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Design for All

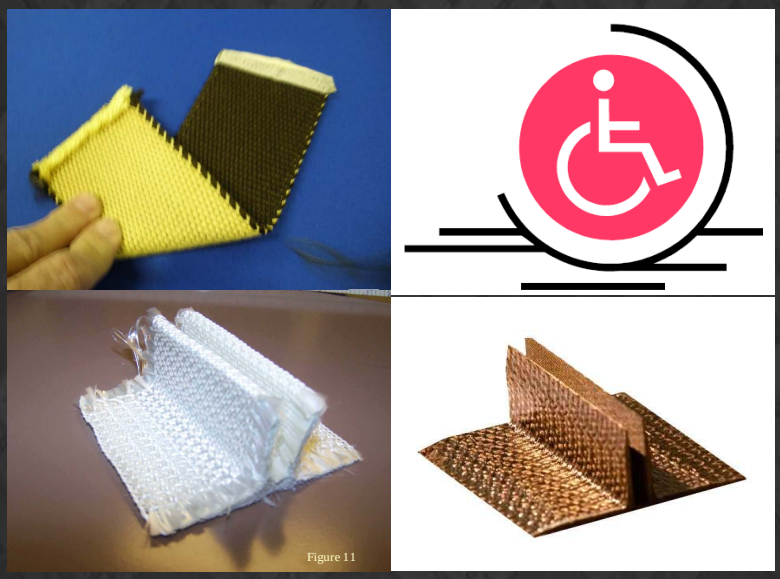
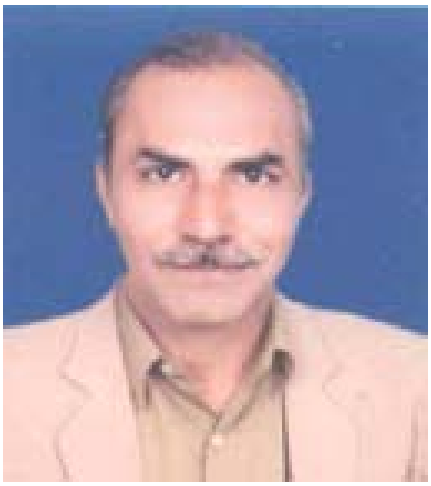


Figure 11

Chairman's Desk



Dr. Sunil Bhatia

The story goes that Adam & Eve used the fig leaf to cover the body part after eating the forbidden fruit of knowledge tree was the small step for man but later on proved a giant leap for mankind and it had been believed as a great reason of concept of clothing. A fig leaf is the covering up of an act or an object that was embarrassing or disagreeable to human mind. The term has a metaphorical reference to the Book of Genesis and in very simple words of fig leaf entire journey of struggle of ancient man to modern man had been explained. 'Why had it struck to peoples minds to cover with fig leaf?' Was some sense of good & evil seizing their minds?

My next question is who made them realize that genital parts are evil? Was shame responsible for covering? Is man born with inbuilt character of shame or society makes man to feel shame? There are many hypothesis of covering. A few scholars believe that ancient peoples might have thought involuntarily pissing in public was sense of defeat when weak person was attacked by strong fellowman either for women, food, shelter

or command of the group, as weak sensed his survival was in danger he pissed out of fear and it was the sign of losing voluntarily control, surrendering the power or woman or holding and it might be an indication of mercy ' Spare my life, allow me to go safely out of this place, don't harm me, take my holding ' or smelling of the urine was an act to know whether she is willing for sex or pregnant because body releases some unique hormones during this time and it changes the smell of urine, that might have forced them to cover the organs or hormonal changes in both bleeding during menstrual cycle in woman and erection of penis in man forced to cover their parts or there is remotest chance but possibility can not be ruled out that sex organs produce more energy and it should not dissipate to entire body that gradually not make the person disinterested or lose interest in sex but lust and sex drive should be high for producing better off springs for survivals or as Sigmund Freud had stated castigation of penis fear in man that it should not turn to phallus was responsible for covering or fear of predator attack was reason to enjoy sex in isolation and others should not be attracted they started covering or erection of penis is involuntarily when man is sleeping or dead and in both cases man was defenseless and to cover his defenseless state other passerby covered and later on it might have taken the rituals of burial of dead person. Whatever may be the reason this small idea of covering had revolutionized the human minds. Were they aware about consequences of their eating of forbidden fruit that would be beginning of revolution in human's life?

These questions may not be relevant for modern man but it leads to many profound questions that need special attention even today. We can make humble beginning by questioning 'why are humans so fascinated with clothing?' The moment Adam looked at Eve and she looked back, they had realized that both were cheated by creator since there was too much dissimilarity amongst them. That was the point of disagreement but it turned out to be the reason of competition and one thing both had realized the value of what they had and later on it proved as assets and needed protection. 'I am better than you and I can perform better'. Men could not relish what they were enjoying the privilege and failed to realize its importance and their craving for what other was enjoying overpowered their thoughts. Till today man is living under same pressure and imitating woman and she is busy in imitating man. 'Woman lifetime goal is to overpower man and he wastes his entire life in overpowering her and it is no win-win situation.' That biological difference was the turning point for disagreement and not to argue on what haves or have not rather content with 'no one is complete & perfect in this world.' This simple idea was the reason of journey of attaining perfection in all respects, completeness in what people lack. It was the turning point when man's need was to overpower fellowmen, women and living beings took ugly turn and his greed was visible in his actions and inflated to that height that he wished to enjoy as much freedom as what supreme power enjoyed. This was the sign of beginning of progress along with destruction. This philosophy was prevailing among few greedy but some peoples wished to live with peaceful manner and they

cooperated and sharing and helping one another with one's need with another made them survive longer .It made them to understand the need of an individual and his social life development accordingly. Group role was to look after the interest of minimum common basic needs of an individual and perform the duties. Our greed is not allowing us to perform what a fellowman is expecting. Designers should not think just as an ordinary person thinks. Their role is different from others. Everyone has varied substance of greed but it works as dynamo for their progress. Every person should attention for his basic need namely clothing, food, discharging of waste and breathing but a few who are old, challenged and children need proper look after either by institutions or family or an individual or society . At this stage, role of designers becomes significant and if they do not discharge their duty properly toward society they can never be good designers & good human beings. Philosophy of perfection strikes to a few people since they ignored materialistic world and look for spiritual goals. Majority is not interested in framing them. Reason is they fail to come out from their routine struggle and do not think beyond their survival. Our ancestors' effort was limited to food, shelter and survival & then much later clothes came. Modern man's struggle is from many sides& nature of struggle is not less than that of our ancestors. We cannot say definitely what was the reason of germination of concept of clothing but it turned the man introvert. Otherwise every individual is a born extrovert. 'Modesty died when clothes were born – Mark Twain'. Unclothing locks the power of imagination of an individual. Imagination evaporates and stark naked truth

comes face to face. Clothing has given wings to human thought, imagination and leads man to see beyond what is visible. Our generation is failing to catch the signal of progress that is a sealed envelope and delivered long back by our ancestors and no one is caring for message in it. Message is yet to heard by us.

Clothing refers to any covering of the human body. The wearing of clothes is exclusively a human characteristic and is a feature for all human societies. Clothes have various languages and interpretations much need proper understanding of different cultures. The amount and type of clothes used depends on functional considerations such as a need for warmth or protection from the elements or vagaries of weather and social considerations. In some situations the minimum amount of clothing may be socially acceptable, while in others much more clothing is expected. India discourages exposure unlike those of western peoples but economic condition is the reason that majority is somehow managing their nudity. Western thoughts till today in this advance era are unable to come out of the idea of fig leaf and still use minimal clothing subject to the condition if weather permits. Modern man has learnt the science of controlling weather and it provides them tremendous opportunity to experiment with clothing. India was the first place where cotton was produced, even as early as 2500 BC in the Harappan period. Modern science & technology that exist in India as on today still out of reach of masses and its impact is still to be felt by them , is the reason of not experiencing drastic change in our modern man dressing compared to our

western counterpart. The journey of clothing from the Aryan period to modern world has not witnessed much change; women wore one very long piece of cloth called "a sari" that they wrapped around themselves in different ways. Our country is under western influence and in few pockets; women prefer western attire but at the time of religious, social or family rituals they revert to traditional dressing. Their minds are not rebellious but still defy at times the traditional value and then wish to live the life at par with western women. An individual mind is in confusion and it reflects in the dressing & behavior. The word "sari" comes from a Sanskrit word that just means cloth. Saris are first mentioned in the Vedas, i.e the period 600 BC. Rich women wore saris made of silk, but other women wore of cotton. Sari for woman and dhoti for man are unstitched long clothes and these were probably the first dress based on concept of Design For All/ Universal Design. If you know the process of wearing anyone whosoever is fat, slim, tall, able and disabled all can wear with ease and enjoys the same comfort. Clothing is social phenomenon mandatory in modern civilizations. We can not ignore the needs of an individual who are without clothes. Normal average person can easily manage their dress because it suits the mind set of commercial mass production world to meet the need of masses. Mass production of clothes is basically based on concept of statistical average and those who do not fit into average criteria, markets do not bother. We have large population that constitutes of old; disabled, wheelchair, and not normal (not fit in average criteria) but they need our special attention.

This issue is special for us because first time in the history of Design For All publication since 2006. We have never covered such a beautiful topic. We are thankful to Ms Ruth Clark of Fashion Moves who not only suggested us this area for our attention rather accepted our invitation for publication of special issue. She is focusing on area where persons with different needs also need special clothing. This special issue is focusing on those who do not come under the average category and are exceptional in their own way demands exceptional approach. Their clothes are designed in general of the time need base but in some occasion we are taking average of these exceptional cases and designing the dress with little flexibility in alteration keeping in mind it should be useful for majority of this group, affordable, comfortable and manageable with minimal difficulties. It is the social need that we should wear cloths otherwise as Mark Twain stated 'The finest clothing made is a person's skin, but, of course, society demands something more than this.' He has further written that skin is our first natural god's given dress and clothes are our second but manmade. What has God given us no one can cluck over & complain? Man is without any choice in matter of first dress but second dress invites various associated problems for human beings. The selection of colors, texture of materials bothers us, washing is required and for dry the cloths we have to hang it under the sun in open and there is need to shoo away cow that may chew it. He also said 'Clothes make the man. Naked people have little or no influence on society'.

I remember my college days, at the time of ragging, our senior's ragging start by ordering us to unclothe and allow us to stand naked. Majority was not feeling embarrassed & shame in standing naked and mind was fearful with consequences of disobeying them. That makes used to youngsters undress without hesitation. A few students waited for others to do first and they followed. Rare person refused. Reason was he used to feel highly embarrassing in standing naked in front of others and he was mentally prepared to face the wrath of the seniors. That time I failed to understand the meaning of naked but at present I know a little. 'What's never interesting is what they are trying to show us, what's always interesting is what they are trying to hide.' Clothing is enough for promoting secrecy and conspiracy theory to go around.' Why do husband and wife enjoy special bonding? Reason they have stand stark naked in front of one another frequently especially during love making and explored one another physically, mentally and culturally.

Clothes have various purposes and it provides a hygienic barrier, keeping toxins away from the body and limits the transmission of germs. Based on this theory some anthropologist claim that human body lice have come to the existence from the head hairs because of clothing works as hide out place and they used to say that clothing was hardly few thousand years old concept. Prior to this everyone was naked. In Europe till 16th century there was social practice that entire family of mother, father, sons and daughters used to sleep in stark naked in one room. As time passed on and technologies improved, humans style of livings also changed

and the concept of clothing changed not to meet the requirement rather how to use it as tools for winning the competitive modern world. 'Clothes are used to disguise and what they think should never comes openly and sometime it helps in expressing what is inside.' Introduction of air conditioners and modern gadgets in home, offices and transports have given freedom to men & women that they can wear the clothing of their choices and for occasions. Introduction of absorbent sanitary napkins have given a new freedom to modern woman, old and children. Before the invention of absorbent material they were confined to limited areas. Restricted movements are no more visible in their activities. The emergence of the modern world is marked by dramatic changes in clothing. Industrial revolution introduced the concept of boiler suits, workers dress designed for meeting various safeties associated with their works. Bomb squad needs special dress for diffusing and life should be safe if any accident occurs. Fire fighter needs fire resistance materials dress. Cloths are designed mostly for functional values and these should not restrict the movement of the body to perform specific jobs. Ours is an era of white color jobs and information technology where no grease, no oil spilling, no hammering & no chiseling. Machine jobs are rarely encountered by select classes and they can afford the dress not according to their nature of job rather what they wish. It is an era of fashionable clothes. It is easy to forget that there is a history to the clothes we wear. All societies observe certain rules; some of them are quite strict, about the way in which men, women and children should dress, or how different social classes and groups should

present themselves. These norms come to define the identity of people, the way they see themselves, the way they desire others to see them. They shape our notions of grace and beauty, ideas of modesty and shame. As times change, societies are transformed, these notions also alter. Modifications in clothing come to reflect these changes. Ancient peoples used dress for protection and moved to social influenced power to fashion. Fashion never meets the real objective rather it reflects different parameters like state economic, culture, position in power game. Our politicians, models, actors are players of fashion game and they reflect their importance in the crowd of ordinary people by changing their dresses for different occasions and this uniqueness is vital for them. They are trend setters and make fashion statement and others follow. Nation's prosperity can be judged by various techniques, fashion is one of the tools. Those claims to be representing nation never repeat the same dress for different occasions. Head of the state's wife, actors and models clothes are followed by common peoples. Roman clothing took on symbolic meaning for later generations. Roman armour, particularly the muscle cuirass, has symbolized amazing power. Transparent or see through dresses symbolizes the status and holding of tremendous power. 'My dress is tempting you. Do you have guts to touch me? If you dare to do so, consequences may be that you will be eliminated or life will be hell'. A piece of royal history will soon be auctioned in the form of a sexy see-through dress that Kate Middleton modeled at a fashion show in the early days of her relationship with Prince William. It is thought he was intrigued by the revealing

garment and it was meant exclusively for him and others did not even dare comment. Every dress communicates some loud message. Protestors wear clothes for highlighting issues like meat dress to express solidarity for cruelty against animals, Brinjal dress is used to protest the introduction of genetic modified food. A black cloth of band expresses the resentment against the management and it is the peaceful way without harming the interest of the organization it is attracting the attention of the management. Clothes are reflection of an individual psychological thinking, cultural background, tolerance levels, economical conditions, enjoyment of power, authoritative behavior, and respect & sensitivity toward human beings. Clothes are use as tool for covering inner, external feelings by majority and a few uses it as an ornament. We need a cultural understanding to decode clothes language.

Before the emergence of democratic revolutions capitalist markets in eighteenth-century in Europe, most people dressed according to their regional codes, and were with limited choice of clothes and their styles were also strictly regulated by class, gender or status in the social hierarchy. Selection of color or material or texture was mainly under the influence of the local environments. Desert people invariably use gaudy color. Reason was if a person lost in desert the bright colors were helping in location. Reason of preference of white color cars are by majority because the roads are black made of bitumen and others colors assimilates if it at distance or in dark night and white distinct even in dark at distance. Some cultures consider black color of cloth auspicious and in some it is

mourning color. Some feel white as sign of spirituality and their priest dress code is white. In India, white dress is exclusively for widow and it is sign of inauspicious. People prefer red color for auspicious occasions. Ours is a globalization era and we do not live with limited choice of materials, styles and do not face harsh vagaries of weather as our ancestors and we enjoy better freedom in selection of dress. After the eighteenth century, the colonization of most of the world by Europe, the spread of democratic ideals and the growth of an industrial society, completely changed the ways in which people thought about dress and its meanings. Western jeans are equally preferred by man & woman of all ages of many countries inspite of their religious restrictions. It enjoys a true status of international dress as our salwar kurta for woman as national dress. Automobiles of two wheeler and four wheelers has changed the perception of local people dressing. What elite class was enjoying the respect while riding the cart with horses or elephant with their signature dress during festivals or rituals it is replaced by better comfort economical cars and even an ordinary person can afford what was privilege for elite class. In dressing sense there is not much difference. Personal vehicle has given freedom of selection of cloth inspite of moving in public domain. This vehicle gives sense of security and personal space and occupants are free to wear what they feel like to. In public domain, we are cautious that our dressing should not invite unwanted trouble and respect others dignity as well our own. People could use styles and materials that were drawn from other cultures and locations for designing their distinct identity. No one can escape the influence of

technologies and it is creating similar needs and drifting everyone toward the standard format of mankind through out the world. Mobile , internet and most of the persons are under impression that western development model is best suited model for progress, are the reason that man's thought process are narrowing , focusing and developing standard traits in human of the world. The future isn't only friendly, but possibly smart and sexy too so our dressing. One of the most encouraging signs was how much the notoriously uptight world of design has decided to unbutton its collar, let its hair down and maybe even has a little fun

Clothing is actually worn for a variety of reasons. It can protect, identify, and give a way to communicate to others something about us: our nationality, religion, age group, social level, and especially our personality. Clothes are designed for different occasions and it may inflate someone ego, makes delighted, saddens during mourning, extremely happy during marriage. Clothes for newly born child are affairs of welcoming & happiness. Requirement of young is different and they can carry any dress material & styles with ease because of their high energy level. Old person requirements are totally different from rest of the population because they are sensitive, energy level is low and one or some parts are not functioning properly. Adaptive clothing for disabilities need special design. Adaptive clothing is normally a garment assembled with medical functionality in mind for post-surgery individuals, the handicapped/disabled, seniors, therapy, special needs, joint inflammation, stroke victims and more. Adaptive apparel provides easy accessibility to body regions without removing

the entire garment, or by making it less difficult to change or pull off their clothes. A decent adaptive garment will have medical features that last as much time as the life of the garment, so all adaptive clothes will go through many more processes in development to enhance medical purposes and to produce a long lasting, sustainable piece of clothing. There are quite a few designs and health-related functions for disabled clothing - mostly clothing with zippers provide access to areas of the body that would otherwise need the clothes to be removed altogether. With adaptive clothing, a disabled or aged patient can preserve dignity, can provide some degree of self-care, and enjoy the added comfort of faster access to healthcare appliances for both themselves and for a registered nurse or medical practitioner. While designing for such people we should not forget limitation of the para medical as well as medical staff that is caring these persons. They work under tough conditions and they can not devote much for an individual attention. It means design should not only look into need of such special peoples rather it should not be of little discomforts those who are caring them. We can not change the nature of market forces abruptly rather it is long and gradual process. At this moment we should focus on how to roping the perspective manufacturers who are solely investing when profits are lucrative and our language should be such that they should understand in terms of profits and convince enough to execute. Users should be in position to afford, feel comfort and their needs should meet.

Clothes are vital part of the civilized society and these help in differentiating the sane and insane. No clothes are designed to

express the temporary insanity of an individual. During Hippie era in 70's they defied all standard format of lives and believed in philosophy 'what you feel you do' and their dress sense was dirty clothes and did not care of how society was thinking for them. Normally the insane wear over clothes or no clothes. Nudity is unlawful in our society so the government should provide that much clothes to everyone that they can protect irrespect of abled or disabled. In India there was old practice in every family that everyone was using mechanical spinning wheel to draw threads and weavers used to charge for making cloth out of those threads. They dye with natural ingredients and everyone was using unstitched cloth as a dress sari for female and dhoti for male (if needed they can cut, stitch for growing or challenged children) to meeting their needs. Tailoring was must for every marriageable girl. With the advent of modernization we have forgotten our old practice and mostly dependent on government or institutions or market forces. Most of the problems are because we are not educated to meet our needs rather we are focusing on earning money as a tool to buy our various needs. Moral duties of designers are they should make affordable design and fit for all. The world is under the turmoil of exposure. No profession enjoys anymore respect by ordinary peoples. Everyone is feeling he/she is constantly cheating by others in the name profession and society appears to them as den of looters. Trust, respect and honesty are of gone-by days and generates as living in anarchy. Everyone is all alone and what they feel like to do they do as no one is going to question them. Authorities are exposed by various agencies and lose their credibility of how they behave

and think for majority. It is era of guideless, ownerless and ageless. The role of designers becomes larger than life and they should offer that can truly embrace the bigger societal picture and represent this through a considered and conscious design approach—that means something to both the individual and the new collective mindset.

With warmest regards

Dr. Sunil Bhatia
Design For All Institute of India
www.designforall.in
dr_subha@yahoo.com
Tel 91-11-27853470(R)

Forthcoming issues:

March 2011 Vol-6, No-3

issue is Special with EIDD and President Of EIDD Design for All Europe will edit this issue. He is also Chairman at EIDD Sweden

April 2011 Vol-6, No-4

issue is special issue on 'Travel and Universal Design' and this will be edited by Dr Scott Rains of Rolling stones

May 2011 Vol-6, No-5

issue is special with Design For All foundation, Spain and Guest Editor will be Mr. Francesc Aragall – *President of Design For All Foundation.*

Content of February 2011 Vol-6, No-2

Other regular features

Guest Editorial:

Ms Ruth J Clark,

Fashion Moves

The youngest of 5 children, Ruth Clark grew up with many clothes being altered to fit or made at home by her Mother. It was just assumed that the garments would fit or work for the person wearing them, not the person needing to try to fit into or 'work' for the clothing. As the family aged, a Grandmother and an Aunt needed to use a wheelchair full time and again, clothing was modified for better fit and easier dressing. It was just second nature.

During High School and during her early working years Ruth took as many sewing courses as possible, including Advanced Tailoring in Grade 12. After College, where Ruth obtained a Diploma as a Library Technician, she worked in Public and University Libraries for 25 years. During her last 10 years at the University of British Columbia, in Vancouver, British Columbia, Canada, she worked in Disability Services, including the Crane Library and Resource Centre which was established

to provide library and other services to students with visual and other print disabilities. This provided an opportunity to become even more aware of the need for respectfully designed or modified clothing, for People with various disabilities.

Once again her mother's influence was felt when Ruth returned to Kamloops and the family home in 1998 to provide full time live in care for her mother. Through the following 12 years, Ruth has provided in-home caregiving for a variety of people across a range of ages and conditions. While doing this she continued with her interest in Adaptive Clothing and had a number of Fashion Shows and Speaking engagements throughout the United States and Canada. Some of these included the Amputee Coalition of America (3 times), the International Association of Orthotics and Prosthetics, the Rehabilitation Institute of Michigan, the Fashion Technology students at Olds College in Olds, Alberta, Canada, a Marketing class at Thompson Rivers University in Kamloops. One of her largest audiences was at the International Pacific Rim Disability Conference, held by the University of Hawaii. A group of over 1000 conference attendees from 42 Countries joined in the fun as Ruth provided a light hearted look at the hows, whys and benefits of Adaptive Clothing.

Ruth is currently establishing the Fashion Moves Annual Garment Design Competition, through which she will build a bridge between the Fashion/Garment Industry and People with disabilities.

Throughout each year many organizations raise funds to provide support and service to assist disabled children maximize education opportunities and grow successfully into adulthood. These children go on to be parents, bankers, lawyers, doctors, clerks etc.

As they go into active, successful adult lives, who is creating stylish, appropriate clothing that function well with their disability?

Through Fashion Moves, Ruth is stepping forward to facilitate filling this void. Before a Lawyer who uses a wheelchair can purchase a suit designed for him to wear while sitting in a wheelchair, a store or internet site has to stock this suit. Before a store can sell fitted dress trousers for a leg amputee, someone has to design these trousers.

The Annual Fashion Moves Design Competition will encourage student and working designers and others, from around the world to take part and start creating Stylish, respectful, professional, functional clothing for People with a full range of disabilities. We will convene a conversation between Designers, Paralympic and Amateur Athletes, Business professionals, parents and kids. Through our Internet Radio programme we will provide design ideas and reveal the lifestyles of many active People with disabilities. Garment, Fashion and Textile Industry news and tidbits will lead at the top of each show which can be found on BlogTalkRadio at: http://www.blogtalkradio.com/fashionmoves

The primary 'product' of Fashion Moves will be educational / informational - consulting, speaking engagements, producing the Design Competition, etc. Some hard products will also be produced, including paper sewing patterns (based on the designs submitted to the Competition), a potential magazine and additional collaborative efforts such as this with the Design for All Institute of India.

www.fashionmovescompetition.blogspot.com

www.blogtalkradio.com/fashionmoves

859 Battle Street

Kamloops, British Columbia,

Canada V2C 2M7

01-250-314-1849

What is in Your Clothes Closet?

Clothing. This is something we all interact with every day but how often do we actually sit down and think of it in all of it's permutations? Dr. Bhatia has provided a thoughtful introduction and history to this complex aspect of our every day lives. But what else is clothing?

Packaging – in its most basic concept, clothing is Packaging. Protecting its valuable contents from weather and from bumps and bruises. This Packaging conceals parts of its contents that Society deems private and exposes other areas, often teasing the viewer. The owner of a Sweets shop will package a cake or other sweets in a box that has cellophane as part of the lid so you can peak in. Then the marketers come in and decide upon the colours and diagrams to be placed on the packaging material to best appeal to the customer (or society in the case of clothing)

Uniform – As a Uniform clothing tells us about the person wearing it. A suit leads you to think of a Business person or someone attending a Special Occasion. Baggy Blue jeans are the Uniform of young people around the World. In many cultures a long white flowing dress signifies a Bride. For People in the Northern Temperate zones of North America, Europe and Asia, shorts and a colourful top are the Uniform to wear when on vacation.

Mask – Clothing can also be used as a mask. If we are feeling particularly sad, a brightly coloured garment or fanciful garment will portray an image of happiness to others. Sometimes a fanciful garment will help to change our own mood from sad to happier. If we are feeling unsure and nervous, we can wear Business formal clothing and put forward a more confident mask to a new boss or a new situation.

These are just some of the intangibles that is commonly and simply called clothing. In his article, 'Empathy not sympathy helps inclusiveness' Dr. Gibilisco talks of 'normalizing' and 'integrating' People with disabilities into all aspects of Society. Is access to a full range of garment types and styles not one of the easiest and most significant ways to achieve this?

Dr. Roberts shares with us her awakening to the concept of adaptive clothing during a chance conversation with a friend who happens to be a leg amputee. Growing out of this she and a group of students in the Department of Design and Engineering at Philadelphia University planned and created a large display of adaptive clothing ideas, for Unity Week on Campus in Spring 2010.

In 2009 I had an opportunity to speak with the 1st and 2nd year students of the Apparel Technology Programme at Olds College in Olds, Alberta, Canada. In her summary of my visit, Professor Lisa Sorestad said

"Ruth's realistic approach to specialized clothing proved to be informative and enlightening. Her insight into the needs of individuals with disabilities helped our students understand potential challenges associated with dressing those with disabilities. The positive feedback from our students validates the importance of Ruth's presentation and keeps us looking forward to her next visit! It was truly our pleasure to learn with Ruth!"

After retiring from a long career, the last 20 years as a Marketing Executive for an Air/Sea rescue equipment company, Mrs. Partridge invites us to have a glimpse into the life of a Retiree, still eager to take part in many life activities but living every day with the limitations resulting from childhood Polio. In her light hearted article 'Get a Life', clothing is one of the things she touches on.

Fabric and textiles are also some of the most malleable of Engineering tools. Mr. Franconi of Bally Ribbon Mills speaks of weaving 3D constructs out of fibers and a range of use of these woven textile items, from tubes that are inserted into blood veins to heal and support upto woven structures that become wings of airplanes and construction I beams. A weaving loom is both an Artist's paint brush and a Sculptors' chisel. The thread or filament that is fed in at the beginning can come out as a thousand different textile constructs, from which millions of different structures can be created.

Comments on clothing were also solicited through one of many Social networks on the Internet. It was encouraging to see the number of replies and the variety of issues introduced. As you read these, please pay as much attention to the rolls these individuals play in their communities. Through innovative products made from metal, wood and concrete, the world has become a much friendlier and more inclusive place for People with disabilities. It is now time for the Fashion and Garment industries to make that same magic with textiles, closures and finishes.

Textiles and clothing. Not as simple as you thought they were, a mere 20 minutes ago!

Welcome to this Special Issue from the Design for All Institute of India, as we introduce you to the world of Adaptive or Purpose designed clothing. You are also welcome to join us as we work to create a bridge between the Fashion/Garment Industry and People with disabilities.

