



ANNUAL REPORT SOCIETY OF WOMEN ENGINEERS

North Carolina State Univ STUDENT SECTION OF SWE FOR 1978-79

SECTION NUMBER DL

THIS REPORT (ITEMS 1 AND 2, AT A MINIMUM) MUST BE FILLED IN AND RETURNED BY MAY 15 TO

*** IMPORTANT ***
Anne Gillenwater
Alcoa
P.O. Box 9128
Alcoa, Tn 37701

1. NEXT YEAR'S OFFICERS (NAME AND MAILING ADDRESS FOR SECTION MAIL)

PRESIDENT- Karen Stoker

903-C Carroll, Box 22153, NCSU

Raleigh, NC 27606

VICE PRESIDENT - Rhonda Walker

1131-2A Crabb Orchard Dr.

Raleigh, NC 27606

SECRETARY- Cynthia Yarborough

109 Sir Gallahad Dr.

Hendersonville, NC 28739

TREASURER - Janie Wood

3930-D Marcom St.

Raleigh, NC 27605

SWE COUNSELOR- Frances M. Richardson

NCSU -2158 Burlington Labs

Raleigh, NC 27650

FACULTY ADVISOR - same as counselor

SWE member #11 580163

SWE member #

(SWE Counselor and Faculty Advisor same if possible)

PERMANENT SCHOOL SECTION ADDRESS

2158 Burlington Laboratories

North Carolina State University

Raleigh, N.C. 27650

TERM OF OFFICE EXPIRES ON (DATE)

May, 1979

2. FINANCIAL (TREAS.) REPORT SENT TO SWE TREASURER ON (DATE) May 12, 1979

3. SECTION MEMBERSHIP

A. WE NOW HAVE 38 SWE STUDENT MEMBERS IN OUR SECTION.

B. THERE ARE 407 WOMEN ENROLLED IN ENGINEERING AT THIS COLLEGE.

C. WE ADDED 15 NEW MEMBERS THIS YEAR AND LOST 9 OF LAST YEARS MEMBERS.

4. ATTACHMENTS TO THIS SHEET (CHECK AS APPROPRIATE)

☒ LIST OF NAMES AND MAJORS FOR ALL SWE STUDENT MEMBERS OF THIS SECTION WHO GRADUATED THIS FISCAL YEAR.

☒ REPORT OF MEETINGS AND ACTIVITIES. (INCLUDE THOSE SCHEDULED FOR REMAINDER OF YEAR).

☐ REPORT ON FUNDS RECEIVED FROM UNION CARBIDE (BEST STUDENT SECTION AWARDS AND SPECIAL GRANTS).

Helen Claire Cowart
Student Section President (Sig.)

Frances M. Richardson
SWE Counselor (signature)

Janie M. Wood
SWE FACULTY ADVISOR (signature)

SWE STUDENT MEMBERS GRADUATING AUGUST 1978-MAY 1979

North Carolina State University

Jennifer A. Clark	EO	May 1979
H. Claire Cowart	ChE	May 1979
Chie Ishizaki	EE	May 1979
Lisa J. O'Neal	EE	May 1979
Nancy C. Walker	ChE	May 1979

EO - Engineering Operations

ChE - Chemical Engineering

EE - Electrical Engineering

ACTIVITIES CALENDAR

1978

June 23-24 Summer Conference on Engineering Careers for Women
Aug. 24 Membership Drive at Class Registration
Aug. 31 Business meeting - fall forecast
Sept. 6 Recruitment Taco Dinner with new freshmen women
Sept. 13 Business meeting
Sept. 20 T-shirt sale
Sept. 22-23 Fall Conference on Engineering Careers for Women
Sept. 23 NCSU Open House - members aid highschool students and parents
Sept. 26 Business meeting
Oct. 5 SWE members attend Association for Women Students meeting
Oct. 18 Program meeting - Carol Driggers of Procter and Gamble
Oct. 24 Business meeting
Nov. 5 SWE members paint "grafitti tunnel" to advertise "Your Job Inner-View"
Nov. 7 Business meeting
Nov. 8 "Your Job Inner-View" Career Awareness Day
Nov. 21 Program meeting - Cooperative Education
Dec. 5 Business meeting

