#### Addendum to Affirmative Action Plan

#### School of Textiles

#### April 1973

### Implementation

The School of Textiles recognizes that the establishment of goals alone will not bring about the solution to problems of imbalance of employment among white males, females and blacks. Responsibilities for continuing action must be assigned to individuals who will plan specific actions and see that they are followed through.

Accordingly the School has established an Affirmative Action Committee. The initial composition of the committee is as follows:

J. F. Bogdan, Chairman

H. A. Rutherford

W. E. Smith

This committee will have ad hoc advisers who will be chosen according to the needs of the committee. Various minority groups will be represented by an adviser to be elected by each group. All permanent committee members, selected temporary committee members and some ad hoc advisers will each be assigned some aspect of the overall plan of implementation as their individual responsibility for action or coordination as required.

The permanent committee as presently constituted will:

- (1) Identify and classify the component parts of the affirmative action plan.
- (2) Develop a plan of implementation.
- (3) Determine the composition of the permanent committee and, together with advisers, the assignments of the component parts of the plan to individuals.
- (4) Establish methods of recordkeeping and a repository for records.
- (5) Receive grievances and recommend to the appropriate administrators what kind of consideration should be given to them.

### NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF TEXTILES

OFFICE OF THE DEAN Box 5006 Zip 27607

March 9, 1973

#### MEMORANDUM

TO: Vice Chancellor Harry C. Kelly

FROM: D. W. Chaney, Dean, School of Textiles

SUBJECT: Affirmative Action Plan

Attached are two copies of the Affirmative Action Plan for the School of Textiles, NCSU.

DWC:eh

1 Copy gran to Dr Jenkins

### AFFIRMATIVE ACTION PLAN

School of Textiles

North Carolina State University

March 1973

David W. Chaney, Dean John F. Bogdan, Head, Textile Technology Henry A. Rutherford, Head, Textile Chemistry

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### Affirmative Action Plan - School of Textiles, NCSU

#### March 1973

### I. Background Information

A. Characterization of School of Textiles and Textile Education in General

The School of Textiles is a career-oriented segment of North Carolina State University. Majors in this School receive about one-third of their course work in their major field of study and the remainder from the humanities, social sciences, mathematics and sciences provided by the University. Subjects offered by the School are interdisciplinary and applications-oriented. There are several concentrations of study available based on application.

Because of the breadth of subject matter covered, no two of the 39 faculty are alike. Many have industrial experience with total experience from research and study adding up to some indepth aspect of textiles, fibers and/or polymers.

Emphasis is on the theoretical principles underlying the practical processes and products which constitute this vast field of commercial and human endeavor. Physical sciences, mathematics and engineering subjects are crucial to the educational approach taken by the School. Over 77% of present faculty have attained the doctorate or equivalent in some discipline and combined this with years of applications study and experience.

The School is one of only seven in the country with undergraduate programs, one of six with masters level programs, and one of five with a Ph.D. program. It is by far the largest school with approximately 1/3 of the national enrollment at each of the above academic levels. The national output of graduates is roughly 450 per year at the undergraduate level, 70 per year at the masters, and 6 at the doctoral.

#### B. Textile Students

In the current semester there are 638 students enrolled in the School of Textiles: 577 undergraduate, 40 masters, 18 Ph.D., and 3 special. At the undergraduate level there are 40 female (7%), 15 black (2.6%) and 8 oriental (1%).

At the graduate level there are 6 female (12.5%), 1 black (2%) and 18 oriental (37.5%).

During the period from fall 1969 to spring 1973 the number of black students enrolled increased from 6 to 16, a change from 0.8% to 2.5% of our student body.

The number of female students increased from 27 to 46, a change from 3.8% to 7.2% of our student body.

The number of black undergraduate students who were awarded scholarships increased from 16.7% to 37.5% during this same period. A larger proportion of blacks were supported by scholarships during each of the semesters since 1969 than were females or white males.

The percent of female undergraduate students receiving scholarships increased from 11.1% to 30.5% from fall 1969 to spring 1973.

All black and female graduate students currently enrolled receive financial support through assistantships. Only 82% of the white male graduate students have been awarded assistantships.

For more detailed comparative data on enrollment and financial support awarded to students from 1969 to the present see the charts on pages 13 and 14 of the appendix.

In the seven colleges and universities that have undergraduate B.S. programs in textiles, only 30 other blacks are currently enrolled. There are 215 female enrolled in addition to those at NCSU.

Other than those enrolled in the School of Textiles at NCSU, there are 5 black students enrolled in the six colleges and universities offering graduate programs in textiles in the U.S. Of these 5, one is female. In addition there are 3 other female students enrolled in these same colleges and universities.

C. Steps Taken to Increase Enrollment of Minority Students in Order to Increase the Potential Supply of Minority Faculty

It is evident that the supply of blacks and females who are fully qualified (Ph.D. or equivalent) for teaching at NCSU School of Textiles is extremely limited. There are only one or two who have achieved the doctorate in the past five years and these have gone to industry at salaries beyond the range available to the university. In addition, the known Ph.D.s were not optimally prepared in that the course of study that they followed was in a non-textile discipline. The only connection with textiles was in the thesis problem.

In general the females with Ph.D.s in textiles come from home economics programs. We have one such person on our faculty, plus

one more temporarily. In consideration of the range of subject matter taught by the School of Textiles there is only room for one or possibly two faculty with backgrounds of this type.

Recently, in 1972, the first female graduated from UNC-G with a Ph.D. in home economics whose thesis work was done at NCSU on a textile subject. It is expected that this avenue, and females and blacks in our own textile program, will generate the potential for them to qualify for faculty positions. Results of efforts to increase black and female enrollment are given in the appendix, pages 15 and 16. Graduates resulting are also listed.

Encouragement for minority students is indicated by the fact that all seven of the graduate students from that group are currently receiving assistantships as opposed to 82% for other students. Blacks and females are also experiencing a higher proportion of undergraduate scholarships than other students (appendix, page 13).

The School has intensified recruiting of minority students each year over the previous year. For the past two years a black recruiter has been used. Seventy-five percent of his recruiting efforts have been directed to the minority group in the coastal and southeastern part of the state. The first year he visited 9 schools and talked with approximately 250 students, 7 of whom were accepted here. This year he has recruited in the seven or eight predominately black high schools in the state and with the other recruiters has visited about 20 other high schools. We estimate that our recruiters have talked with approximately 400-500 black students so far this year.

At our last four open houses for high school students we have had special programs for blacks with black industrial representatives participating in them.

This past year a special brochure for black students was produced. A copy is appended to this report.

The problem of encouraging high school and B.S. graduates to enter the School of Textiles is not an easy one, as testified to by the drop of the national enrollment of textile students by 25% in the past five years. It is doubly difficult to attract minority students. That the School has succeeded with minority students over this same period is testimony to the very strong effort that has been made.

### D. Faculty of the School

A list of current faculty is provided in the appendix, pages 17 and 18, with brief information about their background and areas of expertise and interest.

Distribution of faculty by rank is:

Professors	8
Associate Professors	16
Assistant Professors	12
Instructors	_3
Total	39

There are two females and no blacks among the faculty. Both females have the rank of assistant professor, one with tenure and the other with visiting status for one semester. The tenured female has a current salary of \$11,500 on a 9-month basis. She is the newest in the rank of assistant professor and is one of three who do not have Ph.D. degrees. Six others do.

### E. Openings in Faculty Positions Expected, 1973-1977

Faculty positions estimated to be available in the next five years are as follows.

Table I.

Year, Fall		egular aculty	Ac	djunct		st Doc.	Sub. Total	Visiting (3)	Total
		Replace.	New	Replace.	New	Replace.			
1973	2(1)				1		3	1(2)	4
1974		2	1			1	4	1	5
1975				1	1	1	3	1	4
1976		2	1	1		1	5	1	6
1977		3		1	1	1	6	1	7
	2	7	2	3	3	4	21	1	22

Seven new positions, fourteen replacements, and four non-cumulative replacements (visiting professors)

<sup>(1)</sup> Will materialize only if budget request approved by legislature now in session and by Board of Governors

<sup>(2)</sup> Already committed

<sup>(3)</sup> Non-cumulative; only one at a time

# F. Fields of Specialization to be Sought for Positions Open, 1973-1977

Restricting attention to the 7 to 9 regular faculty positions that will be filled in the next five years, School administrators have chosen the following fields of specialization to fill these positions. The listing is in order of current priority. The chances of being able to find a minority person with the particular characteristics described are also estimated.