I am delighted with the opportunity to introduce this concept of purpose designed clothing to the Design for All Institute of India and to colleagues and associates around the World. I would like to thank Dr. Bhatia for inviting me to compile this Special Issue and also thank him and the other authors for their contributions to this introduction of the concept of Adaptive and purpose designed clothing to enhance the lives of People with disabilities. I look forward to continuing to bring more Adaptive clothing related information to you a few times

each year and will appreciate learning your thoughts on this endeavour. Is this something you have been introduced to in the past? Will this new awareness cause some changes in things you do and the way you meet others, in the future? I look forward to chatting soon.

Ms Ruth J Clark,

Fashion Moves

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One Size Does NOT Fit All

Ruth J Clark / Fashion Moves

In preparation for presenting the concept of textiles and clothing as a Universal / Adaptive Design concept, I put a question out on one internet social media site. One of the questions I asked through this internet social network dealt with the Structural formation for new companies starting to provide services and/or products for People with disabilities. In my case, when I speak with people on the phone and mention that my programme includes People with disabilities they automatically assume that I am working under a Not for Profit structure. Are pharmaceutical companies Not for Profit? What about companies that produce hospital type beds or crutches and prosthetics. Are these companies Not for Profit? I wonder why, then, if I am assisting with the creation of Stylish Adaptive Clothing people automatically think 'non-profit' and 'charity' The group this question was asked of is a group focused on Disability Advocacy. The thought here was to create a For Profit Corporate Structure. L.H. is a lifestyle writer in San Francisco and her comment was:

> ***I believe that the reason everyone assumes any entity for PwD must be a charity is, as Irene says, a form of marginalization. The unthinking assumption is that PwD couldn't possibly work and thus have disposable income and the wish or ability to use it on things like fashion and travel. Which is nonsense, of course. PwD can and do work, make plenty of money, and enjoy new***

clothing, fine food, fine wines, exotic and domestic travel, and so forth.

I think by creating [For Profit] corporations that cater to the PwD community, we can and do help break stereotypes. We're assuming the opposite of the "usual"--we assume that PwD have the money and interest in buying our products

I frequently question, that if I were creating assistive devices out of steel, wood or concrete, would the societal expectation be that this work be done under the umbrella of a Not for Profit? Also, would I be expected to set the price point for retail sale to be bargain basement or would a higher price evoke quality of design and workmanship? No. Why then, should assistive devices made from fabric and made into clothing be expected to be done under the umbrella of a charity with the added expectation of setting prices as low as possible. Steel and wood produce serious and engineered products while fabric and clothing are common place and simple. Society's concept that People with disabilities never go anywhere, are poor and dependant on the good will of others is very deeply set in most areas of the World. Through the work of Fashion Moves, the Design for All Institute of India and other partner groups, we will break down these stereotypes. For Individuals with disabilities who do live with limited financial resources, we will ensure that quality garments are available to them so they can have self empowerment and dignity in this area of

their lives. Few of us live in Nudist Colonies, we all need some form of clothing so let it be of thoughtful design.

Input was also requested to point out areas where the Fashion/Garment Industry needs to improve. Through this one site I was rewarded with 50 or more replies, voicing complaints of the current Garment Industry. As you will see, few of these suggestions came from people with extremely limited finances nor from people who stay at home all the time. These replies and the people making them support the contention that a For Profit corporate structure is appropriate.

Surprisingly many of these wonderful complaints were about the need for shoes that would provide stability and support while still having some degree of Style. Black oxford's do not blend well with the Mother of the Bride outfit, can you not at least make white, red, green or yellow orthopedic oxfords?

Some of these replies include, from:

- ***I.C. who operates a Tour company for People with disabilities, in Australia writes: regarding clothing issues: many of my clients have trouble with the following: buttoning up, shoe laces, bra's, and spilling food when eating. Wheelchair users cannot wear skirts, and pants/slacks fastening are hard to undo (which makes going to the toilet tricky when you're in a hurry). Working out which is the front of a T-shirt is also tricky, even for us able of body and mind.***

- ***From Liz in California: Ruth: my readers have some specific fashion needs as well. I personally didn't wear jeans for about 5 years because they hurt so badly. Jeans made from alternative, softer materials with metal and grabby-elastic *free* waistbands would be a godsend. Pants of all kinds that are similar to maternity pants and yoga pants (the soft, wide waistband) would be great. Some of us have the same issue with difficult pants fastenings when needing to go to the bathroom in a hurry. And of course, lightweight layers are great for travelers of all abilities***
- ***M.B. who works as a Senior Policy Advisor writes: Another disability-related clothing issue is clothes for people who wear external bags.***
- ***P.K., a student in Indiana: I am a disabled veteran and have severe foot and ankle problems. The issue with foot wear is there is nothing that looks business related about combat boots. Boots or shoes that support look like the average 'ugly' shoe or boot. Is there anyone who makes a stylish boot or shoe that can also be a functional aid***
- ***A.T. is an E.E.O. Specialist in a large Hospital system : My mother's hands are severely deformed as a result from RA. Please provide info for user friendly clothing.***
- ***M.A. is a Geo-Science Research Scientist who does extensive field work : The problem I have i dealing with one leg shorter than the other is that I wear inserts and trying to locate decent boots that fit "comfortably" is a nightmare. Also I am looking for a riding type boot as it is easier to get those on as opposed to a lace up.***

- ***B.W., a Freelance Writer brings us back to shoes: I am a spinal cord injury survivor (C5 incomplete). I am a mobile quad, in that I can walk. But due to weakness in my feet and ankles, I have to wear thick orthotics in each shoe, and I have to build up my right shoe a full inch because of a leg length discrepancy. I wish there were stylish shoes made that would accommodate substantial orthotics. I am forced to wear running shoes all of the time, because I can't find dressier leather shoes to fit.***
- ***S. M. from England writes: My daughter has problems with small buttons because of fine motor skills. Buying wide fitting shoes and boots is also a problem. Short trousers as she is only 4ft 9 means everything has to be turned up. She still wears a child's digital watch because I can't find a pretty adult one as she has dyscalculia. Aprons she can't do backward bows so a longer length tie would be useful. I will also add as turner syndrome adult she has no bust as her diagnosis was missed so still wears sports bras because she is flat chested. They are either white or black and awful. She still wears a child's swimsuit as she is flat chested and has trouble with buttons on waistbands on jeans and trousers. Turner syndrome adults has broad feet and it is sad that I can't find her a nice ladies shoe that actually fits her that is also sensible to make her look more girly.***
- ***Brad Parmenter is with a State Rehabilitation Commission and writes : I work as a consultant, which means I am often in a suit or at least a jacket. In the less-than-ideal New England weather, the (bottom) ends of the jacket are***

often caught in the wheels, as it is generally too long for a seated person...Destroyed more jackets that way! Also, my upper body is properly developed for a man and my legs are not...So, I often have to find a man's suit that has a boy's counterpart and bludgeon stores into letting me buy half of each...This is a pain and also limits my choices to those marketed at boys as well as men.

- *Rosalind Bergemann is the President and CEO of a firm in England: sometimes taken as a 'hidden' disability, people with Aspergers often have significant problems with work clothes. Since we have highly sensitive skin and perceptions, we struggle to wear tight, itchy or overly constricting clothes. Whilst I don't have a problem at home, as a professional consultant I often get odd looks because I would prefer to wear nylon shirts and suits - more men's wear than traditional female. I feel more comfortable in a shirt and tie because I don't have open blouses rubbing against my skin and irritating me. Also, we often find heavier suits (ie traditional male attire) is more comfortable than the flimsy suits made for women, because these tend to irritate our skin.*
- *Donna Maheady is the President and Founder of ExecptionalNurse.com and writes: As an advocate for nurses with disabilities, I have learned about the struggles nurses and nursing students with various disabilities have finding scrubs and lab coats to fit properly e.g nurses with short stature and nurses who use wheelchairs.*

- ***L.B. is a Project Director at a University Medical School : SHOES. Yes, shoes are the most frustrating piece of attire for me to deal with . I have size 1.5 EE feet and I must wear tie shoes, otherwise the shoes fall off. It is extremely difficult even to find kid's sizes that fit and the shoes that do fit are unbelievably ugly. I joke that I "live in the land of ugly shoes." I don't know why shoe manufacturers think that women with orthopedic issues like ugly shoes. It seems to me that it wouldn't be so terribly difficult to design something slightly more attractive, even if it is a tie shoe. Even the colors are often bad. Taupe - who wants taupe shoes. Ugh.***
- ***Petra Jorissen is a Publisher and Editor for a magazine in the Netherlands and sums the problem up well : It is really fascinating to see how many people are interested in clothing and, in this case, clothing problems. But it is true 'special clothing' very often is special priced and very, very, very special ugly. Perhaps designers have a special image from disabled people: disabled means ugly. Could you send me the magazine when it's ready or tell me where I can find it? And S.M. replied to this: Well in my situation I would prefer quality as my daughter's height will never change. I understand that designers may not make the high profit we imagine them to make. I was in London this week and I searched all the top makes and still could not find anything her size with the height.. What has happened to many of the Zips in boots they seem to be disappearing...I was also disgusted with the quality of many clothes. i don't want to pay designer***

prices but would be willing to pay a little more for something that is going to stay smart and keep its shape instead of looking like a rag. I much prefer the colours of summer.. The yellows, oranges and lighter tones. They may uplift the mood…It is great that someone cares to ask these questions.

- ***Later Petra J. also added : Some time ago I (wheelchairwoman) fell upon websites about adapted clothing for people with disabilities. A new Dutch concern, called Nobody is Perfect, showed some 'hip' special skirts and jackets for wheelchairwoman. I went on searching for American and Canadian sites for adapted clothing. The American and Canadian offer of `special adapted clothing' is huge, but very pitiful. Most of the special garments reduce a wheeling person into a phantom on wheels. The Dutch factory Nobody is Perfect in between is a moribund affair. (Ruth's note – for those of you reading these comments, how many of you would describe the clothing and Fashion choices available to you as moribund or pitiful?)***
- ***Sheila Radziewicz is a Motivational Speaker and was born with functioning hands but very short arms, her comments are : I think having a line of clothing for people disabilities is huge. I wish there were dress pants and jeans that used velcro instead of buttons or snaps. I have hands attached to my shoulder therefore can not reach far. I have to get other people to fix the pants before I can wear them. I have had other clothing frustrations growing up some I figured out other I grew out of.***

Another one I'd like to bring up is having short sleeve shirts available year round that have the warmth of the current season. I find I can only shop for shirts in the warmer months and shirts are often thin [for Northern Winters].

- ***R.B. works as a Development Consultant at a National Research laboratory : I echo the other comments and thank you soooo much for opening this up to us. Like many others, I really struggle with small things like buttons and hooks. I have bought several types of bras that seemed they would be easier, but if they hooked in the front, the hooks were too small and on and on. This may not be a concern for men, but I'm sure there are frustrations that they have that aren't for women. Amen to the Shoes comments. I need fashionable shoes that 1)stay on my feet as I wobble along 2) don't have a heel... I have bought some SASS shoes, and they are okay, but pricey and old-looking. and found some cheaper Grasshopper ones that I am happier with. For pants, my big issue is easy on and easy off. Like many others, I have a short window to get to a restroom when I need to, so that is sometimes a really close call as I fiddle with buttons and zippers. I saw an article once that suggested having a seamstress put "false fronts" of buttons and zippers on clothing and hiding elastic and velcro underneath. That would be ideal***
- ***S. H.. is the President of a Disability Rights association and she writes of the needs of her pre-teen daughter : Until my daughter recently turned 11, I had been able to***

adapt a lot of standard kids' clothing and shoes to meet her needs (and ours). European made short boots came in extra wide widths, and could accommodate her orthotics. She had a whole supply of ankle boots that could give her the extra support she needed when walking.
Clothing that made it easy to do her tube feedings and that "camouflaged" her diaper while still being stylish was fairly easy to come by.
But everyone either stops making these products once the kids hit age 12 or so, or the prices get jacked up horrifically by the ones who still do. Thinking about it, most of the products left are coming from Europe and have the price tags to match.
If there wasn't a market for these types of adaptable styles, those companies wouldn't be able to get $70 for a pair of shoes or $50 for a cotton tunic and elastic-waisted capris.

- *S.H. also added: Thank you, Ruth, for the opportunity to talk about these kind of things. You have no idea how bummed out I've been ever since my daughter reached that age "plateau".*

  I've also recently gone through the process of designing and building a "forever" home for my daughter, if anyone wants to talk about that. She is mobile but she has cortical visual impairment, so it meant working with colors and lines, as well as a floor plan.
  Fine using any of my info if you want. I'll be looking forward to seeing the articles. I think the idea of a special group for design is great

- ***B.S., the Director of a Counselling company in England writes : How about trousers that fit! I have found that as my legs are no where near as active as they once were (how I miss rugby), my thighs have actually increased in girth! I'm a 48" chest 38" waist, but it seems that the model of economy dictate that men with my waist size must have stick thin legs. The result 42" trousers, that hang off me. So buying a suit is always a pain, but the tailors I use are very good and accommodating, but if I were to move to another part of the country then the story may well be very different and the problems start again.***
- ***D.F. is the Owner of an Employment Counselling firm in Canada : This is similar to what is already mentioned about different body shapes and pressure sensitivity, but for people with digestive problems it is difficult to find clothing that will provide extra room in the waist and stomach area without the corresponding extra fabric in all other areas, such as the legs. Similarly, with suit jackets, it is difficult to find one that fits in the stomach without being too big in the shoulders. It would be helpful if the actual materials are softer and hypoallergenic, and elimination or, if necessary, using environmentally responsible substances without strong chemicals and perfumes to manufacture the garment. The smells on the fabrics these days are nauseating and interfere with health. In terms of hats and gloves, I wish the manufacturers would not assume one size fits all heads and hands, and would accommodate smaller people. I***

certainly identify with the comments on footwear as well, especially extra width and above all, more cushioned, shock-absorbing footwear, especially boots and dress shoes.

- ***L.B. a Chartered Secretary in South Africa writes : I am wheelchair bound. For me the biggest problem is the size of fitting rooms. The standard small cubicle is just too small. The only solution is to buy clothes and then try it on at home. That does however mean you have to return it for a refund if it does not fit and not all stores are willing to do that. Also that is not the answer of you want to try on a number of different items. One local retailer in South Africa did make an attempt to provide a suitable fitting room. It is about three times the size of a regular fitting room. They then put a bed in it - the same size as the cubicle. It is of no use if you are alone as there is no space to get into the cubicle and to leave your wheelchair***
- ***A.C. who has a Bachelor of Science in Nursing and is a Certified Pain Management RN writes : I have fibromyalgia and some other issues that make it almost impossible to pull things over my head, so I am on the lookout for things that can completely unbutton or unzip to get them on. Front close bras are nice, but even they can be hard to get on over each shoulder. I think my issues are similar to someone with severe arthritis. As several others have commented, there isn't a universal issue here and one size does not fit all.***

- ***Urban Miyares is the President of the Disabled Businesspersons Association : Great topic, and I often am asked to do, or include in my presentations the "tips and tricks" on dressing and apparel for the business owner, professional and executive with a disability. This most-popular topic almost always include topics from tailoring to colors worn and matched (to fit the occasion, personality of the person, or business/professional intention), as well as areas of upgrading a wardrobe -- buttons and other accessories.***
- ***D.M. from South America writes : I'm very excited about this and wish you well in your project. As a parent of a young man with Down syndrome who is working in an office his "uniform" consists of shirts (either dress or polo) and slacks (e.g. Docker's like). He is also the son of a corporate manage which means he joins us often in formal occasions. He also has a great sense of style and has no desire to look frumpy. He's actually a bit of a clothes-horse and rather into the preppy/Euro style - preferring a good vest/sweater and dress shirt or suit over T's any day- summer included.***
  As a person with DS his personal body type is short and squat. His arms are also short which means that the cuffs of his dress shirts hang out over his hands. When we find a shirt that fits his arms, it's too tight to make if around the circumference of his belly. We may find a pair of pants that make it around his belly but then the cuffs need to be folded up to his knee caps.
  Regarding shoes- we have a difficulty finding a shoe that

is both wide enough and small enough and provides him with sufficient arch support for his flat feet. We've discovered the Skeechers brand is wonderful for causal shoes but trying to find something a bit more sophisticated is a challenge.

We have succumbed to purchasing a tailored dress suit-design suitable for most occasions. We must have his shirts tailored in the cuffs....yet as we are now residing in Chile, where many citizens are of short stature, I've noticed many men without disabilities waiting in line for the same shirt tailoring service. We also have his pants tailored.

Another issue is the fasteners. His fine motor skills sometimes do not allow him to fasten tight buttons. We use to always change out his pants buttons for a velcro-ed fastner and then replacing the button on top and button hole stitching to simulate a for-real buttoned pair of pants. He has finally mastered the small buttons of dress shirts, but the cuffs and neck buttons remain a challenge. Tying shoes independently is semi-successful for him. But he needs sufficient cord to work the knots. Unfortunately he doesn't like slipons

- *L.M. a Consultant in Verification and Validation of Medical Devices has a simple request : SOCKS!!! I recently had a stroke and getting my socks on is almost impossible even with sock helpers*
- *The problem J.W. from Canada has is not with the design of the clothing but with identifying colours, as you will read : " Hi all, great discussion. I have low vision and I*

also teach at the Ontario College of Art and Design (OCAD University). The design students that I teach are fascinated by adaptive technology, often because it provides challenges that requires cutting edge design solutions and/or the use of newer digital technologies (e.g. wayfinding, integrated of screen tech in mobility tech, etc) - one of the spin-offs that I find interesting is that what we might call 'ability' oriented design is not so stigmatized as it was in the past, even more so as designers, policymakers, etc recognize that as our population ages so we will all benefit from design in ever day life that focuses on being friendly to the human body in all its shapes and sizes. Maybe I'll start a discussion on this separately...

Anyway, on to the topic at hand: my disability (poor eyesight) is a hazard for a man who likes to dress well (as I do). Colours are a challenge as my condition advances - on top of typical male blue-green confusion I also now find it hard to distinguish brown-purple, khaki-green-grey, and shades of blue-black-charcoal.
I'm bold enough, and interested enough, to ask shop assistants to help me out - but sometimes that is not much of a solution, since they are often either a) too scarce, or b) insensitive/uninterested. Only in high-end shops do I find asking questions a consistently good strategy.

A simple design innovation would be to return to the inventory systems of the past that provided customers with a clue, on the label, as the colour of the fabric. For all I

know, perhaps this could even be extended to the feel or texture of the fabric as well, for people who may lack touch sensitivity. A simple clue to the colour of a fabric is a huge boon to me.

I suspect one problem is that the fashion industry does not want to stick with 'standard' colour names - what happened to taupe for example? or beige? or merlot? or cobalt? they like to change the names to give us the sensation of 'new' but, honestly, that is their problem, not mine. I'm sure if a retailer wanted to be kinder to customers with poor eyesight, they could find a way around it ('brown - aka dark coffee').

I'd go even further for men in general (though being male is not generally described as a disability!) and say that retailers could do well to loudly announce what exactly is on the rack ('long-sleeved dress shirts, no muss no fuss') since men have a habit of poking around as if they are afraid to appear TOO interested in the clothing on the rack. Cheers all, happy dressing!"

Is the adaptation only in the shape of the Garment?

Garments do not only need to be designed to address one disabling condition or another, restricting their sale to only that small, geographically disbursed group. Functional Fashion designed for the general market place often has a great benefit for People with disabilities. Hitha Prabhakar wrote about 'Smart, High-Tech Clothing' for Forbes Magazine in March 2007. In this she states:

> ***"Smart clothes for men and women come in all forms, from jeans equipped with an iPod docking station to sweaters that regulate body temperature. And with sales of performance-based clothing increasing by 25.3% in 2006, according to NPD a retail research firm based in New York, you'll be seeing more and more of them in the future. Functional womenswear was not tracked"***

A handful of companies produce purpose designed garments that provide extra benefit to People with disabilities. Gerbing's (www.gerbing.com) is one company that incorporates heating coils within garments and provides a rechargeable battery. Gloves, shoes and jackets that provide a heat source is a great help for individuals with limited temperature control, who live in climates with long cold winters. Coolsport (www.coolsport.net) on the other hand makes a variety of vests with a variety of pockets on the inside. They also provide a supply of gel pouches that can be cooled in the refrigerator and then placed in the interior pockets to keep people cooler

during hot periods. The gel is specially made and calibrated so as to prevent them from getting too cold and overcooling your body. This is very important for illnesses such as Multiple Sclerosis. A new phosphorescent compound is now being produced by Internova (www.internova.at) from Austria. When permanently adhered to a cloth backing, this can then be cut into strips and sewn onto clothing. At night this phosphorescent compound is it's own light source so provides a much higher security and visibility for pedestrians, wheelchair users or cyclists at night. One application of the UV Block solution by Atsko (www.atsko.com) will turn any fabric into an Ultra-Violet barrier and will provide long term protection from the sun for Cancer survivors and people with other illnesses and medications that makes them highly sensitive to the sun. This protection is without the use of sun screen creams that we still have only limited longitudinal studies to observe the effect of repeated use of.

In the above examples, the adaptation is not in the design of the garment but in additions to either the garment or the fabric. Yet all have a beneficial use for People with disabilities or significant illnesses.

Economics

But what of the economics of producing products for this underserved niche market you may ask. Again I turn to Forbes, a preeminent Business and Economic publication. In Daryl C Hannah's article "Want to Reach a Trillion-Dollar Market? Don't Ignore People with disabilities" some interesting figures are

provided. Please bear in mind that these figures are for the United States only and would be significantly higher based on Global figures. This article opens with statistics from the U.S. Census Bureau, that indicates People with disabilities have a collective discretionary income of $220 Billion a year and that this represents the most buying power of any traditionally underrepresented group.

The Society for Accessible Travel and Hospitality (www.sath.org) teamed with a variety of other agencies in 2002 to study the travel and spending habits of People with disabilities in the U.S. Again, these figures need to be extrapolated for Global totals. In 2002 they found:

- ***People with disabilities spend $13.6 Billion on 31.7 million trips per year***
- ***About $3.3 Billion was spent annually by travelers with disabilities in the airline industry***
- ***Travelers with disabilities spent $4.2 Billion in the lodging industry each year***
- ***Four out of 10 members of the traveling public are People with disabilities and their companions.***

THESE PEOPLE DO NOT TRAVEL NUDE! This is part of the community we need to design new and exciting, appropriate, Stylish and functional clothing for.

Examples to follow

It was not all that many years ago, in Western culture, that women in mid and late stage pregnancy were not encouraged

to be seen out in public. Maternity clothes were large, tent like structures in muted colours. Today Maternity clothes are a must have for up and coming (and established) Designers. This is a Billion dollar industry. But what wear patterns is it based upon? Most families now only have one or two children. During each pregnancy the mother will only wear purpose designed Maternity clothes for a maximum of 5 months. Even if she has 3 pregnancies, that is only 15 months of her entire life! Once someone is disabled, it usually is forever. They need purpose designed clothes for every day for the rest of their lives. This is no small market!

Fashion Shows are often produced as part of a fund raising campaign. Fashion Shows for Neo-natal Hospital wards, or in support of Day Care Centres may often include pregnant mothers showing the latest in Maternity wear. Yet why is it that Fashion Shows to raise funds and awareness of Cancer or Domestic Violence or Spinal Cord Injury very seldom have People who use wheelchairs included as runway models? If you are raising funds for Domestic Violence issues, why hide the victims of this violence and in some ways make them victims again?

As is indicated above, there is much to be done. My company, Fashion Moves is taking one of the initial steps in this Industry change that will be felt Globally. Through our Annual Fashion Moves Garment Design Competition (www.fashionmovescompetition.blogspot.com) we will provide a platform for Design Students, working Designers and

consumers to work together for Change. Our hope is that the Fashion Moves Garment Design Competition will be the bridge between the Fashion/Garment Industry and People with disabilities. This is no small task and will only succeed with the help of many hands and minds. And it will be exciting!

Join Us!

Ms Ruth J Clark,

Fashion Moves

Peter Gibilisco

I was diagnosed with Friedreich's Ataxia at 14 and then my mother died of cancer when I was 18. I was well and truly on a downward emotional and physiological spiral. By 23, I was confined permanently to a wheelchair. But it was also around this time, with the encouragement and perceptive advice from a close lady friend which lifted me out of a fantasy land of self-pity, that I began studying for an Associate Diploma in Accountancy at Dandenong TAFE. That inclusive and happy learning environment gave me inspiration to tackle life with vigour and it still serves as a reminder to me when, like anyone else, I develop the usual emotional itches which need scratching. That was my 1984. By 2007 Peter had graduated with a PhD in Philosophy and in that year was presented with the Emerging Disability Leader of the Year Award.

Peter is a person who has Friedreich's Ataxia a neurological condition that is progressive and has left him wheelchair bound and with slurred speech, to name a few inherent defects. Despite this he has shown a command of different abilities completing a Ph.D at the University of Melbourne, currently an on-line lecturer in Sociology at the Jansen Newman Institute

and was recently appointed as an Honorary Fellow of the University of Melbourne.

Dr. Gibilisco has just released his book Politics, Disability and Social Inclusion and it is available at: http://www.amazon.com/Politics-Disability-Social-Inclusion-different/dp/363929355X/ref=sr_1_1?ie=UTF8&s=books&qid=1288146598&sr=1-1

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Empathy not sympathy helps inclusiveness

Of late my severely progressive disability; Friedreich's Ataxia has maintained its advance on my bodily system. This is, I guess, what I have always expected. But for all that, it is a practical and theoretical fact that the near end results of this disease are simply beyond the reality of most people.

Many intelligent people who know of me, but have no idea of my determination, are caught in an intellectual "Catch 22" situation. That is, how can a person with such a severe progressive disability achieve so much?

Their taken-for-granted view of life, of success, of achievement, is somehow challenged because disability is equated with a *lack* of ability to achieve! How then are "normal" people ever going to *achieve* insight that this just isn't so? It just doesn't have to be! In some ways it reminds me that my own views on achievement had to be changed too!
Or as Judith Snow puts it in her 20 minute speech on World Peace & Inclusive Transformation:

What I am saying is that I grew up knowing and being surrounded by people who knew that my essential functions were missing. There is a lot more to say about that, but for now what is important to understand is that what we think we know and what is really so can be very different things.

My biggest achievement to date is the recent publication of my book *Politics, Disability and Social Inclusion*. What am I to say about my experience that no major mainstream Australian publishing house seemed eager to touch a book on disability? Doesn't this only clarify at a deeper level the importance of such books and the subject matter they present to us? And so, after many negative and disheartening attempts with publishers, I finally went to an on-demand publisher based in Europe.

We are led to believe that the 'norms' that prevail in the US, are 'progressive' and so we would expect that those in positions of political and societal dominance who make a claim that they are in support of 'inclusion for all', would believe that such a study as mine would be relevant to contemporary political discourse and that disability should also be depicted in conventional historical accounts. But that kind of 'progressive' determination is somewhat too abstract and too conservative to encompass some of the infinite progressive changes that are at work in society to make social inclusiveness a reality.

This shift to move people with disabilities from the margins to the mainstream of society, maintains a close correlation with social inclusiveness and the need to fit in with their peers Thus, the word disability in the past has not been synonymous with fashion or sex appeal. But Bob Dylan's song of the 1960s is still relevant - 'the times they are indeed changing'.

Such progressive achievements may put a new spin on the stigmas and disutilities that encompass the lives of many people with a severely progressive disability, like mine; please believe me, so many people feel condemned by such negative stereotypes.

This, brings us to and prompts us to ponder at a deeper level the subject of disability rights. Let me quote from Wikipedia:

Although the concept of Inclusion incorporates many of the fundamentals of the ideas present in human rights, inclusion is for the most part a distinct social movement and should not be conflated with disability rights more generally.

Jenny Cooper in her article 'Inclusion our destiny' argues that the human race has an historical and monumental obsession with the idea that the "body beautiful" can only be portrayed by perfection. Such a portrayal, therefore, does not have a great track record of "including" people with disabilities.