1979

Jan. 16 Business meeting - spring forecast
Jan. 24 T-shirt and bumper sticker sale
Jan. 30 Business meeting
Feb. 10 Work on exhibit slide show for Engineers' Exposition
Feb. 14 Program meeting - Deborah Ogden of Hewlett-Packard
Feb. 19-24 Engineers' Exposition for National Engineers Week
Feb. 27 Program meeting and potluck dinner - Despina Boindiris of IBM
Mar. 13 Business meeting
Mar. 20 Business meeting
Mar. 24 Symposium, "Assertiveness, Life Planning, and Decision-Making"
Apr. 3 Business meeting - election of new officers for 1979-80
Apr. 5 Tour of Union Carbide Battery Division in Asheboro, N.C.
Apr. 10 SWE members attend Association for Women Students meeting and dinner
Apr. 12 Slide show presentation to local highschool
Apr. 13 Slide show presentation to local highschool
Apr. 20 Second Annual Union Carbide Awards Banquet
Apr. 24 Slide show presentation to local highschool
Apr. 25 Slide show presentation to local highschool
Apr. 25 T-shirt and bumper sticker sale

The following activities were sponsored entirely by the NCSU
SWE Student Section:

- 1) "Your Job Inner-View" Career Awareness Day
- 2) Symposium for Women in Engineering and Sciences
- 3) High school slide show presentations
- 4) Program meetings
- 5) Resume Brochure
- 6) Fundraising projects
- 7) New member recruitment activities
- 8) SWE Information Bulletin Board
- 9) Union Carbide Awards Banquet

The following activities were carried out in conjunction with the
NCSU School of Engineering:

- 1) Conferences on Engineering Careers for Women
- 2) Engineering Exposition for National Engineers' Week

OUTSTANDING ACTIVITY NO. 1

"YOUR JOB INNER-VIEW"
Career Awareness Day
November 8, 1978

Once again this year the section sponsored a day-long event for all engineering and technically related students, commonly known around campus as "Your Job Inner-View". The SWE section realizes that the majority of the engineering student population is totally unaware of the many opportunities and different facets of employment that are awaiting them upon graduation. We feel that this event exposes NCSU students to many different kinds of industry. One of the main purposes of the program is to help students get a clear picture of exactly what working for a particular company would involve and to give students a chance to make that initial contact with employers. Also this program allows students to explore the many potential career paths available within a company before the formal interview takes place. Approximately 400 students attended, making the event extremely successful and worthwhile. All of the twenty businesses, both commercial and government, represented felt the day was a very worthwhile and enjoyable experience.

Correspondence and planning for "Your Job Inner-View" began in the summer of 1978. Two members, Lynn Misenheimer and Nancy Walker, chaired the event and 15 additional members served on related committees.

This event serves to improve SWE's image and visibility on campus as well as fulfilling the purpose of career planning.

OUTSTANDING ACTIVITY NO. 2

SYMPOSIUM FOR WOMEN IN ENGINEERING AND SCIENCES
March 24, 1979

The section sponsored a Spring Symposium for Women in Engineering and the Sciences entitled, "Assertiveness, Life Planning, and Decision-Making". Sixty women attended including engineering and technical school students, and professionals from various industries. A two-hour morning session on Assertiveness Training was led by Ms. Carol Pierce, co-owner of New Dynamics Associates of Laconia, New Hampshire, which specializes in assertiveness training and male-female co-worker relationships. Ms. Pierce's fee was \$250 plus travel expenses of which she donated \$125 to the section to continue meeting our national goals through programs such as the Symposium.

After the morning session, a luncheon was held at which Isabella Cannon, 73-year-old Mayor of the city of Raleigh, spoke on the woman's role in politics and urged us all to participate in the political decisions which affect our everyday lives. In addition to Symposium participants, the luncheon was attended by representatives from companies who funded the event, the Associate Dean of the School of Engineering, several female engineering faculty members, and the afternoon workshop leaders.