	Field of Specialization	Chances for Minority Person			
		Black	Female		
1.	Textile scientist or engineer specializing in physical and chemical testing, quality control, and statistical analysis of textile materials	Fair	Good		
2.	Materials scientist and/or engineer skilled in theory and practice of the formation of non-conventional fabric structures	Very slight	Very slight		
3.	Chemist specializing in environ- mental concerns of the textile industry	May already h	nave moral com- white male		
4.	Industrial engineer or economist specializing in textile management, operations research, technical and economic forecasting, etc.	Very slight	Fair		
5.	Knitting specialist — research and machine oriented	Very slight	Nil		
6.	Textile chemist specializing in the theory and practice of the finishing of textiles	Very slight	Very slight		
7.	Textile engineer or materials scientist thoroughly knowledgeable in theory and practice of weaving and related fabric systems	Very slight	Very slight		
8.	Physicist or equivalent specializing in science of color and its applications in textiles	Fair	Good		
9.	Textile engineer specializing in theory and practice of yarn manufacture	Very slight	Very slight		

### G. Supply of Blacks and Females for Open Positions

Another possible source of university faculty is from related disciplines coupled with special training and development. There are occasions when we do this deliberately in order to build an on-campus bridge to the department of that discipline. It is not a common thing, having been done only once in the past ten years. In other related instances the individuals in question also had fairly extensive experience or training in textiles, fibers, and/or polymers.

It would appear that the number of such individuals in the minority group is quite limited as judged from the records. The records quoted are the Ford Foundation Survey Black American Doctorates and another source, Negroes in Science: Natural Science Doctorates, 1876-1969. Between 1960-69 only 70 blacks obtained Ph.D. s in chemistry and 32 in engineering and other physical sciences. On top of this there are only 20 institutions in the country that offer Ph.D. degrees relating to the chemistry or physics of polymers, fibers and/or textiles. Four of these have initiated such programs in only the past five years. It is estimated for example that of 10,000 Ph.D. chemists graduating annually less than 1% (100) have been given training in polymers, fibers or textiles. Furthermore, less than 1% of these are blacks; therefore, one or two per year might be expected to have an appropriate orientation, but there is a good probability than in any given year there would be no blacks obtaining a doctorate in chemistry with a polymer-fiber-textile orientation.

The number of women available with such doctorates is estimated to be small but at least existent. In the period 1960-69, 52 women obtained Ph.D.s in home economics, clothing and textiles (limited usefulness to the School of Textiles). There were 881 Ph.D.s in chemistry in the same period. Eight or nine of these may have had an orientation in polymers, fibers or textiles. Only 168 obtained doctorates in physics.

### H. Promotions and Tenure, Minority Faculty

The one permanently employed female faculty member was recently promoted to the rank of assistant professor and given tenure.

# I. SPA Employees

At the present time there are 29 full-time and 3 part-time SPA employees in the School of Textiles. A complete list is given in the appendix, page 19. Sixty-four percent are female and 6% black. One of the two black employees is female.

Out of 32 positions, turnover in the past five years was 45 with highest turnover rate in the lowest level positions (appendix, pages 19 and 20).

Looking at individual positions, only 15 of the 32 positions actually experienced one or more turnovers; the rest had none. It would be reasonable to expect that in the next five years approximately 1/2 of the present work force will be replaced. This averages out to about three new persons per year, but nine will be hired in order to gain the three. Through June 1977 only three SPA personnel will retire, two of them textile laboratory mechanics and one a secretary III.

In the past five years it was necessary to invite 8 blacks in for interviews in order to hire two. This is slightly more than our average for whites, male or female.

### II. Affirmative Action Plan by the School of Textiles

#### A. General

The record of the recent past described in the introduction above shows that the School of Textiles has taken many positive steps designed to increase representation of minorities in all areas of its operations: students, faculty and non-academic employees. The results have been promising but not outstanding. The supply of interested, qualified individuals is a severe problem at the faculty level; lesser problems exist in the other categories. Honest attempts are being made in all areas to search out qualified minority applicants.

The affirmative action plan set forth below will include every known device for improving chances of bringing the minority situation in each of the three categories mentioned above more nearly in line with the theoretical supply. The word theoretical is deliberately chosen because it is our experience that what appears to be the supply may be overestimated in view of the fact that the rate of rejection by the minority group is higher than for the majority. Nevertheless, as the plan indicates, the School will do its part.

The plan is for targeted numbers of minority personnel within a particular span of time. It is necessary to make assumptions with respect to (1) the availability of qualified people and (2) their willingness to accept an academic appointment within the pay scale available to the School. If these conditions are not met with a frequency equivalent to our assumptions, the targets will not be achieved.

### B. Plan for Faculty and Other EPA Personnel

A complete picture of the proposed affirmative action plan for all EPA employees and related associates is given in Table II.

Table II.

Affirmative Action Plan for Faculty and Other EPA Personnel

	<u>1973S</u>	1973F	1974F	1975F	1976F	1977F
Administrative	6	6	6	6	6	6
White Male Female Black	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0
Regular Faculty	38	37	39	39	39	39
White Male Female Black	37 1 0	36 1 0	37 1 1	37 1 1	35 2 2	35 2 2
Adjunct Faculty	8	8	9	9	10	10
White Male Female Black	8 0 0	7 0 1	7 1 1	6 1 2	6 2 2	6 2 2
Visiting Faculty	1	1	1	1	1	1
White Male Female Black	0 1 0	1 0 0	0 0 1	0 1 0	1 0 0	0 0 1
Other	7	7	8	8	9	10
White Male Female Black	5 2 0	5 2 0	5 2 1	4 2 2	5 2 2	5 3 2
Total	60	59	63	63	65	66
White Male Female Black	56 4 0	55 3 1	55 4 4	53 5 5	53 6 6	53 6 7

The following points are apparent in this plan:

No provision is made for minority representation among administrative personnel. Since there is at present no potentially eligible minority person in the United States for either of the key positions that will be open in the next five years, and the

positions require approximately 10-20 years of prior experience to qualify, it is not reasonable to expect that a minority person can qualify in the time span considered.

- 2. Four out of nine regular faculty positions open in the next five years will be filled with either black or female if available. At least two of the nine positions are not certain to be approved. The increase in the five-year period will be from 3% to 10% of total regular faculty.
- 3. Adjunct faculty who are minority persons will increase from zero to 40% in five years. To accomplish this, four out of the next five appointments will have to be black or female. This can probably be accomplished because there is no salary involved but merely an agreement to share interests and to work together.
- 4. Visiting faculty will probably not exceed one person at any one time and will rotate each year. The rotation will be equally balanced between white male, black and female.
- 5. Other EPA personnel include research associates, recruiters, instructional technologist, and extension specialist. At present 29% of this group are black or female. In five years it is anticipated that the minority will become 50%. Five out of seven of those persons added will have to be minority.
- Minority EPA persons five years from now is targeted for 20% of total EPA.

In order to achieve even this relatively modest figure it is going to require a very great effort. The steps we plan to take are as follows:

- Establish direct communications with all departments in institutions of higher education which graduate black students and females trained in fields which might qualify them for an open position. At the faculty level this will be practically impossible in the next year or so according to our survey of the supply situation. In other EPA positions it should at least be possible.
- Develop an increasing supply of minority students coming through our own programs who would qualify to become faculty or fill other EPA positions. This effort is already underway as indicated in the section on background. Applies at both undergraduate and graduate level.
- 3. Extend invitations to qualified minority faculty of other institutions to enter into some sort of relationship in the hopes that something more permanent might develop. These relationships would include visiting professor or adjunct faculty status.

- Increase invitations for minority persons to lecture here for purposes of becoming better acquainted.
- 5. Work with industry for leave arrangements with minority persons employed there. Traditionally many of our faculty have come from industry. Until recently this would not have been possible. Now industry is beginning to employ more minority persons and this approach will soon become at least possible.

#### C. Plan for SPA Personnel

The plan shown in Table III below is proposed for SPA employees in the School of Textiles.

Table III.