But many will say this has all been tried before: integration, mainstreaming, normalisation; is there anything left to say on inclusion? Maybe the time is not for loudly making nice sounding policy statements, but there's plenty left to be done and nobody seems quite sure what's holding it all up. Is it bureaucrats not toeing their "party line"? The economy? Fear, perhaps? Fate? Or does the idea of social inclusion or disability rights act as a handy tool for government in the creation of social dilemmas.

What is reality and what is the rhetoric? What I am trying to say is that the vision for change appears to be there but not the active commitment.

How is this to be achieved for everybody with disabilities? There are infinite forms of disability with infinite actions, which have been stereotyped in comical and other demeaning ways, basically due to a lack of education and an inability, or more likely, an unwillingness, to enforce anti-discrimination laws.

Further to this, Cooper argues that a primary example of this apathy to overcome stereotypes is particularly evident when it comes to people with severe disabilities. When the importance of treating all people equally is acknowledged, then the broad spectrum of people with disabilities confronts such good intentions so that this has been called "the last human rights movement".

But is this label not based on a hierarchy of stereotypes? Does it not define inclusiveness of a person with disabilities as the final frontier, and therefore suggest that it is the most difficult? I'm not so sure.

When the apparently impressive statistics concerning inclusion worldwide are analysed carefully, a closer look at the figures for the inclusion of those with severe disabilities, including speech impairments, will tell us that our record around this globe of ours is not as good as is we'd like to think. The statistics simply indicate a serious lack of attention to those

with severe bodily disabilities. Inclusion is happening, but mainly for those with milder disabilities.

And so, how do government initiatives and practices in education improve the prospects for inclusion of people with severe disabilities?

For example. In his article "Disabled people struggle to find work" James Massola argues that the crucial identifying fact is that for the time being there is an increase in the numbers of people with severe disabilities entering mainstream education. Statistics confirm that the number of students with a severe disability who attend mainstream education has increased fourfold since the 1980s.

Massola goes on to identify the fact that public policy is in danger of leaving people with disabilities behind. This is because the growth in participation rates in education has not been matched by an increase in employment. As he puts it:

The growth of participation by people with a less severe disability was because of a strong labour market, but the improvement has not carried through to people with a more severe disability.

In conclusion, and to return to the analysis of Jenny Cooper:
…. we continue to stay in denial about who we are and still succeed as a nation. Disability is a part of what we are.

Inclusion would acknowledge that. Destiny may one day lead us there. Or there's always revolution!

Peter Gibilisco

Peter Gibilisco, B Bus (Acc) Ph.D. (*Melb*).

Honorary Fellow University of Melbourne.

New Book: *Poliitics, Disability and Social Inclusion*

Avaliable here http://www.amazon.com/Politics-Disability-Social-Inclusion-different/dp/363929355X/ref=sr_1_1?ie=UTF8&s=books&qid=1288146598&sr=1-1

Ms Ruth J Clark,

Fashion Moves

High School and during her early working years Ruth took as many sewing courses as possible, including Advanced Tailoring in Grade 12. After College, where Ruth obtained a Diploma as a Library Technician, she worked in Public and University Libraries for 25 years. During her last 10 years at the University of British Columbia, in Vancouver, British Columbia, Canada, she worked in Disability Services, including the Crane Library and Resource Centre which was established to provide library and other services to students with visual and other print disabilities. This provided an opportunity to become even more aware of the need for respectfully designed or modified clothing, for People with various disabilities.

Ruth is currently establishing the Fashion Moves Annual Garment Design Competition, through which she will build a bridge between the Fashion/Garment Industry and People with disabilities.

FASHION POINTS TO PONDER

Ruth J Clark / Fashion Moves

Fashion, Function, Pizzazz - for People with Disabilities

Leading Edge Fashions, for today's Globetrotter

Examples of Situations Addressed:

- ***A new Law School Graduate is called for an interview with a Prestigious Law firm. Where can he find a Professional suit that accommodates his wheelchair use?***
- ***A young man joins his Accounting Firm's Basket Ball team but needs a way to keep his colostomy bag stable and secure***
- ***For her 1st Wedding Anniversary a woman is planning a romantic weekend at a Country Resort. Where will she find Lingerie that won't hinder her transfer from the wheelchair to the bed?***
- ***A teacher wants to be able to join the rest of the staff at lunch but needs to release her Below-the-Knee Prosthesis limb for 20 – 25 minutes. Where can she buy slim leg trousers that will allow her to do this?***
- ***A musician is hired by the New York Philharmonic but when he wheels into the Formal wear shop recommended, they have no Tuxedos designed for people who use wheelchairs.***
- ***An Executive with Cerebral Palsy uses forearm crutches to aid in walking. Where can they get Business professional***

shoes that support their halting gait and Professional clothes that accommodate significant movement of the body while they walk, yet is not so loose as to look ill-kempt and tangle in the crutches?

Consider this:

An individual, with a Spinal cord injury, lives independently and has an assistant come in for 90 minutes each morning & each evening to assist with dressing, etc. and 45 minutes at mid day for personal care. The Agency charges $35/hour, budgeted into the settlement with the Automotive Insurance company. Calculate the savings when appropriately designed clothing allow the individual to do some self dressing and reduce this paid time by 1 hour per day ($35 x 365 days = $12,775 per client per year) Visualize the improved sense of self worth, which allows them to excel in their work and their participation in society.

Pressure Sores (Decubitus Ulcers)

These regularly plague people who use wheelchairs, occurring at the center of the lower back. These often result in reduced overall health, reduced workdays and ultimately, hospitalization. Calculate an average cost of each day of hospitalization at $2,360 and an average stay of 7 days.
7 days x $2,360/day = $16,520 per patient hospitalization per occurrence
Now visualize the cost savings of trousers that are properly designed for the seated posture, leading to the reduction or elimination of pressure sores. (www.decubitus.org)

According to the *National Organization on Disability,* among 18 – 29 yr olds

- **57% of those with disabilities who are able to work are employed**
- **72% of their non-disabled counterparts are employed**

This untapped resource needs appropriate clothing. In addition, the National Organization on Disability states:

'*The disability community, comprising nearly one-fifth of the American population is an untapped market worth over $220 billion in collective spending power. Further enlarging this potential market are families, friends, communities, employers, and service providers of people with disabilities. Like other niche markets, the disability community responds positively to companies whose marketing approaches are sensitive to their needs and interests'*

A landmark study in 2002 found that disabled travelers

- ***took 31.7 million trips per year, in the United States of America alone.***
- ***spent $13.6 Billion annually on travel and travel related expenditures***

(http://opendoorsnfp.org/_wsn/page3.html)

From the U.S. Census Bureau:

The aggregate income of people with disabilities tops $1 trillion. This includes $220 billion in discretionary income.

It is time to:

- ***MOVE the Fashion and Garment trade into the 21st Century, and encourage them to follow the Americans***

with Disabilities Act (ADA) and similar legislation around the World.

- ***Start to MOVE appropriately designed garments, by wheelchairs and crutches. Buttoned with slow or stiff fingers.***
- ***MOVE People with Disabilities to find clothing choices, designed for their needs and all aspects of their active lives.***
- ***Work with a variety of groups and agencies to support their members***

Through our collective work we can:

- **Produce educational / informational products, to be made available to private individuals, Rehabilitation Centers, Consumer Health groups, Garment design schools and more.**
- **Encourage the Fashion Design and Textile Design students today to design clothing to address various disability and medical issues.**
- **Showcase quality adaptive clothing through Fashion Shows. Frequently these Fashion Shows will be held as fund raisers for subject oriented non-profit organizations.**

Ms Ruth J Clark,

Maureen Yvonne Roberts, Associate Professor of Design, Philadelphia University

Prof. Roberts teaches in the foundation design program of the School of Design and Engineering at Philadelphia University. Her specialty is color theory and use. She has a minor in Art History and has previously taught classes in European Art History and Art Appreciation at several institutions of higher learning in Wisconsin and Pennsylvania, USA. After graduating from North Olmsted High School in northern Ohio, Dr. Roberts attended Ohio Wesleyan University and later received her Bachelor of Fine Arts from Ohio University at Athens, Ohio. She later studied painting, printmaking and art history at the University of Wisconsin-Milwaukee. She received her Master of Science in fine arts from that university. She holds a PhD in Art Education from Penn State University where she focused her research studies on adult education in the visual arts. In addition to teaching color and design, she has taught basic design and drawing. Currently she assists with the advising of upper division fashion design majors. In her own studio work, she has most recently been involved with making hand-made

paper which incorporates a variety of synthetic and natural fibers bonded with polyurethane or polypropylene to make it possible to heat form and to sew this non-woven media. She airbrushes or hand paints colorants onto the forms or compositions she creates using this medium. She notes that" one of the things I like most about working at Philadelphia University is its diversity. We have many students studying here who come from all over the USA and the globe. When I retire from teaching I hope to be able to visit several of the home countries of my former students – places I have yet to see."

Creative Activities

- ***Hand-made paper with polyester and polypropylene fibers.***
- ***Paintings.***

Formal Education

Ph.D. in Art Education, Pennsylvania State University
Master's of Science in Studio Art, University of Wisconsin – Milwaukee
Bachelor of Fine Arts, Ohio University, Athens, Ohio. Painting/Crafts with completion of requirements for State Certification in Art Education.

Teaching and Administrative Work Experience

1993-Present -Associate Professor of Design, Foundation Studies, STMT

1991-1993 -Coordinator of Design Foundation Studies, School of Design and Engineering

1988-1990 -Coordinator of Fashion Design curriculum, PCT&S

Spring 1989 -Visiting Lecturer in Art Education Methods for pre-service elementary education majors. Penn State University, Abington Campus.

1986-1988 -Coordinator of summer design workshops for high school students; and high school art teachers, PCT&S.

Summer 1984 -Adjunct instructor, School of Visual Arts, Penn State University, University Park, PA.

1983-1984 -Teaching Assistant, Penn State University, University Park, PA.

1976-Present -Tenure Track appointment to Instructor, then Assistant, then Associate Professor of Design, School of Design and Engineering, Philadelphia University. Tenured 1980.

Professional Associations

- ***National Art Education Association, Past Chair of Committee on Life-long Learning.***
- ***F.A.T.E. (Foundations in Art: Theory & Education).***

One University in the Eastern United States Helped Make Its Campus Community Aware of Clothing Adapted for Persons with Special Needs

Dr. Maureen Y. Roberts, Associate Professor of Design,
Philadelphia University

Philadelphia University is a relatively small, private university in eastern **Pennsylvania whose main campus is located in a north-western section of a city known for its racial, ethnic and economically diverse history and current population. Its students come from all over the U.S.A, and other nations as well. Its mission focuses upon professional career oriented post-secondary undergraduate and graduate educational programs. It was founded in 1884 as the Philadelphia Textile School by Theodore Search and a group of textile manufacturers, to assist in the development of better quality textile and apparel products. Over the years since, it has not only grown in the range of educational programs it offers, but since becoming a University in 1999, it changed its then name from Philadelphia College of Textiles and Science to Philadelphia University. It continues to serve the textile and apparel industries, as well as other professions through its schools of Science and Health, Business Administration, Design and Engineering, Liberal Arts, Architecture, Physical Education and Professional and Continuing Education. Beginning in Fall 2011 a new School will be inaugurated. It will be the School of Design, Engineering and Commerce. Degrees awarded upon**

completion of program studies include the Associate in Science, Bachelor of Science, Master of Science, Bachelor of Architecture, and in PhD in Engineering. There are currently 9 different programs in design specialties including Industrial Design, Digital Design and Animation, Graphic Design, Textile Design and Fashion Design.

My job at the University for the last 30 years, (minus some sabbatical study time) has been with the Foundation Design program – developing and teaching courses in drawing, art, color, design and art history which are foundational studies for several of the professional design programs. Recently I have also been serving as an Advisor to about 20 of the 80 or so upper level Fashion Design majors. My service in this capacity has allowed me the opportunity to see many of my Advisees and former beginning students develop and blossom into highly skilled and self-confident Senior Students, ready to graduate and embark upon careers focused on the fashion and apparel industries.

My work here has also allowed me to engage myself and my students in a variety of extra-curricular activities. The campus has a very vital Office of Student Development and Student Life. In the Fall term there is one day when classes are cancelled and students volunteer their assistance for a Day of Community Service. For the past few years this office has also sponsored a Unity Week, designed to help the entire campus community focus on the richness we all bring to our experiences here from diverse locations, cultures and heritage

backgrounds. Activities are organized and held which allow faculty, staff and students to share some of their unique, diverse and special talents, artifacts, music, dance, poetry and performance events and displays.

In the early spring of 2010, I attended several of the planning meetings as a representative of my school's faculty. I then reported back to my faculty, announcing that the Unity Week coordinators would like to know if anyone from our School was planning to do anything special related to the goals of Unity Week, and if so, to let me know and I would report back to the planning group so it could be included in the event publicity. Only one professor intended to do something special for that week: he was going to mount a display of self-portraits done by his drawing and design students which demonstrated the racial and ethnic diversity of these classes. No one else was planning to get involved other than encouraging their students to participate as fully as possible. I then decided to explore some ideas that had been percolating in my head recently as the result of an encounter I'd had within my own personal community.

Several weeks earlier, I was at the Episcopal Church of the Advent in my home town. The wife of one of my fellow choir members is someone I often speak with after services. 'Jillian' is a small, thin, older woman who several years ago had to have a lower portion of one leg amputated. She wears a sturdy, metal and plastic prosthetic limb, and needs a walker and assistance to manage stairs. She usually is well dressed in well

tailored pant suits. As I sat having coffee and chatting with 'Jillian ' and her husband one such Sunday, she remarked that she was anxious to get on home so she could take off her 'heavy darn leg' and rest. Her husband was now deeply in conversation with another person and did not seem at all ready to 'go home'. I half jokingly said that since she was among friends in this understanding congregation, she might consider removing it here so she could be more comfortable. She laughed and said that to do so would require her to take off her slacks entirely and that might make some 'folks' a bit upset. Soon however, her husband came to help her up and out toward the car to ride home. She did move slowly and seemed in a bit of pain.

When I saw 'Jillian' and her husband about a week later, a thought jumped into my head: why not investigate to see what variety of slacks and pant design might be available that would allow 'Jillian' to remove her prosthesis without totally taking off her lower garments. I began to research apparel for persons with special physical needs. I asked my colleagues with the Fashion Design and Fashion Management programs about this. I spoke with a friend who has her own apparel design business. I went on-line and eventually found Fashion Moves and Ruth Clark and several others who helped me learn more about stylists and others who specialize in designing and making adaptive clothing for persons with special needs. I also learned that there is little out there in the general retail market in the way of business and professional wear for these individuals. There are companies who make apparel for

institutionalized adults, those staying in hospitals or convalescent care facilities. But these items were bed clothes, housedresses, robes and pajamas. Nothing you could wear to the office or to a nice dinner party with your friends or family. It seems that if you use a wheel chair, have a prosthetic limb or any other special clothing need, or just want to be able to dress yourself, by yourself, so you can go to work, you need to hire a fashion designer, seamstress or tailor to fabricate or modify your clothing, for you especially. Unlike most adults in most towns and cities of the world, these individuals cannot just buy from ready-to-wear offerings in shops, catalogues or on-line. In short, having apparel especially made, can be and is a more expensive situation. I came to realize that many of us take shopping for clothing and finding something that we want to wear and need for the occasions of our lives is something most of us take for granted. I wanted others in my educational community to also have a chance to become aware of this.

I spoke to a few of my fashion design major Advisees, one of whom had also been my Studio Assistant for two years. Along with three other Senior fashion designers, we decided to put together a display to be part of Unity Week. A display that would help the campus community to become more aware of the special apparel needs of many. I continued my research, seeking the loan of attractive special garments from a range of sources and individuals. For some of the items we wanted for our display, we went into second-hand shops and purchased inexpensive shirts and pants, which the students then modified with zippers and Velcro @ fasteners allowing pants to be

opened up at the legs to accommodate prosthetic limbs, and jackets and shirts to be pulled over heads or seemingly buttoned normally, yet fastened with Velcro tabs beneath the front placket. We received help with loaned garments from Canada's Ruth Clark and her Fashion Moves organization connections here in the States. My fashion designer friend, H. Harper, loaned us a pair of winterized, padded-seat denim blue jeans she designed for a wheel chair user. All in all we ended up with about 20 adult and children's wear garments.

We borrowed several male and female display manikins from the fashion design department.

The professors in the Occupational Therapy program at our University loaned us a wheel chair from their instructional fleet used as part of their clinical experience training. The Director of Special Services loaned us a walker. My studio assistant and I designed and made two little girl figures with articulated limbs out of foam board. These were hung from the ceiling of the 7 ft high display case which we installed our display. This case was on the lower level of the main library, near the Audio-Visual area. This large display unit was glassed –in and had two levels inside. It was about 12 ft wide and 5 ft deep at its widest level. The students who worked with me on this were also very busy that spring term, their last before graduation, designing and making their garments for their Senior capstone collection class and trying to make them good enough to be part of the annual student Fashion Show, held each year at the historic Academy of Music in downtown Philadelphia. A gala event!! I

was pleased that they felt strongly enough about our shared concerns to donate their valuable time to this endeavor. Installing the case had to been done over a weekend and a couple of afternoons prior to the Unity Week itself, since all our schedules were tight and access to the case itself was through an auditorium like high-media classroom, where classes met throughout much of each weekday.

I was excited about what we were doing. I had learned a lot about adaptive apparel and later the students who worked on this all mentioned that they were glad to have had the opportunity to become aware of this niche of the fashion designing world. I later interviewed the Director of Student Development, the office which sponsors Unity Week. Dr. Aurelio Valente felt that the Adaptive Apparel exhibit was extremely well done, and looked fantastic. He said he wished it could have been done somewhere else on campus where it would have had more exposure, and I had to agree. We talked about doing something similar in future, perhaps as a fashion show presentation during the performance 'Showcase' held in the performance space. I agreed that it would perhaps have a greater direct impact on those attending to see actual persons 'modeling' the apparel but that 'real needs persons' might be hard to enlist to do such a show and that there would be a limit as to how convincing student models could be. I told him of a contact I had made with Sunshine King, a woman with Spinal Cord Injury, in Baltimore who had organized a modeling agency crew of people who used wheelchairs as a result of Spinal Cord Injury. I mentioned that professional models can be expensive

unless you can get the agency to donate their services. I also mentioned that I felt using manikins allows individuals to observe the "special needs" situation without the possible concern about it not being polite to "stare at the handicapped", as my mother had said to me once years ago.

In closing, I would like to tell readers that what I and my students learned by doing this exhibit has caused me to hope that at some time in the future, fashionable apparel, readily adapted to the special physical needs of both adults and children, will be more readily available. I think about how years ago, stylish and elegant maternity wear was unavailable in the ready-to-wear marketplace. Then a Philadelphia based apparel company, called initially Mothers Work and later Destination Maternity, was started by a woman who needed to remain attractive and professional looking during her own pregnancy. Their products have made it possible for pregnant women here and around the nation to continue working as business professionals and to have a full, well dressed social life as their bodies adapt to the growing new life within.

So, as a result of my new learning and awareness, I envision a future day when given the availability of advanced computer aided scanners and computer-aided designing, it will be much less expensive to produce and market apparel products that meet the requirements of those whose quality of life will be enriched by the increase in the availability of high quality adaptive apparel.

Dr. Maureen Y. Roberts, Associate Professor of Design
School of Design and Engineering
Philadelphia University
Phone:215-951-2767
e-mail: robertsm@philau.edu

Jo-An M Partridge is a former Marketing Executive for one of the world's foremost air-sea rescue, gunnery training and ground to air target manufacturers. A post held for twenty years. Her work took her all over the world negotiating civil and military contracts with most major governments and industrial organisations.

On retiring Jo-An set up as a consultant dealing in the main with marine and offshore development companies. Having developed in this field, she decided to branch out into the world of community service, helping organisations to become self-sufficient to 'think smart'. Jo-An was appointed as Public Relations Officer for the British Red Cross (Surrey Branch) and elected to the South East Thames Area Health Authority Community Health Council, becoming Vice President a post held until leaving England for Australia.

Another interest was in Alcohol and other Drug Rehabilitation. She was instrumental in setting up innovative programs such as Beauty Therapy. Jo-An was also President of the Mental

Health Committee set up to monitor and advise on the mental health program being initiated in the U.K. Her work as Project Co-ordinator of the Hospitals Emergency Services Appeal fund was an exciting and educational experience that culminated in the equipping of two Emergency Centres within the Tunbridge Wells Health District. She was also consultant to the 'Hospice at Home' pilot project. Unfortunately, Jo-An moved to Australia before the project was completed.

In Australia Jo-An maintained her professional skills in her former work, travelling to China, Japan and other Asian countries to promote Australian goods and services. In addition, she managed an Alcohol & Drug Dependence Centre for ten years. She also served on the Board of the Angliss Hospital for nine years. She served on every Committee, ending her term as Chairperson of the Ethics Committee.

In more recent years, having worked in a male dominated area of industry,

Jo-An has applied her experience to promote the growth of women and to encourage them to reach their full potential.

Jo-An is presently working as News Coordinator for the International Federation of Business & Professional Women and also as a volunteer producing newsletters for a number of organisations.

Editor's note:

Jo-An Partridge has given us a glimpse into her life and how deteriorating health has affected her daily life. Once an active Professional, who travelled a significant amount for her work, Jo-An finds she spends more and more of her days at home. Still she feels the desire to dress stylishly but with clothes that work with her body.

Jo-An is an example of many, many People with disabilities who have learned to make accommodations as their health and bodies continually change, but who are not willing to give up a diverse and active lifestyle. She and many others are still anxious to contribute their skills and ability to the world community around them.

HEALTHY AGEING WITH A DISABILITY

Jo-An M. Partridge, Australia

I can only speak from personal experience, as a child I contracted polio and for nearly four years was totally immobilised. The title of this paper is a contradiction in terms; how can you be healthy in your advancing years with a disability? It is a matter of mind over matter in most cases.

As the years have advanced, I realised that I still had polio the weakening of limbs, the pain, etc. In addition a damaged spine and more recently diabetes caused by the medication given for control of pain, the diabetes was quite easy to control once I stopped the medication that caused it, I have been off insulin and oral medication for nearly five years and control it by diet and exercise. I can hear the question "How does she exercise?" Easy instead of a floor I use the bed and chairs and have worked out a set of exercises that not only keeps me reasonably fit but also contributed to a much needed weight loss of some 45 kilos.

The next blow was the diagnosis of cardiomyopathy, which I was at odds to understand, as I was a vegetarian, did not smoke, drink alcohol, coffee, and tea; however, on the correct medication it is under control. All this puts me in a category of multiple disabilities; I cannot stand for more than a few seconds, or walk even a short distance without a walking aid or wheelchair.

Probably many of my complaints particular those associated with polio may have been lessened if when I was young I felt I had to excel at all sports and I pushed hard to become proficient in swimming, high jump and hurdling. In hindsight a more moderate approach may have proved more beneficial.

In my former business life I was a Marketing Executive for an Air/Sea rescue equipment company a post I held for over twenty years, travelling all over the world on behalf of the company. In the 1980s I had a change of direction and became CEO an alcohol and drug dependence agency.

In retirement I have maintained an active and hopefully productive life by producing newsletters and maintaining databases for a variety of organisations, how do I manage is what most people ask.

I manage well, by getting up in the morning and carry out the routine exercising Prior to that I could only manage basic bed exercises. I have maintained my computer and cooking skills. I have spared no expense in obtaining the items I require to enable me to continue to live a useful and productive life. A major problem is to get people to understand that my lifestyle has changed and I am not available 24 hours a day. That because of my strict routine I am not available until 11.00 am each day and as I work from home I am available by email , phone from 11.00 am to 6.00 pm and in the evening I want to relax and refortify myself for the next day.

I am aged so the Welfare to Work program does not really affect me, however, while the concept is good, however, until there is access and flexibility in the workplace it is an impossible dream, or to some a nightmare of both physical and mental proportions. And is the subject of another paper. In 2009 I started part-time work as News Coordinator for an international organisation.

Looking good is essential to one's self-esteem as a teenager I had an ambition to become a dress designer and actually won first prize for an evening gown design. My first job was at the local fashion house and my heroine was the company model who was to me the personification of an ideal fashionable and intelligent woman.

My interest in fashion continued when I dreamt up ideas for the local amateur theatrical society, I experimented with cosmetics and materials to my heart's content.

I made dresses out of a variety of unusual materials, always simply cut and elegant; none of the daggy looks for me. I still love tailored simple clothes that can be dressed up or down for any occasion and most importantly suitable for a wheelchair user, no flowing gowns that can tangle in the wheels or cause you to trip. Unfortunately, high heels are out unless I can be assured I won't have to walk anywhere with them.
Layered look is OK if you are able to dress and undress easily, however, this look can be obtained by clever design taking out

the agony of having to offload a number of garments with limited mobility. In my early days models were real women, today's models are mere caricatures of how a real woman looks, designers must realise the potential market for practical and fashionable clothes for the aged and infirm and of course real women.

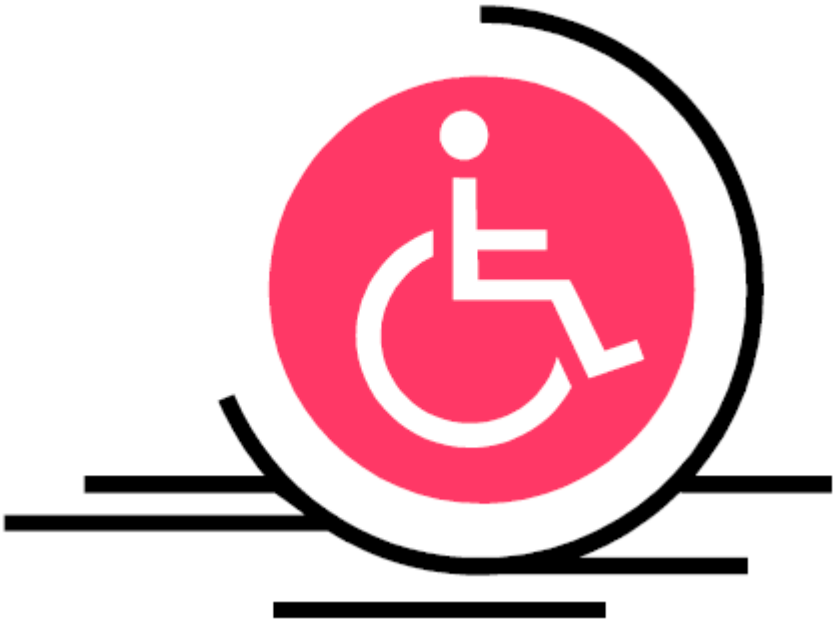
Ignore well-meaning relatives and friends who tell you "You shouldn't wear this or that, you are too infirm, etc." and " You don't need make-up." Make your own decisions on these issues and all others and you will feel great.

One rule - remember you can do anything you want to do.

Jo-An M Partridge

©

Jo-An M Partridge



GET A LIFE!

Lifetime Living

Dreamt up by Jo-An

GET A LIFE

Thinking of retiring, looking forward to the halcyon days of your life?

***THINK AGAIN*, you will probably end up with arthritis, or some other form of disability which will limit your capacity at home, work and you definitely become a party pooper when it comes to a social life. So what can be done? Forward planning is the priority.**

The key to purchasing a house is to not buy a house with steps, stairs, sunken lounge, narrow doors, glass shower doors, narrow entry hall, Safety is a priority for your age or infirmity and all of the above can cause hardship in your golden years. Make sure the garage and leisure are is accessible.

Similarly when purchasing a car for your retirement make sure the :

☐ Seating is high and comfortable

☐ The boot does not have a large lip

☐ It will meet your needs should you need to have a hoist fitted to lift a wheelchair. or any other equipment.

IN THE KITCHEN = MAKE SURE –

☐ Worktops are a correct and comfortable height for you.

☐ Cupboards and drawers are accessible.

☐ Cooking utensils can be easily accessed.. Pegboard is ideal for hanging frequently used utensils and placing shelves for condiments .

