



CYCLOTRON EXPERIMENTERS

Dr. Thomas Sugihara, center, points out a device used to align the beam of a cyclotron to Kenneth Hofstetter, left, and Joe Natowitz. The three Texas A&M researchers are the first to begin experiments with the university's variable energy cyclotron.

A&M Cyclotron Researchers Begin Nuclear Experiments

Scientists have begun nuclear experiments with Texas A&M's cyclotron.

Targets of various materials, including cobalt, copper, aluminum and gold, have been bombarded with beams of alpha particles from the big accelerator.

Energy of the alpha particles, which were brought about 20 feet outside the cyclotron, was 40 million electron volts, Whit McFarlin, associate director of the Cyclotron Institute, said.

Dr. Thomas T. Sugihara and Kenneth Hofstetter have collaborated in bombardment of a cobalt target. The bombardment produces a radioactive isotope of copper which, when it decays, leads to excited states of nickel (nickel-60).

"A theorist recently made calculations based on a model as to what the excited states of nickel-60 should be," said Dr. Sugihara. "There is some experimentation available, but not enough."

Joe Natowitz also has bombarded targets, this time foils of copper, aluminum and gold.

"The experiments were to investigate the possibility of detecting low energy recoil nuclei from the nuclear reactions," Natowitz said.

Sugihara, Hofstetter and Natowitz, all of A&M's chemistry faculty, are staff members of the Cyclotron Institute.

Workers in the cyclotron insti-

tute are completing installation of an array of huge magnets and vacuum pipes which will guide beams of atomic particles from the machine to various laboratory areas — or "caves." Scientists will use these caves to set up other experiments.

This precisely-aligned beam optics system includes a 55-ton analyzing magnet which bends the beam of nuclear particles emerging from the cyclotron around 159.5 degrees so that it enters the "high-resolution" experimental cave. It is here that another massive device, a magnetic spectrograph, will be installed at a later date.

The Atomic Energy Commission has granted \$250,000 for the spectrograph, which will allow extremely precise discrimination of nuclear particles.

Other basic experiments are

planned by the institute in the structure of the atomic nucleus and various interactions of atomic particles. In addition, a number of biological and medical investigations and materials research studies are contemplated.

A cyclotron accelerates nuclear particles to high energies and speeds by holding them in circular paths with an intense magnetic field while extremely rapid oscillations of an electric field push and pull them faster and faster.

The high-speed particles are then able to penetrate the forces surrounding the cores of atoms and thereby give some indication of their structure, physicists explain.

Texas A&M's \$6 million facility produced its first exterior beam of nuclear particles in December.

Ashcraft Receives Award

Dr. Allen C. Ashcraft, associate professor of history at Texas A&M University, was named the recipient of the "Award of Merit for Teaching" here March 11 at the annual Gamma Sigma Delta initiation banquet.

Gamma Sigma Delta is an international honor society of agriculture and veterinary medicine.

Dr. W. F. Krueger, president of Gamma Sigma Delta, said the award is presented to a faculty member outside the College of Agriculture and the College of Veterinary Medicine who makes an important contribution in molding, building and developing students who seek an education.

Gamma Sigma Delta wishes to give recognition to teachers in

other fields who give of their talents and time beyond the call of duty in order that students may receive a better education, Krueger said.

Dr. H. O. Kunkel, dean of the College of Agriculture, presented the award to Ashcraft.

Ashcraft was born in San Antonio in 1928. He received his Bachelor of Arts degree from A&M in 1950. He was awarded his Master of Arts and Doctor of Philosophy degrees from Columbia University. The latter degree was completed in 1960.

Ashcraft has served in both the United States Air Force and the United States Army. He currently holds the rank of major in the U. S. Army.

Pinkie's Wife Says

Everything Keeps Changing

By VANCY MANNING
Battalion Special Writer
"Everything is changing," "Miss Bea" Downs, wife of the late Pinkie L. Downs, says.

"When we first came to A&M from Temple in 1940, it took us a whole day to travel here," she said. "But now it takes only a few hours."

"A&M has grown so and added so many big buildings," she said. She thinks that the biggest change at A&M has been the increased enrollment.

