



TEXTILE TOPICS

TEXTILE RESEARCH CENTER • TEXAS TECH UNIVERSITY • LUBBOCK, TEXAS • USA

Volume XV, No. 3
November 1986

NEW LOCATION FOR TRC In the November and December 1985 issues of *Textile Topics* we mentioned that new facilities had been assigned to the Textile Research Center. Since then, a 110,000 square-foot building located on Loop 289 on the east side of Lubbock has been undergoing renovation and redesign to accommodate our various laboratories. The renovation is nearing completion and plans for moving the Center are accelerating.



The photograph at left shows the new TRC headquarters. It is expected that restructuring the internal portion of the building will be completed by January 1987. If so, the actual process of moving machinery and instruments will begin during February. Because of the amount of equipment we have and the size of some of it, this will be a major transition. It is anticipated that part of the equipment can be transferred to the new building with the remainder kept in operation until it is moved. If this can be done, our operation will not be completely stopped for any great length of time. Once we

are located in the new facility, we plan to expand the research we are already conducting and extend our efforts into new areas that limited space has not permitted. While the move itself is expected to be difficult, we look forward to the time when we are in full operation once more in a new and larger building.

VISITING PROFESSOR Dr. Zhou Yongyuan, vice president of the China Textile University, Shanghai, People's Republic of China, is presently visiting the Department of Textile Engineering at Texas Tech University. He has come to study textile education and university administration at all levels. He joins two other international visitors, Dr. Slobadana Matic and Dr. Joseph Perel, who were mentioned in the February 1986 issue of *Textile Topics*.

Dr. Zhou is one of four vice presidents at his institution, which is the world's largest textile university. It has a teaching staff of approximately 1140, 1555 support personnel, and 5675 students enrolled at this time. The school has an extensive and advanced research program and biannually publishes in English the *Journal of the China Textile University*. It has nine departments including Apparel Technology, Fashion Merchandising, and Textile Technology. Prior to becoming vice president, Dr. Zhou served as head of the Department of Textile Technology. One of China's thirty-six original key universities, the China Textile University sets the pace for other schools in that country. Its graduates

include many of the decision makers in China's textile industry, notably the government minister for textiles, Mr. Wu Wenging.

It is reported that China's textile industry processes more than eleven billion pounds of fiber annually, and we have been told that 96% of this goes to domestic consumption. The country has become a major purchaser of imported fibers and machinery, and the importation of these is expected to continue for some time as the industry carries out its modernization program.

Dr. Zhou is a warp preparation and weaving specialist and has contributed to literature on the chemistry of warp sizes. He has been at Texas Tech for approximately two months and plans to stay until May 1987. Since his arrival, he has given several lectures on textile production and education in his country. The research programs of Drs. Matic and Perel were described in the February 1986 issue of *Textile Topics*. Both are continuing their studies and Dr. Matic has also taught a class of fiber microscopy.

QR – SS Quick Response is a popular program that we read and hear quite a bit about these days. It is an excellent effort that can result in a number of benefits. We have our own QR program, but we call it "SS" – Sudden Service. An example of our SS was demonstrated during the past month, when a project was scheduled for a company in North Carolina. When it was initiated, there did not seem to be any particular urgency in completing it. Therefore, it was put in line behind several other programs that had been previously scheduled.

This particular program involved the development of a special fabric to be made from a cotton that had already been delivered to the Center. On a Tuesday afternoon, we received a telephone call from the sponsoring company stating that all of a sudden they had an urgent need for the fabric and requesting us to begin work on it as soon as possible. In fact, company representatives stated they needed the fabric in ten days. The bale of cotton was opened the next morning (Wednesday) and processing was begun immediately. Some of the yarn was being spun in the afternoon of that first day, and by the following morning spinning had been completed on one of our open-end machines. Warp preparation began on Thursday and slashing was completed that afternoon. Drawing-in was done on Friday, and before we closed for the weekend we already had a small amount of fabric woven. This was completed at the beginning of the following week, and the fabric was shipped to the research sponsor in five working days after the project was begun.

We are not able to give this type of service on every program, but we do attempt prompt completions and deliveries at all times. We are pleased that we could give this Sudden Service to that particular sponsor. Obviously, a great many on the TRC staff were responsible for completing the project in such a short time and a special thanks goes to our technicians for doing such a good job.

TEXTILE EDUCATION: AN EARLY START For many years the Textile Research Center has had an ongoing program of support for textile education. This has taken many forms, and one of the most successful has been to attract prospective students by giving out samples of textile fibers and fabrics and explaining how the former is converted to the latter. Related to this, Dr. Mason Somerville, Dean of Engineering at Texas Tech University, requested TRC to prepare samples of cotton at various stages of processing for students in the fifth grade of a rural school in central New York state. These samples were prepared beginning with the cotton boll and including raw material, sliver, roving, yarn, and fabric. Additionally, a pair of tube socks and a miniature bale of cotton were sent for each student. A written description was enclosed with each sample.