☐ Don't forget those all important accessible power points

BATHROOM - MAKE SURE

☐ The bath is easily accessible

☐ Best option a walk-in shower with handrails and definitely no step, and

☐ **NO glass shower doors**

☐ **Non-slip bath and shower mats are essential**

☐ **Non-s slip rugs on tiles floors**

☐ **Soap, shampoo and conditioner easily accessed**

☐ **Towels and other necessary items are easily accessed**

☐ **Mirrors at a correct and comfortable height**

☐ **There is a comfortable lightweight bathrobe**

Lounge Room

☐ **Adequate comfortable seating not too low**

☐ **Lift chair is ideal as it enables sitting and rising**

☐ **TV, Radio, video, DVD and reading material easily accessible**

☐ **Floors non-slip material, carpets firm with no tears**

☐ **The all important electric sockets must be accessible**

☐ **Lighting should be strategically placed to enable easy reading**

Dining room & Breakfast area

☐ **Floors as for lounge room but be sure you r chairs can move smoothly when sitting at the table**

☐ **Tables must be the correct height for wheelchair, walkers, etc. no large lip under the table top that impedes access**

☐ Chairs must be an accessible height, most dining chairs are too low for comfort

☐ A square table is probably the most convenient

☐ Avoid overhanging tablecloths as these get caught up when sitting and rising from the table. Table mats may not be so ascetically acceptable, but they are far safer

☐ All important electric sockets to be accessible

Bedroom

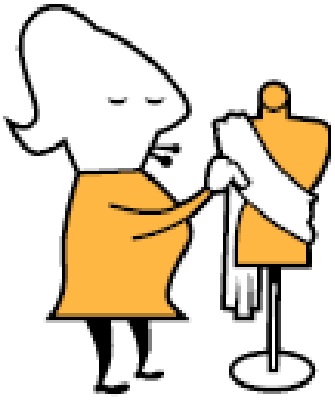
A good restful night's sleep is essential to all of us and our choice of a bed can make or break how we feel.

☐ Choose a bed that is not too low., you should be able to sit without jarring your back. You should also be able to stand easily . A bed that is electronically controlled is a best buy, you can switch it to rise or fall, lift the back , foot & include a massage facility it will be expensive but worth every cent

☐ Make sure that all medicines, books, bed lights & other necessities are easily accessible

☐ Chest of drawers & wardrobes must also be easily accessible

Clothing



Just because you are aged or disabled there is no reason why you should look daggy but unfortunately, Designers & Manufacturers rarely cater for the elderly & disabled, so you have to be very careful when choosing and should avoid -

☐ **Back and side fastening dresses**

☐ **Full skirted, flowing clothes, these get caught up in wheel chairs and are difficult to manage**

☐ **Clothes that do not have front fastenings as they are difficult to remove without assistance . It is particularly important to have a front opening garment if you are a diabetic and using insulin**

☐ **Fitted garments that are uncomfortable when sitting for long periods of time. Buy a size larger than required and be comfortable**

☐ **Tight fitting waistbands, knee highs, panty hose , and shoes as these can cause swelling**

☐ **Front fastening bras are an essential item but very difficult to find and expensive unless you want to have a 1920's flat chest look**

The Smallest Room

☐ **Door is wide enough for mobility aids**

☐ **Ensure the toilet seat is at a comfortable height for both sitting and getting up. Hand rails will assist.**

☐ **Toilet roll is accessible**

☐ **Other necessary toiletries are also easily accessed.**

☐ **Scales available and accessed easily**

Study /Computer Room

☐ **It is a good idea to keep this separate from the living areas, even if it is only a converted cupboard or you**

have to sacrifice a bedroom or some other space.

☐ This will give you a degree of privacy

☐ Make sure everything is to hand, printer, scanner, data storage devices, phone/fax, etc.

☐ The all important electric sockets, cable and phone installation points should be easily accessible.

☐ Seating must be comfortable and with a rise and fall mechanism, wheel-chairs should have arms that can be folded back to avoid arm and neck strain.

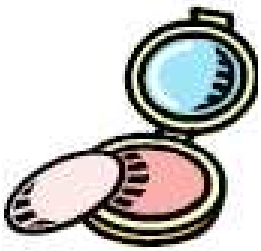
☐ My physio has given me a set of neck exercises to help remove the strain, speak to your health worker about this.

☐ Spare discs and other essential equipment should be easily accessible.

☐ The average computer station is not user friendly to the disabled with shelving too high and computer engine storage space too low.

☐ It is really a matter of sorting our the storage space, etc. to suit you r particular needs.

Cosmetics



Far be it for me to tell anyone what to use, but make the most of yourself and highlight your good points. The real problem with cosmetics are the containers which are usually very difficult to open.

Ask the shop assistant to show you the easiest way to open any item.

Medication

Childproof tops are great but prove to be very difficult for the aged and dis-abled to open without assistance.

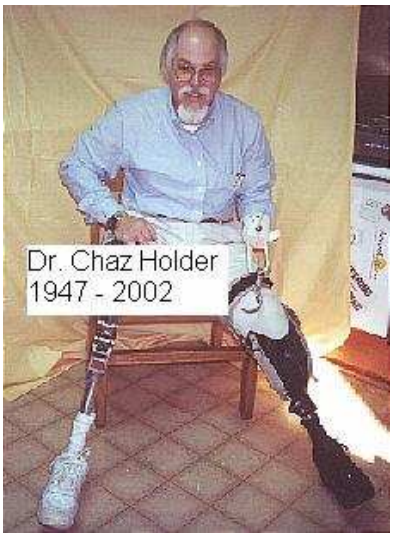
Most bottle and containers are difficult to open and the container openers are not much use if you are not able to hold the container and manipulate the opener. Again ask you friendly shop assistant or checkout person to open any item for the first time, just to break the seal.

Finally, make sure you have the equipment necessary to help you 'Get A Life'. Be pushy when it comes to getting services that are rightly yours, don't sit back , lobby everyone , do not be put off by accepting second best.

Keep pushing for better access f and inclusion for all. In other words www

We Will Win

Jo-An M Partridge



Dr. Chaz Holder (1947 – 2002)

Although Chaz (Charlie) Holder studied Fine Art and Engineering at University, he spent much of his working life with his first love, that of working on and with Exotic cars. It is said that he could remember almost every Rolls Royce, Ferrari, Buggati he ever work on or owned himself.Two major incidents in his life resulted in him eventually becoming a triple amputee (Right arm and both legs). When he first became a leg amputee he studied the prosthesis that was custom made for him, the process to make it and the short time before it needed to be replaced. Coming from a world of highly tuned and engineered items, he knew the current concept of Prosthetics needed to be changed. For the remainder of his life he dedicated himself to becoming an advocate for individuals with disabilities and for disability awareness. He also worked to develop the world's first highly functioning, long lasting

adjustable and field deployable Below-the-Elbow socketless prosthetic. Toward the end of the conflict in Sierra Leone, Dr. Holder supplied over 400 Socketless Below-the-Elbow prosthetic limbs that were provided to Women and Men, Adults and Children, arm amputees in Sierra Leone, Haiti, Palestine, Scotland, Afghanistan and even in the U.S.A. Because of its design, this technology is also ideal for people with friable skin due to thermal injury or who have suffered with Leprosy and lost hand function but still have their hand.

In 2000 and 2001 he was recognized for his work by three Foundations, including the honour of being named an Award Laureate (winner of the $50,000 prize) in the Equality category of the Tech Museum – Technology to Benefit Humanity competition. (www.techawards.org) At the time of his untimely death due to a Heart Attack, we were engaged in a R&D contract to modify our Below-Elbow Socketless Prosthetic system into a piece of Personnel Protective Equipment for people engaged in hazardous work, such as Land Mine Removal. I had the privilege of working with Dr. Holder for 3 ½ years.

Chaz was a tireless advocate for People with disabilities and we have included an address he made to the International Association of Orthotics and Prosthetics, in 1999, the Dynamics of Disability.

Guest Editor's note: ***This paper was presented to the International Association of Orthotics and Prosthetics. Dr. Holder was a triple amputee and combined his Academic qualifications of Bio-Medical Engineeer with his lived experience to design Award Winning Socketless Prosthetics. It was my great privilege to work closely with him for 3 years, until his untimely death from a Heart Attack in 2002.***

This article voices the respect and spirit of inclusion we should include in all of our work and interactions with one another.

THE DYNAMIC OF DISABILITY

Presented at the IAOP Scientific and Educational Symposiums 1999

Dr. Chaz Holder (1947 – 2002)

We live in a world of increasing complexity and more and more specialization which leads to compartmentalization. This is especially true in the healthcare community. Someday we may even see Orthotics totally separated and isolated from Prosthetics. Does this mean in the future that these disciplines might not even be talking to each other? I hope not. Because, as we look into the dynamics of disability, I believe we will see the importance of communication, shared ideas, and experiences. This is so important, because it has a major impact on the quality of the lives of those of us with disabilities….and after all,..what you do, what you are all about in these professions,..at the very bottom line is: quality of life. You seek to give back, or provide for the first time, some quality which has somehow been lost, or was never in the package in the first place.

Before we go any further, let's establish the basics: We need to always remember that:

Every disabled person wants the same three things

- ***A quality life***
- ***freedom to pursue that life, including employment opportunities***
- ***and free and open access to the community in which he or she lives***

When asked to talk about the effects of disability, I frequently bring up the "Pebble in the Pond Principle". If we view the disabled individual as a pebble tossed in a still pond, we have to look at the rings that expand outwardly from that pebble. Disability doesn't simply touch the individual, the ripple effect first impacts significant others, then family members, perhaps the workplace or school and, ultimately the community in which he or she lives. And, all of these groups are impacted on the physical, emotional/psychological, and economic levels as well. All of these components interact to create a complex dynamic which makes recovery and rehabilitation difficult; and so presents a challenge to any group or service seeking to positively impact the quality of the lives of the disabled.

There isn't a family in America which somehow hasn't been touched in some way by disability. It isn't confined to any particular group either.

It is: cross cultural

cross generational

cross economic

cross educational

cross territorial

cross gender

It can strike without warning,..anyone can step off a curb and have a passing car change things forever.

It has been my experience that generally, disabled people fall into two groups. There are those who are totally self-focused, and look only inward.

They want to be done for, and do not take an active part in their recovery or rehabilitation. One the other hand, there are those who take a pro-active role in their recovery, they look outward and ahead. They reach out to help others along the way, and are generally outwardly focused. Of the former group, I can say: If you think only of yourself and you only want to be done for; you can hardly complain if you are done to. Of the latter group, I can say: You will find the outwardly focused in every support group and service you encounter.

However, some individuals are simply beaten down and overwhelmed by the experience. Since limb loss, mobility, or facility impairment often results in a mourning process over the loss, exactly like loss of a loved one,...the person who is passive/totally self-absorbed may be going through, or even stuck in a "stage of grief" which they cannot get through...as in bitterness, hatred, resentment,.. you might want to check out the classic work on the subject by Kubler-Ross. It may help in figuring out where this person is in their recovery. Getting these people involved in a support or help group may assist them in moving through this process. Also it is important to be aware that this grieving process can come back later in life as a

"flashback" experience. An event or thought can "push that button" again. You do not necessarily go through this one time and then it is over. Incidentally, I really don't like the term "support group".. somehow there is the connotation that these people need to be "propped up". I call the organizations I work with outreach groups, information networks, resource organizations, etc, but never "support groups".

I counsel looking beyond the inconvenience of the disability, and focus not on what is missing, but rather what remains. I tell the disabled to put their abilities to work for themselves and others; and, in doing so, they set a powerful principle in motion. Not only do they make an impact on the quality of the lives of others, but the quality of their life improves as well.

In the disabled world, there are barriers to be broken down; some are physical, some are perceptual. "Accessible" to someone in a wheelchair is not the same as accessible to someone who doesn't use one. Handrails don't make a bathroom accessible,... if you can't transfer to the toilet or turn around in the stall because it is too small. They got the idea right, but missed the point. It works the same way in breaking down perceptual barriers. When I check in at professional conferences and get in the lines for information or materials I am routinely ignored or stepped around. I became invisible when I began to use a wheelchair. I was instantly two feet shorter than the rest of the adult world. People simply don't see me; they look over me. If they look over me, it's very easy for them to overlook me. Just like you, I like to be looked at

eye-to-eye...it makes me feel equal. If the world is "looking down" on me, I can feel looked down upon. It seems like a very simple thing, but the ramifications psychologically can be immense. And remember, all of these people, at these conferences, are healthcare professionals who deal exclusively with the disabled and particularly the mobility and facility impaired. So, if it can happen innocently there,.. what about out in the world?

Remember also, that people with disabilities did not choose to experience the event, or act of nature, which altered the course of their lives forever.

Often soon after the event, they are forced to make choices which may impact every other event in their lives which follows, frequently without balanced or unprejudiced information. A "true life" story: A diabetic, middle-aged head of household, who is faced with the decision of whether or not to amputate a leg below the knee. He has been told he runs the risk of thrombophlebitis with the possibility of a pulmonary embolus. He has also been dealing with infection, gangrene, and other potentially life threatening issues. This individual is now weighing survival issues against limb loss and the unknowns which follow. He's never met an amputee and has no idea what is involved in the amputee experience. His vascular surgeon is suggesting an amputation, but does not push the issue because he considers amputation surgery a "medical failure"; and, after all, who wants to be associated with a failure. At this point, along comes a well meaning, but

uninformed, physical therapist who tells this individual that he won't be able to drive anymore. Quote: "People with artificial limbs can't drive." The fact is, at the time I heard about all of this, I was a bilateral below the knee amputee and operated the clutch, brake, and accelerator pedals on a 911 Porsche with a pair of prosthetic legs and no assistive devices.

The therapist had no clue what was possible. When I questioned her about where she got her information,.. this able-bodied individual said: "I simply guessed". What we have here is a matter of information being empowerment. Without the "knowledge of possibility", the patient in question could not make informed choices about his own healthcare; which would ultimately influence those outwardly expanding rings in the pond of life which I mentioned earlier.

One of the greatest artists of the 20th Century was a man named Marcel Duchamp. His ideas helped to shape present creative thought, as much as the visual arts. He said: "The role of an artist is as a selector of materials and techniques". Implicit in that statement is that you cannot select them if you do not know what they are. Marcel Duchamp's thoughts are particularly significant to healthcare professionals dealing with the amputation experience, because I have always believed Orthotics and Prosthetics are a bit of alchemy somewhere between art and science. Of course that is what educational and scientific symposiums are all about. Healthcare professionals attend these events because they want to see

what is new, share experiences, and learn new techniques to take home to their patients and practices.

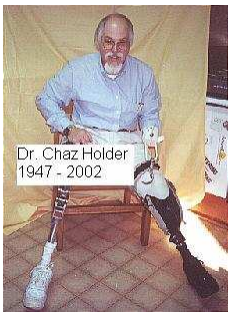
It works for the disabled community,.. from the consumer side as well, they need to know too. 148 years ago Abraham Lincoln said in his "Gettysburg Address" that "..a house divided against itself cannot stand…"..That is, of course, a quote from a much older document, the Bible. It is a principle which is as true today as it was in Lincoln's time, or 2000 years ago, for that matter. Even now that principle operates in the disabled community. Each provider, public or private, each service, or support group seems to operate with its own agenda; often exclusionary and maybe even a bit provincial in its outlook. If we stay divided and compartmentalized, we are kept powerless, ineffective, and in a sense, even defeated. All of this last part is about empowerment, if the healthcare provider/advocates are connected and empowered; they then have the resources to empower their patients. As in navigation, ½ degree of change at the beginning of the course can result in miles of difference at the end.

The event which resulted in your contact with the mobility or facility impaired individual was just the tip of the iceberg. The unknown and unseen futures, and the quality of the lives of your patients, lie below the surface. There are also other healthcare issues and personal dynamics which hide in those murky waters. If you will defocus just a bit from your specialty, remember some of the things presented here, and

also that a little thing can have a major impact on the quality of someone's life,…your community and ours will get better.

I'd like to mention one other thing: As a founder of the Cumberland Amputee Network, working in conjunction with the ACA,.. We advocate the team approach to amputee/disability rehabilitation. That team should be as comprehensive as possible. And, we feel than an amputee should, whenever possible, be involved in the counseling process. For all of their experience and education, healthcare professionals cannot truly appreciate all of the dynamics, and be able to answer many of the questions that will come up, unless they are themselves amputees. ACA trained peer counselors have been effectively employed in every aspect of amputee counseling; from pre-operative and immediately post-operative visits, and home visitation, to prosthetic fitting follow-up.

By the way, I did have one healthcare professional, who shall remain nameless; ask me why in the world they would want to have an amputee on the amputation team. Sometimes I realize we still have a long way to go.



Dr. Chaz Holder (1947 – 2002)

Louis C. Franconi

Currently holds the position of New Business Development for Bally Ribbon Mills, in Bally, PA. Bally Ribbon Mills is a privately held textile company that sells both commercial and highly engineered fabrics for Medical, Industrial, Aerospace and Commercial applications for over last 81 years.

Louis received his BA Degree in Biochemistry & Microbiology from the University of Connecticut. He is an American Society of Clinical Pathologists (ASCP) Certified Medical Technologist. He received a Masters in Business Administration (MBA) with emphasis in Finance and Marketing from Suffolk University, School of Management, Boston, MA.

Louis has over 38 years experience in technical applications, new product development, technical marketing, sales and financial decision making. Over 14 years of P&L responsibility for companies that market high technology products and services internationally. This experience includes establishing and managing foreign subsidiaries, as well as completing joint venture operations in the Soviet Union (USSR) and the Peoples Republic of China (PRC). His key responsibilities include

technical product development, budgeting & financial control, identifying new product opportunities, and the management of technical engineering and product development teams.

Editor's note: ***As a specialty textile mill, Bally Ribbon Mills uses natural and man made fibers to create woven items for a variety of uses. Many of these devices are created for medical purposes and are used in lifesaving surgeries for people who have experienced trauma or severe medical incidents. We are very pleased to have the expertise of Mr. Louis Franconi to introduce us to a sampling of uses of just some innovative woven devices. Many of these 3D constructs could play a positive roll in new or modified devices, designed for use by People with disabilities.***

Converting Fibers into Woven Technical Products

Louis Franconi, Bally Ribbon Mills,

It has always struck me as interesting that fibers are thought of as being something that clothing, bedding and decorative home furnishings are made of, but not as components from which to construct technical and application specific products. Engineers are quick to identify metals; concrete, plastics and glass as items more suited to construct these products. Fibers have been with us from the beginning of time and are quite useful in addressing our needs. Fibers are easily converted into textiles that are flexible, light in weight, non-corrosive and pound for pound as strong as other building components. Furthermore, fibers can be easily combined to produce hybrid structures that are able to address multiple application issues. In short, textiles remain a most humanly compatible and cost effective of constructs when woven and braided into technical materials.

At Bally Ribbon Mills, a privately held manufacturer of highly engineered narrow fabrics and specialty broadcloth for military, aerospace, medical and commercial applications, matching fibers to specific applications is our business. Located northwest of Philadelphia, Pennsylvania, Bally Ribbon

Mills engineers fabrics to meet challenging and demanding applications each and everyday.

Typical applications include:

- **materials that resist heat, flame, light, corrosion and / or abrasion**
- **constructs that demonstrate the biocompatibility required for medically implantable devices**
- **materials that are high in strength, shear and break force**
- **materials that are engineered to a controlled elongation, conductivity, or of a specific porosity necessary for air and liquid filtration.**
- **fabrics that can wick moisture and are durable**

All are features that can be engineered into the products that we produce through the judicious choice of fibers, be they natural, manmade, or performance.

What follows are four examples where highly engineered constructs and devices have been designed and constructed to meet the specific technical applications requested by a few of our customers.

Woven Medical Implantable Devices

Textiles, having the capability to be light in weight and highly flexible, are most natural for use in the body. Recognized many years ago, polyester has been well tolerated by the human body and a natural vector for attracting cellular growth. This makes polyester a natural and readily available material

from which to construct replacement arteries and veins. There are many other fibers that are also well tolerated by the body. However, due to the potential for litigation and small fiber requirement surrounding this application, it is difficult to find manufactures that will allow their materials to be implanted. One group of fibers that demonstrate significant advantage in high strength and low denier is ultra high molecular weight polyethylene (UHMWPE) fiber. This intrinsic high strength, found in UHMWPE, allows for its use in low denier, high stress, high flex applications. This means that we now have the ability to construct smaller and smaller devices to go farther into the body, in more of the narrower passages, while still having the strength and flex resistance necessary to survive the stresses exhibited.

A typical application that has demonstrated great success over many years is a bifurcate graft used to treat Abdominal Aortic Agularism (AAA). An agularism results in a weakening and a bulging in the wall of an artery. If allowed to progress untreated, the arterial wall will eventually rupture, and the patient will quickly bleed to death internally. Most recently woven AAA devices (see figure 1) have been fitted with shape retentive wire, such as nitinol, crimped and fitted into a catheter and guided into position. Once there, they are deployed and used to shore up the arterial wall, adding strength and preventing the arterial wall from bursting. In time, the polyester AAA implant becomes coated with cellular material and fully becomes a part of the arterial wall. Figure 2, is an artist's rendering of the AAA device deployed and in use.

Figure 1 – Woven bifurcate AAA Device, as yielded from the loom.

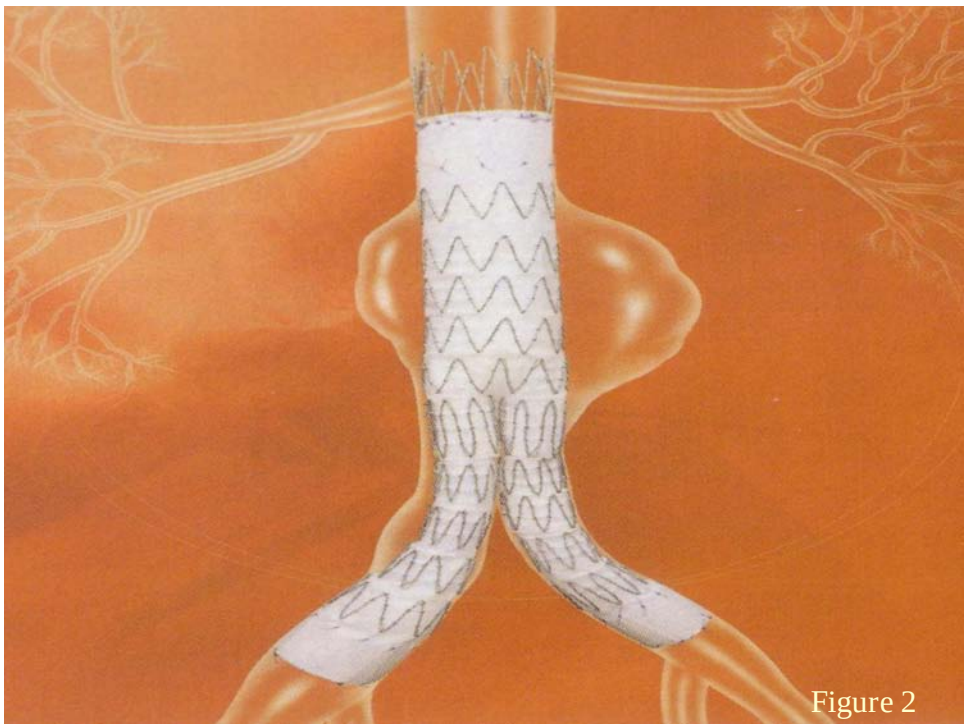


Figure 2 – Artists rendition of how an implanted AAA Device appears in-situ

Controlled Elongation

Construction workers who work 25 feet, or more off the ground are required to wear a harness fitted with a lanyard that will be

affixed to a stationary structure as a means to protect against a fall injury. Regulatory and standards organizations such as the American Society of Testing and Materials (ASTM) and the Canadian Standards Association (CSA) have established tests and standards for a lanyard, that serve as guidelines for fall protection devices and shock absorbing lanyards.

CSA Standards require that the shock absorber arrest a force of 4.0 kN (900 lbf) (E-4 Specification) and/or 6.0 kN (1300 lbf) (E-6 Specification). The test parameters for the E-4 specification requires that a 100 kg (220 lb.) test mass be dropped 1.8 meters (5.9 feet) with a maximum elongation of 1.2 meters (3.0 feet). The total mass of a worker must be at least 45 kg (100 lb.), but not exceed 115 kg (254 lb.). The E-6 specification test parameters call for a similar drop of 1.8 meters (5.9 feet) and a test mass of 160 kg (350 lbs.). Elongation must not exceed 1.75 meters (5.7 feet). Total mass of a worker must be at least 90 kg (200 lb.), but not exceed 175 kg (386 lb.).

To meet these demanding requirements Bally Ribbon Mills has designed an essentially one-piece lanyard/shock absorbing system, composed of a partially oriented yarn (POY) interior shock absorber enclosed in tubular polyester webbing. When subjected to a fall situation and under load, the POY orients and elongates, absorbing the shock to the worker and meeting the requirements outlined in the E-4 or E-6 Specification. The polyester tubular webbing serves as a sleeve that encloses and protects the POY from dirt and abrasion inherent in a

construction environment. Furthermore, the Polyester sleeve functions as a back-up system, able to hold a static weight to a breaking strength of 5,000 lbs., thus securing a suspended worker until rescue is possible.

Reducing Friction and Abrasion Resistance

Textiles woven from fibers having a low coefficient of friction are well suited to applications in which the resulting construct is difficult to access and/or cannot be readily maintained. Typical applications include greaseless bearings, propeller shafts in marine applications and even spherical bearings used to support a bridge. Greaseless bearings are found in instruments used in an operating room, in clean rooms and other areas where the environment is rigidly controlled and where grease is not allowed. Spherical bearings in bridges require that the bridge be allowed to move slightly as traffic moves over its surface and with thermal expansion and contraction caused by extremes in heat and cold. Examples of fibers having a low coefficient of friction are the Polyethylene, Polytetrafluoroethylene (PTFE) and many other fluorocarbons such as ETFE. All are highly resistant to chemicals and work well to reduce friction and lessen abrasion.

Figure 3 shows a bi-component or hybrid construct used between a spherical bridge bearing and between two metallic surfaces such as an ocean going ships deck and a hatch or hold cover. The material is able to stand up to the crushing weight of the two surfaces coming together while preventing their

contact and resulting abrasion. This material is composed of filament Teflon® (PTFE) fiber and natural Kevlar® fiber. The Teflon® (PTFE) fiber provides the friction reducing "slip", while the Kevlar® Fiber, having a high modulus, provides structure to the material such that it will hold up in this harsh environment.

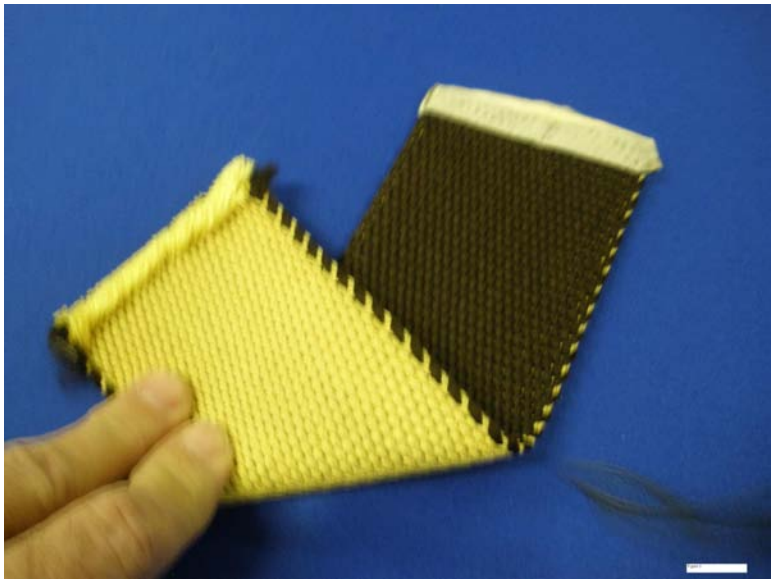


Figure 3 – Woven Teflon® and Kevlar® Fiber Bridge Bearing fabric

Three Dimensional (3D) Woven Structures

Three dimensional (3D) woven structures offer a significant advantage over a traditional 0 and 90 degree woven structures. 3D structures provide for an extremely high fiber volume to be placed within the structure. Having a high fiber volume, or fiber density, means that the resulting structure is significantly stronger then its typical two- dimensional counterpart. A 3D woven construct provides an opportunity to develop near net shapes that, in the case of medical component, or devices, allow one to yield anatomically correct replacements and/or structures. The same is true of other complex shapes, thus allowing one to reproduce say a metallic part with something much lighter. Therefore, this is an effective way to provide

high strength and support while saving weight. An important point when designing products for the Aerospace Industry or for other applications where strength versus weight are issues that require consideration. 3D structures provide for the creation of very large surface areas. Surface area is important in medical applications where one would like to get significant protein binding. Another advantage is applications where a similar large area is needed to accommodate drug infusion, or absorption. With a little thought, it is even possible to weave 3D structures on current looms. With a resulting depth in the additional dimension, one is able to minimize the number of layers from traditional 2D weaving while providing for a much stronger weave (see figure 4). The resulting fabric, held together by binder and woven in each dimension, is inherently much stronger thereby resisting wear, while better able to stand up to a demanding environment.