Affirmative Action Plan for SPA Personnel

Target Date	White Male	White Female	Black Male	Black Female
Jan. 1973	11	20	1	1
July 1973	10	19	2	2
Jan. 1974	10	18	2	3
July 1974	10	17	2	4
Jan. 1975	9	16	3	5
July 1975	9	15	3	6

This plan would take the percentage of black SPA employees from 6% to 28% in three years. Twenty-eight percent is reasonable based on population ratios but may not be achievable based on ratio of output of blacks to whites in the fields of training represented by these job classifications. Furthermore, state pay scales will eliminate many qualified individuals who will find higher paying jobs elsewhere.

It should be emphasized again that this affirmative action plan is based on the availability of qualified women and blacks to fill the positions anticipated to be open. If an adequate supply is not available, or if qualified individuals decline our offers, or our minority employees are lured away by higher salaries than are available to us, these targets will not be met.

Minority employees will be given opportunity to train and to qualify for higher paying positions in the same manner as non-minority employees. As a result, we would expect that upward movement will be available to them on the basis of merit. As already pointed out, higher level jobs will open with much lower frequency and, while intensive searches will be made to uncover qualified minority personnel, the chances of filling these positions from the outside will be very much less.

APPENDIX

# Student Enrollment in School of Textiles

	1969	1970	1971	1972	1973 (S	)
Number						
Black	6	6	12	15	16	
Female	27	29	35	39	46	
White Male	671	716	662	602	576	
Percent						
Black	0.8	0.8	1.7	2.3	2.5	
Female	3.8	3.9	4.9	5.9	7.2	
White Male	95.4	95.3	93.4	91.8	90.3	

# Undergraduate Scholarships Awarded

1969	1970	1971	1972	1973(S)
1	2	3	3	6
3	6	7	6	14
88	94	87	90	101
16.7	33.3	25.0	20.0	37.5
11.1	20.6	20.0	15.4	30.5
13.1	13.1	13.1	14.9	17.5
	1 3 88 16.7 11.1	1 2 3 6 88 94 16.7 33.3 11.1 20.6	1 2 3 3 6 7 88 94 87  16.7 33.3 25.0 11.1 20.6 20.0	1 2 3 3 3 3 4 6 7 6 88 94 87 90 16.7 33.3 25.0 20.0 11.1 20.6 20.0 15.4

# Graduate Student Enrollment in School of Textiles

	1969	1970	1971	1972	1973(S	)
Number						
Black	0	1	1	1	1	
Female	5	5	7	6	6	
White Male	54	78	68	56	51	
	59	84	76	63	58	
Percent						
Black	0	1.2	1.3	1.6	1.7	
Female	8.5	6.0	9.2	9.5	10.3	
White Male	91.5	92.8	89.5	88.9	88.0	

# Graduate Assistantships Awarded 1972

	Nun	Percent with	
	Grad. Students	Assistant- ships	Assistant- ships
Black	1	1	100
Female	6	6	100
White Male	50	41	82

# Summary of Graduate Recruiting by School of Textiles Faculty December 1971 to Present

Recruiter(s)	Institution	Contact(s)	Students Intervie	wed M	Action: Offers made including financial support - Record of Acceptances
Chaney, Rutherford	A&T State Univ.	W.I. Morris W. Sullivan	6		3 students, Miss Kelly, Miss Parker & Mr. Boone, visited here 2/14/72 at Burlington Ind.'s expense. No applications received afterwards.
Goldfinger	A&T State	Gilcrist & Hanghan	5 (2 of which were female)		One black enrolled and graduated from M.S. program
Chaney, Rutherford	UNC-G	Schaeffer			Visited Director of Placement who planned to inform students of School of Textiles programs
Cuculo, Rutherford	UNC-G	Puterbaugh			Follow-up on 2 potential students revealed that one went to Wis. and other to Duke with assistantship
Hamby, Rutherford	UNC-C	English	1	1	Graduate assistantship offered and accepted by J. J. Hendley (black) - NCTF \$300 month. Other student dropped out after 1 semester.
Hamby	Fayette- ville State	Knuckles, Fields	2		Presentation made to students in Science Dept. Application forms mailed to Miss Morant and Miss Mack who showed interest. Miss Morant admitted later on provisional basis — then dropped out. Miss Mack did not apply.
Hamby	Gaston C.	DeanCline	2	1	Sent application forms to blacks although records seemed weak. Later sent letters to students on Dean's List. No results.
Hamby	UNC-Ch			1	*Talked to 2 classes. One boy given an Enka assistantship. He withdrew after 2 weeks.  *One or 2 students presently in 4-1 program
Rutherford Hamby, Rutherford Hamby	UNC-C  Fayette- ville State  Gaston C.	English Knuckles, Fields		1	went to Wis. and other to Duke with as Graduate assistantship offered and acc J. J. Hendley (black) — NCTF \$300 mor student dropped out after 1 semester.  Presentation made to students in Scient Application forms mailed to Miss Mor Miss Mack who showed interest. Miss admitted later on provisional basis — tout. Miss Mack did not apply.  Sent application forms to blacks althous seemed weak. Later sent letters to stopean's List. No results.  *Talked to 2 classes. One boy given an assistantship. He withdrew after 2 we

Recruiter(s)	Institution	Contact(s)		nterviewed M	Action: Offers made including financial support —  Record of Acceptances
Rutherford, Cuculo	Duke	Quin and P. Smith			Set up to give a seminar to the 100+ students (including some black) in the Chemistry Dept.  No one showed up.
Cates	Wake F.	J. Reed		2	Discussed graduate programs with 2 students (one oriental). Neither applied.
Goldfinger	Appalacian	Gram, Randall			Talked with Placement Director and Chairman of Math Dept. who will inform students of programs
Hamby, Rutherford	UNC- Wilm.	Crews			Talked with group. Two male students applied and are enrolled in School now. Mr. Crews could recommend no one when contacted this year.
Hamby	PCTS	Partridge	(1 ы	3 6 ack)	Interviewed each separately. Files contain summary of comments. Black female encouraged to discuss further the possibility of entering School's MTT program; female Vietnamese has already submitted an application; suggested to third female that she discuss MTT program with Dr. Cooper here during holidays; assistantship offered to male with "A" average; will forward application form to another male with high average; no encouragement given to two foreign nor 1 American whose grades were low.

# Fields of Training of Textile Technology Faculty

# Graduates of textile colleges or programs:

Field	Faculty
Textile Engineering	Bogdan
	Bradford
Textile Technology	Hutchison
	Klibbe
	Middleton
	Mohamed
	Moser
	Pardue
	Porter
	Smith
	Stuckey
	Lynch
Textile, Fiber & Polymer Science	Brown
	Grady
	Tucker
Textile Physics	Gupta
Physical Chemistry	Hersh
Law	Powell
Education	Robinson
Home Ec., Tex. & Clothing	Massey
Mechanical Engineering	E1-Shiekh

# Faculty with textile experience at time of recruitment:

Mechanical Engineering	Lord
Physics	George
Economics & Industrial Engineering	Cooper
Microscopy	Rochow

### Fields of Training of Textile Technology Faculty (Cont.)

Field

Faculty with no textile experience at time of recruitment:

Physics

### Fields of Training of Textile Chemistry Faculty

Faculty with practical textile experience at time of recruiting:

Organic Chemistry H. A. Rutherford

J. A. Cuculo

Faculty

Fornes

Textile Chemistry K. S. Campbell

R. McGregor

Textile Chemistry & Education C. D. Livengood

Physical Organic Chemistry T. H. Guion

Physical Chemistry D. M. Cates

Chemistry R. W. Work

Faculty with applicable polymer experience:

Polymer Chemistry R. D. Gilbert

M. H. Theil

Organic Chemistry C. E. Bryan

Physical Chemistry G. Goldfinger

Chemical Engineering W. K. Walsh

# SPA POSITIONS IN SCHOOL OF TEXTILES

Position No.	Classification	No. Turnovers 7/1/67 to 12/31/72	Turnover Total
44499	Steno III	3	
44500	Secretary IV	0	
44506	Secretary III	0	
44518	Steno III	0	
44528	Steno III	3	
44504	Steno III	0	6
44520	Steno II	3	
44534	Steno II	7	
44536	Steno II (Established 12/1/70)	2	
45530	Steno II	4 (1 retired	)
44530	Steno II	5	21
44550	Typist III	3	3
44560	Typist I (Established 2/1/70)	5	5
44800	Tex. Lab. Mech.	0	
44804	Tex. Lab. Mech.	0	
44807	Tex. Lab. Mech.	0	
44802	Tex. Lab. Mech.	1 (Retired)	1
44870	Tex. Res. Tech. (Est. 8/28/	70) 0	0
45453	Res. Tech.	0	0
44776	Instr. Maker II	1	1
44784	Instr. Maker I	0	0
44620	Stock Clerk	0	0
44792	Maintenance Mech.	1	1
44790	Res. Mech. II (Est. 8/2/71)	0	0
44450	Accounting Clerk III	0	0
44464	Accounting Clerk II	1 (Death)	1

