

"Ion Shooter" To Be Loaded With Million Volts

Dr. W. R. Kanne, under the sponsorship of the department of physics, is beginning research in Room 104, Physics Building on the subject of nuclear physics. Dr. Kanne will be assisted in this work by John Ellison, a research assistant. The studies are to be of a purely scientific nature, as Dr. Kanne pointed out that the object of such efforts is to learn as much as possible about Nature, with the view of possibly utilizing this knowledge to control natural processes in the future.

The main piece of equipment consists of a Van de Graaf electrostatic generator mounted in a high-pressure tank. The tank is being constructed and donated by the Chicago Bridge and Iron Co. and the Taylor Forge and Pipe Works. The generator is mounted in the tank which contains air under a pressure of about 150 pounds per square inch, because of the fact that air is a much more efficient electrical insulator when under pressure.

It is estimated that the machine will develop a potential of approximately one and one-half million volts. It will be used to produce a beam of positively-charged ions of high velocity. The goal of the experiments to be performed with this apparatus, in common with the more widely publicized cyclotrons, is to produce information regarding atomic nuclei from the effects produced by the penetration of these high-velocity ions into the nuclei. Electrostatic generators however are used in some experiments impossible with cyclotrons since the energy of the ion beam can be controlled more precisely, even though the magnitude of the energy is usually not as great. The beams to be utilized are those consisting of protons and deuterons. In operation the electrical charge is sprayed upon a belt, moving at the rate of a mile a minute, which carries the charge up to the electrode.

CORRECTION

The reference to jewelry selected by the Senior committee at Armour as the "official jewelry of IIT" was erroneous. There is, at the present time, no official school jewelry.

Every student at Armour should carefully check the following list and be sure to have his picture taken for every one of the following groups of which he is a member. All students are excused from classes to have their picture taken.

Pictures for the yearbook will be taken on Tuesday, Wednesday and Thursday, February 25-27, in the auditorium of the Student Union.

TUESDAY FEB. 25

| | | | |
|--------------------|----------|-------------|--|
| Mechanicals | | | |
| Juniors | 2 groups | 9:30-10:00 | |
| Sophs | 3 groups | 10:00-10:45 | |
| Frosh | 4 groups | 10:45-11:45 | |
| Electricals | | | |
| Juniors | 1 group | 12:00-12:15 | |
| Sophs | 2 groups | 12:15-12:45 | |
| Frosh | 2 groups | 12:45-1:15 | |
| Fire Protects | | | |
| Juniors | 1 group | 2:00-2:15 | |
| Sophs | 1 group | 2:15-2:30 | |
| Frosh | 1 group | 2:30-2:45 | |
| Civils and Science | | | |
| Juniors | 1 group | 3:00-3:15 | |
| Sophs | 1 group | 3:15-3:30 | |
| Frosh | 1 group | 3:30-3:45 | |

WEDNESDAY FEB. 26

| | | | |
|-----------|----------|------------|--|
| Chemicals | | | |
| Juniors | 2 groups | 9:30-10:00 | |

DR. M. SCHULTZ'S GRADUATE COURSE

This semester, the graduate division at Armour is offering a course in the physics and chemistry of matter in the crystalline state. Dr. M. L. Schultz is conducting the class.

The aim of the modern theories of the solid state is to predict the arrangement of atoms and molecules in crystals from the theories of the structure of these atoms and molecules. From a knowledge of this arrangements, the theories attempt to foretell the properties of intermetallic compounds of crystals.

During the course a study will be made of the methods used in attacking the problems outlined above and also of the results which have been obtained. In addition, some typical chemical reactions occurring between solids will be studied.

Hurry! Hurry! Scientific Cure

Passing an electric current through the head of an insane person causes the patient to have an epileptic fit. If the shock is severe enough it may restore the patient's mind to normal.

Mohammad Muthleb, former instructor in the Lewis physics department, made the device for Dr. Neymann, who has written many books on the cure for insanity. Dry cell batteries are attached to two electrically charged discs which are placed on each temple of the diseased. This causes the epileptic fit which, if it does not kill, will cure the patient of general paresis.

School Song—

(continued from page one)

"There's only one IIT." went over with a bang: The lyrics are as follows:

"We pledge our hearts, our all to IIT.
We'll spread your fame and glory where're we be.
In all the land there's only one Under the sun, there's only one.
We pledge our hearts, our all to IIT.
Long may your splendor shine for all to see,
We stand and sing with fervent loyalty
In all the land there's only one."

| | | |
|-----------------------|----------|-------------|
| Sophs | 2 groups | 10:00-10:30 |
| Frosh | 3 groups | 10:30-11:15 |
| Senior Class Officers | | 11:30-11:45 |
| Sen. Com'teen'n group | | 11:45-12:00 |
| Individual Sen. Com. | | 12:00-12:45 |
| Junior Class Officers | | 12:45-1:00 |
| Soph Class Officers | | 1:00-1:15 |
| Frosh Class Officers | | 1:15-1:30 |
| Junior Dance .Com | | 2:15-2:30 |
| Soph Dance Com. | | 2:30-2:45 |
| Frosh Dance Com. | | 2:45-3:00 |

