat required when drawn up the pleats should just touch but should not tightly packed.

S.Gowthami
I B.Sc CDF Vocational

STRETCHABLE ELECTRONIC APPAREL

University of Tokyo researchers have developed an ink that can be printed on textiles in a single step to form highly conductive and stretchable connections, *Microwave Engineering Europe* reports.



This, according to researchers, will enable electronic apparel, such as sportswear and underwear, incorporating sensing devices for measuring a range of biological indicators, such as heart rate and muscle contraction.

Current printed electronics, such as transistors, light emitted diodes and solar panels, can be printed on plastic or paper substrates, but these substrates tend to be rigid or hard. The use of soft, stretchable material would enable a new generation of wearable devices that fit themselves to the human body. However, it has proved difficult to make an ink that is both highly conductive and elastic without a complicated multi-step printing process, the magazine reports.

Elastic conducting ink

Professor Takao Someya's research group at the University of Tokyo's Graduate School of Engineering has developed an elastic conducting ink that is easily printed on textiles and patterned in a single printing step.

This ink is comprised of silver flakes, organic solvent, fluorine rubber and fluorine surfactant. The ink exhibited high conductivity even when it was stretched to more than three times its original length, which marks

the highest value reported for stretchable conductors that can be extended to more than two and a half times their original length.

Muscle activity sensor

Using this ink, the group created a wrist-band muscle activity sensor by printing an elastic conductor on a sportswear material and combining it with an organic transistor amplifier circuit conductivity."

R.Ranjitha
I M.Sc CDF

TIPS ON HOW TO PREPARE A PORTFOLIO

Tips for a good portfolio

Keep it Updated - Ensure that your fashion portfolio is maintained and updated, you never quite know who you will bump into when, and what doors may open leading to a great career opportunity

Most Recent First - The work in fashion portfolio should be in reverse chronological order, the most recent work first. Start with the latest trend research and work backwards through your fashion career history

Show Process - Fashion companies like to see a representation of the whole process of fashion design, meaning every step you took to get to your final designs should be represented in your portfolio

Creative Research - Here you should display your understanding of trend, colour, fabrics, texture, and represent how you identify key trends.

Development - It is important to show your development from a concept into a final garment, range, print or graphic. A good Fashion Designer spends most of their time in the development stages of the design process

Sketch Work - Include your sketch work in your fashion portfolio.

Key Shapes – During your development process you should have identified key shapes and silhouettes, and so you should show how you shortlist these ideas.

Working Drawings - Present working drawings or line drawings. Your proportional flat 2D drawings with all seam, darts, fastening and openings required for manufacturing. This will represent your understanding of pattern cutting as well as the highly important skill of ability to ensure correct interpretation and briefing to your sample room.

CAD Skills – Knowledge of Photoshop or Adobe Illustrator are essential for a fashion designer.

Finished Work – To support your fashion design work, include any images of your finished garment. This can include, look books, published designs on websites, fashion magazines, marketing materials, professional fashion shoots, images of celebrities wearing the design etc

Editing - Edit your work. Don't leave any empty sheets in your fashion portfolio, but also don't be afraid of taking work out. There is no fixed rule about the number of pages, however keep it concise and relevant

Customize – Just like your fashion CV, you should take time to customize your fashion portfolio in preparation for any interview.

The Portfolio – Make sure your portfolio case is of top quality, looks professional and will protect your work. Good portfolios are expensive but will definitely last.

The Digital Portfolio - You also should create a digital version of your fashion portfolio.

Use A Tablet – Fashion design portfolios are being presented more and more on tablets, which are a great tool. Know how to use it, ensure it's charged and know where your portfolio is saved.

Commercial Work Only – With the exception of fresh fashion graduates it is time to exclude any project work you may have done as a fashion design student.

Show Your Strengths – Your fashion portfolio should only represent your strengths, if you are weak at something, don't include it, as it will stand out against your other good work and lower the overall standard. If you have supporting strengths such as good fabric knowledge, pattern

cutting, fitting, costing, print skills remember to present this in your portfolio too.

Quantify your Success - Just as in your CV, you should try to quantify your experiences and success.

Presentation Skills – No matter how good your fashion portfolio is**,** if your presentation skills are not up to scratch it will reflect badly in your interview.