Position No.	Classification	No. Turnovers 7/1/67 to 12/31/72	Turnover Total
44480	Library Assistant	3	3
45770	Public Infor. Specialist	3	3
45750	Graphic Arts Specialist (Est. 2/1/72)	0	0
45230	Tex. Dyer & Finisher	0	0
45230 44936	Tex. Lab. Tech. III Tex. Lab. Tech. III	0 0	0
Total No. Pos	itions - 32 (2 blacks, 30 whites)	45	45

# DEPARTMENT OF TEXTILE CHEMISTRY

Faculty Research and Teaching Interests

	Academic		Degrees			
	Rank	Bachelor	Master	Doctor	Field	Industrial Experience
Bryan, C.E.	Research Assoc.	U. of Miss.		U. of Minn.	Org. Chem.	Chemstrand; Uniroyal; Sou. Res. Inst.; DuPont
Campbell, K.S.	Prof.	Bates C. Clemson			Tex. Chem.	Ciba Co.; USDA; Bureau of Standards
Cates, D.M.	Prof.	NCSU	NCSU	Prince- ton	Phys. Chem.	Industrial Rayon Corp.
Cuculo, J.A.	Assoc. Prof.	Brown U.		Duke U.	Org. Chem.	DuPont (Research Chemist)
Gilbert, R.D.	Prof.	U. of Ma	nitoba	Notre Dame	Polymer Chem.	Naugatuck Chem. Co.; Am. Synthetic Rubber Co.; Polymer Corp. (Canada) (Res. Chemist)
Goldfinger, G.	Prof.			U. of Paris	Phys. Chem.	U.S. Rubber Co.; Armour Res. Fdn.; Godfrey Cabot (Research)
Guion, T.H.	Assoc. Prof.	David- son		UNC	Phys. Org.Ch.	Monsanto Co. (Research Chemist)
Livengood, C.D.	Asst. Prof.	NCSU	NCSU (i	NCSU n program	Tex. Ch.	N.C. Finishing Co. (Production)
McGregor, R.	Assoc. Prof.	Leeds	Leeds	Leeds	Tex. Chem.	Academic only
Rutherford, H. A.	Prof.	Davis & Elkins	Geo. Wash. U	J.	Org. Chem.	National Bur. Standards; Harris Res. Labs. (Research)
Theil, M.H.	Asst. Prof.	Cornell		Brooklyn Poly.	Poly. Chem.	
Walsh, W.K.	Assoc. Prof.	U. of S.C.	U. of S.C.	NCSU	Chem. Eng.	Celanese

### Teaching Areas

Polymer synthesis; textile waste control

Textile waste control

Dyeing; color measurement

Textile chemical technology

Polymer structure and crystallization; interaction of org. liquids with polymers

Instrumental analyses; chemistry of polymers

Conversion of bulk polymer to fiber; derivatives of cellulose Fiber extrusion

Substitution reactions in cellulose; structure of polymers as determined by high resolution NMR; synthesis of novel polymers Fiber and polymer chemistry - organic

Kinetics of polymerization; interfacial phenomena; color measurement

Science of color

Phys. chem. of processes of sorption & diffusion of substances from solution into polymers and fibers; nonaqueous dyeing No active participation; modification of cotton cellulose; flame retardance

Theory of dyeing

None

Warp sizing

General textiles and textile chemical tech.

Sorption of organic compounds by polymers; sorption of dyes by fibers; theories of dyeing; transport processes Radiation chemistry of fibers; fiber modification by radiation in adjunct with chemicals Physical chem. of dyeing

Fiber chemistry

Polymer crystallization; polymer crystallite morphology; mech. of anionic poly.

Physical chemistry of polymers

Use of ionizing radiation to initiate grafting and crosslinking in textile materials Physical chemistry of polymers

# SCHOOL OF TEXTILES

# Faculty Research and Teaching Interests

	Academic		Degrees			
	Rank	Bachelor	Master	Doctor	Field	Industrial Experience
Chaney, D.W.	Dean & Prof.	Swarthmore College	U. of Penn.	U. of Penn.	Org. Chem.	Chemstrand Res. Center (Tech. Dir., New Prod. & Basic Research); Chemstrand Corp.; American Viscose
Emerson, P.D.	Assoc. Prof.	Purdue Univ.			Mech. Eng.	Chemstrand Res. Center (Sec. Head, Dev. Mgr., Mechanical Res.)
Hamby, D. S.	Prof.	Auburn Univ.			Tex. Eng.	Goodyear Tire & Rubber (R&D, Quality Control); Celanese Corp.; B.F. Goodrich Co.
*Hard, W. H.	Tex.Ext. Spe.	U. of Md.	Geo. Wash.		Bus. Admin.	U. S. Army (Sr. US Army Standard- ization ReprCanada; Chief, Review & Analysis Branch, Office of Chief of R&D, Wash., D.C.)
Shaw, M.R.	Res. Assoc.	Johns Hopkins	1.14	Johns Hopkins	Elec. Eng.	Corning Glass Works (Mgr., Prod. Planning)
Smith, W.E.	Asst. Prof.	NCSU			Tex.	Avondale Mills (Foreman, Finishing Plant)
Work, R.W.	Prof.	U. of Ill		Cornell Univ.	Chem.	Chemstrand Corp. (Section Head, Tex. Res. & Dev. Mgr.)
*Russell, T. L.	Instr. Tech.	U. of N. Y.	U. of Ind.		Audio Visual Comm. Radio & TV Edu.	Graflex Corp. (Consultant) GTE Sylvania, Inc. (Consultant)

<sup>\*</sup>Non-academic

Polymerization; fiber formation and modification; performance of textile structures Teaching Areas

Fiber and polymer chemistry

Textile machine design; noise control

Textile engineering

Textile quality control

Textile technology

Continuing education

Dielectric materials; glass forming and fabricating processes; micro electronics; high frequency heating; elec. components Dielectric materials; glass fibers

Manufacturing processes

Orientation courses

Research on man-made fibers; technical information systems; production problems related to the textile and man-made fiber industry with particular emphasis on impacts upon society Supervision of graduate level research

Instructional media

Television and audio visual

FACULTY
DEPARTMENT OF TEXTILE TECHNOLOGY

	Academic		Degrees			
	Rank	Bachelor	Master	Doctor	Field	Industrial Experience
Bogdan, J.F.	Prof.	L. T. I.			Tex. Eng.	Manville-Jenckes Corp. (Supt., Yarn Depts.)
Bradford, E.H.	Assoc. Prof.	L.T.I.			Tex. Eng.	Crown Mfg. (Asst. Supt.) High Rock Mill (Mgr.)
Brown, P.	Asst. Prof.	Leeds		Leeds	Tex.	
Cooper, W. D.	Asst. Prof.	NCSU	NCSU	NCSU	Econ.	Wash. Mills (Eng.) Dupont, Kins. (Planning)
El-Shiekh, A.	Assoc. Prof.	Alex- andria	MIT	MIT	Mech. Eng.	
Fornes, R.E.	Asst. Prof.	ECU		NCSU	Phys.	
George, T.W.	Assoc. Prof.	Kansas City U.	U. of Ill.		Phys.	Nav. Res. Lab (Sec. Head) Celanese (Sr. Res. Asst.)
Grady, P. L.	Res. Instr.	NCSU	NCSU	NCSU (Current)	FPS	NCSU (Electronics Tech)
Gupta, B.S.	Asst. Prof.	Punjab Univ.		Man- chester	Tex. Phys.	Modi Spin. & Weaving Mills (Supvr.)
Hersh, S. P.	Prof.	NCSU P	ITT & rinceton	Prince- ton	Phys. Chem.	U. Carbide (Res. Chem.) Chemstrand (Sr. Res. Chem.)
Hutchison, E.E.	Asst. Prof.	Mari- etta	ITT			Std. Ultramarine (Lab. Technician) Aberfoyle Mfg. (Q.C.)
Klibbe, J. W.	Assoc. Prof.	NCSU			Tex. Tech.	Dan River Mills (Supvr.) Erwin Mills (Prod. Contr.)
Lord, P. R.	Assoc. Prof.	Maid- stone Tech. I.		Surrey	Mech. Eng.	Fairey Av. (Draftsman) Vacuum Oil (Eng.) Vickers-Armstrong