The afternoon consisted of eight workshops of which participants chose four to attend. The hour-long workshops and their leaders were as follows: Interviewing Techniques (Linda Saunders and Susan Morgan of DuPont), Career Planning (Sue Sperger of Procter and Gamble), Careers in Management (Carol Driggers of Procter and Gamble), Technical Writing (Dr. Kathryn Seidel of the NCSU English Dept.), Professional Licensing (Janet O'Brien of Guilford Technical Institute), Dress for Success (a consultant of John Robert Powers School of Fashion),

OUTSTANDING ACTIVITY NO. 2 (CONT'D)

Careers and Children (Despina Boinodiris of IBM), and Money Matters (a banker from Wachovia Bank and Trust Co.).

Planning for the Spring Symposium began in September and was chaired by two officers, Chie Ishizaki and Dwan Upchurch. Three committees consisting of five members each worked actively on the project, with all members helping out on the day of the event.

This activity fulfills the goals of professional and personal development and career guidance, and provides high exposure for SWE not only on campus, but also with many companies and local professionals.

OUTSTANDING ACTIVITY NO. 3

HIGH SCHOOL CAREER GUIDANCE

April 1979

A high school slide show presentation was completed by SWE members in the spring semester and four local high schools were visited in April. The presentation contains 120 slides with a 20 minute taped narration. The show covers in order a definition of engineering, the kinds of contributions engineers in general make to our world, the kinds of problems engineers must solve, the different branches of engineering and what each does, different career paths within each branch, the kind of person who would make a good engineer, college preparatory courses that should be taken in high school, freshman engineering, campus activities, cooperative engineering, the job market, and an invitation to consider engineering as a career. The slides portray the narrative story showing such things as construction sites, engines, campus scenes, engineers at work, etc.. After the slide show presentation, the high school students asked questions of SWE members about engineering, classes, campus life, and SWE. Copies of "Women in Engineering Pictorial" and "Have You Considered the Possibility of Becoming an Engineer?" ordered from SWE National Headquarters were distributed in addition to a notebook folder containing conversion charts, and a pictorial of the female engineer at NCSU entitled "Reflections".

The slide show presentation, including the picture-taking and narration, was prepared entirely by SWE members, and a total of 12 members visited the four local high schools staying from 1 to 3 class periods. High school presentations and preparation of the slide show was chaired by Claire Cowart, section president. The high school program, fulfilling the goal of career guidance, will be expanded to reach even more high schools in next year's activities.

OUTSTANDING ACTIVITY NO. 3 (CONT'D)

NATIONAL ASEE EXPOSURE
Summer 1979

The high school slide show presentation prepared by the section will be shown at the National American Society of Engineering Educators Convention in Louisiana this summer. The NCSU Freshman Engineering Division viewed the slide show presentation and agreed that it was extremely comprehensive as a high school guidance tool, and, consequently, invited the section to send it to the National ASEE Convention.

CONFERENCE ON ENGINEERING CAREERS FOR WOMEN

June 23-24, 1978
September 22-23, 1978

The section assisted the NCSU School of Engineering with two, two-day, Conferences on Engineering Careers for Women, designed to introduce several hundred highschool girls to engineering as a prospective career. Approximately 15 SWE members served as campus guides, dorm counselors, role models, and aides in activities including lectures and demonstrations on the various branches of engineering, and personal contacts between the highschool girls and engineering students and professionals. The NCSU student SWE section invited local women engineers to come as speakers and special guests. Claire Cowart, SWE section president, spoke about her three summer engineering work experiences and answered questions about those experiences as well as about SWE, at the Conference luncheon. Mary Whitton, section member, spoke on career planning and the qualities of an engineer at the luncheon. Two SWE members served as Conference Coordinators, Mary Whitton for the June program and Janie M. Wood for the September program.

ENGINEERS' WEEK EXPOSITION
February 19-24, 1979

The section participated in National Engineers' Week activities by having a booth at the Annual Engineering Exposition held in a local shopping mall. This event gives the Society significant exposure as well as fulfilling the purposes of outreach and education.

Relating to the theme, "Engineers- People Bringing Purpose to Progress", the booth featured pictures and descriptions of nine women engineers at work and included comments from them relating the purpose of their work to progress.

