At special ceremonies at the "Awards Banquet" on Nov. 18, the Food Science Club presented its "Meritorious Service Award" to R.A. "Bo" Bullard of Valsa Milk & Ice Cream Co., New Bern, N.C. In the presentation, Food Science Club President Karen Croner read the following citation: "The Food Science Club is indeed pleased to present the 1984 Meritorious Service Award to R.A. "Bo" Bullard. Mr. Bullard is Production Manager of the Valsa Milk and Ice Cream Company, New Bern. Prior to joining Valsa in 1964, he worked for the Borden Company.

Mr. Bullard received his Bachelor of Science degree in Dairy Manufacturing from N.C. State University in 1950.

Mr. Bullard has served as chairman and member of several North Carolina Dairy Products Association committees responsible for providing funds for scholarships, assistantships, research programs and extension activities in Food Science at N.C. State University. Mr. Bullard has been a strong supporter in the establishment of the Food Processing, Distribution and Service curriculum of the Agricultural Institute at N.C. State University. "Bo" has also served on the Advisory council of the Agricultural Institute.

Pres. Croner presents award to "Bo" Bullard

Mr. Bullard enlisted in the U.S. Navy Air Force during World War II. He spent most of his 30 months of service overseas. Mr. Bullard is an active member of Garner United Methodist Church as lay leader, Sunday school teacher, and administrative board member and trustee. In expression of our appreciation, we are glad to present the 1984 Meritorious Service Award to R.A. "Bo" Bullard."

Grants & Honors

Dept. researchers are persistent in pursuing monies to support research programs. It is essential that projects be adequately funded in order to perform substantive research. Some of the monies received since July 1983 are: R.H. Basta received $137,000 (3 years) from the Nat. Sci. Foundation. His project concerns the "Regulation & Function of Superoxide Dismutase in Prokaryotes." Superoxide dismutase is an essential enzyme for all forms of life. A basic understanding of how the cell regulates the activity of this enzyme will provide insight into mechanisms of survival of microorganisms, as well as the aging process in humans. T.R. Klenk received two grants: one, from Dairy Research Fund (Nat. Dairy Council) for $95,000 (3 years) for study of "Diseased Genetics & Transfer in Dairy Lactobacilli," and the second from Hills Laboratory to study mechanisms and genetics of phase resistance in phase lactic streptococci. T.R. Klenk received a grant for $25,000 (3 years) from Dairy Research Fund (Nat. Dairy Council) for a study on "Cleaning Associated with the Deposit & Removal of Burnt-on Soil Occurring during Heating of Dairy Products." C.T. Young received two grants: one from the N.C. Peanut Growers Assoc. to study the flavor of N.C. peanuts and the second from Snack-Masters to develop a method for measuring quality in peanuts. S.J. Schwartz received N.C.IH Biomedical Research support grant for work on "Bioavailability of Protein in Carotenoids" which has to do with assessing N.I. content in processed vegetables. T.C. Larimer received a grant from the Alaska Fisheries Dev. Found. to develop heating methods to determine the quality of arctic (refined minked fish). T.R. Turner received funds through the S.C. Ag. Found. to study the yield of processed peaches, and a cooperative project with U.S.D.A. (A.R.S.-Economics Div.) on
"Constructing Technical Budgets for But-up and Further Processed Chickens & Turkeys", which will involve work with N.C. poultry meat processors. D.H. Pickering received funds for a desensitization project on reduced sodium in country hams. Agencies contributing to this project are: NCST Ag. Found., Nat. Livestock & Meat Board, N.C. Pork Producers, & several industrial firms.

Several dept. members are listed on a patent application that was filed on use of a microorganism for pickling vegetables that eliminates carbon dioxide from maleic acid. Listed on the application are: N.A. Deach, T.R. Klaeberner, R.F. McEaster, K.B. Sankey (tech.), and N.P. Fleming.

Personal Changes in Dept. P.L. "Pan" Humphill is the new University Dairy Plant eng. She has a B.S. & M.S. from our dept. & has several years' experience as a technician in dairy prod. research. "Pan" replaces R.R. "Rick" Farley, who resigned to accept a position with N.S. Sewell Co., Greensboro. J.T. "Jimmy" Keaton, assl. prof., who was on a post. doc. here, & for the past three years has researched red meats, has accepted a position as assoc. prof. at Texas A&M at College Station. R.B. Bizjak, a research asst. who has made substantial contributions in the "M.ride" area, has accepted a job with Conoco, Inc., Okla. We wish "Rick", "Jimmy" & "Rich" success in their professional development.

