



# Armour Tech News



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Armour Institute of Technology, Chicago, Illinois

Tuesday, November 2, 1937

## Sophomores Elect Shaver President

**Mackey, Opila, Norkus, and Worcester Win**

The sophomore class in a spirited election held on last Friday, Oct. 26, chose its officers for the coming year. Daniel Shaver, E.E., was elected president over Paul Ransel, F.P.E., by a count of 117 to 92. Ransel led the class the first year. All offices were hotly contested with department pitted against department and fraternity pitted against fraternity as they attempted to place their men in key positions of the class.

### Fahey Lead Stedman

Prior to the final election held on Friday a primary election was held on Tuesday from which the two contestants with the largest vote were entered into the final election. There was a close race for the A.T.S.A. representative with a tie for second place between D. Sunde and J. Fahey with 45 votes each. L. Stedman took first place with 56 votes. Sunde, however, withdrew from the finals in favor of his rival, Fahey. Results in the final election showed Fahey ahead of Stedman by a vote of 114 to 91.

### Mackey Elected Vice-President

Other results showed W. Mackey 151 and E. Horn 51 for vice-president; F. Opila 118 and H. Quandt 85 for secretary; L. Norkus 123 and B. Sternfeld 83 for treasurer; E. Worcester 140 and L. Downing 67 for social chairman.

The new officers expressed their eagerness for a class dance or smoker to be held as soon as possible. There will probably be a meeting of the sophomore class Friday under the guidance of the new officers to discuss plans for the coming year.

## Chapin Hall Location of Civil Engineering Research Laboratory

Research laboratories in civil engineering are now under construction in the basement of Chapin Hall, Mr. Dohrenwend being in charge of the construction. The first of these laboratories is devoted to the study of photo elasticity of structural models. At one end of the laboratory is a dark room to be used for the development of films. Several power tools are being installed for use in making models. This laboratory will also be used for studying impact and vibration in structures.

Another lab is being constructed to make structural tests on full scale models. The first test to be made will be a comparison of different types of concrete. A slab of pre-cast concrete and a slab of concrete cast in place will be loaded with sand bags to measure relative deflections and strains, and to determine which type of concrete is better. This test will take from nine months to a year.

Professor Ensiz is working on a "stable table" to be used in the study of soil mechanics. The purpose of this table is to eliminate vibrations from passing trains. The table will be on the first floor of Chapin Hall and the legs of the table will extend down through the basement to the clay beneath, several feet below the surface of the earth.

## Golden Gate Movies Shown by Roebing Co.

Through the courtesy of the Roebing Manufacturing Company, the construction of the Golden Gate bridge was presented in a sound motion film at an assembly last Friday. The astounding size and structural achievement of the bridge was stressed as well as the technical phase of its construction.

Diagrammatic material supplemented the movies in presenting the scientific achievements. The construction was followed from the sinking of the piers to the laying of the cement road bed. Prefacing the actual subject matter was a biography of the Roebing organization, which has been intimately connected with bridge construction.

## Pi Tau Sigma Men to Motor to Convention

Six members of the Armour Delta Chapter of Pi Tau Sigma, the honorary mechanical engineering fraternity, will attend the national convention of the Society which will be held at the Drexel Institute of Technology and Lehigh University, November 18, 19, and 20.

The men who will participate in the convention are C. K. Nauman, official delegate; L. I. Thomas; H. B. Nicholas, A. Neuert, J. Prochaska, and A. N. Schrieber. The party will leave Armour Wednesday, November 17, and will proceed by automobile to the Drexel Institute in Philadelphia where the first portion of the convention will be held. The convention will then move to Lehigh University, located approximately five miles away in Bethlehem, Pennsylvania, where the remainder of the convention will be held.

## Sixteen Brains Study Practical Psychology

The study of psychology has attracted sixteen of Armour's "brains" to Mrs. Orcutt's new two day a week class. Originally over twice that number signed up for the class, but only the sixteen could find a place for it in their programs although several others are reading and studying outside of class under Mrs. Orcutt's guidance.

Why are they studying psychology? Those taking the course have said that they want to use it to help make and keep friends and to find out about themselves, their own habits, faults, and the why and wherefore of their own actions. Some expect to get married and want the psychology to make their married life a happy one, and some, probably the same ones, want to study psychology in order to raise their children correctly and give them the benefit of their father's college psychology course.

At present the class is wading through fundamentals, but in a few weeks material of a more practical nature will be studied. At that time it is possible that the friends of those taking the course will become guinea pigs as the material will be applicable to them and the students will be anxious to try their new power.