A short slide show with recorded tape commentary presented a definition of engineering, a description of the type of individual who would make a good engineer, and a discussion of the different fields of engineering as well as the various types of jobs within engineering. The slide presentation augmented the photo exhibit by including comments about their work from several of the women featured in the exhibit.

Five section members worked actively on preparing the exhibit, while six additional members participated in the project by working in the booth during the week of the Exposition. The project was chaired by Mary Whitton and Nancy Walker.

ASEE EXHIBIT
April 1-3, 1979

The exhibit prepared for the Engineers' Week Exposition was displayed with other student exhibits at the Regional American Society of Engineering Educators meeting held in Raleigh. While membership participation was limited to setting-up and taking down the exhibit, the booth itself makes a strong statement about women in engineering.

PROGRAM MEETINGS

October 18 Carol Driggers, Procter and Gamble, Albany, Georgia

Ms. Driggers, former section president, spoke about Procter and Gamble and the management training program she is in. She described her work and the increasing responsibilities she has had during her first 15 months on the job.

November 21 Cooperative Education

This program took the form of a panel discussion led by the director of the co-op program at NCSU. The director discussed the mechanics of the program and four co-op students told about their work assignments and experiences and answered questions from the section members.

February 14 Deborah J. Ogden, Hewlett-Packard, Colorado Springs, Co.

Ms. Ogden, former section member spoke on the topic, "Transition from the Academic to the Work Environment". She discussed her first major engineering assignment and the things she had to learn about both engineering and relating to co-workers.

February 27 Despina Boinodiris, IBM, Research Triangle Park, N.C.

Ms. Boinodiris' topic was "The Silver Platter Syndrome"--the myth that everything on the job will just be "handed to" us as women engineers and, also, what has happened when you have been on the job ten years and you feel your career has stalled. This program led to a very lively discussion with members about learning to play the games men play on the job.

Program meetings this year all fit the general category of professional development, but addressed different stages of career development. The co-op program let us know how to get experience while still students, Ms. Driggers and Ms. Ogden gave us two very different views of the first years on the job--one in management training using engineering as a background and the other involved daily in the application of specialized knowledge, and Ms. Boinodiris gave us the perspective of one who has been working for several years with much food for thought about how to keep our careers going in the direction in which we want.

RESUME BROCHURE

The section published a resume brochure again this year, with Chris Simmons acting as chairperson for the project. Expenses were \$477.53 and related income was \$551.00, netting a profit of \$73.47. The brochure, which provides increased opportunities for both temporary and permanent employment, was almost doubled in size this year to 45 resumes and was distributed to 26 companies. Publicity for this project provided increased exposure for SWE on campus.

FUNDRAISING PROJECTS

Selling "Engineers Do It Better" and "Love An Engineer" T-shirts was the major fundraising project this year. Bumper stickers reading "Love An Engineer" with "NCSU School of Engineering" stenciled beneath were also sold. Approximately 36 dozen T-shirts and 600 bumper stickers were sold this year, netting a profit of \$800. This money was used to sponsor our activities and to help send ten members to the National Conference in San Francisco this summer. Karen Stoker served as chairperson for fundraising this year and 12 to 15 members helped out on each sale date.

NEW MEMBER RECRUITMENT

New members were recruited for the section through direct mail correspondence, a special dinner for entering freshmen engineering women, meeting publicity, and general exposure to students through campus activities.

During the summer of 1978, entering freshmen engineering women were sent information about SWE, on campus and nationally, and invitations to join and to attend a special taco dinner to acquaint them with our members and activities. A sign-up sheet and information booth about SWE was held at fall class registration. The dinner, held on September 6, 1978, was funded by IBM and 80 people attended, including IBM representatives.

A letter outlining this year's activities, with emphasis on the leadership/organizational skills and professional development provided through these activities, along with an invitation to join was mailed to all upperclass engineering women at the beginning of the semester (see attached letter).

September 18, 1978

Hi, welcome back to State for the fall semester. As a female engineering student, would you like to:

- 1) develop leadership and communication skills?
- 2) enhance your professional development?
- 3) work with other female engineering students towards common goals?
- 4) learn vital organizational skills?
- 5) have fun doing any or all of the above?