Dept. serves clientele.

The dept. serves the N.C. food industry in many ways. Presently, there are several programs "in the mill" that are different from traditional services; namely two certification programs that have gained national attention.

A "Food Service Mgr. Certification Program" has already certified twenty-four persons after the initial session conducted in Pitt Co. in Oct. The program is conducted in cooperation with the N.C. Dept. Health. Personnel involved in the program include: N.E. Gregory (program coordinator), J.E. Rushing, & R.E. Bracktop (Food & Nutr. Specialist & assoc. member of Food Sci. Faculty).

An "Aseptic Processing & Packaging Certification Program" is planned for March 5-9, 1984. This program is to certify operators of aseptic equipment. This program has FDA approval & is similar to the low acid food certification program, except this one deals exclusively with aseptic processing & is the first such program in the U.S.A. FDA officials & industry executives indicate that our dept. is well qualified to present this meaningful program. N.C. Miller & N.E. Gregory met with FDA officials in "D.C." in Dec. to outline details of the program. Personnel involved in the program include: N.C. Miller (program coordinator), N.E. Gregory, V.A. Jones, A. P. Hansen, J.E. Rushing, K.R. Swartzel, R.F. McEaster, D.E. Carroll, & P.L. Humphill.

Another dept. activity that has received accolades from the food industry is the pilot plant testing program. Dept. plant facilities in the fruits & veg., red meats, seafood, & dairy areas have been utilized in "industry runs" to evaluate proposed products and/or equipment. The "new" set-up in the dairy plant where direct, indirect, & "shell-in-tube" heating options are available, has been widely utilized by industrial concerns, both inside & outside of the state. Companies have utilized our expertise in processing & packaging their test products, & then the product is shipped back to their laboratories where various quality evaluation tests are made. Many of the "MRP" food products presently on the market were tested out in our facilities.

Even though a charge is made for our services to cover expenses, this program has saved the food companies substantial sums of money and also permitted them to make evaluations on test products without committing major financial resources.

Special Flavor & Texture Workshop

A special interest workshop, "Send your taste-buds to school," was conducted during the NCST 4-H Congress in July. Approx. 80 club members, adult leaders & extension agents participated in the flavor & texture panels in which various foods were evaluated. One of the objectives in this program is to create interest in Food Science as a career. L.H. Turner & A.F. Bradley were in charge of these training sessions.
Food Science Extension Retreat

All Food Sci. Ext., along with Dept. Head, D.R. Lineback, & Assoc. Extension Dir., R.C. Wells, participated in a two-day retreat at Sugar Bush. An evaluation of individual commodity programs was made, as well as outlining of individual plans for the next five years. This planning meeting was associated with "People's Plan '67," the long-range plan for the N.C. Ag. Ext. Serv. "People's Plan '67" is the fifth in a series of long-range plans for the statewide extension organization, which encompasses a coordinated & integrated problem-solving approach to program development.

Faculty Activities:

Dept. Faculty promoted from ext. to assoc. prof. in 1963 include: G.L. Caterman (nutrition), T.R. Kleishammer (nursing), & T.C. Lamler (seafood).


K.E. Bannerman served as chairman of the special issue (Food Rheology) in J. of Rheology prepared a chapter (Structural Properties of Food) that came out in Aug. A.F. Hansen gave invited papers at Inter. Conf. on Anosmia Packaging in N.J. in June, & at Marine Colloids in Maine, in Nov. H.R. Hansen gave an invited paper at the Oak Ridge Assoc. Univ. and to Assoc. Aging Assoc. in "D.C." in Oct. T.C. Lamler gave invited papers at the Inter. Assoc. of Fish Meal Mfrs. in Fla. In Nov., & Nat. Fish Meal & Oil Mfrs. in "D.C." in Sept., was appointed as chairman of the special issue comm. on refir. seafood & shellfish for A & D Assoc. (Univ.-Industry Advisory Comm. to the military). T.R. Kleishammer was named by Chancellor to the new Biotech group at NCSU in Dec. gave two invited papers at the Inter. Symposium on Lactic Acid Bacteria in Food in the Netherlands in Sept., was appointed to the editorial board of J. of Applied & Environmental Micro. D.R. Lineback served as team leader of a food science/technology team that visited the People's Republic of China in Sept. The Ministry of Commerce served as host of the team while they were in China studying the food industry. R.P. McFarland gave invited papers at Amer. Chem. Soc. in "D.C." in Aug. & "Pickle Fair" in Colorado in Oct. H.C. Miller attended a conf. on "Capitalizing on Aspilic" in "D.C." in Oct. D.R. Pilkington gave an invited paper at the N.C.-Va. I.P.T. on "Advances in Fermented Meats" in Dec. H.E. Swainson was named by the Biotech group; has continued his program at NHI in N.H. until April. Harold is doing research on the use of specific antibodies for recognition of protein structure. E.L. Schecter gave a report at the regional project meeting in Atlanta in Dec. in response to future research plans on sweet potatoes. R.R. Swartzel gave invited papers at Northeast project on "Improvement of Thermal Processes of Food" in Ill. in Oct. & N.C.-Va. I.P.T. in Dec. on "RFP" aspilic processing; was appointed to Board of Editors for J. Food Proc. in July. J.B. Thomas gave invited papers to the Va. Bankers Assoc. & Md. Bankers Assoc. in Sept. & Interstate Seafood Seminar in Md. in Nov., was selected as 1964 Chairman of Atlantic Fisheries Tech. Conf., which will be held next Aug. in Washington, N.C. J.H. Walter, with U.S.D.A. responsibilities in sweet potato research, has been promoted to GS-15; gave a report before the regional project meeting in Atlanta in Dec. C.T. Young gave a special seminar on peanut quality at the Harris Candy Co. in Ga.