B.Monika
II M.Sc CDF

FIVE FASHION TIPS

- Make sure you wear stuff that fits you
- Show off your assets- knows your body and what you're most comfortable with.
- Know your colors – Just like knowing what you're comfortable with you should know what colors work best on you! Darker! Lighter?
- Alterations-if it doesn't fit you can always get it altered.
- The proper undergarments-this one probably gets forgotten the most but it's also the most simple.

J.Santhiya
I B.Sc CDF

INTERESTING FACTS OF WOOL

- The fleece of sheep has been used to make human clothing since the Stone Age.
- Lamb's Wool was a drink made from apples, sugar, nutmeg and beer drunk on Twelfth Night.
- The fastest recorded time to shear a sheep is 39.31 seconds by Hilton Barrett of Australia
- Wool absorbs and releases water vapour as humidity rises and falls, which is why it works so well as a natural insulator.
- The word jersey originally meant any knitted item make from Jersey wool, especially stockings.
- Under EU rules, a product may be labeled 100 per cent wool or pure wool as long as it contains no more than 5 per cent inadvertent impurities.

- Wool may be used for mixtures of hair from sheep, alpaca, llama, camel, cashmere, mohair, angora, vicuna, yak, guanaco, beaver or otter.
- Alpaca wool comes in 22 natural colours, the most of any wool-producing animal.
- Asbestos was originally believed to be the wool of the salamander.

G.Saranya
III B.Sc CDF

SISAL FABRIC

SISAL fiber is obtained from AGAVE SISALANA, a native of Mexico. The hardy plant grows well in a variety of hot climates, including dry areas unsuitable for other crops. After harvest, its leaves are cut and crushed in order to separate the pulp from the fibers. The average yield of dried fibers is about 1 tons per hectare, although yield in Fast Africa teach 2.5 tons. SISAL is used in twine and ropes, but competition from polypropylene has weakened demand.

It is used as reinforcement in plastic composite materials, particularly in automotive components, but also in furniture. Another promising use is as a substitute for asbestos in brake pads. (It is also the best material for making dartboards). By – products from SISAL can be used for making bio-gas, pharmaceutical ingredients and building material.

M.Keerthika
I B.Sc CDF Vocational

MATERIALS FOR SLASH AND CUT PROTECTIVE CLOTHING

Cut protective clothing's are designed to protect wearer from direct contact with sharp edges such as glass, metal, ceramic and other materials. Cut protection can be increased by increasing material weight (i.e. ounces per sq .yard) using high performance materials such as spectra / Dyneema, Para-Aramid fibers such as kevlar, Twaron, etc.., or by using composite yarns made with varying combinations of stainless steel, fibre glass, synthetic yarns and high performance yarns.

Performance characteristics can also be affected by a materials weight and coatings applied to the outside surface. Lighter weight styles are typically more flexible, resulting in less hand fatigue, while their

heavier counterparts will generally provide the wearer with more cut and abrasion protection.

AREAS OF APPLICATIONS OF SLASH AND CUT PROTECTIVE CLOTHING

- Slash resistant clothing has been developed to help protect homeland security professionals working within law enforcement agencies, such as prison, border control, immigration, customs as well as private security firms.
- Knife (slash) proof curtains for commercial vehicles.
- Knife (slash) proof fabrics for public transport seating.
- Cut resistant fabrics for inflatable structures such as buildings, rigid inflatable boats (RIB's) etc,.
- Slash and cut resistant fabrics for heavy duty tarpaulins, safety straps and restraints protective clothing.
- Slash and cut resistant fabrics for workers in food processing, restaurant/food service and the paper industry.
- Slash and cut resistant garments for speed skaters.
- Slash and cut resistant fabrics for workers in meat/poultry processing and its applications, glass handling, metal fabrication, automotive manufacturing, automotive assembly, sheet metal handling, apparel manufacturing and the fishing industry where sharp blades are used.

Anjali Krishnan
III B.Sc CDF

8 WAYS TO LOOK YOU BEST

Introduction

Stop trying to dress like everyone around you.

Be comfortable with who and what you are; Never ever try to change and be like anyone else; be yourself.