This was done in the early part of 1986. A short time later the students wrote letters to Dr. Somerville thanking him for making the samples available. The boys and girls seemed to enjoy studying cotton in its various forms, for the letters of appreciation contained a number of interesting comments. We have decided to carry a few of these for the readers of *Textile Topics*.

We would like to emphasize that we are reproducing the following letters exactly as they were received, including spelling and punctuation.

"Dear Dr Sommeville,

Thank you for the cotton bale, socks, and all of the stages It was very interesting about all of the stages. The socks were very nice and soft. I liked the sliver because it was soft. I learned a lot about cotton that I didnt know It was very nice of you to send all of that. I liked the bale. I was amazed about how hard you can pack the cotton in there and how hard it was. We got all of this cotton things on Friday the 25.

Thank you very much!

P.S. I usually don't write this neat, But this is a special occasion.

"Dear Dr. Somerville,

Thank you for the cotton socks it was very nice it kept my feet warm. The fabric was neat. I never saw a cotton bowl be for it was very enjoying. I learned alot from that. I showed my family the cotton and the cotton bale they never saw one before in there life."

ANNUAL FIBER TESTING As we have reported in previous years, we conduct a concentrated cotton fiber testing program during the fall of each year which usually carries over into the first few months of the next year. We are now involved in this after having a later start than usual. We knew in advance that cotton production in Texas would be down this year along with a late harvest, and we thought perhaps the fiber testing would not be quite as extensive as it normally is. However, we have been working since the first of October, and it appears that we will continue for the next three or four months. Most of the cotton has now been harvested and we are receiving cotton samples from many places in the United States.

As for the cotton grown in the West Texas High Plains area, production is less than normal because of poor weather conditions, but the fiber testing has held up to the level we usually expect. We have been working steadily with our high volume instrument lines, and there have been periods when we have had to work overtime to keep up with the demands of this program.

Since one of the goals of the Textile Research Center is to assist cotton producers, marketing firms and textile manufacturers with evaluations of cotton quality, we make our testing program as thorough and extensive as possible. Part of our testing -- both in fiber and yarn -- is published each year in reports that go to marketing and textile firms in the United States and in other countries. We are presently purchasing cotton for our annual quality survey of the Texas production, and the report on this should be ready for distribution in the early part of 1987. We hope the information we generate from this research is of use to many of our readers.

VISITORS Visitors to the Textile Research Center during the month included Mr. & Mrs. James W. Boswell, J. G. Boswell Company, Los Angeles, CA; Albert G. Myers III, Ti-Caro, Gastonia, NC; Jim Maddox, Hobbs, NM; Mr. & Mrs. Richard Caldwell, Gastonia, NC; Gary Wells, John D. Hollingsworth on Wheels, Inc., Greenville, SC; Edward F. Patterson and Ken Wilde, Cotton Board, Memphis, TN; Rex A. Schad, Sears Laboratories, Chicago, IL; R. Bruce Leblanc, LeBlanc Research Corporation, Tallulah, LA; Francis E. Schlueter and Phil Krambeck, John Deere Company, Des Moines, IA; Frank Carter and Doug Fain, Cotton Incorporated, Raleigh, NC; Ann Gomez, Legislative Budget Board, Austin, TX; and Roger Bolick and Don Brown, Allied Plastics & Fibers, Hopewell, VA.

Others included Dan Stokes and Hansuli Suter, Rieter Corporation, Spartanburg, SC; Guido W.

Bausch, Robert Demuth and Walter Schneider, Maschinenfabrik Rieter AG, Winterthur, Switzerland; Urs Meyer, Maschinenfabrik Rieter AG, Horgen, Switzerland; Andrew Mills, A. Hannay Company, Liverpool, England; Albert J. W. Bote, Baumwoll Kommissions-und-Lagerhauser Gesellschaft, Bremen, Germany; Norbert G. Stuhlfauth, Fils-Textil GmbH., Riechenbach/Fils, Germany; and Ulrich Siegrist, Paul Reinhart SA, Winterthur, Switzerland.

In addition to those above, several executives representing the Japan warehouse industry came to the Center. The group included Morio Uchiyama, Mitsubishi Warehouse & Transportation Co., Ltd., Kobe; Tsunefumi Tsutsui, The Mitsui Warehouse Co., Ltd., Kobe; Denta Ogawa, Yokkaichi Warehouse Co., Ltd., Yokkaichi; Takio Hamada and Syusuke Tsubaki, The Sumitomo Warehouse Co., Ltd., Osaka; Masakazu Kishimoto, The Shibusawa Warehouse Co., Ltd., Osaka; Junio Ushijima, Toyo Menka Kaisha, Ltd., Osaka; M. Yamaguchi, Meiko Trans. Co., Ltd., Osaka; Y. Yoneda, Sugimura Warehouse Co., Ltd., Osaka; and Shinichi Yoshitaka, Japan Cotton Traders' Association, Osaka.

Other visitors included forty cotton producers representing the Lockney County Gin, Lockney, TX; ten students from Southland High School, Southland, TX; six graduate students from the College of Home Economics, Texas Tech University; and thirty-six "Junior Engineers in Training," who are high school students considering careers in engineering.