If your answer is "yes" to any of these questions, then the NCSU student section of the Society of Women Engineers would like to invite you to join.

Some of this year's activities include: publication of a resume brochure to be sent to employers of your choice, "Your Job Inner-View" Career Day, "Love an Engineer" and "Engineers Do It Better" T-shirt sales, participation in NCSU Open House, plant trips, Symposium on "Assertiveness, Life-Planning, and Decision Making", participation in the Engineers' Exposition at Crabtree Mall, program meetings with informative speakers, awards banquet to sum up the year and present a monetary award provided by Union Carbide to a SWE member, SWE National Convention in San Francisco, and the list is endless... With so many activities, every SWE member has the opportunity to become a leader - we have no followers in this group.

If you are interested in becoming a part of the enthusiasm of SWE, please plan to attend our next meeting on Tues., Sept. 26, 6:00pm, Student Center, Brown Room, 4th floor. The Society of Women Engineers would like to make you a special part of their activities this year. For more information about SWE, please feel free to contact me at 737-6625. Best wishes for a successful semester.

Sincerely,

Claire Cowart

Claire Cowart, ChE '79
President, '78-'79
Society of Women Engineers

SWE INFORMATION BULLETIN BOARD

SWE members maintain a bulletin board on the engineering campus which serves as a source of information including the following: Scholarship Information for women in engineering, Job Information and contacts, interesting engineering articles and statistics, SWE "Activities Calendar", and announcements of special programs and activities.

CURRENT MEMBERSHIP REMINDERS

Throughout the year, all current student members were encouraged to update their membership dues with National Headquarters, and were advised of their status as reported by the computer printout sent from National. New Student Member Applications were available at all meetings and new members were encouraged to join the National organization.

MEMBERSHIP UPGRADE REMINDER

National Headquarters was contacted to order Membership Upgrade forms and to obtain information on higher dues. The attached "Membership Upgrade" reminder was issued to all graduating seniors along with applications in April, 1979.

Membership Upgrade

Taken from the STANDARD STUDENT SECTION BYLAWS (As approved by the Executive Committee, 10/8/76), Article II, Section 3.

In order to upgrade to "Associate" or "Member" it is necessary to submit a properly executed Membership Application to the Admissions Committee, c/o SWE Headquarters, not later than June 1 of the year following termination of "Student Member" status. Failure to upgrade when required, or failure to notify SWE Headquarters of continued student status when required to do so, will cause the SWE Executive Committee to drop these members from the Society as ineligible for the grade of Student Member.

Explanation (taken from Student Section Manual, page III-2E):

A SWE member may apply for membership upgrade to Member or Associate upon graduation or when the eligibility requirements for Student Member are no longer met. The grade of membership upon upgrading depends on the degree and experience. Engineering graduates will upgrade to a voting "Member" grade, whereas, non-engineering graduates will upgrade to a non-voting "Associate" grade. Student Members failing to upgrade when eligible automatically forfeit membership in SWE.

INSTRUCTIONS FOR APPLICANTS

1. Execute one copy of application, both sides. Indicate grade applied for. If you have a degree in engineering or a science related to engineering fill out the Authorization to Registrar, and attach resume, if desired.
2. Forward the Membership Application and the Authorization to Registrar to the Society, together with the appropriate dues and fees in accordance with the schedule below.
1. Execute one copy of Application, both sides. If the application is based on a degree received since your prior application please fill out Authorization to Registrar.
2. Indicate grade applied for and forward the application and Authorization to Registrar (if required) to the Society. No fees are required, but dues must be current.
1. Execute one copy of the Membership Application and the Authorization to Registrar. You may omit references and professional record.
2. Forward the Application and the Authorization to Registrar to the Society.

Complete as for new members, including appropriate dues and admissions fees, and forward to the Society.

DUES and FEES	GRADE APPLIED FOR Senior Member Member Associate	ANNUAL DUES	ADMISSIONS FEE	TOTAL
		\$ 35	\$ 15	\$ 50
		\$ 30	\$ 15	\$ 45

DO NOT DETACH THIS AUTHORIZATION: SWE WILL PROCESS.