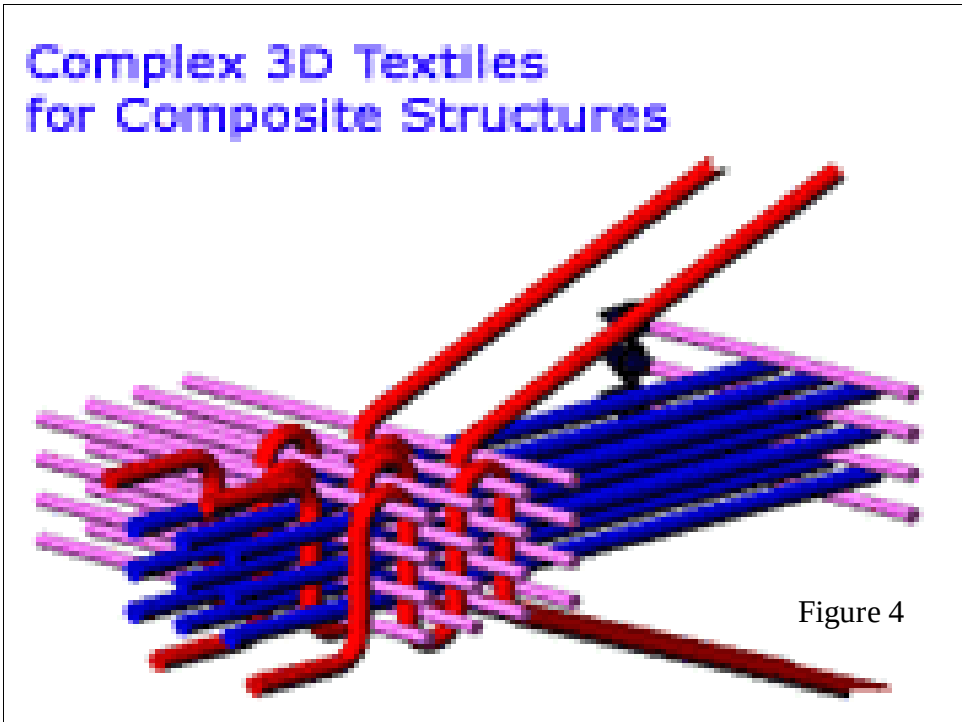


Figure 4 – Weaving schematic showing the structure of a typical 3D fabric

The above makes an impressive case for 3D structures. However, as with all things, there are tradeoffs that must be considered. Small constructs, such as medical devices, often present a problem in that there are limitations in what can be done on a loom. The availability of fibers in small deniers, able to withstand the abrasions inherent in 3D weaving, are not always available. This limits the extent to which a 3D item may be reproduced. Not all fibers can take this abrasion and the resulting construct might have to be woven more open then desired. Finally, it may not be possible to make devices, or structures that are entirely symmetrical, due once again to physical parameters on a given loom.

Figures 5 through 12 are a few of the Three Dimensional structures that are routinely woven at Bally Ribbon Mills.

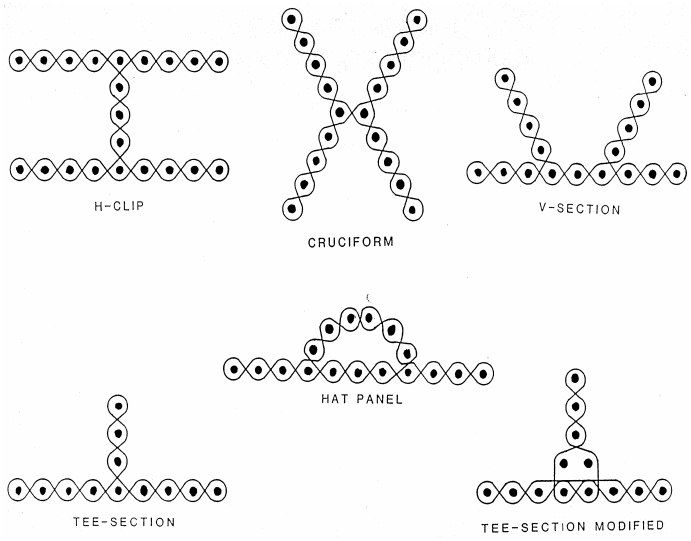


Figure 5 Typical 3D shapes that can be woven

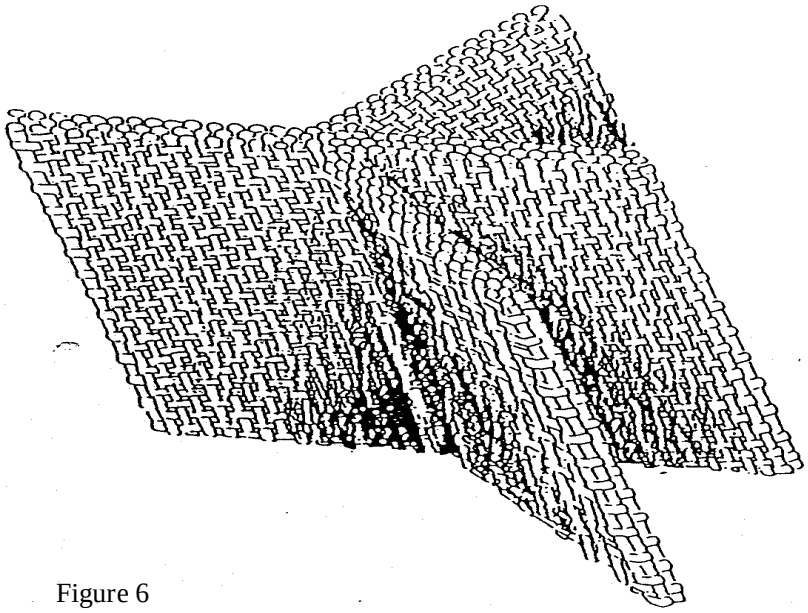


Figure 6 - Example of a 3D cuneiform construct

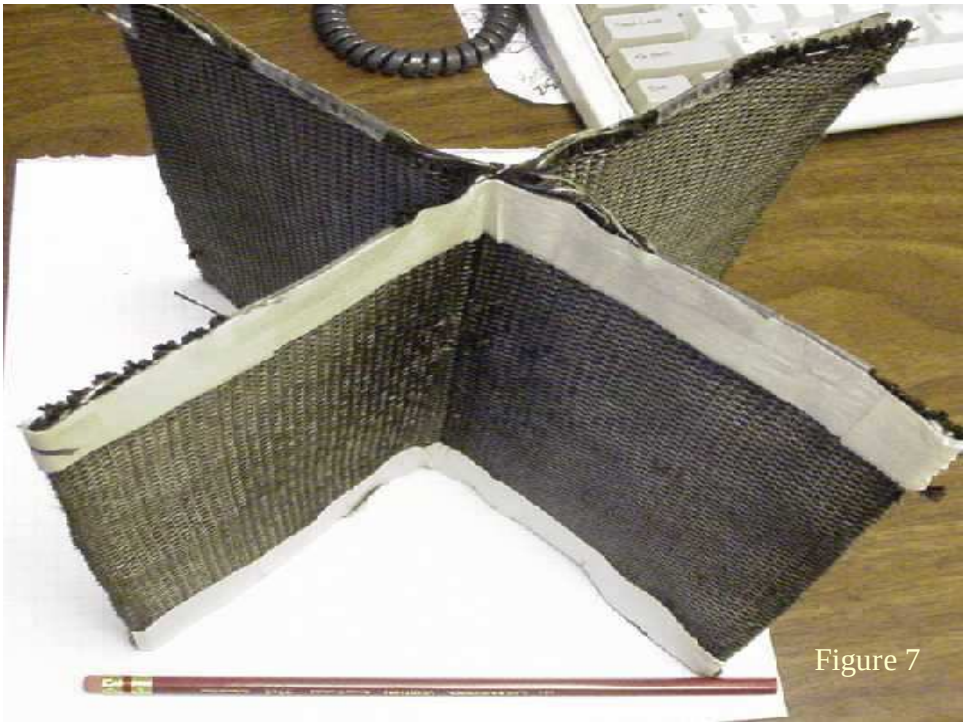


Figure 7 - X Shaped fabric construct woven from carbon graphite

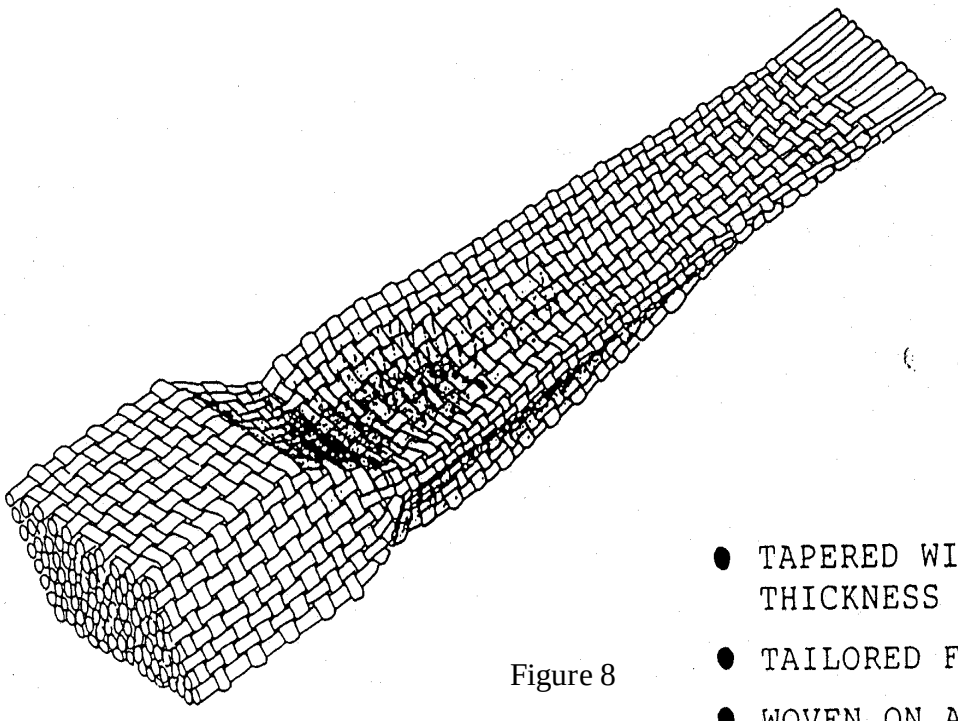


Figure 8 - Schematic of a woven jet engine turbine blade

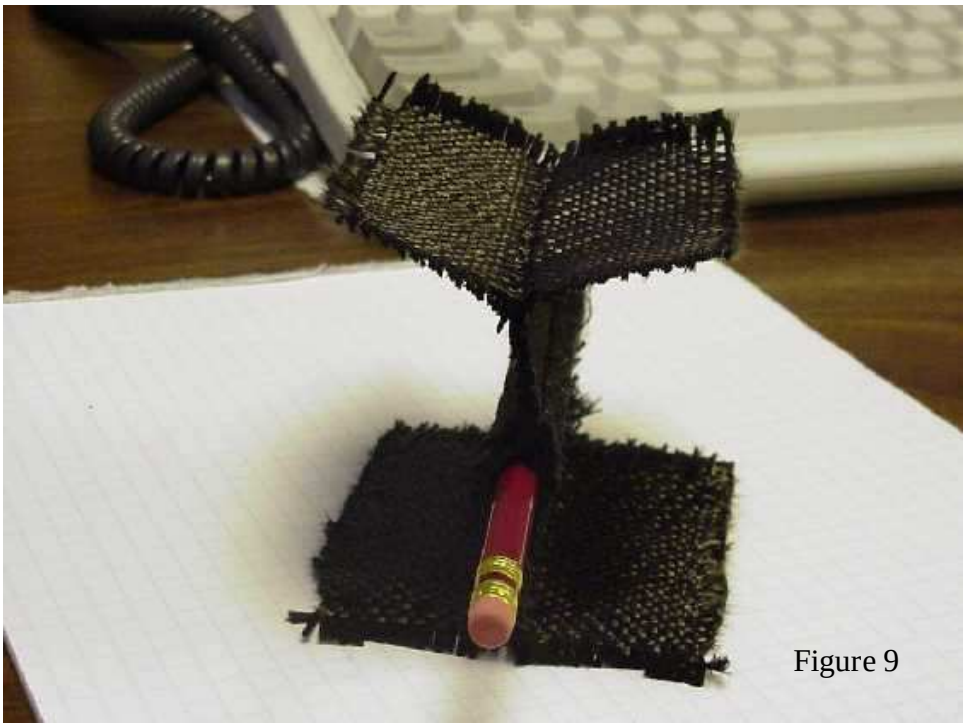


Figure 9 - Woven I beam, just off the loom

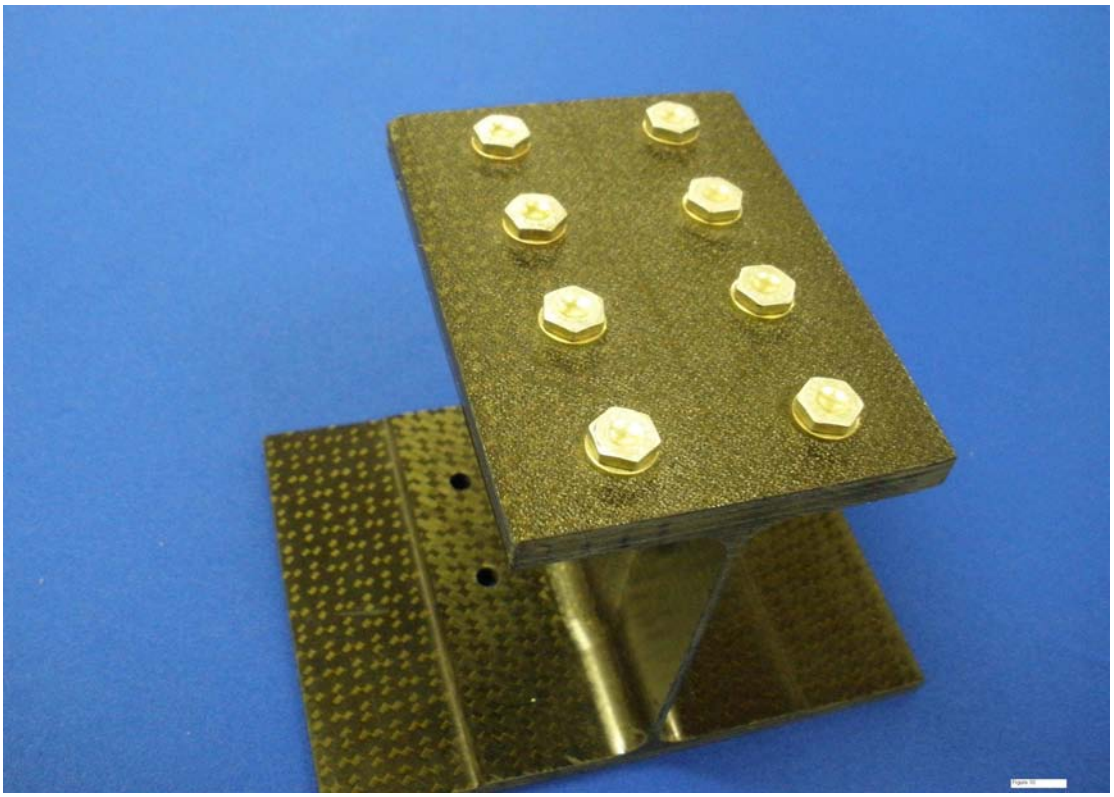


Figure 10 - construct from Figure 9, after being formed into a thermoset and machined

Figure 11 – Woven π Structure

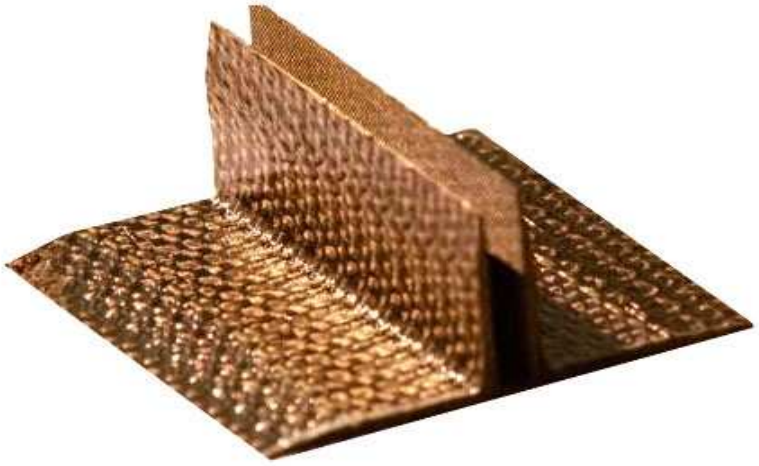


Figure 12 – Woven π Structure after being formed into a thermoset

Louis C. Franconi

Glossary of Common Textile Terms

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www.ballyribbonmills.com

A

AAA – Abdominal Aortic Agularism

Abrasion Resistance – The ability if a fiber or fabric to withstand surface wear and rubbing.

Air Jet Spinning – A spinning system in which yarn is made by wrapping fibers around a core stream of fibers with compressed air.

Air Permeability – The porosity, or the ease with which air passes through material. Air Permeability determines such factors as the wind resistance of sailcloth, the air resistance of parachute cloth, and the efficiency of various types of air filtration media. It is also a measure of warmness, or coolness of a fabric.

Alternating Twist – A texturing procedure in which S and Z twist are alternately inserted in the yarn by means of a special heating apparatus.

Aramid Fiber – A manufactured fiber in which the fiber-forming material is a long chain synthetic polyamide having at least 85% of its amide linkages (-NH0CO-) attached directly to two aromatic rings.

ASTM – American Society of Testing and Materials

Autoclave – An apparatus for the carrying out of certain finishing operations, such as pleating and heat setting, under pressure in a superheated steam atmosphere.

B

Balanced Cloth - A term describing a woven fabric with the same size yarn and the same number of threads per inch in both the warp and the fill direction.

Basket Weave – A variation of the plain weave in which two or more warp and filling threads are woven side to side to resemble a plaited basket.

Beam – A cylinder of wood or metal, usually with a circular flange on each end, on which warp yarns are wound for slashing, weaving and warp knitting.

Beaming – The operation of winding warp yarns onto a beam usually in preparation for slashing, weaving or warp knitting. This process is also called warping.

Beating –Up – The last operation of the loom in weaving, in which the last pick inserted in the fabric is “beat” into position against the preceding pick, usually by a “comb- like” device called a reed.

Bicomponent Yarns – Spun or filament yarns of two generic fibers or two variants of the same generic fiber.

Bi-directional Fabric – A fabric having reinforcing fibers in two directions, i.e., in the warp (machine) direction and filling (cross-machine) direction.

Bleeding – Loss of color by a fabric or yarn when immersed in water, a solvent, or similar liquid medium, as a result of improper dying or the use of dyes of poor quality.

Blend – 1. A yarn obtained when two or more staple fibers are combined in a textile process for producing spun yarns. 2. A fabric that contains a blended yarn in both the warp and filling direction.

Blending - The combining of staple fibers of different physical characteristics to assure a uniform distribution of these fibers throughout the yarn.

Boil Off – see scouring.

Braid – 1. A narrow textile band, often used as trimming or binding, formed by plaiting several strands of yarn. The fabric is formed by interlacing the yarns diagonally to the production axis of the material. 2. In aerospace textiles, a system of three or more yarns which are interlaced in such a way that no two yarns are twisted around each other.
Biaxial Braid - Braided structure with two yarn systems running in one direction and the other in the opposite direction.
Triaxial Braid – a braided structure with axial yarns running in the longitudinal direction.
Braid Angle – The acute angle measured from the axis of the fabric or rope to a braiding yarn.
Braided Fabric – A narrow fabric made by crossing a number of strands diagonally so that each strand passes alternately over or under one or more of the other strands.

Braiding – The interwinding of three or more strands to make a cord or narrow fabric.

Break Factor – A measure of yarn strength calculated as: 1) the product of breaking strength times the indirect yarn number. 2) The product of breaking strength tomes the reciprocal of the direct yarn number.

Breaking Strength – 1. The maximum resultant internal force that resists rupture in a tension test. 2. The load (or Force) required breaking, or rupturing, a specimen in a tensile test made according to a specified standard procedure.
Breaking Tenacity – 1. The tensile stress at rupture of a specimen expressed as

Newton's per Tex (cN/tex).

Broadcloth – A fabric so named because it was woven in widths exceeding 29 inches.

Broad Goods – Woven fabrics 18 inches or more in width.

Broken End – A broken, untied warp thread in a fabric. Broken ends can result from: slubs, knots, improper shuttle alignment, shuttle hitting the warp shed, excessive warp tension, faulty sizing, and rough reeds, heddles, dropwires and shuttles.

Broken Pick – A broken filling thread in a fabric. Broken Picks can result from: excessive shuttle tension, weak yarn, or filling coming in contact with a sharp surface.

C

Cabled Yarn – A yarn formed by twisting together two or more plied yarns.

Cabled Twist – A construction of thread, yarn, cord, or rope in which each successive twist is in the same direction opposite the preceding twists; i.e., an S/Z/S, or Z/S/Z construction.

Calender - A machine used in finishing to impart a variety of surface effects to fabrics. A calender essentially consists of two or more heavy rollers, sometimes heated, through which the fabric is passed under heavy pressure.

Calendering – A mechanical finishing process for fabrics used to produce special effects, such as high luster, glazing, moiré', and embossed effects.

Carbon Fiber – A high-tensile fiber or whisker made by heating rayon or polyacrylonitrile fibers or petroleum residues to appropriate temperatures. Fibers may be 7 to 8 microns in diameter and more than 90% carbonized.

Cloth - A generic term embracing all textile fabrics and felts. Cloth may be formed out of any textile fiber, wire, or material.

Coated Fabric – A fabric to which a substance such as lacquer, plastic, resin, rubber, or varnish has been applied in firmly adhering layers to provide certain properties, such as water impermeability.

Coating – The application of a semi-liquid material such as rubber, polyvinyl chloride, or polyurethane to one or both sides of the textile material. Once the coating has dried (cured) it forms a bond with the fabric.

Color Abrasion – Color changes in localized areas of a garment resulting from differential wear.

Colorfastness – resistance to fading, i.e., the ability of a dye to retain its color when the dyed, or printed textile material is exposed to conditions or agents such as light, perspiration, atmospheric gases or washing that can remove of destroy color.

Composite – 1. An article or substance of two or more constituents, generally, with reinforcing elements dispersed in a matrix or continuous phase. 2. Hard or soft constructions in which the fibers themselves are consolidated to form structures rather then being formed into yarns.

Conditioning – A process of allowing textile materials to reach equilibrium with the surrounding atmosphere.

Cone – A conical package of yarn, usually wound on a disposable paper core.

Coning – The transfer of yarn from skeins or bobbins or other types of packages to cones.

Converter – An individual or organization that buys greige fabrics and sells them as a finished product to cutters, wholesalers, retailers, and others. The converter arranges for the finishing of the fabric.

Core Spinning – The process of making a core-spun yarn. It consists of feeding the core yarn into the front delivery roll of the spinning frame and of covering the core yarn with a sheath of fibers during the spinning operation.

Core-Spun Yarn – A yarn made by twisting fibers around a filament or a previously spun yarn, thus concealing the core.

Creel – 1. A framework arranged to hold slivers, roving or yarns so that many ends can be withdrawn smoothly and evenly without tangling.

Creeling – The mounting of supply packages in a creel to feed fiber to a process, i.e., beaming, warping or weaving.

Crimp – 1. The waviness of a fiber expressed as crimps per unit length. 2. The difference in distance between two points on an unstretched fiber and the same two points when the fiber is straightened under tension. 3. The difference in the distance between two points when the yarn has been removed from the fabric and straightened under specific tension expressed as a percentage of the distance between the two points as the yarn lies in the fabric.

Crocking – The rubbing-off of dye from a fabric as a result of insufficient dye penetration of fixation, the use of improper dyes or dying methods or insufficient washing and treatment after the dying operation. Crocking can occur under either wet or dry conditions.

CSA – Canadian Standards Association

D

Density – Mass per unit volume usually expressed as grams per cubic centimeter (g/cc). Also known as specific gravity.

Denier - Officially, the weight, in grams, of 9000 meters of yarn. Denier is a direct numbering system in which the lower the numbers represent the finer sizes and the higher the numbers the courser sizes. In countries other than the USA, Denier is replaced by the Tex system.

Denier per filament (dpf) – The denier of an individual continuous filament or an individual staple fiber if it were continuous.

Yarn Denier – The denier of filament yarn. It is the product of the denier per filament and the number of filaments in the yarn.

Total Denier – The product of the denier per filament and the number of filaments in the tow.

Denier Variation – Usually variation in diameter, or other cross-sectional dimension, along the length of a filament or bundle of filaments. Malfunction or lack of process control in fiber manufacturing causes denier variation.

Dent – On a loom, the space between the wires of a reed.

Dimensional Stability – The ability of textile material to maintain or return to its original geometric configuration.

Dobby – A mechanical attachment on a loom that controls the harness to permit the weaving of geometric figures.

Doff – A set of full packages, bobbins, spools, etc. produced by one machine.

Doffing – The operation of removing full packages, bobbins, spools, etc. from a machine and replacing them with empty ones.

Double End – Two ends woven as one in a fabric. It may be intentional or accidental.

Drape – A term to describe the way a fabric falls while it hangs; the suppleness and ability of a fabric to form graceful configurations.

Drawing-in – In weaving the process of threading warp ends through the eyes of the heddles and the dents of the reed.

Drop Wires – A stop-motion device utilizing metal wires suspended from warp or creeled yarns. When a yarn breaks, the wire drops, activating the switch that stops the machine.

Dyeing – A process of coloring fibers, yarns, or fabrics with either a natural or synthetic dyes. A partial list of dyeing methods follows:

Pad Dying – A form of dyeing whereby a dye solution is applied by means of a pad or mangle.

Pressure Dyeing – Dying by means of forced circulation of dye through packages
of fiber, yarn, or fabric under pressure.

Skein Dyeing – The dyeing of yarn, fiber, or fabric in the form of skeins, or hanks.

Yarn Dyeing – The dyeing of yarn before the fabric is woven or knit.

E

Elastomers – Synthetic polymers having properties of natural rubber such as stretchability and recovery.

Electrical Conductivity – a measure of the ease of transporting electric charge from one point to another in an electric field.

Elongation – The deformation in the direction of load caused by a tensile force. Elongation is measured in units of length (inches, millimeters) or calculated as a percentage of the original specimen length. Elongation may be measured at a specific load, or at the breaking point.

Elongation at Break – The increase in length when the last component of the specimen breaks. Usually expressed as %.

End - An individual warp yarn. A warp is composed of a number of ends.

End Out – A void caused by a missing warp yarn.

Entering – The process of threading each warp yarn on a loom beam through a separate drop wire, heddle, and reed space in preparation for weaving.

ETFE (E-TFE) - Poly(Ethylene-Tetraflouroethylene)

Extractables – The material that can be removed from textiles by means of a solvent (water can often be a solvent).

Extraction – Removal of one substance from another, often accomplished by a solvent.