## Riesz and Gerber Receive Awards

Dr. Gustav Egloff, director of research for the Universal Oil Products Company, has announced the establishment of graduate fellowships in the chemical engineering department, on a yearly basis, to carry a stipend of \$600 and tuition. Research in catalysis will be done by the appointees under the direction of Professor V. I. Komarewsky in the catalytic laboratory on the fourth floor of the main building.

To Do Catalysis Research  
The particular recipients of the fellowship have been selected by Professor Komarewsky. They are: Charles Riesz, Armour '35, and Norton Gerber, Armour '37. Mr. Gerber will carry on work leading toward a master's degree, while Mr. Riesz will pursue research toward a doctorate.

The investigations carried out in the catalytic laboratory at Armour are highly interesting, as well as extremely important industrially, since they are a part of nationwide research leading toward the improvement of high grade gasolines for aviation and other purposes, and the better utilization of waste natural gas for the production of gasoline.

Papers Presented to A. I. Ch. E.  
The particular problems under Professor Komarewsky's direction are: alkylolation with hydrogenation catalysts, and the aromatization of octane and decane.

Papers on these topics were presented recently at the meeting of the American Chemical Society at Rochester.

## A.S.M.E. Plans Trip to Nash Motor Plant

All phases of automobile construction work will be viewed by the Armour members of the A. S. M. E., tomorrow, when the society will conduct an inspection trip through the Kenosha plant of the Nash Motor Car Company.

The trip will be open to all junior and senior members of the society. Sophomores are not advised to attend as similar trips are held every year and the size of the group is limited. Stephen Gryglas, A. S. M. E. inspection trip chairman, is in charge of the visit.

Transportation to the plant is to be by private automobiles, and those who wish to secure places will be assisted by a committee composed of I. M. Footlik and N. D. Rice, juniors; and E. W. Menke and E. F. Sipp, seniors.

A speaker will preview the high lights of the plant, just previous to the beginning of the trip. These arrangements were necessary because the activity of the plant, in the production of a new line of automobiles, would not permit the appearance of a speaker at the school.

## A.I.Ch.E. Chapter to Visit National Student Meeting

On Monday and Tuesday, November 15 and 16, the National Student Meeting of the A.I.Ch.E. will be held at St. Louis, Missouri, a point which will give students at Armour and other midwestern colleges for the first time an opportunity to attend with a minimum of inconvenience and expense. For this gathering, the program has been planned to emphasize certain points which cannot be adequately handled in the college class room or laboratory.

### Reasonable Rates

The total cost of the two days' activities, including registration, transportation on inspection trips, and two meals will be \$3.50. Tickets for individual events will also be available. Overnight accommodations at the Kingsway Hotel, where many of the features of the meeting will be held are available at daily rates of \$2.00 for single rooms, \$3.00 for double rooms, and two room suites with bath for \$6.00.

The program will begin on Monday morning with a visit to the Monsanto Chemical Company's new pilot plant. Here the student members will see the operation of various essential steps between laboratory and full scale operation. Following this trip, a dinner will be held at the hotel, with Dr. Harry A. Curtis, Chief Chemical Engineer of the T. V. A. as main speaker.

### Will Visit Anheuser-Busch

On Tuesday morning the students will receive an entirely different type of instruction at Anheuser-Busch, Inc., where they will see an old time product made in a modernized plant. A group luncheon will be held in the afternoon and will be followed by an address "How Can a Chemical Engineer Develop Professionally?" by Dr. Albert E. Marshall, past president and chairman.

## 'Where the Cross is Made' To Be Staged Next Week

Under the guidance of Professor Homer Combs, the new Players will present their first play of this semester, "Where the Cross is Made," next week.