AUTHORIZATION TO REGISTRAR

PLEASE PRINT OR TYPE

OFFICE OF THE REGISTRAR

COLLEGE OR UNIVERSITY

ADDRESS

CITY, STATE, ZIP CODE

Please Return To:

SOCIETY OF WOMEN ENGINEERS
SWE Headquarters Center, Room 305
345 East 47th Street
New York, New York 10017

DATE

Permission is hereby given to confirm to the Society of Women Engineers that I attended from _____
to _____ and graduated with the following _____

PRINT NAME USED AT SCHOOL

SIGNATURE

I certify that the above information is correct:

SIGNATURE OF SCHOOL OFFICIAL

TITLE

W111-15

UNION CARBIDE AWARDS BANQUET

April 20, 1979

The section hosted its Second Annual Union Carbide Awards Banquet in April. The banquet served not only as an appropriate setting to present the Union Carbide Award to a deserving member, but also gave us the opportunity to review the year past and to preview next year's activities. During the program North Carolina Legislator, Ruth Cook, spoke on her role as a woman legislator. We also reviewed the year in slides and presented our faculty advisor, Frances Richardson, with a gift of thanks. Mary Whitton, a graduate student member and past officer, was presented with a special gift for the endless time and efforts she has given the section over the past years.

Again this year the section received an unsolicited \$100 grant from Union Carbide to be used to encourage scholarship and leadership in section members. The award was presented to Nancy C. Walker, a graduating member, for her personal and enthusiastic involvement in almost every activity this year.

Attending the dinner in addition to our members and their guests were both the retired Dean and the Associate Dean of the School of Engineering, two female faculty members, and a past section president.

BUSINESS MEETING/COMMITTEE PROCEDURES

All meetings were announced in the campus newspaper published three times a week, and also in the campuswide activities bulletin published once a week. Meetings were generally held every other Tuesday at 6:00 PM in a reserved room of the Student Center, with the exception of special programs and potluck dinners. An "Activities Calendar" was distributed to members at the beginning of each semester. All meetings were well organized and professionally conducted, covering in order, old business, committee reports, new business, and then working together as a group on upcoming activities. Due to the magnitude of most activities undertaken, many special committee meetings, outside of the regular business meetings, were required to organize major activities. With so many activities, all members have the opportunity to become involved and to develop leadership and organizational skills. Fall semester meetings were "dinner-meetings", but the Student Center discontinued cafeteria service for the spring semester.

In addition to regular meetings, SWE has two representatives on the Engineers' Council, the governing student body of the School of Engineering, which meets biweekly. Besides these two members who represent SWE, three SWE members who represent their respective professional societies (IEEE, AIChE, etc.) are members of the Council also.

INDUSTRIAL CONTACTS

Our SWE section feels that industrial contacts are important not only for contributions to support activities, but also to learn about a variety of companies, career avenues available, and to observe practicing professionals at work "setting good examples" for us to model our professional behavior after. In addition to the industrial contacts already reported on in "Your Job Inner-View", the Assertiveness Symposium, program meeting speakers, and those contacted through the Resume Brochure, contacts were also made in the following ways:

(1) The SWE student section president was invited to lunch with Robey Howard of Union Carbide-New York on Sept.12,1978, to discuss ways in which Union Carbide could aid women engineering students on campus, (2) SWE officers and faculty advisor attended a cocktail dinner on Sept.14,1978, sponsored by Olin Corp., along with student leaders from other campus engineering organizations, (3) the student section president represented SWE at a special banquet on Oct.26, 1978, at which scholarship funds were presented to the Dean of the School of Engineering by Union Carbide Corp., (4) representatives from companies supporting the Assertiveness Symposium on March 24, 1979, were recognized at the Symposium luncheon, (5) several SWE members and officers lunched with a Procter and Gamble representative on March 25, 1979, during which a check for one member's trip to the conference in San Francisco was presented, (6) SWE members visited Union Carbide Battery Division in Asheboro, N.C., on April 5, 1979. Activities included a plant tour, luncheon, and question/answer period.