F

Fabric – A planar textile structure produced by interlacing yarns, fibers, or filaments.

Fabric Construction – The details of structure of fabric. These include such information as style, width, type of weave, or knit, threads per inch in warp and fill, and weight of goods.

Fabric Crimp – The angulation induced between a yarn and a woven fabric via the weaving, or braiding process.

Fibers – A unit of matter, either a natural, or manufactured that form the basic element of fabrics and other textile structures.

Fiber Number – The linear density of a fiber expressed in units such as denier, or Tex.

Filament – A fiber of an indefinite or extreme length such as found naturally is silk. Manufactured fibers are extruded into filaments that are converted into filament yarn, staple, or tow.
Filament Count – The number of individual filaments that make up a thread, or yarn.

Filament Yarn – A yarn composed of continuous filaments assembled with, or without twist.

Filling – In woven fabric, the yarn running from selvage to selvage at right angles to the warp. Each crosswise length is called a pick. In the weaving process, a shuttle, rapier, or other type of yarn carrier carries the filling yarn.

Finish – 1. A substance or mixture of substances added to textile materials to impart desired properties. 2. A process, physical, or chemical performed on textile materials to produce a desired effect. 3. A property, such as smoothness, drape, luster, water repellency, flame retardancy, or crease resistance that is produced by 1 and/or 2.

Finished Fabric – fabric that is ready for the market, having passed through the required finishing process.

Finishing – All the processes through which fabric is passed after bleaching, dyeing, or printing in preparation for the market, or use.

Flame Resistant – A term used to describe a material that burns slowly, or is selfextinguishing after removal of an external source of ignition.

Flame Retardant – A chemical compound that can be incorporated into a textile fiber during manufacture, or applied to a fiber, fabric, or other textile item during

processing to reduce its flammability.

Flammability Tests – Procedures have been developed for access the flame resistance of fabrics. Three common tests follow:

Diagonal Flame Test – In this test for flame resistance, a specimen is mounted at a 45-°angle and exposed to an open flame for a specific time. The test measures the ease of ignition and the rate of burning.

Horizontal Flame Test – A test for flame resistance in which a specimen is mounted in a horizontal holder and exposed to an open flame for a specific time to measure the burning rate and char-hole diameter.

Vertical Flame Test – A test for flame resistance in which a specimen is mounted in a vertical holder and exposed to an open flame for a specific time. The open flame is then extinguished and continued flaming time and char-length of the sample are measured.

Float – A weaving defect consisting of an end lying, or floating on the fabric surface instead of being properly woven in.

G

Gauge – A generic term for various measurement instruments such as pressure of thickness gauges, also the thickness of a knitting needle, and the number of wales per inch in a knitted fabric.

Gauge Wire – Used with an extra filling yarn during weaving, this type of standing wire controls the height of fabric pile.

Geotextiles – Manufactured fiber products made into fabrics of various constructions for use in a wide variety of civil engineering applications. Examples include Erosion Control Fabrics, Drainage Fabrics and Asphalt Overlay Fabrics.

Glass Fiber – A manufactured fiber in which the fiber-forming substance is glass. These fibers are incombustible and will tolerate heat up to 1000°F. However, the resulting fabric is brittle and fracture points may develop.

Graphite Fiber – Although the terms carbon and graphite are used interchangeably, to describe these fibers, graphite fibers are more accurately defined as fibers that are 99+% carbonized, while the term carbon is used for any fiber carbonized to 93 to 95 %, or more.

Greige Fabric – (pronounced gray) An unfinished fabric just off the loom, or knitting machine.

Grosgrain – A heavy fabric with prominent ribs, grosgrain has a dressy appearance and is used in ribbons, vestments and ceremonial cloths.

H

Hand – The tactile qualities of a fabric, e.g., softness, firmness, elasticity, fineness, resilience and other qualities perceived by touch.

Heat Resistance – A property of certain fibers, or yarns whereby they resist degradation at high temperatures. Heat resistance can be a quality inherent in a yarn, or it may be imparted by additives or treatment of the resulting fabric.

Heat Setting – The process of conferring dimensional stability and other desirable properties (wrinkle resistance and improved heat resistance) by means of either moist or dry heat.

Heat Stabilized – A term to describe fiber, or yarn heat-treated to reduce the tendency of the fiber to shrink, or elongate under a load, or at elevated temperatures.

Heddle – A cord, round steel wire, or thin flat steel strip with a loop, or eye near the center through which one or more warp threads pass on the loom, so that the thread movement may be controlled in weaving. The heddles are held at both ends by the harness frame. They control the weave pattern and shed as the harnesses are raised and lowered during weaving.

Herringbone – A broken twill weave characterized by a balanced ziz-zag effect produced by having the rib run first to the right, and then to the left for an equal number of threads.

High Modulus – A term that refers to a material with a higher then normal resistance to deformation.

Hollow Filament Fibers – Manufactured, continuous filament fibers, having voids created by introduction of air, or other gas in the polymer solution, or melt spinning through specially designed spinnerets.

Homespun – Course plain-weave fabric of uneven yarns that have a handspun appearance.

Hopsacking – A course, open, basket-weave fabric that gets its name from the plainweave fabric of jute, or hemp used for sacking in which hops are gathered.

I

Impregnated Fabric – A fabric in which the interstices between the yarns are completely filled, as compared to sized or coated materials where the interstices are not completely filled.

Industrial Fabric – A broad term for fabrics used for non-apparel and nondecorative uses. They fall into the following classes:

Fabrics employed in industrial processes (e.g., filtration, polishing and absorption).

Fabrics combined with other materials to form a different material (e.g.,

rubberized fabric for hose, belting, tires, timing gears, bearings, and electrical parts).

Fabrics impregnated with an adhesive and dielectric compounds.

Fabrics incorporated directly in a finished product (e.g., sales, tarps, tents, awnings and specialty belts for agricultural machinery, airplanes and conveyers) Fabrics developed for industrial use cover a wide variety of widths, weights and construction. In many cases, they have been painstakingly developed to meet a specific application.

Inspection – The process of examining textiles for defects at any stage of manufacturing and finishing.

J

Jacquard - A system of weaving that utilizes a highly versatile pattern mechanism to permit the production of large, intricate designs and (at Bally Ribbon Mills) shapes. The weave controls the action of one warp thread for the passage of one pick. Each card perforation machine may carry a large number of cards, depending upon the design, because there is a separate card for each pick in the pattern.

Jet Loom – A shuttleless loom that employs a jet of water, or air to carry the filling yarn through the shed.

K

Kink – In fabrics, a place where a short length of yarn has spontaneously doubled back on itself. Kinking – The doubling back of a yarn on itself to relieve torque imparted by twisting or texturing.

Knit Fabric – A structure produced by interlooping one or more ends of yarn or comparable material.

Knitting – A method of constructing fabric by interlocking series of loops of one or more yarns. Knitting Types:

Warp Knitting – A type of knitting in which the yarns generally run lengthwise in the fabric. The yarns are prepared as warps on beams with one or more yarns for each needle. Examples include; Rachel (a plain or lacy knit) and Tricot (run resistant) Knitting.

Weft Knitting – A common type of knitting, in which one continuous thread runs crosswise in the fabric making all of the loops in one course. An example is Circular Knitting, where the fabric produced on the knitting machine is in the form of a tube, the threads running continuously around the fabric.

L

Lace – Ornamental openwork fabric, made from a variety of designs by intricate manipulation of the fiber by machine or hand.

Leno Weave – A weave in which the warp yarns are arranged in pairs with one twisted around the other between picks of filling yarn. This type of weave gives firmness and strength to an open-weave fabric and prevents slippage and displacement of warp and filling yarns.

Let-Off Motion – A device for controlling the delivery and tension of the warp during weaving.

Leveling – Migration leading to uniform distribution of dye in a dyed material. Leveling may be a property of the dye or it may require chemical assistance.

L.O.I – An abbreviation for Limiting Oxygen Index, or a relative measure of flammability. The higher the value, the lower the flammability.

Loom – machines for weaving fabric by interlacing a series of vertical parallel threads (the warp) with a series of horizontal parallel threads (the filling). The warp yarns from a beam pass through the heddles and reed, and the filling is shot through the “shed” of warp threads by means of a shuttle, or other device and is settled into place by the reed and lay. The primary distinction between different types of looms is the manner of filling insertion.

Loom-Finished – A term describing fabric that is sold in the condition in which it comes off the loon (see greige).

Lot – A unit of production, or group of other units, or packages that is taken for sampling, or statistical examination, having one, or more common properties and being separable from other similar lots.

Lubricant – An oil, or emulsion finish applied to fibers to prevent damage during textile processing, or to knitting yarns to make them more pliable.

M

Machine Direction – The long direction within the plane of the fabric, i.e., the direction in which the fabric is being produced by the machine.

Manufactured Fiber – A class name for various genera of fibers (including filaments) produced from fiber forming substances which may be polymers synthesized from chemical compounds (acrylic, nylon, polyester, polyethylene), modified, or transformed natural polymers (cellulose-based fibers like acetate and rayon) and minerals, e.g., glasses. The term manufactured usually refers to chemically produced fibers to distinguish them from truly natural fibers such as cotton, wool, silk and flax.

Melt Index – The weight in grams of a thermoplastic material that can be forced through a standard orifice within a specified period of time.

Melting Point – The temperature at which the solid and liquid states of a substance are in equilibrium; generally the temperature at which a substance changes from a solid to a liquid.

Microdenier – refers to fibers having less than 1 denier per filament, or 0.1 Tex per filament.

Mill Run – A yarn, fabric, or other textile product that has not been inspected, or does not come up to standard quality.

Mispick – A weaving defect in which a pick is improperly interlaced, resulting in a break in the weave pattern.

Mock Leno – A combination of weaves having interlacing that tend to form the warp ends into groups in the cloth. This gives the imitation of an open structure that is characteristic of leno fabrics.

Modulus – The ratio of change in stress to change in strain following the removal of crimp from the material being tested, i.e., the ratio of the stress expressed in either force per unit leaner density, or force per unit area of the original specimen, and the strain expressed as either a fraction of the original length, or percentage elongation.

Moiré' – A wavy, or watered effect on a textile fabric. It is produced by passing the fabric between engraved cylinders that press the design into the material, causing the crushed and uncrushed parts to reflect light differently.

Moisture Regain – A measure of the increase in weight due to the adsorption of water by a fiber vs. its initial dry weight. Usually expressed as %.

Monofilament – Any single filament of a manufactured fiber, usually of a denier higher than 14. Rather than a group of filaments being extruded through spinnerets to form a yarn, Monofilaments generally are spun individually.

Monomer – the simple, unpolymerized form of a compound from which a polymer can be made.

Mullen Bursting Strength – An instrument test method that measures the ability of a fabric to resist rupture by pressure exerted by an inflated diaphragm.

Multifilament – A yarn consisting of many strands, as opposed to Monofilament, which is one strand. Most textile yarns are multifilament.

N

Narrow Fabric – Any non-elastic woven fabric, 12 inches, or less in width, having a selvage on either side.

Natural Fiber – A class name for various genera of fibers of animal (fur, wool and silk), mineral (asbestos and quartz) or vegetable (bamboo, cotton, flax, jute, and soy).

Needle Loom – A high-speed narrow fabric-weaving machine (loom) that uses a needle to insert filling across a warp. A Needle loom uses a catch cord system to make a selvage on one edge of the weave and to return the pick after anchoring it within the selvage.

Nylon Fiber – A manufactured fiber in which the fiber-forming substance is and long chain synthetic polyamide having recurring amide groups (-NH-CO-) as an integral part of the polymer chain.

O

Olefin Fiber – A manufactured fiber in which the fiber-forming substance is any long chain synthetic polymer composed at least 85% by weight of ethylene, polyethylene, or other olefin unit. Olefin fibers combine lightweight with high strength and abrasion resistance.

Orientation – In linear polymeric structures, the degree of parallelism of the chain molecules.

Orifice – Generally, an opening. Used specifically to refer to the small holes in spinnerets through which the polymer flows in the manufacture of fibers.

P

Packages – A large selection of forms for winding yarn onto. Examples include A Cone, Cheese, and pineapple package.

Pattern – 1. An arrangement of form, or weaving designs; a decoration such as the design of woven or printed fabrics. 2. A model, or guide, or plan used in making things, such as a garment pattern.

Pick – A single filling thread carried by one trip of the weft-insertion device across the loom. The picks interface with the warp ends to form a woven fabric.

Pick Count – The number of filling picks per inch, or per centimeter of fabric. Pick and End Counts are two fabric specifications needed to design a fabric. Pick Counter – 1. A mechanical device that counts the picks as they are inserted during weaving. 2. A mechanical device equipped with a magnifying glass used for counting picks (and/or ends) in finished fabrics.

Pirn - 1. A wood, paper, or plastic support, cylindrical, or slightly tapered, with, or without a conical base, on which yarn is wound. 2. The double-tapered take-up yarn package from drawtwisting of nylon, polyester and other melt spun yarns.

Plain Weave – One of the three fundamental weaves: plain, satin and twill. Each filling yarn passes successfully over and under each warp yarn, alternating each row.

Ply – 1. The number of singles yarns twisted together to form a plied yarn, or the number of plied yarns twisted together to form a cord. 2. One of a number of layers of fabric.

Polyester Fabric – A manufactured fiber in which the fiber forming substance is any long chain synthetic polymer composed of at least 85% by weight of an ester of dihydric alcohol and terephthalic acid. They are high is strength and are resistant to shrinking and stretching.

Polyethylene Fiber – A manufactured fiber made of polyethylene, often in monofilament form as well as in filament form. The fibers have low specific gravity, very low retention of moisture, the same tensile weight wet or dry, are resistant to mildew and insects.

Polyamide Fiber – Fully imidized, manufactured fiber formed from the condensation polymer of an aromatic anhydride and an aromatic diisocyanate. A polyamide fiber is a high shrinkage fiber.

Polypropylene Fiber – A manufactured olefin fiber made from polymers or copolymers of polypropylene. This is a very tough fiber with a tenacity of 8.0 to 8.5 grams/denier and a melting point of 165°C. It is so light in weight that it floats and is highly resistant to mechanical abuse and chemical attack.

Polytetrafluoroethylene (PTFE) Fiber – A fluoride containing manufactured fiber characterized by high chemical stability, relative inertness and high melting point. The fiber has moderate tensile strength, resistance to chemicals and the effects of high temperature. It has very low frictional characteristics and has a slippery hand. It works well in filtration, packaging and in combination with other fibers in self lubricating bearings.

POY – Partially Oriented Yarn

Prepreg – A ready to mold, reinforcing material, either fiber, fabric, or mat that is fully impregnated with resin and in some cases partially cured. Prepregs are then used by fabricators in laying-up and molding composites after which curing is completed.

Primary Colors – Magenta, yellow and cyan (red, yellow, blue). These are the subtractive primaries used when mixing dyes and paints to make other colors.

Projectile Loom – A shuttleless loom that uses small, bullet like projectiles to carry the filling yarn through the warp shed. Fill is inserted on the same side of the loom and a tucked selvage is formed.

PTFE – Polyethylene Polyteraflouroethylene

Put-Up – A term used to describe how a fabric is supplied. Put-Up is usually described in terms of length, on rolls, or bulk supplied and may have standards as to how many “cuts” are allowed per roll, or box.

Q

Quartz Fiber – Pure silica that has been melted and drawn into glass-like fibers. Used for heat resistance and high dielectric strength.

Quill – A light, tapered tube of wood, metal, paper, or plastic on which the filling yarn is wound for use in the shuttle during weaving.

Quilling – The process of winding filling yarns onto filling bobbins, or quills, in preparation for use in the shuttle for weaving.

R

Rapier Looms – Looms in which either a double or single rapier (thin metallic shaft with a yarn-gripping device) carries filament through the shed. In a single rapier machine, the yarn is carried across the fabric by the rapier. In a double rapier machine, the yarn is passed from one rapier to the other in the middle of the fabric.

Raw Fiber – A textile fiber in its natural state, such as silk, and or cotton as it comes from the bale.

Rayon Fiber – A manufactured fiber composed of regenerated cellulose as well as manufactured fibers composed of regenerated cellulose in which the substituents have replaced not more than 15% of the hydrogen’s of the hydroxyl group. Rayon yarns may be white or solution dyed. The process itself and the structure of the yarn regulate their strength.

Reed – A comb like device on a loom that separates the warp yarns and also beats each succeeding filling thread against that already woven. The space between two adjacent wires of the reed is called a dent. The fineness of the reed is calculated by the number of dents to the inch. The more dents to the inch, the finer the reed.

Roll Goods – fabric rolled up on a core after it has been produced. It is describes in terms of weight and width of the roll and length of the material on the roll.

S

Sailcloth – Any heavy, strongly made woven canvas, linen, jute, polyester, nylon, aramid, etc. that is used for sails.

Satin Weave – One of the basic weaves, plain, satin, and twill. The face of the fabric consists almost completely of warp, or filling floats produced in the repeat of the weave. Satin weave fabric has a characteristic smooth, luxurious surface and has a considerably greater number of yarns in the set of threads (either the warp or filling) that forms the face than in the other set.

Scouring – An operation to remove the sizing and tint used on the warp yarn in weaving and, in general, to clean the fabric prior to dying.

Scrim – 1. A lightweight, open weave, course fabric. 2. Fabric with open construction used as base fabric in the production of coated or laminated fabrics.

Seamless – A term that describes a tubular knit, or woven fabric without seams, e.g., seamless hosiery, or seamless woven tube.

Section Beam - 1. A large flanged roll upon which warp yarn is wound at the beam warper in preparation for slashing. 2. Small flanged or unflanged beams placed side by side on the shaft of a warp beam for further processing.

Selvage – The narrow edge of woven fabric that runs parallel to the warp. It is made with stronger yarns in a tighter construction than the body of the fabric to prevent raveling. A fast selvage encloses all, or part of the picks, and a selvage is not fast when the filling threads are cut at the fabric edge after each pick.

Served Yarn – In aerospace textiles, a reinforcing yarn such as graphite, or glass around which two different yarns is wound. The intent is to protect, or compress the yarn bundle.

Shot – The number of filling yarns per row of tufts.

Shuttle – A boat-shaped device usually made of wood with a metal tip that carries filling yarns through the shed in the weaving process.

Shuttless Loom – A loom in which some other device than a shuttle is used for weft insertion.

Sinker – In weaving design, a blank square indicating a filling thread over a warp thread at the point of insertion.

Sizing – 1. A generic term for compounds that are applied to warp yarn to bind the fiber together and to stiffen the yarn to provide better abrasion resistance. 2. The process of applying sizing compounds.

Skein – A continuous strand of yarn, fabric, or cord in the form of a collapsed coil. It may be any specified length and is usually obtained by winding a definite number of turns on a reel under prescribed conditions.

Slasher – A machine used to apply size to the warp ends, while transferring the warp yarns from section beams to the loom beam.

Slit Tape – A fabric, 12 inches, or less in width made by cutting wider fabric to the desired width.

Slub – A yarn defect consisting of a lump, or thick place on the yarn caused by lint, or small lengths of yarn adhering to it.

Slug – A thick place in a yarn, or a piece of lint entangled in yarn, cord, or fabric.

Spinneret – A metal disc containing numerous minute holes used in manufactured fiber extrusion. The spinning solution or melted polymer is forced through the holes to form fiber filaments.

Splicing – The joining together of two ends of yarn or cordage.

Staple – Natural fibers, or cut lengths from filaments. The staple lengths of natural fibers vary from less that 1-inch, as with some cotton fibers, to several feet for some hard fibers. Manufactured staple fibers are cut to definite length, from 8 inches down to 1-½ inches. The term staple (fiber) is used in the textile industry to distinguish natural, or cut length manufactured fibers form filament.

Static - The accumulation of negative, or positive electricity on the surface of fibers, or fabrics because of inadequate electrical dissipation during processing.

Stiffness – The property of a fiber, or fabric to resist bending, or to carry a load without deformation.

Stop Motion – Any device that automatically stops a textile machine's operation on the occurrence of a yarn break, high defect count, etc.

Strand – A single fiber, filament, or Monofilament.

Stuffers – Extra yarns running I the warp direction through a woven fabric to increase the fabric's strength and weight.

Surfactant – A surface-active agent, i.e., a product that acts by modifying the

surface or boundary between two phases.

Swelling – In textile usage, expanding of a fiber caused by the influence of a chemical, solvent or agent. A property often used to facilitate dying.

T

Taffeta - A plain-weave fabric with a fine, smooth, crisp hand usually lustrous appearance. Taffeta fabric usually has a fine cross rib made by using a heavier filling yarn than warp yarn.

Take-up (Twist) - the change in length of a filament, yarn, or cord caused by twisting, expressed as a percentage of the original (untwisted) length.

Take-up (Yarn in Fabric) – The difference in distance between two points in a yarn as it lies in a fabric and the same two points after the yarn has been removed from the fabric and straightened under specified tension, expressed as a percentage of the straightened length.

Tape – A narrow woven fabric not over 8 inches in width.

Tear Strength – The force required beginning, or continuing a tear in a fabric under specified conditions.

Tensile Strength – In general, the strength shown by a specimen subjected to tension as distinct from torsion, compression or shear.

Tensile Test – A method of measuring the resistance of yarn, or fabric to a force tending to stretch the specimen in one direction.

Tenter Frame – A machine that dries fabric to a specified width under tension. The machine consists essentially of a pair of endless chains on horizontal tracks. The fabric is held firmly at the edges by pins, or clips on the two chains that diverge as they advance through the heated chamber, adjusting the fabric to the desired width.

Tex – 1. A unit for expressing linear density, equal to the weight in grams of one kilometer of yarn, filament, fiber or other textile strand. 2. The system of yarn numbering based on the use of Tex units.

Textile - Originally, woven fabric; now applied generally to any one of the following;
Staple Fibers and filaments able to be converted into woven, knit, or braided fabrics, or yarns made from natural of manufactured fibers.

Textile Materials – A general term for fibers, yarn intermediates, yarn, fabrics, and products made from fibers.

Textile Processing – Any mechanical operation used to translate a textile fiber or yarn to a fabric, or other textile material. This includes such operations as opening, carding, spinning plying, twisting, texturing, coning, quilling, beaming, slashing, weaving, braiding and knitting.

Texture – A term describing the surface effect of a fabric such as dull, lustrous, wooly, stiff, soft, fine, course, etc.

Textured Yarns – yarns that develop stretch and bulk on subsequent processing.

Thermal Shrinkage – The amount shrinkage of a fiber measured in dry air vs. that measured in its saturated state. Usually expressed as a %.

Thermoplastic – A term used to describe a plastic material that is permanently fusible, i.e. manufactured fibers that will soften at higher temperatures.

Thermoset – A term used to describe a plastic that, once formed, will not melt.

Thread – 1. A slender, strong strand, or cord, especially one designed for sewing, or other needlework. 2. A general term for yarns used in weaving and knitting i.e.

Thread Count and Warp Count.
Thread Count – The number of ends (wales) and picks (courses) per inch in a woven (Knitted) fabric.

Three-dimensional Weaving – To produce three-dimensional textiles, yarns are simultaneously woven in three directions (length, width and thickness), rather than in the conventional two.

Throwing – The operation of doubling or twisting silk or manufactured filament yarn.

Throwster – A company that specializes in putting additional twist in yarn.

Transition Temperature – A temperature at which some radical change, usually a phase change, in the appearance or structure of a substance occurs. I.e. melting point, boiling point.

Traveler – A C-shaped, metal clip that revolves around the ring on a ring spinningframe. It guides the yarn onto the bobbin as twist is inserted into the yarn.

Twill Weave – A fundamental weave characterized by diagonal lines produced by a series of floats staggered in the warp direction.

Twist – The number of turns about its axis per unit of length of a yarn, or textile strand. Twist is expressed as turns per inch (tpi), turns per meter (tpm) or turns per centimeter (tpc).

Twist, Direction of – The direction of twist in yarns and other textile strands is indicated by the capital letters S and Z. Yarn is S-twisted if when it is held vertically, the spirals around its central axis slope in the same direction as in the middle portion of the letter S (i.e. to the right) and Z twisted if they slope to the left, i.e. middle section of the Z.

Twist Multiplier – The ratio of turns per inch to the square root of the yarn count.

Twist Setting – A process for fixing the twist in yarns to deaden torque and to eliminate kinking during further processing. This process usually involves using steam.

Two-For-One Twister – A twister that inserts twist at a rate of twice the spindle speed.

U

UHMWPE – Ultra High Molecular Weight Polyethylene

Ultraviolet Degradation – Weakening, or deterioration caused by exposure to ultraviolet rays of sunlight, or artificial light.

Ultraviolet Resistance – Ability to retain strength and resist deterioration on exposure to sunlight.

Undrawn Yarn – Extruded yarn (filaments), the component molecules of which are substantially unorientated. An undrawn yarn exhibits predominantly plastic flow in the initial stages of stretching and represents an intermediate stage in the production of a manufactured yarn.

Uneven Dying – A fabric dying that shows variations in shade resulting from incorrect processing, or dying methods, or from the use of faulty materials.

UV Absorbers – polymer additives that absorb light in the UV region, or that trap radicals produced in fiber during photoxidation.

V

Vectran® Fiber - Manufactured fiber spun from Hoechst Celanese Vectra® liquid crystal polymer. These fibers have high-temperature resistance, high

strength and modulus, and a high resistance to moisture and chemicals, with good property retention in hostile environments.

W

Warp – The set of yarn in all woven fabrics, that runs lengthwise and parallel to the selvage and is interwoven with the filling.

Warp Beam – A large spool, or flanged cylinder around which the warp threads, or ends, are wound in a uniform and parallel arrangement.

Warp Drawing – A process in which a number of threadlines, are orientated under essentially equal mechanical and thermal conditions by a stretching stage using variable speed rolls, then directly wound onto the beam. This process gives uniform end to end properties.

Waterproof – A term applied to materials that re impermeable to water; waterproof fabrics have all of their pores closed and are also impermeable to air and very uncomfortable.

Water-Repellent – A term applied to fabrics that can shed water, but are permeable to air and comfortable to wear.

Wear Test – A test for fabric wear, abrasion, flexibility, washing, crushing, creasing, etc., in which the fabric is made into a garment, warn for a specific length of time and then assessed for performance.

Weather-Ometer – An instrument used in measuring the weather resistance of textiles. It can simulate various weather conditions as sunlight, rain, dew, and thermal-shock.

Weave – A system, or pattern of intersecting warp and filling yarns. There are three basic two-dimensional weaves: Plain, twill and Satin.

Weaving – The method, or process of interlacing two yarns of similar materials so that they cross each other at right angles to produce woven fabric.

Webbing – Strong, narrow fabric, closely woven in a variety of weaves and principally used for belts and straps that can withstand strain.

Weft Insertion – Any one of various methods, shuttle, rapier, water jet, etc. for making a pick during weaving.

Width – A horizontal measurement of a material. In woven fabric, it is the distance from selvage to selvage, and in knitted fabric, from edge to edge.

Winding – Winding is the process of transferring yarn, or thread from one type of

package to another,

Wind Ratio – The number of wraps that an end, or ends make in traversing from one side of a wound package to the other side and back to the first side.

Woven Fabric – Generally used to refer to a fabric composed of two sets of yarns, warp and filling, that is formed by weaving, which is the interlacing of these sets of yarns.

Y

Yardage – The amount, or length of a fabric expressed in yards.

Yard Goods – Fabric sold on a retail basis by the running yard.

Yarn – A generic term for a continuous strand of textile fibers, filaments, or material in a form suitable for knitting, weaving, braiding, or otherwise intertwining to form a textile fabric.

Yarn Construction – A term used to indicate the number of singles yarns and the number of strands combined to form each successive unit of plied yarn, or cord.

Yarn Number – A relative measure of the fineness of yarns.

Yarn Quality – Various grades of yarn designated by the producer with respect to performance characteristics.

Yield – 1. Number of linear or square yards of fabric per pound of fiber, or yarn. 2. The number of finished square yards per pound of greige fabric.

Young's Modulus – A property of perfectly elastic materials, it is the ratio of change in stress to change in strain within the elastic limits of the material. The ratio is calculated from the stress expressed in force per unit cross-sectional area, and the strain expressed as a fraction of the original length.