Your neighbour may look great in bell bottom but before blindly and you'll discover that perhaps you need something absolutely different something you feel right in.

1. Concentrate first on grooming

Whatever you do be well-groomed. Remember grooming and personal hygiene come first, because even the finest designer wear will look terrible if you are scruffy. The trend now is towards a healthy, natural look.

2. You are as trendy as you think

First feel trendy in your mind and the rest will follow. How you feel when you dress up is always reflected by whatever you wear .If you are feeling down, even the most glamorous outfit will not lift up your spirits.

3. Play up your strengths

Discover your assets and focus on them remember no one is perfect, but we all have our strengths which we should highlight. The clever thing to do is to dress in a manner that will focus attention on those parts you are proud of.

For instances if you have a slim neck and big hips wear a flattering neckline to accentuate your neck and take the focus away from your hips by wearing dark colours, or a shirt-out.

4. Drop your weakness

If you think you are fat stop thinking about it and start working out.

5. Be creative play with your look

Never shy away from trying something new. Be innovative. Play around with different looks. Try new colors. Mix and match your outfit with accessories. Wear a look that has never been worn before.

6. Avoid Miss strange look

Everybody wants to be different and I couldn't agree more. Only don't look strange! Never dress to shock and wind up looking like a punk.

7. Colorful best

Choose colours that complement your complexion, figure and personality.

For example: plump people should choose black over white outfits. Those with wheatish complexion look better in brown shades of make – up rather than pink or purples.

8. Attitude scores

Always wear your clothes with an attitude; you could totally change the way they look by the way you carry them off.

P.Bhuvana
III B.Sc CDF Vocational

S.Sri Nivedha
III B.Sc CDF

Q MILK- THE BIO MILK FIBRE

- Q-MILK fiber is made from 100% renewable resources.
- For the protection of 1kg of fiber we need only 5 minutes and max 2liters of water. This implies a particular level of cost efficiency and ensures a minimum of carbon dioxide emissions.
- Q-MILK is biodegradable and leaves no traces.
- It is naturally antibacterial and ideal for people that suffer from textile allergies.
- It provides high wearing comfort and a silky feel and 0% chemical additives.

FUTURE FIELD OF APPLICATIONS

CLOTHING

Fashion made from milk-sounds crazy, but we made it possible. An admixture of only 20% of Q-MILK fiber is sufficient to improve the quality of yarns and fabrics made from conventional fibers significantly. Fabrics made of Q-MILK fiber are very soft and provide a comfortable fit. Due to the excellent heat and moisture management fabrics of Q-MILK allow to be used in work wear ranges and ready to wear clothing. The reduced bacterial growth by the fiber and the best skin-sensory properties provide you the opportunity to often your customers clothing for every activity and any weather.

MEDICAL

Q-MILK fiber enables the development of new textile equipment in medical technology that have been produced without the addition of chemicals. It is antibacterial, especially against the bacterial stains.

S.Sowmiya
II B.Sc CDF

KARL MAYER DEVELOPS NEW WARP-KNITTED SHOE FABRIC WITH PVA

Shoe fabrics, especially those used in sports shoes, are the jack-of-all-trades among apparel textiles. On the one hand, they must be able to withstand wind, weather and high mechanical stresses, be pliable and breathable and must also look good.

Product developers at Karl Mayer, the leading warp knitting machinery building company, have developed a semi-rigid fabric which, with the right finish, is flexible enough to be comfortable to wear and also tough enough for long-term use.

The key element of this innovative textile is a tricot fabric combined with a coating made from polyvinyl acetate (PVA).

Suppleness and dimensional stability.

Coating with PVA is an alternative to these processes, according to the manufacturer. The amorphous, odourless and tasteless PVA coating is said to increase the stiffness and consequently the dimensional stability of the warp knit, without having any great effect on its textile characteristics.

Both the breathability and specific handle of the knitted fabric are said to be retained. The coating also increases the light and weather resistance of the textile. Additionally, the PVA reduces flammability and is harmless to the skin, Karl Mayer reports.

Textiles with durable inserts

The main application for these semi-rigid warp-knitted textiles is in sports shoes, according to the manufacturer.