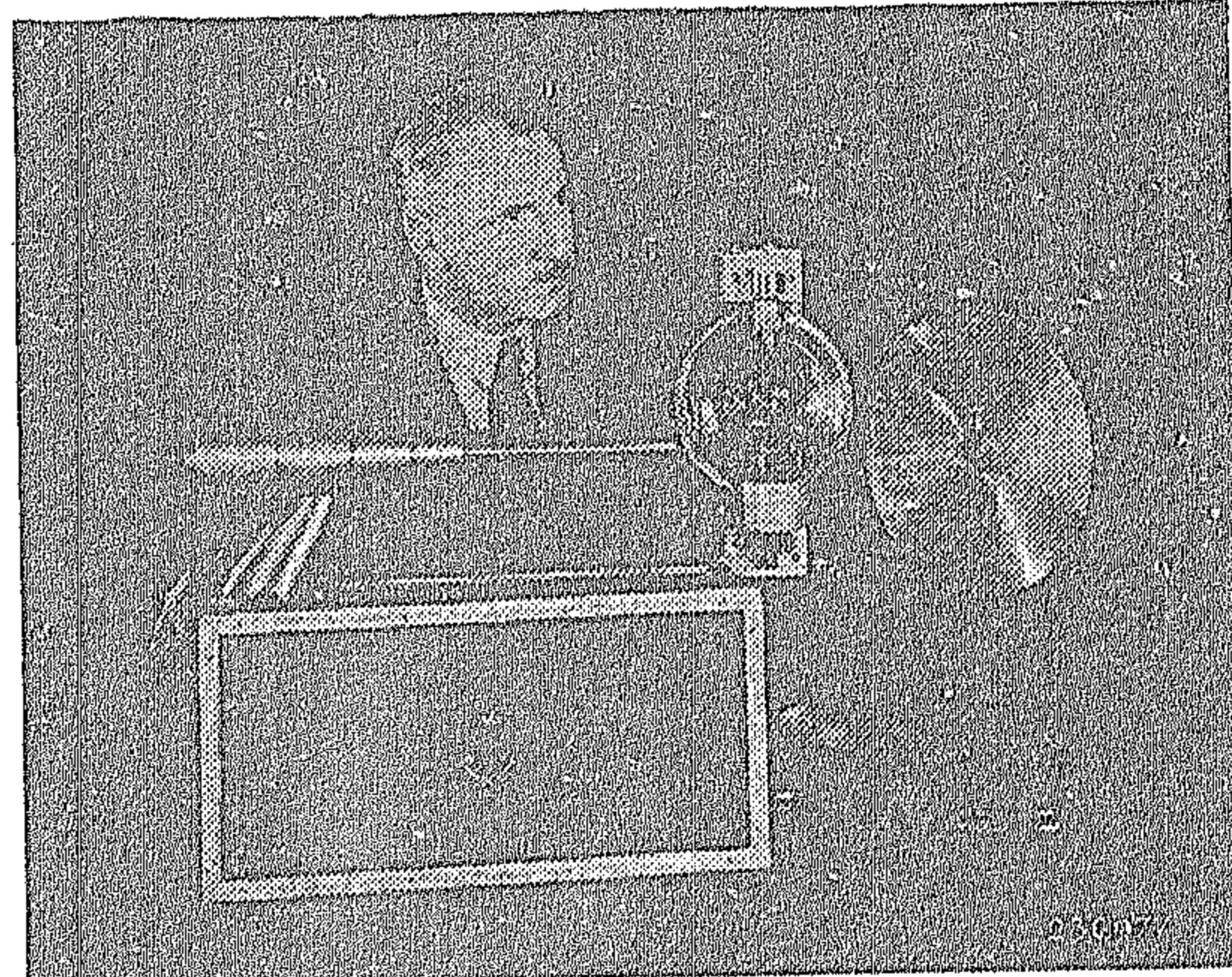
Professor Combs announced last week that the lone feminine role in Eugene O'Neill's play has been filled. His selection, Miss Mary Russo, is already well known to many students here at Armour.

Miss Russo appeared some time ago in a number of Guild successes. She probably will be best remembered by her excellent portrayals in "The Red Robe," and "Waiting for Lefty."

## Appointments to Be Made For A.I.E.E. Committees

Committee appointments for the coming year are to be announced at the A. I. E. E. business meeting scheduled for Friday at 10:30 in the electrical lecture room. Positions on the social, program and technical papers committees will be filled at that time. Final preparations for the coming smoker will also be made.

The technical papers committee to be appointed functions as a judge of papers submitted by students. The papers describe the students' contact with a unique problem or phase of electrical engineering. Papers selected by the committee are presented at A. I. E. E. meetings.



"STOPS" PROJECTILE—Instantaneous in action, the ignitron tube flashes the moment a projectile passes in front of it, thus making it possible to see action ordinarily too swift for human eyes. The devices in the picture are a compressed air gun, the ignitron tube and a target used by Dr. Phillips Thomas, Westinghouse research engineer, in his lecture-demonstration "ADVENTURES IN ELECTRICITY," that shows recent important developments of electrical engineering laboratories.

## Foundations of White House Quiver As Anarchism Breaks Out at Armour

By R. Perry

Certain signposts invariably point the way when an organization takes the winding bosky path brinking on the noisome pit of anarchy. Be it a nation, village or school, there are certain seemingly mild situations that occur prefacing the final headlong plunge.