Z

Zero Twist – twistless, devoid of twist.

Z Twist – See Twist, Direction of.

Obituary:

Michal Jan Ozmin, EIDD Vice-President Finance and a representative of IDD Ireland, died in his native Warsaw 23 January 2011 at the age of 70.

Three of us have had the privilege of serving with Michal on the EIDD Executive Committee since 2003. He was one of the strongest personalities we have ever met and the greatest friend one could hope to have.

With his passion for the DfA cause combined with a strong critical sense, he was a tremendous asset for EIDD. We, and the whole EIDD organisation, miss him sorely, but the memory of the man will remain an everlasting inspiration.

Michal's name now lives on in our Michal Ozmin Design for All Archive and Research Centre in Cieszyn, Poland, inaugurated 4 December 2010 in the presence of the man himself.

Finn Petrén Avril Accolla Pete Kercher

President Vice-President Ambassador

It is sad to know that Mr. Michal who was a moral force for social movement of Design For All left us on 23rd January 2011. He was man of principal, great communicator, and dedicated to

the cause and always ready to help others. He has contributed article in our newsletter and his contribution toward the social movement is not easy to forget for coming generations. If collectively work to realize his dream will be real homage. I, on the behalf of Design For All Institute of India team express over great concern for this great loss for our social movement.

Dr. Sunil Bhatia

Design For All Institute of India

www.designforall.in

dr_subha@yahoo.com

Appeal:

1.

This 'Baseline Survey of Online Senior Citizen 2011' is one of the projects of SILVER INNING FOUNDATION (SIF). This online survey for Senior Citizens will help us to understand their needs and devise much better programme & projects for the overall well being of our Elders.

Silver Inning Foundation is an NGO (not for profit) working with Senior Citizens. SIF is part of Social Enterprise Silver Innings which hosts one of the most comprehensive and dedicated website for elderly &their family www.silverinnings.com . The vision, mission and goals of SIF are centered on creating and implementing services and programmes that are holistic in nature and address the need to acknowledge the much needed supportive environment that the elderly deserve. It looks at reintegrating the elderly into mainstream society and lives with dignity. Silver Innings is working towards creating Elder Friendly World where Ageing becomes a Positive and Rewarding Experience.

Anyone above 50yrs of age and Children on behalf of their parents/grandparents too can take this survey.

Click the Link and Take the Survey:
http://sifbaselinesurveyofonlineseniorcitizen2011.questionpro.com/

We would appreciate your feedback in our online survey. All responses will remain confidential and secure. Thank you in advance for your valuable insights. Your input will be used to ensure that we continue to meet your needs. We appreciate your trust and look forward to serving you in the future.

We have contracted with QuestionPro, an independent research firm, to field your confidential survey responses.

News:

1.

IDR: FRESH IDEAS

WWW.INCLUSIVEDESIGNRESEARCH.ORG

FEB 18 2011 ISSUE 1

THERE ARE 1.6 BILLION PEOPLE OVER 60 IN CHINA AND 60% OF THEM LIVE IN RURAL AREAS - CCTV 17 FEB 2011

Inclusive Design Research

Welcome to the first issue of the Inclusive Design Research newsletter. Many of you have received the ErgoCES newsletter in the past (now available online www.inclusivedesignresearch.org/). We hope the new Inclusive Design Research newsletter will give you updates of a broader range of our projects and activities, enjoy reading...

ALLDESIGN MAGAZINE SPECIAL ISSUE: INCLUSIVE DESIGN

Alldesign, a major design quarterly in China, will publish a special issue on inclusive design in the spring of 2011. As Guest Editor, Dr Hua Dong has invited a number of experts around the world to contribute articles on the evolution of inclusive design/ universal design/design for all in different countries and regions. The special issue will also introduce new case studies and inclusive design research projects in China. If you would like to contribute an article or a case study (around 1000 words, in English) to the special issue, please send it to inclusivedesignresearch@gmail.com by the **25th February**. The editors will contact you if they decide to include the newsletter in the special issue.

INCLUSIVE DESIGN RESEARCH CHINA ESTABLISHED

The Inclusive Design Research China has been established at the College of Design and Innovation (D&I), Tongji University in Shanghai China. Together with the Inclusive Design Research Group in the UK, the research group aim to promote inclusive design to the largest audience possible through academic and applied research, education, public engagement, and knowledge transfer to industry. Visit www.inclusivedesignresearch.org.

MEMBER PROFILE: PROFESSOR ROB MACREDIE

With over 15 years of research experience, Rob Macredie has worked with a range of organisations, ranging from large blue-chip companies, through to small businesses, and government agencies. Rob's key interest lies in the way in which people and organisations use technology, and his research aims to determine how work can be more effectively undertaken by improving the way that we understand how people and technology interact in organisational (and social) settings. He is the Professor of Interactive Systems at Brunel University, and has held senior leadership roles as Head of School, Dean of Faculty and as Pro-Vice-Chancellor.

UPDATES

INCLUSIVE BUS TRAVEL
We have won a grant from the Hillingdon Council to improve the accessibility and inclusivity of bus travel in the London Borough of Hillingdon. Contact Famaz.Nicolaou@brunel.ac.uk for more details about the project.

AUDIT OF SHANGHAI METRO
An accessibility and inclusivity audit of the Shanghai Metro system has been conducted by a group of postgraduate students taking the Inclusive Design Module at the D&I. They audited 10 old and new underground lines, and found that there is a lack of accessibility of older lines and a lack of system thinking in the newer lines. None of the lines are fully accessible for all. Contact donghuahao@gmail.com for more details about the project.

EVENTS

CES SYMPOSIUM
CAMBRIDGE, UK
7-8 APRIL
www.grantadesign.com/symposium/cambridge/

ERGONOMICS & HUMAN FACTORS
LINCOLNSHIRE, UK
12-14 APRIL
www.erf2011.org.uk/

INCLUDE2011
RCA, LONDON
18-20 APRIL
www.hhc.rca.ac.uk/2965/all/the-include-2011.aspx

INCLUSIVE DESIGN RESEARCH CHINA
ZONGHE LOU 1691, COLLEGE OF DESIGN AND INNOVATION, TONGJI UNIVERSITY, 1239 SIPING ROAD,
SHANGHAI 200092, P.R. CHINA | TEL: 0086-21-65983778 | EMAIL: INCLUSIVEDESIGNRESEARCH@GMAIL.COM

INCLUSIVE DESIGN RESEARCH UK (TARTE),
SCHOOL OF ENGINEERING AND DESIGN, BRUNEL
UNIVERSITY, UXBRIDGE UB8 3PH

2.

PM lays foundation stone for new NID campus in Assam

New Delhi: Prime Minister Manmohan Singh addressed the gathering at the foundation stone laying ceremony of the National Institute of Design (NID) at Jorhat Campus in Assam today.

Expressing his happiness at laying the foundation stone of the institute, the Prime Minister said that this was the second institute of its kind in India after the first National Institute of Design had been set up in Ahmedabad fifty years ago. "The need for design intervention for Indian products and services was first visualized by the then Prime Minister Pandit Jawaharlal Nehru. He actively encouraged the setting up of the National Institute of Design at Ahmedabad. Starting from a small campus in 1961, the institute today is a multiple campus organization with a strong national and international profile," he said.

"It conducts graduate level diploma programs in eight design disciplines and sixteen sector specific post graduate programs in diverse domains. It has also set up state of the art infrastructural facilities like the Knowledge Management Centre, Information Technology Center, and Design Vision Center."

Manmohan Singh stated that the new NID at Jorhat is a timely and welcome initiative. "The National Institute of Design has evolved as the touchstone of good design education in India while continuing its efforts for spreading knowledge of traditional Indian design across the world. But one institute cannot serve the growing and variegated needs of our nation," he said.

The Prime Minister said that he was happy that the institute had been set up in Assam, a state with which he had a special bond. "I represent Assam in Parliament and to me coming here is like coming home," he said.

He also informed that the government had always been alive to the special needs of Assam and other north east states and a number of projects for rapid development of Assam had been initiated.

He stated that he was happy to note that the comprehensive project for protecting the Rohmoria area and the Majuli Island from erosion is to be completed soon.

The Prime Minister stated, "It is design that converts creative ideas into tangible products and services for society at large. It

can play an important role in economic, societal and industrial development. Its importance in creating opportunity for economic development and providing jobs is to be emphasized."

He said that the aim of good design should be the improvement in the quality of life through products and services which can be accessed by people in general. "In the Indian context design should also be a tool for inclusive development. Value addition through innovation in design can play a pivotal role in enhancing the competitiveness of both manufacturing and service industries," he said.

He further added that "Specific to the North East, better industrial product design can contribute to the development of Micro Small and Medium Enterprises by enhancing product utility and by helping in translating new ideas into new products."

Stating that design had been a traditional skill in India, Manmohan Singh said, "It gives a unique Indian aesthetic value to our arts and crafts as well as our festivals and historical monuments. However, in the process of rapid industrialization, some of our traditional skills have been lost. But, with the opening up of our country to global competition, the traditional design skills are once again finding a central role in differentiating our products. Indeed this could provide a competitive advantage to our producers."

"Therefore, our design initiatives should sustain and strengthen our traditional knowledge, skills and capabilities while also being sensitive to global demands and requirements," he inferred.

He informed that the government had taken significant initiatives to enhance the design innovation and application framework cutting across all sectors and disciplines, including revamping the Designs Act and setting up Design Business Incubators.

He hoped that the steps that had been taken by the government would ensure that the rights of creative people are protected and talented people are trained in innovative processes and lead to the creation of intellectual wealth. Towards the end of his speech, the Prime Minister stated that the NID at Jorhat should leverage on the traditional craftsmanship of the region and help in giving a new life to the traditional arts and crafts in this area. "At the same time the institute should come out with eco-friendly design for adoption by the people of northeast for modern industrial goods so that

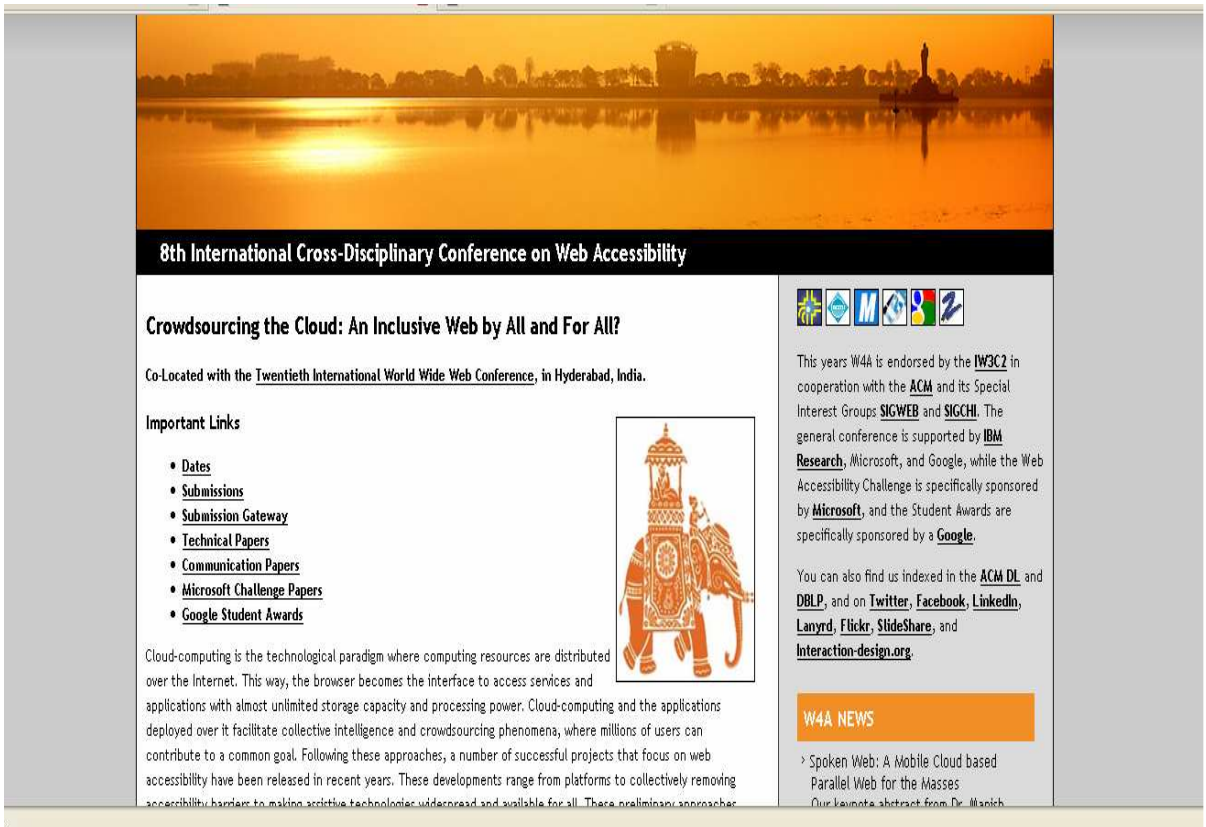
the modernization and preservation of the ecosystem can go hand in hand," he said.

"The promotion of the textile sector in the region as well as the initiatives under the National Bamboo Mission should also get support from this institute," he concluded, wishing that the new institute would be of great benefit to both the region and the country.

Program & Events:

1.

2.



3.

UNIVERSAL DESIGN WORKSHOP

ON

3RD, 4TH & 5TH MARCH 2011

WORKSHOP DESCRIPTION

Universal Design Workshop to be held on 3rd, 4th & 5th March 2011 is planned as a culmination of a National Student Design Competition for Design for All/Universal Design that we floated in Oct'2010.
(http://www.spabhopal.ac.in/comp%20briief%202.pdf , http://www.nsdc.blogspot.com/ , http://www.universaldesigninindia.blogspot.com/).

We received tremendous response for this competition from architecture and design schools with about eighty registrations. The registered student teams have now started working on their designs based on the design brief and in consultation with their faculty advisors. The teams are also provided with a list of books, websites and other online resources on universal design to make their challenge an informed attempt. They will submit their work by 15th February 2011. The evaluation of this competition will be coupled with the three days workshop on 3rd, 4th & 5th March 2011. The two best entries will be awarded and all shortlisted entries will be displayed as an exhibition for the professionals for wider dissemination. Registered students and their faculty advisors are invited to attend this workshop.

WORKSHOP OBJECTIVES

- Create awareness about 'Universal Design' amongst budding architects, planners and design professionals to support social sustainability
- Provide hands-on experience to understand practical application of Universal Design to design Inclusive built-environment for everyone including people with functional limitations.
- Learn about Universal Design education, teaching and practice
- Develop example of a model building through intense Universal Design Education

VENUE

School of Planning and Architecture, Bhopal (An autonomous Institution of Ministry of Human Resource Development, Govt. of India)

PARTICIPANTS

Students of architecture, planning and design, who registered for 'National Student Design Competition' and their faculty advisors, are invited to attend this workshop. The Exhibition of competition entries will be open to all interested individuals, architects, planner, engineers and all other stakeholders involved in development of built-environment and infra-structure.

PROGRAM SCHEDULE

Session	Day 1 3rd March	Day 2 4th March	Day 3 5th March
I **10.00-10.30 AM**	Registration	National Student Design Competition- Presentations and Exhibition-Open for All	Expert Address: 'Universal Design' in Design Practice by Architect Abhishek Ray
10.30-11.30 AM	Inauguration & briefing		
Tea Break 11.30 AM to 12.00 PM			
II **12.00 PM to 13.30 PM**	Expert Address: 'Universal Design' in 'Design Teaching/Studio' by Prof. Abir Mullick	National Student Design Competition- Presentations and Exhibition-*Open for All*	Expert Address: Universal Design in Indian Context by Dr. Gaurav Raheja
Lunch Break 13.30 PM to 14.30 PM			
III **14.30 PM to 16.00 PM**	Interactive hands-on exercise related to Universal Design	National Student Design Competition- Presentations and Exhibition-Open for All	Experience Sharing and Feed-back
Tea Break 16.00 PM to 16.30 PM			
IV **16.30 PM to 18.00 PM**	Interactive hands-on exercise related to Universal Design	National Student Design Competition- Presentations and Exhibition-Open for All	Valedictory, Student Competition Result declaration,
18.00 PM Onwards	Movie Show on Workshop theme	Cultural Program, Evening Dinner & Networking	

JURY OF THE COMPETITION

The judging panel consists of some strong proponents of universal design and a team representing stake-holders. Following three experts of Universal Design in the country are invited to judge the competition and direct the workshop.

Prof. Abir Mullick, *Industrial Design Program, Georgia Institute of Technology, Atlanta, USA*

Dr. Gaurav Raheja, *Department of Architecture and Planning, Indian Institute of Technology, Roorkee, India*

Architect Abhishek Ray, *Disability Design and Research Foundation, Mumbai, India*

COLLABORATORS

National Institute of Orthropaedically Handicapped, Kolkata

National Association of Students of Architecture (NASA)

COORDINATING TEAM FROM SPA-BHOPAL

Convenor: Dr. Rachna Khare

Coordinators: Ar. Sandeep Sankat and Ar. Ram Sateesh Pasupuleti

Address: School of Planning and Architecture, Sports Complex, MANIT Bhopal, 462051, Phone: 0755- 2670910, E mail: nsdc@ spabhopal.ac.in, Web site: www.spabhopal.ac.in

4.

Poster submission

Guidelines for Camera-ready extended poster abstract submission

These sessions will accommodate the presentation of late-breaking scientific and professional news or work in progress. An abstract of 300 words should be submitted through the Conference Management System (CMS), and should include the essence of the planned presentation.

No specific formatting guidelines apply for the preparation of the abstract. References, tables and figures are acceptable in the abstract. The 300-words limit excludes references.

Authors, whose abstract is accepted, will be required to submit an extended poster abstract by Friday, 25 March 2011 to be included in the Conference Proceedings. These abstracts (absolute minimum 4 pages long and absolute maximum 5 pages long) must be written in the form of a self-contained short research paper, according to the Springer manuscript guidelines.

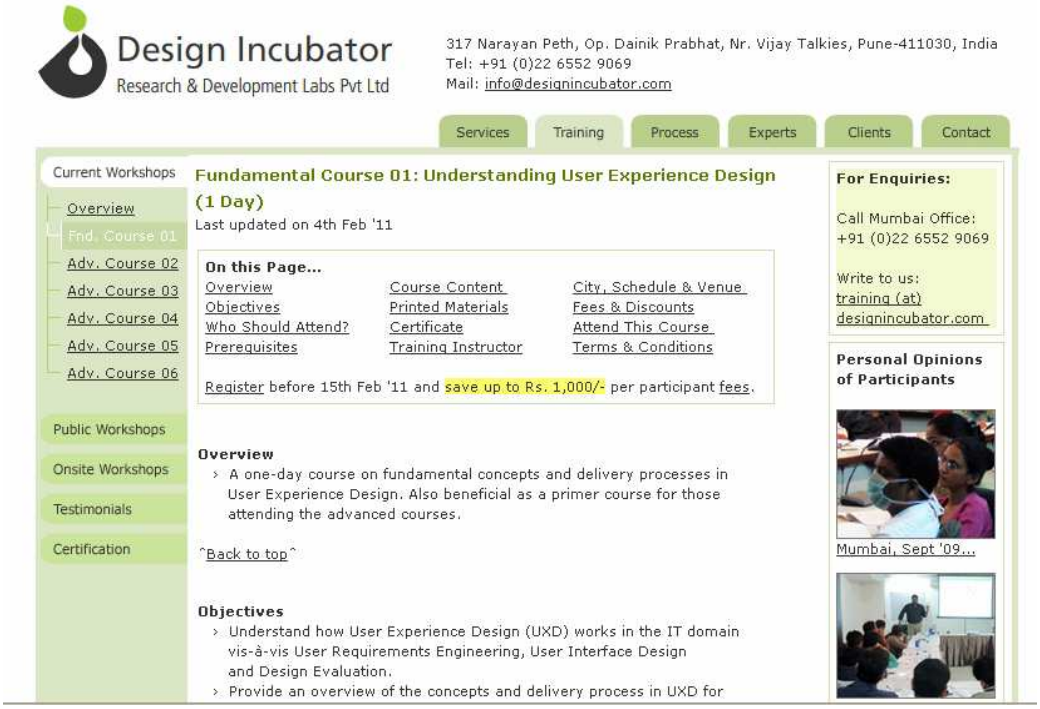
If an extended abstract is not submitted according to the above guidelines, the poster will not be included in the Conference Proceedings, but can still be presented during the Conference.

Because of the publication process, the deadlines for poster submissions are updated as follows:

Summary of Submission Requirements & Deadlines

	Abstract Length	Deadline for Abstract Receipt	Notification of Review Outcome	Deadline for Camera-ready Receipt
Posters	300 words	Friday, 11 February 2011	Monday, 28 February 2011 **(updated)**	Friday, 25 March 2011 **(updated)**

5.



6.

राष्ट्रीय डिज़ाइन संस्थान
NATIONAL INSTITUTE OF DESIGN

main campus | admissions | outreach | consultancy | faculty
pg campus | undergraduate | industry programme | management | awards
r&d campus | postgraduate | research & publication | director & deans | calendar
campuses | education | activities | people | news | search...

Exhibition - Connecting Concepts

Design Gallery, National Institute of Design
Paldi, Ahmedabad
On view: 09.02.11 - 03.03.11
between 10.00 am & 7.00 pm

Connecting Concepts
This February the nucleus of Dutch Design will be explored in a new exhibition - Connecting Concepts.

Dutch Design is recognized for its so-called Dutchness, but what does that mean? The exhibition will deconstruct the intellectual framework of Dutch Design and explore the ideas that combine to create the design culture that defines the Netherlands.

The setup of the exhibition discards with tradition. The focus is not on random objects displayed alongside textbook explanations, but rather on process. This will help visitors to draw connections between the underlying ideas and principles that drive Dutch Design.

It will also help them to identify with such principles and even contribute new ones and thus a dialogue will ensue. The exhibition is flexible and new ideas and objects will be added and deleted to keep it geographically relevant and as immersed as possible in local design debates.

In the Netherlands, design has evolved into a multidisciplinary tool for change. Practitioners are open and flexible -always looking backwards and forwards with a mind for society's reality and needs. Here, design is embraced as the start point for improvements in sustainability, technology, and communication.

The Sand Engine by Province Zuid Holland is a good example. Using a sand engine to protect a country's man-made coastlines is unconventional. The idea does, however, directly relate to the process of building dykes and pumping away water with windmills, which began 500 years ago. Objects like this also reveal much about the Dutch and their cheery stubbornness.

Marcel Wanders' Knotted Chair, is included not because it is famous, but because it arose from an experimental combination of traditional techniques and new materials. Fashion by Painted is beautiful but what matters more is that it came about from cooperation between Dutch conceptual designers and traditional Bulgarian craftspeople.
We believe that by understanding how Dutch design works, communication between our cultures will improve and lead to mutually beneficial opportunities for all. Connecting Concepts is curated by Ed van Hinte. It is a joint project between Premsela - Dutch Platform for Design and Fashion, The Netherlands Architecture Institute, and Design Cooperation Brainport. It has been realized as part of the DutchDFA programme.

Connecting Concepts will open in NID Ahmedabad, India, February 8th before moving to Bangalore and then onto China.

7.

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idisc

PRESENTATION

Program overview: 4th Global Forum on Innovation & Technology Entrepreneurship

May 30 - June 3, 2011 in Helsinki, Finland

Download now (86 KB)

infoDev

MINISTRY FOR FOREIGN AFFAIRS OF FINLAND

4th GLOBAL FORUM ON INNOVATION & TECHNOLOGY ENTREPRENEURSHIP
"Creating Sustainable Businesses in the Knowledge Economy"
May 30 – June 3, 2011 in Helsinki, Finland

PROGRAM OVERVIEW

May 28 (Sat)	May 29 (Sun)	May 30 (Mon)	May 31 (Tue)	Jun 1 (Wed)	Jun 2 (Thurs)	Jun 3 (Fri)	Jun 4 (Sat)
		WHAT'S ALWAYS "ON" SME Fair – meet innovative technology entrepreneurs from around the world Vote for your favorite SME to win Financing Prizes Global Community Lounge – network & re-energize Hotspot to access infoDev toolkits & communities					
Training for incubator managers & **ToT** *Format: 3 parallel sessions, 6 modules in total*	**Training** for incubator managers & **ToT** *Format: 3 parallel sessions, 6 modules in total* **SME Fair opening & Welcome cocktail**	**Global Forum Inauguration** *Format: formal plenary* **The Power of a Global Community – Transform!** *Format: "TED Talk" – external, inspirational visionary* **Building Industrial Competitiveness through an Effective Innovation System** *Format: Davos style* **Innovative SMEs in the Global Market Space** *Format: Q&A with SMEs at Fair* **Policy Interventions** *Format: Davos style* **Networking evening**	**Parallel deep-dive discussions** →Mobile Applications →Climate tech: job creation →Agribusiness →Regional networks →Global Communities of Practice *Format: workshop, convening in morning & afternoon sessions* **Business-to-Business, Business-to-Investor, Idea-to-Idea Twinning** *Format: "Speed dating"* **Cocktail reception** Theme: infoDev knowledge products incl. 2 new SourceBooks on ICT in Agriculture	**Technology Financing: Challenges & Opportunities** *Format: Davos style* **Innovating through Incubation:** business incubation perspectives from around the world *Format: Davos style* **Global Community Commitments**: what have we learned, what will we do next? *Format: Davos style* **Technology SME Financing Prizes – Awards Ceremony** **Closing session** for core GF program *Format: formal plenary*	**M-Labs Business Plan Brainstorming Workshop** *People: 30* *Location: press room* **Day trip to Tallinn, Estonia** Theme: Innovation & Entrepreneurship Ecosystem in the Baltics (Hel-Tal 10:30-12:30 – Tal-Hel 21:00-23:00) or day trip to **Turku, European Capital of Culture 2011**	**Site visits in Helsinki**, held in parallel sets Optional 19:00 **Ferry leaves Helsinki for St. Petersburg, Russia**	9:30 Ferry arrives in St. Petersburg Day program 19:00 Ferry leaves for Helsinki **Jun 5 (Sun)** 8:30 Arrival in Helsinki

8.

CALENDAR
EVENT ARCHIVE
PHOTO ARCHIVE

events

Vilnius, Lithuania

9 - 13 May 2011

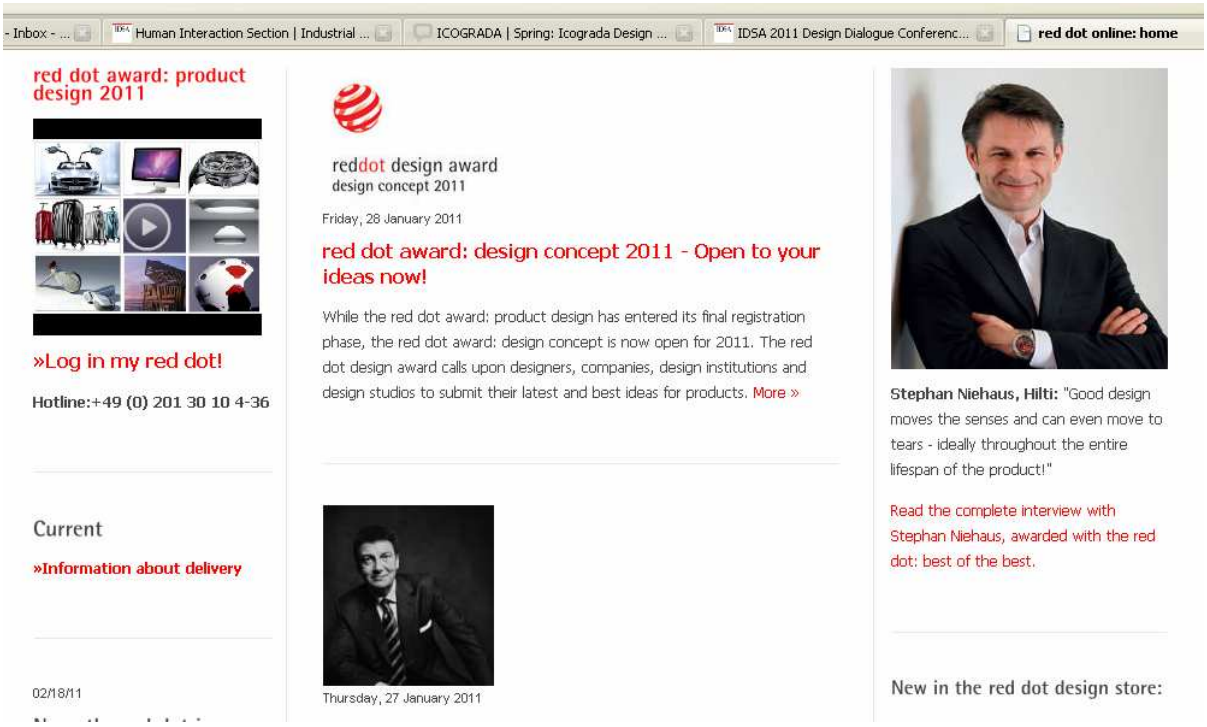
SPRING: ICOGRADA DESIGN WEEK IN VILNIUS 2011

Spring represents the beginning of the cycle where ideas are planted and through a meticulous strategic design process they come to life and we can reap their fruits.