Technology of textile processes and materials

Textile processes

Knitted fabric geometry; knitting mechanics

Textile economics; operations research

Mechanics of textile structures

Magnetic resonance of polymeric systems; environmental problems

Mechanisms of polymerization; solution spinning of fibers

Physics and electronics

Fiber migration

Physics and mechanics of textile processes and structures

Bleaching and mercerization; fiber structure

TV instruction

Physical properties of textile structures; open end spinning; analysis of mechanisms

### Teaching Areas

Fabric analytics

Yarn forming systems; design and control of yarn systems

Undergraduate and graduate knitting courses

Management and control of textile systems; sales mgmt. for textiles; introduction to OR

Yarn forming systems; mechanics of twisted structures; mech. of fabric structures

Physical properties of textile fibers

Technology of nonwoven structures

Physical properties of textile fibers; struc. of fibers; mech. & rheological prop. of fibers

Physical properties of textile fibers; graduate administration

Fiber science

Fabric forming systems

Environment in textile plants; fiber assemblies

	Academic		Degrees			
	Rank	Bachelor	Master		Field	Industrial Experience
Massey, F.	Asst. Prof.	ECC	UNCG		Home Econ.	Bailey H.S. (Voc. Home Econ. Teacher) Millbrook H.S.
Middleton, H.M.	Asst. Prof.	NCSU			Tex. Tech.	Elliott Knit (Supt.) United Hos. (V.P. Prod.)
Mohamed, M.	Assoc. Prof.	Alex- andria		Man- chester	Tex Tech.	
Moser, W. E.	Assoc. Prof.	NCSU			Tex. Tech.	Deering Milliken (Supervisor, Weaving) Springs Mills
Pardue, J.E.	Assoc. Prof.	NCSU			Tex. Tech.	Chatham Mfg. (Fabric Designer)
Porter, J.A.	Prof.	NCSU	NCSU		Tex. Tech.	Goodyear (Head, Card and Spinning)
Powell, D.M.	Asst. Prof.	NCSU	UNC	UNC	Law	Pacific Mills (Q.C. Eng.) Fieldcrest (Supt.)
Robinson, M.L.	Asst. Prof.	NCSU	NCSU	NCSU	Edu.	Gen. Dyestuff (Tech.) Sandoz Chem. (Lab. Tech)
Rochow, T.G.	Assoc. Prof.	Cornell		Cornell	Mi- croscopy	Oppenheimer (Chemist) Am. Cyanamid (Res. Fellow)
Smith, Gary	Instr.	NCSU	NCSU		Tex. Tech.	
Stuckey, W.C.	Assoc. Prof.	NCSU	NCSU		Tex. Tech.	Newport News Shipbuilding & DD Co. (Timekeeper)
Tucker, P.A.	Instr.	NCSU	NCSU	NCSU (Current)	FPS	
Healey, Nancy	Visit. Asst. Prof.	UNCG	UNCG	UNCG	Tex. & Cloth.	ECU (Chairman, Clothing & Textile Department)

### Fabric styling

### Teaching Areas

Testing and quality control; designing and styling

Knitting systems

Fabric mechanics and mechanisms

Fabric forming systems; woven fabric structures

Weaving and designing

Yarn forming systems; long staple systems

Non-conventional fabrics

Fabric forming systems; non-conventional fabric systems

Labor relations

Textile costs

Education improvements

Textile fundamentals; management and decision making

Resinography; microscopy

General microscopy; advanced microscopy

Textile fundamentals, knit fabric structures

Physical testing

Testing and quality control

Fiber structures

Continuous filament yarn systems

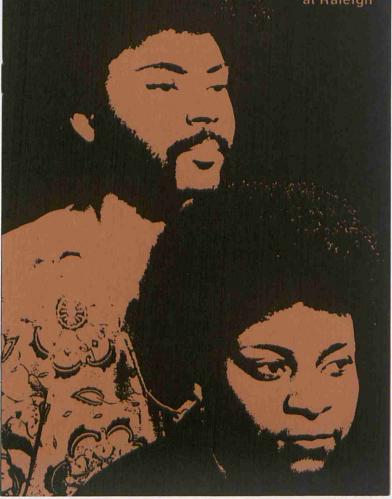
Sociological & Psychological aspects of textile apparel

Textiles and apparel

Carpet research

# **Blacks in Textiles**

School of Textiles, North Carolina State University at Raleigh





Blacks have contributed to the field of textiles for years in areas of picking and processing cotton in the 1700-1800's and working within factories during 1900's. Now many Blacks have the opportunity to participate in the fields of management, design, and research in textiles.

Martha Manuel Class '75

As I view the Textile industry, large numbers of blacks are being hired into low skilled jobs, with an increase in the number being placed into skilled jobs and a very small number in management positions.

I have found N.C.S.U. to be representative of society. People at State are basically no better or worse than people I have met outside of the university community. As far as academics are concerned, you get what you put into it.

Tommie Garner, Jr. Class '73





The textile industry for so long has been strictly white in the management or other high positions. To-day there is a vigourous recruitment of blacks for these jobs. Although opportunity has expanded greatly for blacks in the past few years, the industry still has a long way to go.



#### **Blacks in Textile World**

This brochure has been produced by the School of Textiles at North Carolina State University. We feel that this type of brochure is necessary to answer, from a Black perspective, some of the questions Black students may have about North Carolina State University and to make these students aware of the opportunities available to them in the textile industry.

When a Black student enters a predominately white institution, he is confronted with problems of relating and adjusting to his new surroundings. The Black students at North Carolina State University have formed a social and political organization, Society of Afro-American Culture (SAAC) to help the students make this adjustment while keeping their ties with the Black community.

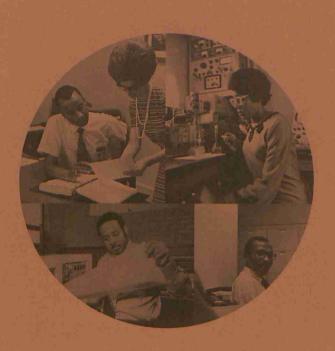
SAAC plays an important role in the life of the Black student while he or she is at North Carolina State. The organization is regarded as "the voice" of the Black student at State. Even though the culture gap in the university's social and educational programing is far from being bridged, SAAC along with other organizations (Alpha Phi Alpha and Black Students Board) are working to increase the programs that are of interest to the Black student. Some events geared towards this goal are the annual Pan-African Festival, lectures, films, and social gatherings. The Black students have control of facilities to be used as a Black Student Union. "The Ghetto" is used by SAAC and other groups for such events as meetings, discussions and parties.

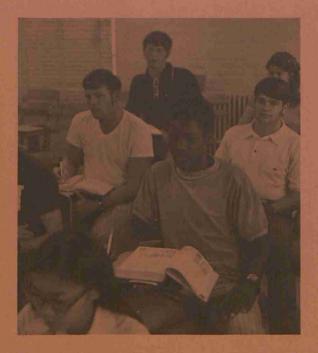
**Opportunities in Textiles** 

Blacks make up about 14 percent of the total work force in the textile industry compared with an average of 10 percent for all manufacturing. However, there are very few Blacks working in the "management decision making aspects of the industry" (approximately 1 percent). With this in mind, the industry is diligently searching for the Black college graduates in a technical field, and even more diligently for the Black textile graduate.

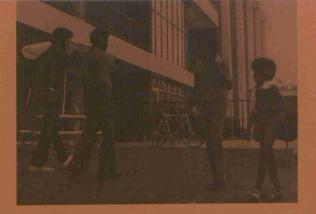
The average starting salary for textile graduates is about \$9700 per year and will rise to about \$21,500 at the end of 20 years, which is approximately \$5000 per year higher than the salary for

engineering graduates after 20 years.





