

# TEXTILES AND APPAREL NEWSLETTER

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## Announcing

### Summer Events

CHARLOTTE COFFMAN

#### Student Exhibition

An exhibit, *Crossing Time and Culture: Perspectives on World Dress*, will be available for viewing May 3 – August 20, 8:30AM-4:30PM Monday – Friday. The display was developed by students of TXA course Aesthetics and Meaning in World Dress. During the spring semester, students examined the aesthetic and social /psychological relationship between body and clothing in the context of various cultures. Each student selected a research topic that was presented orally, in a term paper, and as part of this exhibition. The exhibit is located in MVR 317; obtain the key from MVR 208.

#### Hands-on Activities at the 2003 NYS Fair

TXA will offer \$75 to counties willing to promote In-Touch Science, The Fabric/Flight Connection, or Simple Gifts through experiential activities at the 2003 New York State Fair. Applications were mailed from the 4-H Office. For more information, contact Celeste Carmichael, Tel: 607-255-0886, Fax: 607-255-3767, Email: [cjc17@cornell.edu](mailto:cjc17@cornell.edu).

#### Eastern Great Lakes Fiber Conference

The Eastern Great Lakes Fiber Conference will be held October 10-12, 2003 in Skaneateles, NY. Offerings include knitting by Kathryn Alexander, felting by Polly Stirling, weaving by Sarah Saulson, plus classes in beading and basketry. Check the website < <http://www.eglfc2003.org/> >

## ENGAGING YOUTH

### Resources for Youth

CHARLOTTE COFFMAN

#### Summer Clearance

Every summer finds TXA Extension staff sorting materials and reorganizing the TXA Workroom. This year, we are offering a variety of publications and supplies at bargain prices. See the enclosed flyer for details.

#### Ideas for Science Fairs and Camps

<<http://www.columbuslibrary.org/cmlscif/searchresults.cfm?searchterm=111&type=b>>

The Columbus Metropolitan Library has a Science Fair Project Index. If the viewer asks for textile science projects, a list of 22 possibilities comes on screen. The project is described and the appropriate reference information is given — book title, author, copyright, call number, pages, and grade level. Sample project suggestions include:

- Compare the silk produced by different types of insects and other arthropods.
- Investigate which types of materials are more likely to become statically charged in a clothes dryer.
- Study the effect of air pollution on clothing.

#### DressShop Releases

Twelve years ago, LivingSoft released its first version of DressShop computer software for making personal patterns. In 1996 and 1997, TXA offered summer workshops and regional trainings using DressShop 2.0 as part of a NYS 4-H Foundation program to increase youth interest in computers. In 2000, Kaaren Hoback provided a hands-on course for 4-H leaders/educators in the Cornell CAD Lab as part of our TXA Youth Retreat. Today LivingSoft is testing DressShop 5.0.

In addition, LivingSoft offers twelve other computer programs. The latest releases are Essential Lingerie and Essential Activewear. Essential Lingerie has 25 patterns including robes, pajamas, bras, slips, and kimonos. Essential Activewear includes 22 patterns for bathing suits, skating dresses, leotards, bicycle pants, and other active wear. All LivingSoft products can be ordered online [www.livingsoft.com](http://www.livingsoft.com) or call 800-626-1262.



*Women ages 45-54 spend more money on clothing than any other age group.  
—Women's Wear Daily, April 24, 2002*

## CONCERNING CONSUMERS

### No More Wrinkles!

CHARLOTTE COFFMAN

After a long hard winter, summer days are especially enticing. It is time to get away on vacation (imagine - wrinkled clothes from packing) and slip into comfortable linen clothes (imagine – wrinkles that have wrinkles). You may be one of the carefree people who do not notice wrinkles, but for those who want a life beyond the rumpled look there is Wrinkle Free Fabric Relaxant.

Wrinkle Free, distributed by Westport Brands, is recommended for colorfast cotton, linen, rayon, silk, and wool. It is not recommended for synthetic fabrics such as polyester or nylon. A test by Consumer Reports confirmed that a quick spray (or two) relaxes the fibers, eliminating wrinkles quicker than ironing or steaming in the hotel shower. Manufacturers claim that the product will not stain fabric, eliminates static cling, and even removes odors. Cans of Wrinkle Free range from \$3 - \$10 for 3-9 ounces. It is sold in travel stores and online at sources such as Magellan's Travel Supplies

<<http://www.magellans.com/shopping/product/detailmain.jsp?ruleID=4&itemType=PRODUCT&itemID=1309>>

#### *Sources:*

1. *Wrinkle-free Travel, Consumer Reports, pp 9. February 2003*
2. *Magellan's Travel Supplies* <<http://www.magellans.com>>

## ENHANCING SAFETY

### The Phthalate Question

CHARLOTTE COFFMAN

Phthalates (pronounced THAL-aytes) are a family of chemical compounds. Their chief use is as plasticizers in vinyl, a popular plastic. Vinyl (also known as polyvinyl chloride or PVC) is ordinarily hard. Phthalates, added during the manufacturing process, act as a lubricant among the long vinyl molecules, permitting them to slip and slide against one another. The result is a strong, durable, flexible plastic used in toys, medical devices, and construction materials. Other phthalates are found in cosmetics and adhesives.