Through the theme of 'Spring', **Icograda Design Week in Vilnius 2011** strives to explore design as a powerful process that transitions ideas into functional realities. **Spring 2011** will be a great opportunity for designers, business leaders and government stakeholders to meet, discuss and explore design as a basis for development. Spring is a powerful tool, loaded with positive design energy waiting to be released. Spring forward with design.

Visit: vilnius.icograda.org

9.



10.

Welcome to the Festival of International Conferences on Caregiving, Disability, Aging and Technology - FICCDAT 2011

Results of abstract reviews have been sent to all conferences except for the Neurorehabilitation conference and the RESNA/ICTA Workshop notifications as they are a bit behind. Please don't worry as they will be sent out shortly.

Important Information for Authors

Please link here to download Poster Guidelines.

Please link here to download Accessible Presentation Guidelines.

Technology in the Presentation Rooms

Each presentation room will be equipped with a Windows PC with Microsoft Office pre-

loaded and an LCD projector. There will be an AV monitor for each room. Please bring a memory stick containing your presentation (developed according to the Accessibility Guidelines) to your assigned meeting room at least 15 minutes before your presentation. There will be a fully equipped speaker readiness room on-site. If you have any special presentation needs, please send them as soon as possible to info@ficcdat.ca
We will then try to address these additional needs.
All accepted authors must be fully paid by April 22nd, 2011 to be included in the program. Take advantage of our early bird fee by fully paying by April 15th.

10.

Job Openings:

1.

A leading social organisation in handicraft sector is looking for dynamic individuals for the following positions:

Manager/Senior Manager (Sales & Marketing): The individual will coordinate the domestic sales & marketing strategy of organisation's leading. It will involve setting and meeting sales target, increasing footfalls into the store, converting footfalls into sales and brand promotion.

Qualification & Experience: A graduate or post-graduate in management or related subject with at least 3 years of experience in retail or FMCG industry. The person should have good communication skills.

Compensation: No constraint for the right candidate. It will range from 3.5L/annum-6L/annum with incentives on achieving targets.

Merchandiser: The individual will coordinate with the buying team and the artisans to develop products based on market needs. Besides this the merchandiser will coordinate with the Shop Manager on proper display and also managing the right merchandise in the store.

Qualification & Experience: A graduate or post graduate degree from NIFT, NID or similar institution with at least 3 years of experience in merchandising in a similar industry. Good communication skills are a must.

Compensation: No constraint for the right candidate. It will range from 2.5L/annum-3.5/annum with incentives on achieving targets.

Lead Designer: The individuals will lead the product development team and will be responsible for all design related activities.

Qualification & Experience: A graduate or post graduate degree from NIFT, NID or similar institution with at least 3 years of experience in the crafts sector.

Compensation: No constraint for the right candidate. It will range from 3.5L/annum-4.8/annum with incentives on achieving targets.

Please send your resume along with Phone No / E-mail by 15th Feb 2011 to: jaspal@jobsforgood.com or contact 011 -65672160, 26217460.

2.

1 PhD POSITION AND 1 POSTDOCTORAL RESEARCH FELLOWSHIP IN MOBILE HEALTH INFORMATION SYSTEMS

The Department of Informatics (IFI) is one of nine departments belonging to the Faculty of Mathematics and Natural Sciences at the University of Oslo. IFI is Norway's largest university department for broad education and research in Computer Science and related topics. You can read more about the Department here: http://www.ifi.uio.no. The Department has near 800 students on bachelor level, 300 master students, and over 200 PhD students. The overall staff of the Department is close to 250 employees; about 150 of these are full time scientific positions: about 60 Full/Associate Professors

Job description

The positions belongs to the mobiHealth action research project within the Global Infrastructures research group at the Department of Informatics. For information about the mobiHealth project see:

http://www.hisp.uio.no/projects/mobihealth/

In particular, the mobiHealth project is focuses on the creation and investigation of sustainable health service networks for primary health care workers. The project is also a part of a broader development and research agenda within the Health Information Systems Programme (HISP).

http://www.hisp.uio.no/

For information about the GI research group, see:
http://www.ifi.uio.no/forskning/grupper/is/GI.html
In the evaluation of the candidates their potential contribution to the mobiHealth action research project as well as the GI group's research agenda, in particular through their research proposal, will be given emphasis. The GI group's research agenda is described here:
http://heim.ifi.uio.no/~oleha/Research/GIResearchAgenda.pdf
DOCTORAL RESEARCH FELLOWSHIP IN MOBILE HEALTH INFORMATION SYSTEMS, Ref.no.: 2011/1538
The doctoral fellowship is for a duration of three years, depending on final funding decisions.
Position as doctoral research fellow (SKO), available at The Department for Informatics
Requirements:
Applicants must have a recognized University degree, like "cand.scient", "siv. Ing.", Master of Science or equivalent in a subject area relevant for the planned research
The purpose of the fellowship is research training leading to the successful completion of a PhD degree.
The fellowship requires admission to research training programme at the Faculty of Mathematics and Natural Sciences. An aproved plan for the research training, including a project outlinge, must be submitted no later than two months after takin gup the position, and he admission must be approved within three months. For further information see:
http://www.admin.uio.no/admhb/reglhb/personal/tilsettingvitenskapelig/regulationstermcondition.xml
A good command of English is required of all students attending the University of Oslo.
http://www.matnat.uio.no/english/research/education/proficiency_in_English.html
Salary:
PhD Research Fellow (SKO 1017), pay Grade: 48-56 (NOK 383 900 – 440 500) per year depending on qualifications and seniority.
Applicants are expected to include a summary of academic specialization and statement of scientific interests.
The application must include:

- **Application letter**
- **Statement of research interest**
- **CV (summarizing education, positions and academic work, administrative experience and other qualifying activity)**
- **Copies of transcripts of records, and educational certificates**
- **List of publications and up to 5 academic work that the applicant wishes to be considered by the evaluation committee**
- **Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number**

Foreign applicants are advised to attach an explanation of their University's grading system.
Please remember that all documents should be in English.
Closing date: February 28th, 2011
UiO has an agreement for all employees, aiming to secure rights to research results a.o.

The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply.
In accordance with the University of Oslo's equal opportunities policy, we invite applications from all interested individuals regardless of gender or ethnicity.

Region: Oslo
Application deadline: February 28th, 2011.
Location: Oslo, Blindern
Reference number: 2010/1541
Home page: http://www.ifi.uio.no

Contacts:
Professor Kristin Braa Telephone: +47 41630260
e-mail: kbraa@ifi.uio.no

POSTDOCTORAL RESEARCH FELLOWSHIP IN MOBILE HEALTH INFORMATION SYSTEMS, Ref.no.: 2011/1541
The post-doctoral fellowship is for a duration of between three and four years, depending on final funding decisions.
Position as postdoctoral research fellow (SKO 1352), available at The Department for Informatics
Requirements:
The candidate must hold a PhD or other corresponding education equivalent to a Norwegian doctoral degree in a subject area relevant for the planned research.
Applicants are expected to include a summary of academic specialization and statement of scientific interests.
UiO (and Norway more generally) is a multi-lingual environment, where knowledge of Norwegian is not a necessity in everyday life. However, a good command of English is required.
http://www.matnat.uio.no/english/research/education/proficiency_in_English.html
Submissions:
The main purpose of post-doctoral research fellowships is to qualify researchers for work in top academic positions within their disciplines.
Please also refer to the regulations pertaining to the conditions of employment for post-doctoral fellowship positions:
http://www.uio.no/admhb/reglhb/personal/tilsettingvitenskapelig/regulationstermcondition.xml
Salary:
Postdoctoral Research Fellow (SKO 1352), pay grade: 57 – 64 (NOK 448 200 – 510 000 per year, depending on qualifications and seniority)
The application must include:

- **Application letter**
- **Statement of research interest**
- **CV (summarizing education, positions, pedagogical experience, academic work, administrative experience and other qualifying activity)**
- **Copies of educational certificates and letters of recommendation, as applicable**
- **A complete list of publications and up to 5 academic work that the applicant wishes to be considered by the evaluation committee**

- **Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number**

Foreign applicants are advised to attach an explanation of their University's grading system.
Please remember that all documents should be in English.
Closing: February 28th, 2011
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Region: Oslo
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Reference number: 2010/1541
Home page: http://www.ifi.uio.no

Contacts:
Professor Kristin Braa Telephone: +47 41630260
e-mail: kbraa@ifi.uio.no

3.

INTERACTION DESIGNER
2-8 yrs experience.
Candidates from IIT/NID preferred.
Job location: Hyderabad
Compensation: Very competitive
Job purpose
We are seeking a talented Interaction Designer to help us define the user experience of our product and own the design of various integral features. As Interaction Designer, based in our international Hyderabad headquarters, you will be tasked with designing key features of our system. You will use your experience developing user task flows, high-level design concepts and detailed design wireframes in a fast-paced agile environment to ensure our features are both useful and easy to use. Join today and make an immediate and tangible impact on a game-changing start-up.
Responsibilities
• Create process and task flow diagrams.
• Create UI wireframes, mock-ups and prototypes to effectively communicate interaction design ideas.
• Identify possible usability issues and make constructive suggestions for improvement.
• Work with product team to define product requirements.
• Develop and communicate UI standards.
• Work with engineering and QA to ensure designs are implemented as intended.
• Prepare graphics for use in the UI.
Background & Skills
The ideal candidate has a strong understanding of user-centered design and a proven track record designing enterprise and/or complex web-based

applications. You are passionate about design and technology and get along equally well with designers and developers.
• Background in human-computer interaction or related field.
• Bachelors or Masters Degree in Interaction Design or related discipline.
• Strong experience designing usable, complex web-based interfaces.
• Solid understanding of DHTML, scripting, and web technologies
• Strong, clean visual design sense.
• Excellent leadership, communication and teamwork skills.
• Proficiency in process flow diagramming (Omnigraffle or Visio) and wireframing (Omnigraffle, Visio, Fireworks, Illustrator, or Photoshop)
"Must have" skills...
• Expertise in interaction design and usability principles
• Experience creating documents to describe the UI and detailed interactions. "Nice to have" skills...
• Experience working in a rapid development environment
• Experience with UI visual design
• Experience with User research and usability testing
• Experience with CSS
Notes
1. Expertise - advanced understanding and command, skillful.
2. Experience - understanding and proven ability to perform.
3. Competent - basic understanding and command.
4. Knowledge of - aware of the ideas and theory, not necessarily skilled in implementation.
Attitude & Traits
• Strong analytical and design skills. Detail-oriented; user-focused.
• Effective communicator and collaborator – a team player who can both champion ideas and follow direction.
• Able to thrive in a startup environment, where opportunities are many and bounds few – likes to think strategically and is good at tactical execution.
• Enjoys moving quickly, can make decisions rapidly.
.Job location: Hyderabad
Compensation: Very competitive
Send resumes with portfolio/work samples to: reachabhijeet@gmail.com
4.
We are looking to hire one more person with 0-1 year experience to ramp up on running projects in the team
Products we work on are primarily Healthcare related ....
ID:PD ratio (work content wise) is expected to be 6:4 and designers are expected to ensure their designs reach reality with help of engineers on board
Interested poeple please e mail to ratanjit@yahoo.com
5.
G CELL, a new design studio located in Gurgaon, is looking for experienced graphic designers/art directors with minimum 4 years of experience.
Work Profile - branding, web design, etc.
Clients - kingdom of dreams, Galaxy hotel, The Monk, Orient Taj hotel, Amex, etc
Salary 40 k to 80 k per month depending on capability and experience.
If interested, please contact Mikhil Saluja – 9811939651
6.
Designation*

Information Architect
Company Name
Atidan Technologies Pvt Ltd (www.atidan.com)
Role summary
An Information Architect- UID Technology is responsible for multiple User Experience, Innovation and Design projects delivery with strong UX related technology thought leadership, people management and customer satisfaction.
The role has strategic responsibilities and works on ensuring successful execution of User Experience, Innovation and Design programs. Must possess hands-on graphics design experience of business application.
Role description
• Ensures knowledge management of UID technology assets. Document and update, on a regular basis, repository of knowledge related to User experience, innovation and design. Lead design and update of the knowledge management system.
• Ensures creation, promotion, adoption of UID.
• Works closely with graphics designer to support Web / Apps UI / Animation / Info-graphics activities from technical perspective. Contributes to technical writing.
• Should be able to understand software functionality to make the application intuitive
• Ensures UX thought leadership by enabling UX best practices, design patterns, tools and technologies to suit ongoing program requirements and market trends.
• Ensures effective use of , UX and design methodologies for all projects.
• Keeps abreast with latest technologies and bring about regular self up-gradation
• Assesses, meets and exceeds customer expectations. Should be able to design UI according to the tastes of target audience (mainly the US corporate world)
• Hands on creative graphics designer for business application
• Experience with Microsoft SharePoint and Silverlight a big plus. Know-how of how to incorporate UI into .NET and SharePoint applications
• Expert in HTML, Photoshop or equivalent design tools, CSS etc.
Interested applicants must write in to careers@atidan.com directly along with the job title in the subject line.
Creative Director
TROIKA Design
Web: www.troikadesign.in
7.
1. **UI Developer with Strong Java technology experience (3+ yrs)**
2. C/C++ with Networking domain knowledge (5+yrs)
3. Oracle DBA with Strong PL/SQL Development experience (5+yrs)
4. Core Java developer with networking domain knowledge (5+yrs)
pls send u r cv to ancy.das20@gmail.com
8.

Industries, world leader in home fragrance products...is looking to ESTABLISH A DESIGN CELL AT MANIPAL/MANGALORE to design FRAGRANCE PRODUCTS--MOSTLY CANDLES--for the US market.
Primacy, part of the Manipal Group, sells extensively to US & Europe retail chains including Wal-mart, Pier 1, etc. and is the world's largest private

label candle manufacturer (Paula Deen, Carolina, Harry & David, etc.).
Job entails occasional travel to the US.
For more details, write to abha@manipalpress.com
Official website: www.primacyind.com
9.

Primacy Industries, world leader in home fragrance products...is looking to ESTABLISH A DESIGN CELL AT MANIPAL/MANGALORE to design FRAGRANCE PRODUCTS--MOSTLY CANDLES--for the US market.
Primacy, part of the Manipal Group, sells extensively to US & Europe retail chains including Wal-mart, Pier 1, etc. and is the world's largest private label candle manufacturer (Paula Deen, Carolina, Harry & David, etc.).
This is a full time job and will require you to be based at manipal.Job entails occasional travel to the US.
For more details, write only to supriyashenoy32@ymail.com
10.

We are looking out for HTML developers , with experience 3+ yrs. Job

location PUNE

If interested please revert with your profile.

madhura@pureuse.com

madhura25@gmail.com

11.

Sr. Software Engineer - 4 Positions Apply Now
above 5+ years IT Experience

Knowledge of .NET technology(VB.NET, C#, SQL, ASP.NET)

Must have handled independent module(s) in a project / product.

Software Engineer - 6 Positions Apply Now
3- 4 yrs of Experience

Knowledge of .NET technology (VB.NET, C#, SQL, ASP.NET)

pls send u r cv to navtho@gmail.com or resumes@crg.org.in

12

Job Location : Hyderabad Hitech-City

Experience - 2 to 8 yrs maximum

Send resumes with work samples to: reachabhijeet@gmail.com

Responsibilities

• Create process and task flow diagrams.

• Create UI wireframes, mock-ups and prototypes to effectively

communicate interaction design ideas.

• Identify possible usability issues and make constructive suggestions for improvement.

• Work with product team to define product requirements.

• Develop and communicate UI standards.

• Work with engineering and QA to ensure designs are implemented as intended.

• Prepare graphics for use in the UI.

Background & Skills

The ideal candidate has a strong understanding of user-centered design and a proven track record designing enterprise and/or complex web-based applications. You are passionate about design and technology and get along equally well with designers and developers.

• Background in human-computer interaction or related field.

• Bachelors or Masters Degree in Interaction Design or related discipline.

• Strong experience designing usable, complex web-based interfaces.

• Solid understanding of DHTML, scripting, and web technologies

• Strong, clean visual design sense.

• Excellent leadership, communication and teamwork skills.

• Proficiency in process flow diagramming (Omnigraffle or Visio) and wireframing (Omnigraffle, Visio, Fireworks, Illustrator, or Photoshop)

"Must have" skills...

• Expertise in interaction design and usability principles

• Experience creating documents to describe the UI and detailed interactions.

"Nice to have" skills...

• Experience working in a rapid development environment

• Experience with UI visual design

• Experience with User research and usability testing

• Experience with CSS

Notes

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2. Experience - understanding and proven ability to perform.

3. Competent - basic understanding and command.

4. Knowledge of - aware of the ideas and theory, not necessarily skilled in implementation.

Attitude & Traits

• Strong analytical and design skills. Detail-oriented; user-focused.

• Effective communicator and collaborator – a team player who can both champion ideas and follow direction.

• Able to thrive in a startup environment, where opportunities are many and bounds few – likes to think strategically and is good at tactical execution.

• Enjoys moving quickly, can make decisions rapidly.

Send resumes with work samples to: reachabhijeet@gmail.com

13.

UI Designer/IxD Analyst, Full-Time - chennai, INDIA
We have urgent openings to fill within 2 weeks ; please send your resumes and portfolio details at the email contact at end of this email.
Your responsibilities will include:
 # Applying user-centered design processes to develop high quality user flows, wireframes, and detailed visual UI designs
 # Successfully communicating conceptual ideas and visual design rationale
 # Creative background experience with visual & colours in must
Minimum Job Qualifications:
 # 3-6 years designing highly usable, elegant interfaces for large-scale desktop applications
 # Expertise with Adobe Illustrator, InDesign and/or Photoshop
 # Extensive experience creating detailed wireframes, user flows, and detailed UI design specifications
 # Strong organization skills and an eye for detail
 # Experience and knowledge of Silverlight , Blend would be additional advantage
 # Experience and knowledge of HTML,JavaScript,Advanced CSS, or Flash
 # Strong visual design skills in color, typography and layout
Contact details:
isofthealth.com
company site : www.isofthealth.com
14.
Details at: http://www.indiadesigncouncil.in/

IDC Invites Applications for the post of CEO
The India Design Council was constituted in pursuance of the National Design Policy by the Ministry of Commerce & Industry, DIPP, Government of India, registered as an autonomous body under the Societies Registration Act, is looking for a Chief Executive Officer on contract for three years which is extendable. The incumbent should be a professional designer or a Post Graduate in the age group of 40-45 years with at least 10-15 years experience in leading/coordinating design or design related assignments in an organization/institution of repute with excellent coordination and liaison capabilities.
For more details visit, www.indiadesigncouncil.in

Those interested may send their resume within 10days to the Member Secretary, India Design Council, Office of the Director, National Institute of

Design, Paldi, Ahmedabad 380 007
(e mail - msidc@nid.edu)

Above advertisement is releasing in The Times of India, all editions on 9th February 2011.

Job Profile Chief Executive Officer (CEO) of India Design Council
Reports to : Member Secretary / Board
Responsibilities :

- **Implement and execute the strategic goals and objectives of the India Design Council**
- **Enable the Board to fulfill its governance function**
- **Assist and support the direction and leadership towards the achievement philosophy, mission, strategy, and its annual goals and objectives of the India Design Council**

Other Responsibilities :

1. **Assist Member Secretary in conducting the board meetings, by preparing and communicating the agenda to the members.**
2. **Assist Member Secretary to prepare and circulate the minutes to members.**
3. **Promotion of good design practices and liaison with industry. Organize the good design program and awards annually.**
4. **Budgeting & Financial Management of the India Design Council**
5. **Develop Fund raising strategies and Fund Management. Research and identify funding sources, establish strategies to approach funders, submitting proposals and follow up**
6. **Oversees design awareness and effectiveness programs and facilitate interaction with all stakeholders globally. Coordinate with Government. Oversee R&D and strategy and impact studies**
7. **Prepare MoUs, agreements and legal documents for partnering various organizations and governments**
8. **Organize design promotion events**
9. **Over all administration and HR management**
10. **Create awareness among the public, designers and industry, the India Design Council Mission and various programs through all kinds of media.**

CEO Profile: A management or design professional from a reputed institution with minimum 15 years of post qualification experience in liaison with various stake holders like government, industry, institutions and designers etc.

Excellent communication skills in coordination and liaison. Ideally around 45 years old with working experience from autonomous organizations.
15.
Eninov Systems (www.eninov.com). Interested candidates please respond to her at vishalinip@eninov.com with your resume and link to your portfolio.

Opportunity- Application Design and Development for Mobile/Tablet.

- **You will get to work closely on requirement definition.**
- **Create quick taskflows, story-boards and wireframes to visualize the workflow and design.**
- **Create High-Fidelity playful UIs with high visual appeal for kids.**
- **Create a prototype with the help of developers.**
- **Perform Usability testing on the prototype.**
- **This is a freelance/contract based opportunity.**

Requirement :

- **UX design freelancer with preferably 1 to 3 yrs of experience. Freshers or college students with relevant portfolio may apply.**
- **The candidate must be proficient in UCD methodologies and have passion for UX design.**
- **Can create quick storyboards and wireframes to visualize scenarios and use-cases.**
- **Can create task-flows and task-decomposition diagrams.**
- **Has knowledge and hands-on experience on usability testing.**
- **Can convert the storyboards and wireframes to high-fidelity screens ready for HTMLs.**
- **Must have flair for visual design for Mobile UIs and/or web 2.0.**
- **Proficient in Photoshop and Illustrator.**
- **Hands on experience on HTML, CSS and JQuery would be a big plus.**
- **Must have a web-based portfolio.**

About Eninov Mobility:
We work on the complete mobile stack – starting from application, middleware, protocols, drivers and OS. Our team has experience in designing and implementing Location Based, Gaming, Social Networking, Multimedia, BackUp and Educational applications. Our protocol expertise includes Telephony, Messaging, Networking (HTTP/SIP/RTSP/RTP), Security etc. For more information please visit our website :
www.eninov.com
16.
Position1:
Sr. User Experience Architect:

Industry Experience: 7 to 10 years

A Sr. UX Architect will be required to perform a strategic role along with occasional project specific roles.

Responsibilities:

Strategic-

·Work with product owners to define the UX strategy and roadmap for individual business unit.

·Work towards developing capabilities within the UX_CoE

·Oversee various engagements within UX_CoE

Project Specific-

·Work with Business analysts, product management, software developers to produce a world class user experience for Fiserv products.

·Translate high level business requirements into tangible user interface proposals that integrate the latest standards in interaction design and trends in visual design

· Create low-fidelity and high-fidelity task flow mockups and prototypes while integrating feedback from the product teams and our end-users

·Influence and educate the product teams in user-centered design principles and development processes

·Help define standards and best practices for consistent user experiences across Fiserv products

Position 2

Lead Usability Analyst:

Industry experience: 4 to 6 years

Responsibilities:

· Work with Business analysts, product management, software developers to produce a world class user experience for Fiserv products.

·Translate high level business requirements into tangible user interface proposals that integrate the latest standards in interaction design and trends in visual design

·Create low-fidelity and high-fidelity task flow mockups and prototypes while integrating feedback from the product teams and our end-users

·Develop detailed interaction and visual design specifications and work closely with the development teams to implement them

·Influence and educate the product teams in user-centered design principles and development processes

·Help define standards and best practices for consistent user experiences across Fiserv products

***Skills (for UX Architect and Usability analyst positions):**

· Formal education in Human computer interaction design, Industrial design, Communication design from reputed institutes like IDC, NID or similar

·Strong conceptual skills and demonstrated ability to rapidly prototype and design

·Must demonstrate strong interaction design skills and have a solid understanding of usability principles and user centered design process

·Good understanding of user interface technologies (HTML/CSS, Silverlight, Flex,etc)

·Ability to work independently and prioritize and manage work to meet project timelines

·Must have an eye for detail and be able to quickly put ideas into a tangible form

·Has internalized a rigorous design process and is able to tailor it to the needs of different types of projects

·Must have a good understanding of visual design and hands on visual design skills is a plus

·Must have extensive experience working closely with development teams on implementation of designs

Position 3:

Visual designer with UI development skills:

Experience: 3 to 5 years

Responsibilities:

·Work with product management, Usability analyst to define visual design direction for Fiserv products

· Create high fidelity visual mock ups and convert them in click through prototypes (HTML/CSS)

·Provide visual design inputs in creating Proof of concepts

·Create production ready UI

·Provide implementation support to dev team

Skills:

· Very good understanding of visual design principles and ability to conceptualize the design

· Proficiency with any of the graphic design tools (Adobe Photoshop)

· Proficiency with Flash

·Sound knowledge of HTML/CSS

·Exposure to Flex, Sliverlight will be preferred

IMPORTANT ANNOUNCMENT:

We have released a video film of approximately 40 minutes on concept of Universal/ Design For All/ Inclusive Design in the Month of June 2009 and speakers are

Prof Peter Zec of Red Dot, Germany,

Prof Jim Sandhu, U.k

Mr Mike Brucks , ICDRI

Prof Lalit Das, India

Mr John Salmen of Universal Designers & Consultants, Inc. USA

Mr Pete Kercher, Ambassdor EIDD (2nd Volume)

Prof Ricard Duncan, USA,(2nd Volume)

Ms Onny Eiklong, Norweign Design Council(2nd Volume)

Those who are interseted in free DVD kindly write to us along with their postal address or you can download from our

website www.designforall.in or download from below links for single clipping

If you wish to download the film kindly click the below link of your choice

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Prof Jim Sandhu, UK Min-8

http://www.youtube.com/watch?v=Std4PuK4CmM

Index of the film Min-1.2

http://www.youtube.com/watch?v=kFyCLPuQgxk

John Salmen of UD Min-3

Universal Designers & Consultants, Inc

http://www.youtube.com/watch?v=bU770Vqu19o

Indian Example of Sari (female dress)

and Dhoti(Male dress) Min-4

http://www.youtube.com/watch?v=_vmAmRUFptE

Mr. Francesc Aragall Min- 5

http://www.youtube.com/watch?v=d-D3JH_ JGpA

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Dr. Sunil Bhatia
Design For All Institute of India
www.designforall.in
dr_subha@yahoo.com
Tel:91-11-27853470(R)

Forthcoming Events and Programs:
Editor@designforall.in
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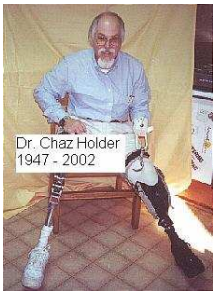
Contributors:

Ms Ruth Clark

Peter Gibilisco

Maureen Yvonne Roberts



Dr. Chaz Holder

Louis C. Franconi

Jo-An M Partridge

Address for Correspondence:
13, Lodhi Institutional Area,
Lodhi Road, New Delhi-110 003India.

This Newsletter is published monthly, by
Design for All Institute of India,
13 Lodhi Institutional Area,
Lodhi Road, New Delhi-110 003 (INDIA)
Tel: +91-11-27853470
E-Mail: newsletter@designforall.in
Website: www.designforall.in

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