

Three NU Men Experiment With Atomic Accelerator

Exhaustive Research Of Jorgensen, Cook, Kuyatt Done Under Atomic Energy Commission Contract

By DICK FELLMAN
Staff Writer

At the present time in an isolated corner of Brace Physics Laboratory, three men are calmly experimenting on the effects of accelerated atoms as they are energized into a column of gas. They are quietly observing the reactions of various atoms. As yet, they have made no practical application of the new findings, for this experiment is in the field of pure atomic research.

THE EXPERIMENT is being done on the Cockcroft-Walton Atomic Accelerator, a machine that energizes ions up to 400,000 volts and focuses them into a beam of gas. Once the ions

reach the gas, they are slowed down, and their reaction is measured.

Dr. Theodore Jorgensen, professor of physics, began working on the atomic accelerator a few years ago and has interested two students in the new work. Dr. Charles Cook, a former student at the University and now on the staff, worked on the accelerator while studying for his Doctor's degree in physics and wrote his thesis on this same experiment.

At the present time, Chris Kuyatt, a graduate student in the physics department, is continuing the work on the accelerator, hoping to uncover new fea-

tures in atomic reactions.

THE PROCESS of testing the atoms begins when atoms of any light gas are placed in a high potential vacuum and accelerated at a determined voltage. The ions receive this energy in a high potential column and advance to the accelerating column, which simply hurries them along, continuing in a series of columns almost fifteen feet long until reaching the analyzing magnet.

The magnet shoots the ions at an angle of twenty degrees into a column filled with one of the light gases, which will slow the atom down. The experiment determines the amount of energy lost as various ions are slowed by entering the gas.

After determining the rate of energy lost, the accelerator shows the characteristics of the ions while they are losing their energy and after they have lost it. The twofold results reached with each different type of ions as it enters a new gas is the purpose of the experiment.

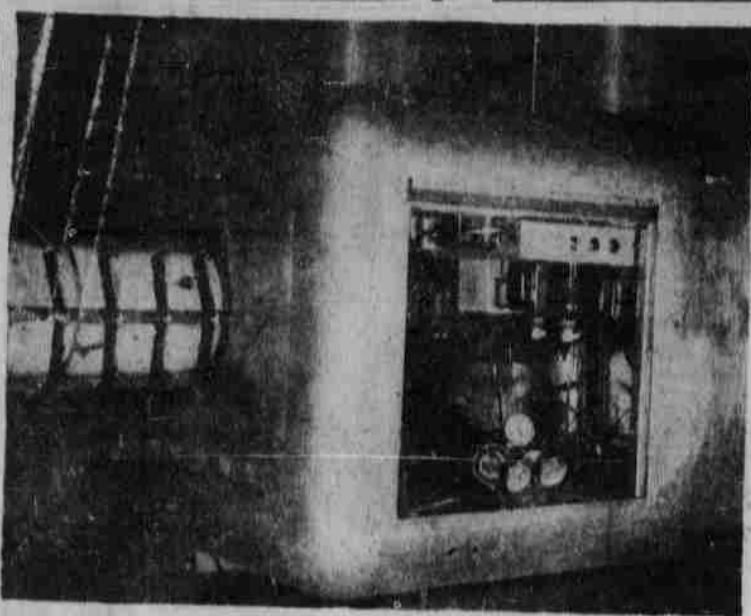
ORIGINALLY, the voltage in the University's atomic accelerator was 250,000, but it has recently been raised to 400,000 volts. It is still considered a low voltage accelerator, although guards have been placed around most of the electrical equipment, for even 400,000 volts can be rather dangerous.

The present experiments are all in the field of atomic physics, or working with the entire atom, rather than nuclear physics, which breaks the atom down and experiments with the individual parts of the nucleus.

Even though it operates at only 400,000 volts, this machine could be used for extensive nuclear research problems by simply increasing its capacity. Although the Cockcroft-Walton atomic accelerator is now being used for this single purpose, in the future the concentrated beam of ions that the machine creates may be converted to different work.

IN CARRYING out this research on atomic energy, the University is working under a contract from the Atomic Energy Commission. Similar experiments in other particular fields of nuclear and atomic development is being done at various centers and universities throughout the nation.

As these men, and others like them in many other places, continue their tedious but fascinating work, our knowledge of the universe is slowly being advanced. Most of today's scientists firmly believe that this new understanding will help all men, if we can co-ordinate our scientific "know-how" with good sense and apply them to the common good.



Accelerator Used By NU Physicists

An atomic accelerator, housed at Brace Laboratory, is now being used for experiments conducted by University staff members and graduate students. The large aluminum cover is to protect researchers from injury while working with the equipment, capable of energizing atoms up to 400,000 volts. (Nebraska photo)

Toulouse-Lautrec Originals On Exhibit In Morrill Hall

A series of 10 original lithographs by Henri de Toulouse-Lautrec are being shown at Morrill Hall until Sunday. The set is presented under an

illustrated cover printed on Japanese paper. Lautrec did not give names to any of the plates, however the titles given them were adopted by connoisseurs and dealers.

Ag Campus Fun Night Scheduled

Rehearsals Set For Tuesday

The 1953 Coll-Agri-Fun night will be held Friday, Nov. 6, Del Merritt, board manager, announced.