THURSDAY FEB. 27

| | | |
|---------------------|--|-------------|
| Armour Players | | 9:30-9:45 |
| Dance Club Officers | | 9:45-10:00 |
| A.S.M.E. | | 10:00-10:30 |
| A.I.Ch.E. | | 10:30-11:00 |
| F.P.E.S. | | 11:00-11:30 |
| A.S.C.E. | | 11:30-12:00 |
| A.I.E.E. | | 12:00-12:30 |
| S.A.M. Officers | | 12:30-1:00 |
| Rifle Club Members | | 1:45-2:00 |
| Armour Eye | | 2:00-2:15 |
| 4th year Co-ops | | 2:15-2:45 |
| 3rd year Co-ops | | 2:45-3:15 |
| 2nd year Co-ops | | 3:15-3:45 |
| 1st year Co-ops | | 3:45-4:15 |

NOTE ARCHITECTS

Arx society pictures and class pictures will be taken Friday at the Art Institute, from 9:30-12:00.
Lionel Naum
Editor

Arx News

Here we are again with the complete coverage of events occurring at ye Art Institute.

Steinweg got a lengthy questionnaire concerning army life. Deciding that this called for celebration, Steinweg, Pointek, and Blume partook of cohasset punches, and returned to class in high spirits. They discovered that Reinke's model house was not fire-proof, and had a ripping good time tearing up other peoples drawings. That is probably what happened to the Crit that Mies gave to O'Brien.

Ostie dropped in Friday, but couldn't persuade anyone to go to the show, everyone was having too much fun giving each other the hot-foot. Michaelson alone escaped that tingling sensation.

Johnny Weese discovered that by inhaling the fumes of rubber cement he could forget about everything and feel "Out of this World." Hannaford finally locked the can of cement in his locker until Weese came out of it.

Contributions:

Why is it that Steinberg has been eating so many raw eggs lately?

When is Daly going to buy some of his own equipment?

Gross finally broke down, and bought an art-gum eraser.

Lane is making quite a few connections at a certain theater on the corner of State and Van Buren. He really enjoys ushering there.

Stowell seems to be getting ready for spring training, at any rate he's pitching oranges around the rooms. One of them almost decapitated Lindgren.

Having exhausted our notes and dope, we've decided to close ope, Soo long

SCENTER.

Golf Research—

(Continued from page one)

on the campus of Illinois Institute. The start of next year will see the banning from tourney play all implements and balls which do not fit into the rules.

Grooves on the heads of iron clubs may not exceed 35 thousandths of an inch in width, while the lands (the flat, raised areas between the grooves) must be at least three times the width of the grooves. No circular punch marks on club faces are to exceed 75 thousands of an inch in diameter and cannot cover more than 18 per cent of the area allowable for scoring. In order to have no effect on the ball's trajectory, all punch marks must be uniformly spaced.

From an extensive study, the golf engineers found that 70 per cent of all clubs now in use conform to these specifications; in 1942 the remaining 30 per cent will be good only for non-tournament play and disciplining the children.

The formerly too-broad rules were replaced by a request of the manufacturers.

Junior Formal—

(Continued from page one)

school's social effort are going rapidly and have exceeded all expectations. Wednesday morning is absolutely the last time that bids may be procured. A special feature of the dinner dance will be a strolling string quartet which will serenade the guests during intermissions between the champagne dance music of Lawrence Welk.

The Junior Formal committee has expressed the desire that all bids be completely paid for by Wednesday morning.

A.S.M.E. MEMBERS TO GO TO DETROIT

Selection of an Armour representative for the district competition at Detroit, April 21-27, will begin at the March 7th meeting, it was revealed Friday at the A.S.M.E. meeting. Any member of the A.S.M.E. may submit a paper written from the scientific aspect of any suitable subject. It is planned that a bus be chartered for the trip if enough members plan to go.

Inspection trips to local industrial plans have been behind schedule due to defense operations. Mr. Roesch has been working on these tours and promises some trips in the near future.

Adoption of by-laws, for the Armour division of the A.S.M.E., was an important part of the business meeting. A committee was appointed last fall to formulate these laws. It was decided that a quorum of 20% be present to transact business.

Friday the A.S.M.E. is sponsoring the W.S.E. assembly in the auditorium of the Student Union Everett S. Lee of the General Electric Co. Schenectady, N.Y. will be the guest speaker. The subject of his talk will be "Prominence of Measurements in Industry".