"The young people have changed, too," she said. "At the first ring dance we attended, it seemed to me that the boys were afraid to kiss the girls. But now they aren't as shy as before."

"Daddy (Pinkie) didn't want girls at A&M," she said. "He wanted a man's school."

"Daddy didn't see how the girls would be able to walk to class in the shoes they wore," she recalled.

"No matter what changes might have taken place, Daddy would have always stayed at A&M," she said.

Pinkie Downs loved A&M probably more than anyone else. Anything that an Aggie ever gave to him he kept.

"Daddy was crazy about the Aggies," she said. "He loved them all and so do I. They're such nice people."

Mrs. Downs is grateful to the Aggies for all the tribute they paid her husband, especially Silver Taps.

Perhaps one of her fondest memories of her 28 years at A&M is the golden wedding anniversary celebration given her and Pinkie on Dec. 7, 1966, at the MSC.

"After the party the five-tiered cake that Col. (Fred) Dollar had baked was brought to our house," she said. "We gave cake to everyone in the neighborhood. I still have the top layer of icing with the man and woman dolls standing in it."

She and Pinkie were married in 1916 in Temple.

"Mother decided when she was 12 years old that she was going to marry Pinky Downs," Grey, her daughter, said.

"They were very happy together," Grey said.

Everything at A&M that was part of Pinkie's life became part of hers too. She tried to attend all the social functions that he did because that was the way she wanted it. She will always have fond memories of A&M.

"Daddy's favorite place on campus was the MSC," she said. "There used to be houses where the MSC is now," she said. "I'm glad that they are going to expand it."

When she goes to lunch at the MSC with friends, students recognize and speak to her.

"They remember me but I sometimes forget their names," she said.

"Mother gets upset if an Aggie remembers her and she can't remember his name," Grey said. "But with all the Aggies she has met, she couldn't possibly remember all their names."

Former students and friends often drop by to see how she is doing.

Recently, Sam Smith, class of '32, of Uvalde stopped by for a visit.

"He bought us a large loaf of homemade German bread," she said. "He brings us a loaf nearly every time he comes."

She and her daughter live at 301 Dexter in College Station.

They have two dogs, Lady and Duke. Lady, who has been at the Downs about two years, is a rather quiet, watchful collie. Duke, a cocoa brown mini-toy poodle, is a bundle of energy.

"Baby (Grey) and I are attached to Duke and Lady," Mrs. Downs said. "They are a lot of company."

She likes to take them for a walk every morning.

She enjoys working in her yard because she says it helps her to sleep better at night. One of her latest ventures was planting a hedge in her back yard.

She owns and drives a black 1949 Dodge.

"It absolutely runs," Grey said. "The only reason she drives it is so that when people ask her if she still drives she can say yes."

She refuses to tell her age. All she'll say is that she was born July 1.

She is 4 feet 11 inches tall and has brown eyes. When she came to A&M she had black hair.

"A&M has turned my hair gray," she said smiling.

As to her what future plans are she said, "I plan to watch A&M grow bigger and bigger."

Miller Authors New Book

Dr. Thomas Lloyd Miller, associate professor of history at Texas A&M, is author of a new historical work, "Bounty and Donation Land Grants of Texas, 1835-1888."

It is an extensive revision of Dr. Miller's doctoral dissertation published by the University of Texas Press.

"This new publication makes a significant contribution to the history of Texas," said Dr. J. M. Nance, head of the Department of History and Government at A&M.

"Bounty and Donation Land Grants of Texas will be of interest to Texas historians in general, and in particular to lawyers, genealogists, and to those interested in studying the land grant system of Texas and the progression of settlement in the state," he said.

Dr. Miller previously has published a number of articles on land grant policies of Texas.

Pejovich Authors Research Study

Dr. Steve Pejovich, associate professor of economics at Texas A&M, is author of an article on Yugoslavia which will be published in "Series Studies in Social and Economic Sciences."

The article is entitled "Trends in the Productivity of Capital in Yugoslavia."

Pejovich's research was sponsored by the American Association of Learned Societies.

"Series Studies" is published by the National Institute of Social and Behavioral Science.

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