The predominate white campus is representative of the world we live in and therefore is a microcosm of society as far as a Black student may be concerned. Although racial discrimination is not condoned by the university, it does exist, (SAAC will see that any reported incidents will be brought to the attention of the proper authority and something done to prevent that type of incident from reoccurring). In the classroom one may be the only Black student and most likely his instructor will be white. This may sound discouraging, but this brochure is not to discourage you or to build State up as a "dream world". The purpose of the brochure is to make the Black student aware of the opportunities available and reveal how State is viewed from a Black perspective.





# **Financial Aid**

Financial aid is given in the form of loans, grants, scholarships, and/or work study. To be considered for aid a student must obtain a Parent's Confidential Statement from his high school guidance counselor and return it to the College Scholarship Service, Princeton, New Jersey.

The School of Textiles maintains its own Financial Aid program; it is closely coordinated with the University's Financial Aid office. Students in the School of Textiles will be considered for financial aid available in the school and/or the university.

# Admissions

Persons of all racial backgrounds are encouraged to apply for admission. The freshmen applicants must take the Scholastic Aptitude Test (SAT) and have the scores submitted to the Office of Admissions by the College Entrance Examination Board.



Blacks here at State feel a togetherness which is unique in itself. This feeling is not one obtained by someone brainwashing us on black unity, but more so a natural feeling that occurs once in this environment. Although our numbers are small, we are an established group and our influence is felt throughout the university.

> Cornell Whitley Class '74

If you want a good education this is one of the best schools in the country. However, if you want 75% of your time for socializing and 25% for study, you will find out immediately that you are at the wrong place!

The School of Textiles is a very personal school. The administration and faculty take an interest in you not only as a student but as an individual as well.

Crosby Brown Class '73

There exist infinite opportunities for advancement, travel, and satisfaction within this industry.

The School of Textiles at N.C.S.U. takes sincere interest when dealing with its students. There is a close bond between faculty and students and between advisors and students. The entire department works with the students, not against them.

Janice Artis Class '75

I find Textiles an interesting and diversified field, while State inspires you to get your mind together and let the "man" see why you are proud of being Black.

Norman D. Campbell Class '75 **Textiles** 

# Righ' On!

and write to ...

ARTHUR J. LEE School of Textiles N. C. State University Raleigh, N. C. 27607

# NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF TEXTILES

DEPARTMENT OF TEXTILE TECHNOLOGY Box 5006 ZIP 27607

June 10, 1974

EPa no new EPA faculty was hered by the School of Textiles since the last reporting date.

a search was made and advertisements were placed for a Lab manager II and for a Lab Technician. No members of memority groups were found; two white males with the needed training were hared. One white female was removed from the hourly rate payroll and was given a Clerk / Typist classification.

Bopan

School/Department TEXTILE CHEMISTRY

Completed By H.A. RUTHERFORD

Date \_ JUNE 10 1974

June 1973 Faculty Complement

Projected 1975-76 Complement

June 1974 Faculty Complement

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<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

School/Department TEXTILE TECHNOLOGY

Completed By J. F. BOGDAN

Date JUNE 10, 1974

June 1973 Faculty Complement

Projected 1975-76 Complement

June 1974 Faculty Complement

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<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

School/Department ScHOOL OF TEXTILES

Completed By VF BOGDAN

Date VONE 10, 1874

June 1973 Faculty Complement

Projected 1975-76 Compl

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Associate Professor	17	7				117	,	16	1			1		1	1	7	-	-	-		17	1
Assistant Professor	9	1				9	1	6				-	-	16	1	1/2	-		-		17	-
Instructor	1					1	1	1	12	1				6	2	9	1				9	
RESEARCH ASSOCIATE	13	1				13	1,	1	-	/				1		1					1	
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<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

School/Department SCHOOL OF TEXTILES

Completed By JF BOGDAN

Date VUNE 10, 1974

June 1973 EPA Non-Faculty Complement

Projected 1975 76 c.

FULL-TIME	Wh M	ite	B1 M	ack F	Other M F	Total M F	W M	nite F	Blac M	ck F	Othe	r	To	tal F		ite F		lack F	n-Facul		
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Technicians	1					1	1		-	-	-	-	2		2						2
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<sup>\*</sup>PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

June 1973 Faculty Complement Projected 1975-76 Complement June 1974 Faculty Complement June 1975 Faculty Complement

CHOOL/DEPARTMENT	Textile Chemistry	COMPLETED BY	R.	D.	Gilbert p	er J.	F.	Bogdan	

DATE June 11, 1975

White | Black | Other White | Black | Other White Black Other White Black M F M F M F M F M F M F M F M F M F FULL-TIME Acting Department Head Professor Associate Professor Assistant Professor Instructor Research Assistant Research Associate SUB-TOTAL \*PERMANENT PART-TIME Professor Associate Professor Assistant Professor Instructor Research Associate Visiting SUB-TOTAL 12 12 12 12 2 11 TOTAL

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

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Department Head	1				-	1		1						1		1					1	1		_1_						1	_
Professor	3	_			-	3		_5			_			5		3					+	3		2	_	_		2		4	
Associate Professor	12	_	1		1	2		11	1		_			11	1	12					- 1	2		11		-		2		13	
Assistant Professor	8	1			1	8	1	6	1		_		_	6	1	8	1				-	8	1	4	1	-		1		5	1
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Professor		_	-		1			_	_		_			_							-				-		-			-	
Associate Professor			1		_				_	_	_	_		-		_	-				-	_			-	-	-	-		-	
Assistant Professor		_		1	_			_	_	_	_	-		_	_	_	_				-		_	_1_	-	-		-	-	1	-
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TOTAL	28	1 ,			1	9 8	2	26	1 3	1				27	3	28	2				1	2.8	2	19	1			8	1	27	2

"Other" includes all except American-born caucasians and blacks.

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

CHOOL/DEPARTMENT	Textile Chemistry	COMPLETED BY	R. D. Gilbert pe	er J. F. Bogdan	DATE	June 11, 1975	
	June 1973 Faculty Complement	Projected 1	975-76 Complement	June 1974 Faculty Com	plement	June 1975 Faculty Complement	

White Black Other White Black Other White | Black | Other Total White Black Other Total M F M F M F MFMF MF MF F FULL-TIME Acting Department Head 2 Professor 4 4 4 4 2 Associate Professor Assistant Professor Instructor Research Assistant Research Associate SUB-TOTAL 12 4 12 \*PERMANENT PART-TIME Professor Associate Professor Assistant Professor Instructor Research Associate Visiting SUB-TOTAL 11 2 12 12 12 12 11 2 TOTAL 12