### Not Initiated Yet?

Now, to the uninitiated these incidents may be regarded as the carefree pranks of students bent on amusement but, on analysis, certain aspects of the initial act rise to the surface and reveal to the awestruck gaze of the populace at large the menacing black shade of anarchy.

## Kent Tenth Speaker on Armour Program

Television was discussed by Mr. Earle L. Kent, instructor in electrical engineering, last Saturday on the tenth and last program of the WCFL radio series on applied science sponsored by Armour Institute through the cooperation of the Adult Education Council of Chicago. This program, as well as the others in the series, was presented at 7.30 p. m. under the direction of Mr. Alexander Schreiber.

Mr. Kent explained how television is designed to transmit, by means of electrical impulses, reflected light of varying intensities through the air channels and then reconstruct those electrical impulses into a pattern which is again discernible to the eye.

To change light waves to electrical impulses, the television engineer has incorporated the principle of the photo-electric cell, with small sections of the image exposed to the cell at a time. The process must be carried out quickly in order that the persistence of vision of the observer will make it appear that the entire picture is constantly present.

Mr. Kent explained the use of the iconoscope as the modern development of the electric eye for transmission, and the elimination of mechanical scanning by the use of the cathode ray tube for receiving.

## Night and Day Divisions To Hold Joint Assembly

**Dr. P. Thomas of Westinghouse to Present Lecture 'Adventures in Electricity' Next Saturday Afternoon**

Dr. Phillips Thomas, research engineer of the Westinghouse Laboratories, will present a lecture-demonstration next Saturday afternoon at 2:30 in the Assembly hall for both evening and day divisions of Armour Institute. This will be the first project planned for both divisions of the school and has been arranged by Dr. B. B. Freud, Dean of the evening division and Professor D. P. Moreton.

Recent achievements in engineering which are producing a continuous evolution within the industrial world will be discussed by Dr. Thomas in his talk entitled "Adventures in Electricity." Specially designed apparatus valued at more than \$10,000 will be demonstrated by the speaker in conjunction with his lecture.

### Electrical Contributions

The equipment will exhibit a wide variety of feats, including the almost 100 per cent purification of air electrostatically, the examination of rapidly rotating parts of machinery with a stroboscope, the study of non-recurrent mechanical motions of great velocity by the use of an ignition tube, and uses and effects of infrared rays. The world's most powerful magnet which can lift twenty times its own weight, a model transmission line, the new extreme sensitive Knowles tube light relay, and a vacuum tube synchronizing relay will also be demonstrated.

Dr. Thomas has been with the Westinghouse Research Laboratories for more than twenty-five years and has made notable engineering contributions in the fields of radio and electricity. He spent his undergraduate days at Ohio State University and received his Doctorate from Princeton University.

### Get Tickets From Registrar

Among the more important development work done by Dr. Thomas are the ultra-audible and glow-discharge microphones, applications of the "Electric Eye," and electro-static condensers for power purposes. At present he is touring the United States giving lectures.

This all-institute project is part of a movement to integrate the evening division more completely with the day division. Admission to the lecture will be by ticket and these may be secured in the Registrar's Office. Since the talk will have both popular and technical appeal, the lecture has been made public and tickets may be obtained for outside guests.

## New Social Science Subjects Studied by Night School Classes

Time and motion engineering, and plant engineering and maintenance, are new subjects now being offered to students attending Armour's evening school. As announced by Professor H. P. Dutton, the classes will meet every Friday evening from 7:30 to 9:30.

### M. Wiberg to Instruct Class

Mr. Martin Wiberg, who has had much practical experience in the printing trade, is to be the instructor of about twenty men in the time study class. The class will analyze the motion picture industry and its relation to time. Instruction will cover the use of the stop watch and elementary time setting. Men who have this knowledge of improving time and increasing production are usually quickly absorbed by industry.

### To Present More Subjects

Plant engineering and maintenance, another subject introduced by the social science department, will be conducted by Mr. Frederick Oakhill, plant engineer for the Bauer and Black Division of the Kendall Company. The subject will be given on the order of the conference course.

Mr. Oakhill is president of the Chicago Division of the Society for the Advancement of Industrial Management and has had many years practical experience.

## Civil Engineering Museum To Be Built in Chapin Hall

Professor Wells is developing a museum on the third floor of Chapin Hall to be used as a display room for civil engineering. The room for the museum is at present being reconstructed, and will be completed this fall.

Some of the exhibits will be a structural section exhibit furnished by Inland Steel, a structural wood joint exhibit, a reinforced concrete exhibit, an exhibit showing structural failures in steel, concrete, and wood, and an exhibit of structural parts of airplanes.

Temporarily these rooms will also be used as a meeting place for the W. S. E.