Academic Affairs (V.A. Jones): "B.S. degrees were awarded to 12 Food Science students in December. In addition, three Ph.D., two Master's, and three two-year students completed their degree programs. The B.S. candidates were: Steve McGee (Raleigh), Joan Hardy (Rocky Point), Joyce Hobbs (Connelly Springs), Dawn Konkel (Shelby), Martha Leonard (Goldsboro), Tim Martin (Rocky Mount), Wanda Martin (Wadesboro), Jean Myers (Winston-Salem), Rafael Perez (Cary), Lee Smith (Shelby), Steve Srock (Greensboro), and James Williams (Darlington). M.S. degrees were awarded to Joe Monteja (Goldsboro), Mary Ellen Sanders (Castro Valley, CA), and Catherine Wright (Audubon, ME) and Jane Burge (Sedro-Woolley, WA), and Jeffrey Randall (New York) earned M.S. degrees. Carl Austin (Apolo), Rusty Hobby (Apolo), and Jeffrey Childress (Pittayetteville) were the graduates in the Food Processing, Distribution and Service Associate Degree program. All Ph.D. and M.S. recipients and part of the B.S. and associate degree students are employed. Some of the candidates were still available during final exam week. Please contact V.A. Jones or L.C. Turner if you have interest in recent graduates."
The Food Science Club is having an active year under the leadership of Karen Croner (Pres.), Ruth Harrick (V.-Pres.), Brian Himmler (Sec.-Tres.), and Kim Roll and Larry Chandler (Activities Co-Chairpersons). Two hold national offices in IFT. Karen Croner is the S.I. area representative of the IFT Student Association and Larry Chandler is Sec. of the IFT Stud. Assoc. The dairy bar at the N.C. State Fair and the Christmas cheese and sausage sale will help a large number of students attend the IFT meeting at Asheville, N.C., next June.

L to R: John E. Johnson (NCFPA), Chris Austin, Steve Tracy, "Bo" Ballard (NCFPA)

The top awards at the Eighteenth Annual Food Science Club Awards Banquet went to Ruth Price (B.H. Newell Award – outstanding senior, and Ambrosia Chocolate Award – senior with highest GPA), Ruth Harrick (Forbes Leadership Award), and Helen Waters (Crouch Scholarship Achievement Award – junior with highest GPA). In addition, 22 undergraduates, one graduate, and five two-year students were recognized for winning scholarships or fellowships. Karen Croner received the Flora Brynth IPT Fellowship; and Sally Smith (Freshman, Lexington, NC), Sara McCaulley (Sophomore, Durham), and Ruth Price (Senior, Lancaster, SC) received IPT Scholarships. More than $14,000 in scholarship money was awarded to food science undergraduates for 1963–64, in addition to full athletic scholarships for two students. Two-year students received $2,650. Donors of the scholarships include Phillip Harris, N.C. Dairy Products Association; John and Helen Kiser, J. Frank and Margaret Neely, Hase H. and Lena Hare Smith, Tarheel Sugar Growers’ Association, Stoner Foods, N.C. School Food Service Association, and IFT.

Many students have benefited from summer work experience in the food industry. Students will begin looking soon for employment next summer. This is a good time to take a look at potential employees for the future. Call V.A. Jones (919/737-2952) for more information.