However, the PVA-coated tricot fabric is also suitable for other applications where dimensional stability, textile suppleness and weather resistance are all needed. Examples of possible products include covers for garden furniture, sunscreens and bag/luggage materials.

E.Sandhiya Devi
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FASHION MAGAZINES

Fashion Magazines in India have popularly grabbed attention of the society, specially the women, in the past few years with the growth of the Fashion Industry. These magazines depict latest trends in fashion which the today's women likes as it keeps her updated. These magazines offer

access to the latest fashion news, trends in styles, beauty tips, lifestyle, celebrities, accessories, models and designers. Here is a list of some popular magazines which are most widely read in India and loved by the women.

- **FEMINA**

Femina is a magazine, published fortnightly in India. It is owned by Worldwide Media, a 50:50 joint venture between BBC Worldwide and The Times Group. It is primarily a women's magazine and features articles on relationships, beauty and fashion, travels, women fight back, cuisine, and health and fitness. It also features articles on celebrities and cultural facets of Indian women. Femina was first published in July 1959. It has organized and sponsored the Femina Miss India beauty pageant since 1964. From 1994 to 1999, it also sponsored the Femina Look of the Year contest to send an Indian contestant to the Elite Model Look competition.

- **COSMOPOLITAN**

Cosmopolitan is an international magazine for women. It was first published in 1886 in the United States as a family magazine, was later transformed into a literary magazine and eventually became a women's magazine in the late 1960s. Also known as Cosmo, its content as of 2011 included articles on relationships, health, careers, self-improvement, celebrities, as well as fashion and beauty. Published by Hearst Magazines, Cosmopolitan has 63 international editions, is printed in 36 languages and is distributed in more than 100 countries.

- **ELLE**

Elle is a worldwide magazine of French origin that focuses on women's fashion, beauty, health, and entertainment. It was founded by Pierre Lazareff and his wife Hélène Gordon in 1945. The title, in French, means "she". Robbie Myers is the editor in chief. It is now the world's largest fashion magazine, with 42 international editions in over 60 countries.

- **NEW WOMAN**

New Woman is an Indian magazine for healthcare, fashion, fitness, beauty, relationship, and career. It is edited by the famous Bollywood actress Hema Malini. It is a complete new working woman's magazine. It was launched in 1996 by the Pioneer Book Company Pvt. Ltd. with its

fresh approach and commitment to women's issues. 'New Woman' notched up a sizeable readership in record time, and is today, one of the largest selling women's monthly in India.

- **WOMAN'S ERA**

Woman's era is one of the leading brands of Delhi Press Magazines. It is a very popular magazine and has reached around 24 lakhs readers. It covers fashion, cookery, articles, contests, serial episode, poem, health, and people. It was first published in 1973, and now it has become one of the largest selling English magazines in India for woman. The magazine has 5 short stories which provide insight in to the women's world and the Indian family.

- **VOGUE**

Vogue is India's best women's fashion magazine offering access to the latest fashion news, trends, accessories, celebrity photos, beauty tips, lifestyle news and more. It is a fashion and lifestyle magazine that is published monthly in 18 national and one regional edition by Condé Nast.

- **MARIE CLARIE**

Marie Claire is a monthly women's magazine first published in France but also distributed in other countries with editions specific to them and in their languages. While each country shares its own special voice with its audience, the United States edition focuses on women around the world and several worldwide issues. The magazine also covers health, beauty, and fashion topics.

- **HARPER'S BAZAAR**

Harper's Bazaar is an American fashion magazine, first published in 1867. Harper's Bazaar is published by Hearst and, as a magazine, considers itself to be the style resource for "women who are the first to buy the best, from casual to couture." Aimed at members of the upper-middle and upper classes, Bazaar assembles photographers, artists, designers and writers to deliver a "sophisticated" perspective into the world of fashion, beauty and popular culture on a monthly basis.

- **VERVE**

Verve, India's premier women's international magazine was launched in 1995. Published and edited by Anuradha Mahindra, Verve reflects the spirit of today's woman — changing with the times, moving with trends, styles, fashion and yet remaining constant in its search for perfection editorially as well as in design. Exhibiting some of the best international and Indian writing talent, Verve chooses to cover achievers in every field from fashion, business and style to Bollywood, books and travel.