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

Textile	e Te	echn	ology	_		-			COMP	LET	ED B	Y _	-	J. I	F. B	ogd	in	-		-			DA	16		une	11,	-15	115			_
	Jur	ne 19	973 F	acu	1ty	Comp	olem	ent	Pr	oje	cted	197	5-76	Con	np1e	nent	Ju	ne 1	974	Faci	ulty C	omp:	lem	ent	Jur	e 1	975	Fac	ulty	Con	mp1e	nent
	Whi					r	Tot	al F			B1 M	ack F	Oth	er	To M	tal F						1	Tot	a1 F	Wh:	te	Bla M	ck F		er	To	F
	1			1			1		1						1		1				_	1	1		_1_						1	_
	3			1		-	3		5						5		3					+	3		2	_			2		4	_
	12			1	_	1	12		11	1		_			11	1	12			_		1	2		11				2		13	-
	8	1		1	1		8	1	6	1				_	6	1	8	1				+	8	1	4	_1_			1		5	1
	1			+	-	-	1		1	-	1	-			1		1	-				+	1	,				-	1	,	1	
		2						2		3	1				27	3		2				+	-	2	18	1			8	1	26	2
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				_					_	_		_			_			_								-		_			_	
				_	-	_			_	_	_	_	_	_				-		_		-				-	-	_			-	
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	-	-						-									-	-					-		1	-	-			-	1	-
		Jun Wh M 1 1 3 12 8 1 1 1 2 2 8 28	June 1  White M F 1  3  12  8 1  1 1  2 2 2	June 1973 F  White Black M F M  1  3  12  8 1  1 1  2 1  28 2	White Black M F M F 1	White   Black   Othe   M   F   M   F   M   M	June 1973 Faculty Com  White Black Other M F M F M F  1 3 12 8 1 1 1 1 28 2	White   Black   Other   Tot   M   F   M   F   M   F   M   F   M   M	White   Black   Other   Total   M   F   M   F   M   F   M   F	June 1973 Faculty Complement   Pr	June 1973 Faculty Complement   Project	June 1973 Faculty Complement   Projected	June 1973 Faculty Complement   Projected 197	June 1973 Faculty Complement   Projected 1975-76	June 1973 Faculty Complement   Projected 1975-76 Complement   Projected 1975-76 Complement   Projected 1975-76 Complement   White   Black   Other   M F	Mite   Black   Other   Total   White   Black   Other   To   M   F	Mite   Black   Other   Total   White   Black   Other   Total   M   F   M   M	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1973 Faculty Complement   Projected 1975-76 Complement   June 1973 Faculty Complement   Projected 1975-76 Complement   June 1973 Faculty Complement	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Face	White   Black   Other   Total   White   Black   Other   M   F   M	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   White   Black   Other   M F M F M F M F M F M F M F M F M F M	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   White   Black   Other   Total   Total   White   Black   Other   Total   White   Black   Other   Total   White   Black   Other   Total   Total   Uhite   Black   Other   Total   Total   Uhite   Black   Other   Total   Total   Uhite   Black   Other   Total   Uhite   Black   Other   Total   Uhite   Black   Other   Total   Uhite   Black   Other   Total   Uhite   Black   Uhite   Black   Other   Total   Uhite   Black   Other   Total   Uhite   Uhite	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement	June 1973 Faculty Complement         Projected 1975-76 Complement         June 1974 Faculty Complement         June 1         June 1974 Faculty Complement         June 1974 Faculty Com	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   June 1975	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   June 1975 Faculty Complement	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   June 1975 Faculty   June 1975 F	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   June 1975 Faculty Complement   June 1976 Faculty Complement	June 1973 Faculty Complement   Projected 1975-76 Complement   June 1974 Faculty Complement   June 1975 Faculty Complement   June 1976 Faculty Complement

TOTAL

"Other" includes all except American-born caucasians and blacks.

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

SCHOOL/DEPARTMENTS	chool of	Tex	tiles		-			COME	LET	ED B	Y -		1. 1	. B	ogda	ın		-	-			Di	MIE	-	Ju	ine i	1,	191			-
	Ju	me 1	973 Fa	culty	Comp	1em	nent	Pr	oje	cted	197	5-76	Con	mp1e	ment	Jt	ine	1974	Fac	ulty	Соп	np1er	ment	Ju	ne 1	975	Fac	u1ty	Con	nplen	nent
FULL-TIME	. Wh	ite	Black M F	Oth	er F	Tot	al F	Wh M	ite F		ack	Oth	er F		tal F	Wh	ite	Bla M	ck F	Othe	er F	Tot	tal F	Wh:	ite F	Bla	F	M	F	Tot	a1 F
Department Head	2					2		2						2		2						2		1				Act 1	ng	2	
Professor	7.					7		_9	_		-			9		7	_			_		7	_	4				4		_8_	-
Associate Professor	17	_				17		16	1	_	_			16	1	17						17	_	15	-			2		17	
Assistant Professor	9	1				9	1	6	2					6	2	9	1					9	1	5	1			1		6	1
Research Assistant Instructor	1					1				1				1		1						1						1		1	
Visiting Lecturer Research Associate	1 3	1				1 3	1	1 3	1	-				1 3	1	1 3	1					1 3	1	1				1	_1	1 2	1
SUB-TOTAL	40	2	-		4	10	2	37	4	1			-	38	4	40	2	1822			-	40	2	26	1			12	1	38	2
*PERMANENT PART-TIME		-						_	L	_	_						-						_		-						
Professor		_						_	_		-						-								-						
Associate Professor		_						_			_					_	_								-						
Assistant Professor								_	_		_					-				_			_	1	-					1	_
Instructor																															
Research Associate Visiting		1				-	1	-	1	200		CM		-	1		1				July 1	-	1		1	-		-		1045	1
SUB-TOTAL	***	1					1	- Land	1						1		1						1	1	1					1	1
Moma v	10	2			1	0	2	27	-	,				20	=	10	2					40	2	27	12			12	1	39	3

"Other" includes all except American-born caucasians and blacks.

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

SCHOOL/DEPARTMENT School of Textiles COMPLETED BY J. F. Bogdan DATE \_\_\_ June 11, 1975 June 1973 EPA June 1974 EPA June 1975 EPA Non-Faculty Complement Projected 1975-76 Complement Non-Faculty Complement Non-Faculty Complement White Black Other Total White Black Other White Black Other Total White Black Other FULL-TIME M F M F M F M F M F MF MFM Officials & Managers 4 Professionals 2 2 2 Technicians SUB-TOTAL 7 8 9 \*PERMANENT PART-TIME Officials & Managers Professionals Technicians SUB-TOTAL

TOTAL

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

#### AFFIRMATIVE ACTION PLAN

Projected 1973-74 Complement June 1974 Complement

June 1975 Complement

SP

			0111		
SCHOOL/DEPARTMENT	School of Textiles	COMPLETED BY	J. F. Bogdan	DATE	June 11, 1974

MANAGEMENT OF THE STREET		ite					To	tal			B1:			T	otal		hite		lack			To	ta1	Wh	ite	B1a	ick	Othe	rT	otal
FULL-TIME	M	F	M	F	М	F	M	F	M	F	M	F	M	M	F	1	I I	M	F-	M	F	M	F	M	F	M	F	M	F M	F
Officials & Managers			-				-																							
Professionals	_		-																					1	1					1
Technicians	7	2	-	-		_	7	2	7.	2				1 7	2	C	1 2					9	2	8	2				1	8
Sales						_	1										1													
Clerical	-	13	11	2			1	15		13	1	2		1	15	_	14	1	2			1	16		15	1	1			1 1
Craftsman	3	-	1				3		3					3		3				7		3		3		1				3
Operations (semi-skilled)	-	-	-			-	-	_	_	-	_				-	-	-	-	-				-	-	-					
Laborers Service Workers	-	-	+-	-	1		-	-	-	-	-		-	+-	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
	+		=	-	-	-	-		-	-	-	-		=	-	+	+	-	-	-	_	-	-	-	-	-		-	_	-
SUB-TOTAL	10	15	11	2			11	17	10	15	1	2		11	17	12	116	1	2			13	18	12	18	1	1		11:	3 1
*PART-TIME																		T						-	1					
Officials & Managers						ii-					9							1							1			-	-	1
Professionals															1		1	1	1						1			-		
Technicians																1		1							1				-	+
Sales			1													1-	1	1	-			-			-	-			-	+-
Clerical		2						2		2		3.			2	1	1 2	1					2	-	2			-	-	1 2
Craftsman																							-		-					1
Operations (semi-skilled)					5.5																									1
Laborers														+	-	-	+	1	1	-	-	-		-	1	-		-		+
Service Workers																1												-	+	+
SUB-TOTAL		2						2		2					2	T	2						2		3					
OTAL	10	17	1	2			11	19	10	17	1	2		111	19	12	18	1	2			13	20	12	21	1	1		13	22

<sup>\*</sup> SPA individuals working at least 1-time in a permanently established position.

June 1973 Complement

#### AFFIRMATIVE ACTION 1974/75

#### SCHOOL OF TEXTILES

During the 1974/75 academic year the following positions were filled in the School of Textiles.

		Ma	le	Fem	ale
Position	Dept.	White	Black	White	Black
EPA					
Department Head	TC	x			
Assoc. Prof., Knitting	TXT	x			
Assoc. Prof., Mgmt.	TXT	x			
Recruiter	Admin.	x			
Recruiter	Admin.	x			
Extension Specialist	Ext.		x		
Extension Specialist	Ext.	x			
		- <u>x</u>	1		
SPA					
Accounting Clerk	Admin.			x	
Clerk-Steno	TXT/Admin.			x	
Clerk-Typist	TC			x	
Clerk-Typist	Ext.			x	
Artist-Illustrator	Ext.			x	
Public Information Spec.	Ext.			x	
				6	

Responsibility for Affirmative Action considerations in connection with the hiring of EPA personnel rests with the School. The campus office of Personnel Services has been charged with responsibility for Affirmative Action in the hiring of SPA personnel, with the cooperation of the department concerned.

The school reached its decision to appoint a white male to the position of Head, Department of Textile Chemistry, after a lengthy search for qualified candidates by a committee.