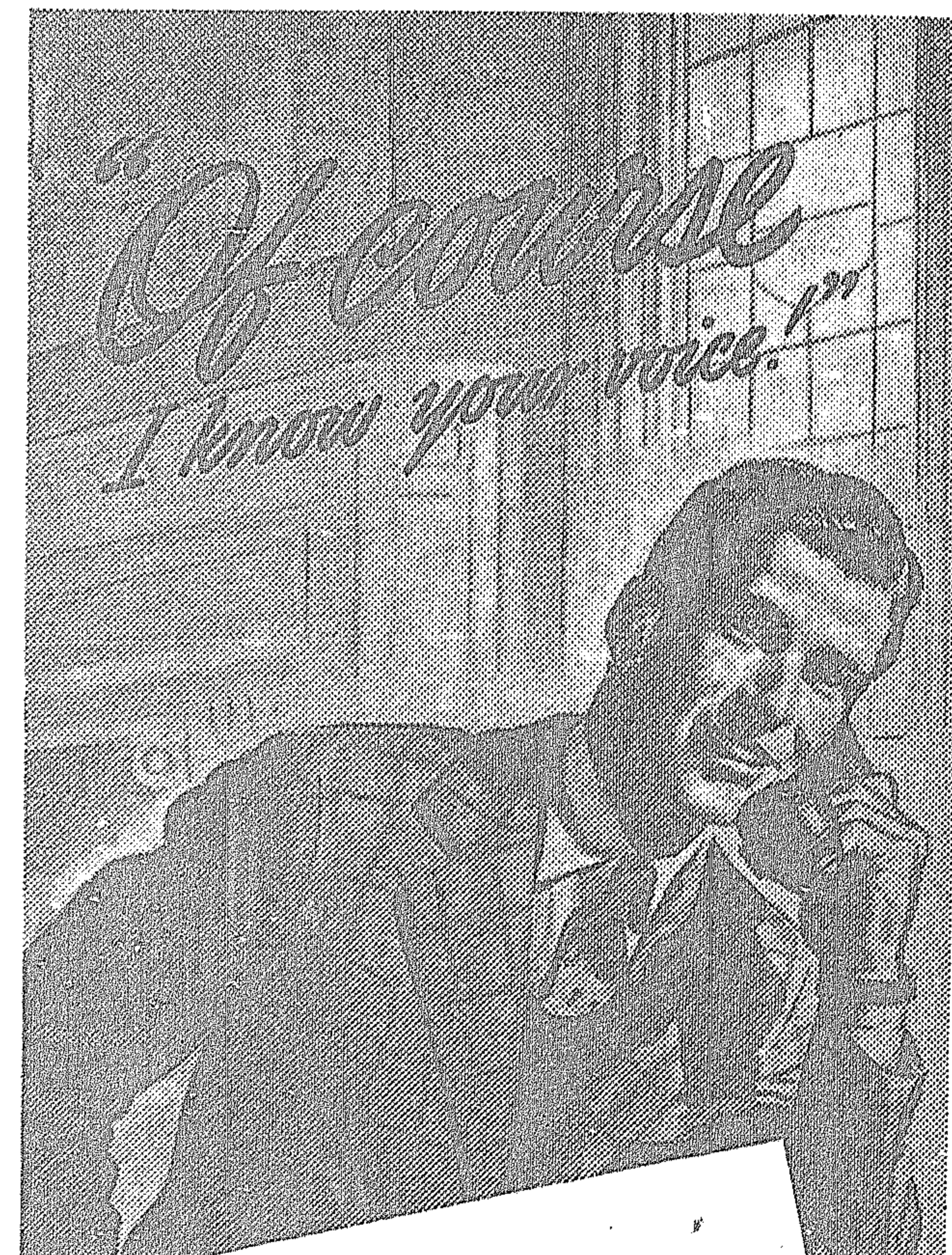
Chemical Honorary Now Includes Lewis

Chemical engineering students at the Lewis campus will now have the opportunity to achieve scholastic distinction. This is the eligibility, for those of high scholarship standing, of becoming a member of the Omicron Chapter of the Phi Lambda Upsilon Fraternity, a national honorary chemical engineering society. The Omicron Chapter formerly of Armour College has been rechartered to Illinois Institute of Technology. Before this Chapter could be rechartered, the National Organization had to approve of such an arrangement.

Students of chemical engineering or science with a high scholastic standing are eligible for membership. Extra-curricular activities also play a part in the selection of members. Henry Wessel is president of the Chapter at IIT. Professors of the chemical department are also eligible for honorary chapter membership.

A joint meeting of chemical students at Armour and Lewis is to be held in the Student Union on the Armour campus on Feb. 26, 1941. This meeting is sponsored by the Alpha Psi Chapter of Alpha Chi Sigma, professional chemical society.

"Of course I know your voice!"



"Of course" pays an unconscious tribute to Western Electric, maker of Bell Telephones. It means that all the equipment used in the connection is made so skillfully that it transmits the familiar tones and inflections. As manufacturer for the Bell System, Western Electric makes some 43,000 different items of telephone apparatus. As pur-chaser for the System, it buys raw materials and supplies from all over the globe. As distributor, it sees that all these things are available where and when needed. This helps to give you the world's finest telephone service.

Western Electric
... is back of your Bell Telephone service