- **SAVVY**

Savvy, India's leading women's magazine, dares to be different. It has been instrumental in making women all over India aware of not just their rights, but their potential too in all spheres of life. Savvy is a complete package for the modern Indian woman who knows what she wants and knows how to get it. Savvy covers fashion, health, career, relationship, fitness, beauty, people, and travel.

Ms.A.Deepika Priya
Assistant Professor, Department of CDF

JODHPUR DHURRIE (DURRIE OR DURRY)

A thick flat woven cotton or wool cloth or rug made in India as floor coverings. The dhurrie began life as a poor relation of the carpet. It slacked all that a carpet had classes, luxury, visual appeal. It formed the bottom layer of a bedding, making the bed smoothed to lie on. It was used as floor covering too.

Cotton, wool, jute, silk and in variety of combination of all these materials. This material is first converted into thread and then woven into dhurries.

It is made manually by skilled artisans on a traditional horizontal loom or vertical loom. A dhurrie is different from a carpet in that it has no pile. Unlike a carpet, it has no backing either, for which reason it is reversible. While carpets are produced by knotting pile yarn to warp, dhurries are made by inter weaving weft and warp. **PANJA** dhurries are made on small or medium sized weaving frames. With left fingers the weaver picks up a specified number of threads on the warp and insert the colour. This is a traditional type of dhurrie. Originally made by village women around

Panipat. Besides cotton, jute, rayon, and chennile dhurries are also made and exported all over the world.

A fairly new type of dhurrie on the Indian market is the CHINDHI dhurrie or rag rug. An innovation on the same theme is the leather scrap dhurrie. Dhurries are woven in various other parts of the country. Each by its own distinctive motifs and colour combinations. The design on dhurries woven by the BHUTIAS of Darjeeling.

Today the Panipat – Ambala dhurrie belt is famous all over the country and various outlets, at home and abroad.

They have a variety of uses depending on size, pattern and material. The smallest one is 12”x12” is used as table covers. For meditation, the size of the dhurrrie is 24”x24” known as Aasan. Dhurries are easily portable because of its light weight and foldable. They come in variety of colour combination and patterns. They do not get infected by Silverfish or other insects.

N.Mythili
III B.Sc CDF Vocational

S.Dharanya
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P.Sindhu Priya
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COSTUME DESIGN Vs FASHION DESIGN

Though fashion designing is now a day gaining much attention, importance and preference, one more profession which is more related to fashion designing and having a vast scope but not that much gained attention and preference is "COSTUME DESIGNING".

COSTUME DESIGN	FASHION DESIGN
Designing is done to the character or story.	Designing is done to once own creativity and tastes or to customer's.
More challenging and limited time frame.	Not much challenging and no limitations for time.
Limitations to creativeness.	No limitations to creativeness.
Designs should match to the theme of the story or character.	Designs should match to the trends.
Need for the knowledge of culture, history, places, rituals, social values, etc.	Not compulsory but it is an additional advantage.
Involves high cost.	Not much cost oriented.
Limited assignment at a particular time.	No limitations; depends on the capability of fashion designer.
At a given time need to design for various role, characters, situations, etc.	Designing is done to particular target customers.

Sindhu
III B.Sc CDF

JEANS MADE FROM RECYCLED PLASTIC BOTTLES

Levi Strauss has emerged as one of the more environmentally conscious clothing companies in recent years. Now the San Francisco-based fashion icon is amping up its sustainability efforts with its new "Waste Less" line as part of its spring 2013 collection. The most exciting feature of this collection, traditional yet edgy each pair of jeans will include an average of eight recycled bottles within the denim fabric. Whether pushing the fashion industry to adopt tough new sustainability

standards, slash water consumption or roll out a climate change strategy,

This line of jeans and jackets will include a minimum of 20 percent post-consumer recycled content within each garment. But that 20 percent is hardly churning out a dowdy line of trousers and jackets. Various materials, such as brown beer bottles, green soda bottles, those pesky clear water bottles and drab black cafeteria trays will add various levels of texture and sheen to the fabrics.