The position of Associate Professor in the Knitting section is being filled by a man who enjoys an international reputation as an educator and researcher. All persons working at this level throughout the world are known to us; we are fortunate that development of circumstances has permitted us to fill this vacant position with a person who is so eminently qualified. The position of Associate Professor in the textile economics and management sections of the department was filled by a well-qualified faculty member of Clemson University. The ability to teach and the ability to do research in the field of textiles were specifications for a position that had a small number of candidates.

Two white male recruiters were hired to carry the story of textiles to the high school students. A black student was taken on for the fall semester to contact students in predominantly black high schools. The increase in enrollment of black students is a source of great satisfaction to the school.

Two Extension Specialists were hired: one black male and one white male. It is intended that the black male will work for an advanced degree as soon as he can arrange his schedule to permit this; it is hoped that he can qualify in time for a teaching position in the School of Textiles.

Six SPA positions in the School of Textiles were filled by white females.

Textiles continues to suffer from the nonexistent pool of blacks with appropriate training in textiles. It is hoped that the growth in enrollment of black students will overcome this deficiency in time and will permit us to hire more blacks for responsible positions in textile education and in textile research.

Respectfully submitted,

J. F. Bogdan June 23, 1975

SCHOOL/DEPARTMENT	School of	Tex	tiles		-		COMP	LEI	ED B	ı –		J. 1	. B	ogda	in_	-				D	ALE		Ju	ne 1	1, 1	1975	2		
28 28 28 28 28 28 28 28 28 28 28 28 28 2	Ju	ne 1	1973 Fa	culty (	Comp1e	ment	Pr	oje	cted	197	5-76	6 Co	mp1e	ment	Jt	ine I	1974 Fa	cu1	ty Co	mp1e	ment	Ju	ne 1	975 F	acu	1ty	Con	mplem	ent
FULL-TIME	Wh	ite	Black M F	Other		tal F	Wh M	ite F	1 100000	ack F	Otl M	her F		tal F	WI-	ite			ther F	To	tal F	Wh	ite F	Blac M	F		F	Tot	al F
Department Head	2				2	1	2						2		2					2		1			A	1	ng	2	
Professor	7				7	1	9	_					9		7			1	-	7	_	4			1	4		8	
Associate Professor	17	_	11	11	17	1	16	1					16	1	17			1	-	17		15	-		1	2		17	
Assistant Professor	9	1			9	1	6	2					6	2	9	1				9	1	5	1			1		6	1
Research Assistant Instructor	1								1				1		1					1						1 1		1	
Visiting Lecturer Research Associate	1 3	_1		7	1 3	1	1 3	1					1 3	1	1 3	1				1 3	1	1				1	1	1 2	1
SUB-TOTAL	40	2			40	2	37	4	1				38	4	40	2		1		40	2	26	1		1	2	1	38	2
*PERMANENT PART-TIME		_		11	_	-	_	_										1		-					1				
Professor		_														_													
Associate Professor							_																						
Assistant Professor						-	1											1				1			1			1	
Instructor																			1						-				
Research Associate Visiting		1				1		1						1		1					1		1						1
SUB-TOTAL		1				1		1						1		1					1	1	1					1	1
TOTAL	40	3			40	3	37	5	1				38	5	40	3				40	3	27	2		1	12	1	39	3

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

School of Textiles SCHOOL/DEPARTMENT COMPLETED BY J. F. Bogdan DATE June 11, 1975 June 1973 EPA June 1974 EPA June 1975 EPA Non-Faculty Complement Projected 1975-76 Complement Non-Faculty Complement Non-Faculty Complement White | Black | Other White | Black | Other Total White Black Other White | Black | Other Total Total Total FULL-TIME M F M F M F M F M F M F M F M F M F M F Officials & Managers 4 4 4 4 4 4 Professionals 2 2 2 Technicians SUB-TOTAL 7 7 8 \*PERMANENT PART-TIME Officials & Managers Professionals Technicians SUB-TOTAL TOTAL

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

### AFFIRMATIVE ACTION PLAN SPA

SCHOOL/DEPARTMENT	School of Textiles	COMPLETED BY	J. F. Bogdan	DATE	June 11, 1974	

June 1973 Complement

Projected 1973-74 Complement June 1974 Complement

June 1975 Complement

	Wh	ite	B1.	ack	Othe	r	Tot		Wh	ite	Bla		Oth	er	Tot	tal		ite		ack	Oth	ner	To	tal	Wh	ite	Bla	ack	Oth	er	Tot	a1
FULL-TIME	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	. F-	M	F	M	F	M	. F	M	F	M	F	Tot	F
Officials & Managers																		1														
Professionals																									1	1					1	
Technicians	7	2					7	2	7.	2					7	2	9	2					9	2	8	12					8	1
Sales																																
Clerical		13	11	2			1	15		13	1	2			1	15		14	1	2			1	16		15	1	1			1	16
Craftsman	3						3		3						3		3						3		3						3	
Operations (semi-skilled)																																
Laborers																																
Service Workers																																
SUB-TOTAL	10	15	1	2			11	17	10	15	1	2			11	17	12	16	1	2			13	18	12	18	1	1			13	10
*PART-TIME																																
Officials & Managers																		1														
Professionals																										1						1
Technicians																																
Sales																																
Clerical		2						2		2						2		2						2		2						2
Craftsman																																
Operations (semi-skilled)																																
Laborers																														1	-	
Service Workers																														1		
SUB-TOTAL		2		- 4				2		2						2		2						2		3						3
TOTAL	10	17	1	2			11	19	10	17	1	2			11	19	12	18	1	2			13	20	12	21	1	1			13	

<sup>\*</sup> SPA individuals working at least 12-time in a permanently established position.

SCHOOL/DEPARTMENT	Textile Chemistry	COMPLETED BY	R. D. Gilbert per J. F. Bogdan	DATE	June 11, 1975	
						-

June 1973 Faculty Complement Projected 1975-76 Complement June 1974 Faculty Complement June 1975 Faculty Complement Black Other Black | Other White | Black | Total Tota1 White Black Other Total Other Total FULL-TIME F M F Acting Department Head Professor Associate Professor 5 4 Assistant Professor Instructor Research Assistant Research Associate SUB-TOTAL 12 12 11 12 8 12 11 12 4 \*PERMANENT PART-TIME Professor Associate Professor Assistant Professor Instructor Research Associate Visiting SUB-TOTAL 12 TOTAL 12 11 11 2 12 12 12

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.

SCHOOL/DEPARTMENT	Textile 7	tile Technology								COMPLETED BY J. F. Bogdan DAT													ATE	June 11, 1975									
	J	une	1973	Fac	ulty Co	mplen	ent	Projected 1975-76 Complement										June 1974 Faculty Complement								June 1975 Faculty Complement							
FULL-TIME		White M F		ack F	Other M F	Tot	Total M F		White M F						Total M F		White M F				er F	Tot		Wh:	ite F	Black M F		Otl M	her F	Tot	tal F		
Department Head			M			1		1						1		1						1		1						1			
Professor	3					3		5						5		3						3		2				2		4			
Associate Professor	12					12		11	1					11	1	12						12		11	_	_		2		13			
Assistant Professor	8					8	1	6	1					6	1	8	1					8	1	4	1	_	-	1		5	1		
Instructor	1					1				1				1		1						1						1		1			
Visiting Lecturer Research Associate	1 2		1			1 2	1	1 2	1					1 2	1	1 2	1					1 2	1					1	1	1 1	1		
SUB-TOTAL	28	2				28	2	26	3	1				27	3	28	2					28	2	18	1			8	1	26	2		
*PERMANENT PART-TIME						_																											
Professor		1						_														-			_	-							
Associate Professor		_						_	_	_	_			-											_		_						
Assistant Professor		_						_	_					_		_								1_	_	_	-			1			
Instructor						_		_			_			_		_											_						
Visiting						-	-				-						-				_				-	-	_						
SUB-TOTAL																					-		-	1						1			
TOTAL	28	3 2				28	2	26	3	1				27	3	28	2					28	2	19	1	1		8	1	27	2		

<sup>\*</sup> PERMANENT PART-TIME - Individuals working less than full-time and being paid accordingly but hired for term of 12 months or more or for a stated term of one academic year or more. This does not include joint appointments which should be reported as full-time by their major departments.