Because phthalates are so widely used, they have undergone extensive testing. Scientists know that relatively large doses of phthalates can cause cancer and reproductive malformations in rodents, but the doses available to humans have seemed well within the safety zone. Now, environmental and health groups suspect that lower levels may also have negative effects and researchers believe that humans are being exposed to higher levels of phthalates than previously realized.

## EMERGING TECHNOLOGY

### Shelter from the Sun

CHARLOTTE COFFMAN

As the rate of skin cancer has grown, so has commercial and consumer interest in sun-protective fabrics. This article shares the latest news on personal sun protection.

Ultraviolet (UV) rays are divided into three categories: UVA (400-320), UVB (320-280), and UVC (below 280). UVA and UVB rays are the most harmful. The unit used to measure fabrics' level of protection against UVA and UVB is the Ultraviolet Protection Factor (UPF) system.

#### UPF Ratings AS/NZS4399:1996

Protection Category	UPF Rating	UV Blocks
Excellent	40, 45, 50, 50+	> 97.5%
Very Good	25, 20, 35	95.9-97.4%
Good	15, 20	93.3-95.8%

A German University tested 236 fabric samples from spring/summer clothing collections and concluded that less than half offered sufficient protection against harmful UV rays. Only 48% of the clothing passed the UPF 30 rating, the European standard. Researchers found that 70% of wool, polyester, and fabric blends had a UPF rating of more than 30, but only 30% of cotton, linen and rayon reached that level.

Wool and polyester absorb UV, but garments from these fabrics are worn less often in hot weather so research has centered on developing a UV absorber that can be applied to other yarns or fabrics. BASF introduced a granular titanium dioxide called Ultramid BS416N. It is a whitener found in toothpaste and paint and can reflect sunlight. Titanium dioxide is blended into nylon 6, crimped, and knitted into garments lighter than cotton and with a UPF of 40.

Ciba Specialty Chemicals invented a UV absorber known as TINOFAST CEL for cotton fabrics. It is also effective on rayon, lyocell, nylon, and their blends. DuPont Textiles & Interiors maintains a UPF certification program for its branded fabrics Supplex and Coolmax. Manufacturers using these fabrics can have them tested, rated, and labeled.

Labels, however, are a major concern for manufacturers. Consumers may not understand the UPF system or label statements such as "anti-UV fabric" or "Australian standard." The reason for the confusion is that each country has adopted its own standard. All major standard-setting organizations agree that an international standardization of UPF measurements in clothing is needed.

#### Sources:

1. Lee, E. *Shielded from the Sun*, ATA Journal, pp 60. Oct/Nov 2002
2. *Supplex with Sun Protection*, DuPont Magazine. 2002.

As concern over phthalates grows, more scientists are doing research on humans. A study published last year in Environmental Health Perspectives, found that a group of men with DNA-damaged sperm also had higher levels of diethyl phthalate (DEP), regarded as one of the less toxic phthalates.

A 2001 study by the Centers for Disease Control and Prevention (CDC) found higher than average levels of some phthalates in the urine of women of childbearing age. The phthalates found in largest quantities tend to be used in cosmetics and perfumes. Of concern is that phthalates are not listed on beauty product labels; they are considered part of the "fragrance," a trade secret legally omitted from labels.

U.S. regulators have already restricted some phthalate use. In 1998, the Consumer Product Safety Commission (CPSC) asked the toy industry to stop using diisononylphthalate (DINP) in toys, such as teething rings, intended for very young children. Earlier this year, the Food and Drug Administration (FDA) recommended that when performing procedures on male babies and boys, as well as women pregnant with boys, hospitals avoid using IV bags, blood bags and tubing made with di(2-ethylhexyl phthalate (DEHP).

Despite these preventive actions, the official consensus is that phthalates are not a health risk. A four-year study by the CPSC concluded that toys with DINP were not a health risk for children unless they mouthed those items for more than 75 minutes per day. Both the FDA and the Cosmetics Ingredient Review Panel have reviewed scientific data and declared that phthalates in cosmetics pose no risk. In January, 2003, the CDC issued a new report that confirms earlier findings — median exposures to phthalates are far below levels that could be expected to cause adverse health effects in humans.