Levi's has developed a process for incorporating PET plastic, including brown beer bottles, green soda bottles, clear water bottles and black food trays, into its denim material. The bottles and food trays are sorted by color, crushed into flakes, and made into a polyester fiber. Next, the polyester fiber is blended with cotton fiber, which is finally woven with traditional cotton yarn by Cone Denim for making jeans and trucker jackets. The color of the bottles used adds an undertone to the denim fabric creating a unique finish in the final product

Mr.R.Rajakumar,
Assistant Professor, Department of CDF

HOW TO CHOOSE THE PERFECT SAREE FOR YOUR BODY TYPE

Indian saree has evolved as a fashion statement that is perfect for any occasion. A right saree will not only hide your body flaws but also can enhance your looks that will you look attractive.

APPLE-SHAPED BODY

If you find that you are heavy around your bust and stomach, then you are having apple shaped body. So for this type of shape you should go for those sarees which have heavy work as this will give you a complement your body shape. Try to cover your waist and prefer to long blouse as this helps you to cover your problem areas. If you have apple shape then you must avoid sarees which are in net. Drape your saree in very simple way or prefer to ulta-pallu style.

PEAR-SHAPED BODY

We all know that women with pear shaped body have a heavier bottom compared to their upper body. Thus if you have this type of body

shape then you should go for fabrics like chiffon and georgette as these type of fabric helps you to balance your upper and lower body shape. Beside this stay away from mermaid cuts as this adds unnecessary attention to your lower part. Always prefer to seedha pallu style in draping as it make you look a proportionate.

HOURGLASS SHAPE

Hourglass or Voluptuous women are perfectly shaped women, and upper and lower body parts are well balanced. All kinds of sarees draping styles and fabrics look great on them. The saree is one of the most ideal outfit for them. Net, chiffons, georgettes, soft silks looks great and helps to accentuate their curves.

RECTANGLE SHAPE

A rectangle shape woman has an athletic body with toned arms and legs. Your upper body is proportionate to your lower body with small bust and not much curve. The main goal is to create body curves. Wear corsets blouse with large prints and floral patterns with plain sarees to balance your body structure. Lehenga saree is perfect for you.

OVERWEIGHT WOMEN

We have listened that overweight women many times complaint that they look broader and bigger in cotton and other stiff fabrics sarees. Thus it is advice to them that they should use chiffon and silk sarees as this type of fabric helps to balance their shape and will draw attention away from your problem areas. Prefer dark colour and handloom sarees as it looks more beautiful to you. Beside this prefer to full sleeves and long blouses as they would help to hide your flab.

VOLUPTUOUS FIGURE

For voluptuous figure georgette, chiffon and net fabrics are best, as they will neatly wrap around your body highlighting your curves. For this type of figure you should go for dark colours saree. Your saree should not be very heavy and it must have delicate embroidery and bead work. It should have a good fall which will make you look slimmer. You can also wear a blouse with criss-cross strings holding it together.

SLIM FIGURE

If you are slim then you must pick up cotton, silk or organza saree as they give you fuller figure. You can go for option for saree in light colour or heavy embroidery. As you slim thus you should go for big and bold prints in a variety of colours. Slim women can easily carry off backless, sleeveless, halter neck and tube blouses.

TALL AND SLIM WOMEN

Taller women must prefer to heavy borders or bog bold prints with variety of colour. This helps to divert the attention from your height.

SHORT AND SLIM WOMEN

If you are short in height then you should avoid big prints and heavy borders. You should avoid big prints and heavy borders and more prefer to medium-sized prints and thin border as this help you to look tall.

S.Bala Atchaya
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B.T.Vigneswer
III B.Sc CDF

THE HISTORY OF INDIAN TEXTILE PRODUCTION

INTRODUCTION

India was the world's foremost centre of textile production. The production of sophisticated textile within the Indian subcontinent has prehistoric origins.

"The hopes and fears of a whole society are reflected in the cut of a dress"

THE WEST

The west region of India includes the Rajasthan, Gujarat and Madhya pradhesh. Embroidery throughout the seventeenth century, Gujarat was probably the most important centre for fine commercial embroidery in the world. They decorated with bead work and embellished with mirrors, sequins, buttons and shells.