Coll-Agri-Fun night is the annual presentation of skits and curtain acts by the students and organizations of Ag College. The event will be presented in the College Activities Building at 8 p.m.

Rehearsal of skits and curtain acts will be Tuesday, at 9 p.m. in the College Activities Building. The Coll-Agri-Fun board will approve the presentations at this time.

Skits and curtain acts will be judged largely on quality of performance, time required, interest of action, and originality. Copyrighted plays are acceptable. Prizes will be awarded to the winning plays.

SOME OF the prints are on gray and others are on a rose-colored paper. It is thought that perhaps Lautrec intended all of them to be on a rose paper, because five of the proofs were on this color.

Lautrec was not interested in the "story" of his paintings. He spoke of their uselessness, saying of his prints "they mean what they mean, they have no need of words." When it was necessary to have a story, he sought the advice of Tristan Bernard, a writer and close friend.

The series was loaned to the University Galleries by Richard S. Davis of Minneapolis, Minn.

Two Former Dental College Teachers Die

Dr. George A. Grubb, former dean of the College of Dentistry, and Dr. Bernhardt Schwartz, former instructor in the College of Dentistry, died last weekend.

Dr. G. Grubb, dean of the College of Dentistry from 1923 to 1939, was a part time instructor in the college prior to assuming this position. Dr. Grubb, outstanding in his field, served on the executive board of the American Association of Dental Schools from 1936 to 1939.

Before retiring in 1949, Dr. Schwartz was with the Lincoln Dental College. When it merged with the University he became an instructor in periodontia and oral hygiene.

Well-Known Playwrite Reviews Own Career

Caine Mutiny Agent Visits NU

By JAN HARRISON
Copy Editor

"I remember when John Barrymore was just a straight actor and I made a song and dance man out of him."

Leaning back in the Union office chair and puffing on a stubby cigar, Ralph Kettering, in a Nebraska interview, told some of his many experiences and contacts in the world of show business.

Kettering—author, playwright, producer and press representative—is in Lincoln laying the publicity groundwork for Paul Gregory's production of the "Caine Mutiny Court Marshal" to be presented at the Coliseum Nov. 19.

A SHOW BUSINESS stalwart, Kettering has known and worked with such American stage personalities as Lillian Russell, Chauncey Olcott, John Barrymore, Elaine Barry and Charles Laughton.

He is the playwright of the Broadway hits "The Marriage Question," "Daughter of the Sun," "Easy Street," "Which One Shall I Marry?" and "The Clutching Claw." Kettering has written three books: "This is My Theater," "Behind The Magic Curtain," and a third book, "Hello Sweetheart," the story of the life and loves of producer Al Woods, which will reach the market in Dec.

KETTERING, WHOSE home is in Chicago, lauded the "Caine Mutiny" production and its producer, Gregory, Kettering said, is the most outstanding young producer of the theater. Only 36, he has enjoyed three

consecutive years of success with the touring companies of John Brown's Body, First Drama Quartette and now Caine Mutiny.

"Caine Mutiny," Kettering explained, is not to be confused with the other two Gregory productions. This is a full stage production, Broadway style, with costumes, sets and topnotch actors. The main advantages of touring the Caine Mutiny, he explained, is that Gregory can determine the play's success by public opinion and can bring the show to parts of the country removed from the New York stage.

THE PLEASANT showman said there has never been a play produced with an all-male cast that has been a success. "The Caine Mutiny" has an all-male cast, and statistics verify the fact that since it opened at the Granada Theater in Santa Barbara, Calif., every house has been sold out, from Oct. 12 until Sunday night.

"The Caine Mutiny Court Marshal" will open at the Plymouth Theater in New York on Jan. 19.

Kettering said an interesting fact about the play is that Herman Wouk, the author of the original book, is the dramatist of the play.

Biz Ad Honorary Pledges 23 Men

Delta Sigma Pi, professional fraternity of the College of Business Administration, pledged 23 men in ceremonies following their annual banquet.

Henry C. Lucas of Omaha, Midwestern regional director of the honorary, was in charge of the pledging. Jim Thomson of Chicago, national executive secretary, addressed the 100 members and their guests.

Students pledged were: Jack D. Bussell, Albert L. Curtis, Gerald R. Davis, Victor H. Golletz, U. J. Kapsi, Donald J. Obrecht, Lyle E. Reighard, Carl J. San Filippo, Wesley W. Steyer, William J. Tussey.

Richard D. Whalen, Francie A. Cruse, Maurice E. Dailey, Darrel G. DeGraw, Allen A. Hesson, Duane McKenzie, Lloyd Peterson, Robert M. Roach, Wayne S. Schoepf, Richard H. Swanson, Ralph M. Deihe, Arthur A. Viater, and Ronnie R. Wohlers.

Philosophy Organization Plans Tuesday Meeting

The Philosophy Club will hold its next meeting Tuesday in the Union Faculty Lounge from 3:30 to 5 p.m.

The club plans to request students attending to list the subjects which they would like to hear discussed in future meetings.

Air Force Squadron G Receives Honor For Drill

Cadet Col. Lloyd Keller announced that Squadron G has been named the honorary squadron of the Air Force Wing as a result of the recent ROTC parade. Squadron G commander is Pat Engel. His squadron was selected on appearance and precision in drill.

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