Over the last 50 years, phthalates have found a place in everything from nail polish and shampoo to plastic swimming pools, vinyl flooring, and syringes. Phthalates biodegrade readily. They do not accumulate in animals or humans; inside the body, they break down quickly and are excreted. In their long history of service to consumers, phthalates have not been identified as causing harm to humans. Still, dozens of phthalate compounds exist that have not been fully studied. Until that happens, consumer groups will continue to call for reduced phthalate use and more complete labeling.

#### Sources:

1. Kohn, D. *Environmental and Health Groups Are Pushing to Restrict the Use of Phthalates*. *Newsday*, March 4, 2003.
2. Hileman, B. *Panel Concludes Phthalate is Safe*, *C&EN*, June 2001.
3. *Phthalate Information Center*  
<http://www.phthalates.org/mediacenter/index.asp>

## GATHERING RESOURCES

### Book Review: *Easy Guide to Sewing Jackets* by Cecelia Podolak

BETH DAVIS

In the last TXA News, I reviewed *The Easy Guide to Sewing Tops & T-Shirts* by Marcy Tilton. In addition, a two-part, correspondence In-Service was offered, with a question and answer format and the option to sew a top using the advice and guidance provided by the book. Thirty people from twenty nine counties participated. Their responses have been summarized and sent to participants.

The *Easy Guide* series, published by Taunton Press, has six additional volumes, covering skirts, pants, blouses, linings, jackets and serging skills. All provide useful information that builds on the lessons found in the *Easy Guide to Tops*. I chose the *Easy Guide to Jackets* by Cecelia Podolak, as the next book to review, as it not only deals with the same area of the body and therefore similar fitting challenges, but also demands an extra level of construction difficulty.

To begin with, forget about pad stitching, bound buttonholes and hand sewn linings. The author has drawn from the quick methods of modern ready-to-wear industry and detailed short-cut techniques for construction of quality garments without the time intensive labors of classical tailoring. The jacket details are minimized for a beginner, so that the final garment is of solid construction, with patch pockets, fusible interfacing, machine sewn linings and buttonholes, and collarless. This is a great way to take advantage of an experienced teacher who has taken the time with her students to experiment with industrial techniques, found quick, new approaches to problem areas, and then perfected those techniques.

Ms. Podolak is a perfectionist seamstress, and her book is equally well organized and presented. Photographs and written directions are neatly coordinated, and shown in an orderly sequence. For example, written descriptions of notions are accompanied by photographs, a great help when shopping for items that are new on the market, or new to the reader. Useful advice is provided for both the beginner and more experienced seamstress when selecting appropriate pattern and corresponding fabric. A step-by-step measurement guide and fitting section are included. Perhaps the most valuable part of this book is the description of sewing techniques needed for assembling different jacket styles. These include kimono and raglan jackets (easiest), and set-in sleeve and dropped sleeve jackets (more challenging), all either unlined, partially lined or fully lined. Finally, for the truly inspired, an agenda is provided for a *Weekend Jacket*, complete with construction prerequisites, followed by two weekend days of intense sewing, with the object of a completed jacket at the conclusion of the weekend.

## EXPLORING FABRICS AND FIBERS

### Lastol — Dow's New Elastomer

CHARLOTTE COFFMAN

The US Federal Trade Commission has approved a new generic name Lastol for Dow Fiber Solution's elastic fiber, Dow XLA. Lastol is created from a synthetic polymer, with low but significant crystallinity, composed of at least 99 percent by weight of ethylene and at least one other olefin unit.

Lastol fibers demonstrate heat resistance to temperatures up to and greater than 220 degrees C and chemical resistance to stringent textile-processing chemicals such as potassium permanganate and hypochlorite. For mills, this means consistent, high-quality results when dyeing, bleaching, mercerizing and weaving stretch fibers with no special conditions or treatments required. For consumers, this means they can follow the same care instructions as their 100 percent cotton, polyester or cotton-poly blend garments.

Lastol is popular in core-spun yarns. The elastic core monofilament is wrapped with a sheath of cotton fibers during the spinning process to form a core-spun cotton yarn. When this yarn is processed into fabric, the finished fabric has the stretch of the core elastic yarn and the hand of cotton.

Apparel articles anticipated from these yarns include uniform shirts and pants and a wide variety of knitted, crocheted and woven garments.

#### Sources:

1. *Dow News Center*  
<[http://www.dow.com/dow\\_news/prodpub/2003/20030204a.htm](http://www.dow.com/dow_news/prodpub/2003/20030204a.htm)>
2. *Generic Name Lastol Approved, AATCC Review 3(4):6 April, 2003*
3. *XLA Elastic Fiber* < [www.dowxla.com](http://www.dowxla.com) >

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