THE NORTH

The rich agricultural states of Punjab and Hariyana are famous for the phulkari shawls that worn with a tight- fitting, choli and gaghra, formed the traditional costume of rural women of this region. The beautiful value of Kashmir is justly famed for its textiles above all for the Kashmir shawl. Akbar introduced the fashion of wearing. Kashmir shawls in Paris stitched back to back. The kulu valley in particular is also associated with shawl weaving. But the state is best known for its embroidery arts that centre around the little town of chamba in Himachal Pradhesh. Lucknow is famous for chikan work embroidery. A kind of white work. Jamdani weave is of a serious of flowers or geometric designs, set against a semi translucent mesh background.

THE EAST

The needle works are known as kanthas in Bengal and sujanis in Bihar. Here they are two different types of applique is practiced one is called khatwa. Short stable cotton and the wild silks known as muga or produced in Assam. The women of Orissa dress in sarees of blue, red and majenta and other deep colour with ikat known as Bandha. The textile that is traditionally the pride of this area is the saktapar sari with its

double ikat checks board pattern and brocaded border of rudrasksh bead compositions.

THE SOUTH

The square double ikat cloths known as Telia or Asia, rumals were produced here for the muslim market. In Chirla, telia rumals were died with traditional alizarin dyes. Traditional ikat fabrics of Andhra pradhesh use at the most three colours forming simple geometric designs and as in orissa or woven on pit looms. The south was historically the source of some of the most beautifully coloured and delicately worked cotton fabric produced and exported by India. The painted cloth of south-east India had been known as pintado. Kalahasti was well placed for kalamkari work. Kanchipuram produces brocaded silk of super texture, colour and luster. Zari threads are come from Surat, Gujarat. The Kanchipuram water gives Kanchipuram silks its lustrous shine. Kerala has a tradition of lace making and embroidery that has a strong European influence.

CONCLUSION

Indian people have been world famous for many centuries. Truly India remains the most original, creative and prolific source of textile production in the world.

P.Vaidheki
III B.Sc CDF Vocational

SPIDER SILK

Spider silk has drawn much attention from engineers in the past 20 years for its toughness and elasticity, properties which may be utilized in applications such as suspension bridge wires, bulletproof vests, and medical adhesives. There remains, however, a mystery behind the production of spider silk. Scientists are intensively studying this process in order for engineers to replicate the silk in synthetic form. One of the first successful reproduction of spider silk was produced from genetically engineered goats. Such inventive approaches lead us closer to a mass-producible, commercializable material that may potentially be as common as ordinary silk.

Spider silk is a protein fibre spun by spiders. Spiders use their silk to make webs or other structures, which function as nets to catch other animals, or as nests or cocoons to protect their offspring. They can also

use their silk to suspend themselves. Many sailors have reported that spiders have been caught in their ship's sails, even when far from land. The extremely fine silk that spiders use for ballooning is known Asgossamer

Production

There are seven types of silk produced by seven silk glands. A single spider does not possess all seven glands but has at least three if it is male or four of it is female.

The glands are located on the lower side of the abdomen and contain a watery fluid known as 'dope'. This fluid passes through to the spinneret via a multitude of microscopic tubes where water recovery and solidification begins. Fluid from different glands can lead to the same spinneret so silk with specific properties required for a particular function can be produced. There are usually three pairs of spinnerets but this can vary between 1 and 4 pairs depending on the species. The substance exits through the spiggots which are mobile, finger-like protrusions and the resulting silk emerges as a solid. There are many spigots so many fibres are bound together like a cable. The diameter of a single fibre is controlled by the muscular action of a valve. The faster and tighter the strand is drawn, the stronger the silk.

APPLICATION OF SPIDER SILK

Spider silk, its tensile strength is greater than steel and it is 25 percent lighter than synthetic, petroleum-based polymers.

These qualities will allow Biosteel to be used in applications where strength and lightness are essential, such as aircraft, racing vehicles and bullet- proof clothing, tendons, ligaments and limbs.

The new material could also be used to help tissue repair, wound healing and to create super-thin, biodegradable sutures for eye or neurosurgery

Ms.C.SARANYA
Assistant Professor, Department of CDF

Front Page was Designed by B.Monika
II M.Sc CDF

Excellence is a continuous process and not an accident.

A. P. J. Abdul Kalam

Department of Costume Design and Fashion

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