



STUDENTS URGED TO REGISTER IN CLASSES EARLY

Plan Tried Last Year To Be Used Again

CONFUSION ELIMINATED

Although the regular registration day for next semester has been set for February 8th, students will be given the opportunity of registering early. This plan of early registration was tried out last year and proved very successful in avoiding confusion and waiting. Of course the student registering early must be reasonably sure of his next semester's program.

Tuition and fees may be paid on Wednesday, Thursday and Friday, January 27, 28, and 29 and on Monday and Tuesday, February 1st and 2nd, between 9:30 A. M. and 1:00 P. M.

Payment may be made by personal check, cashier's check, or money order made payable to the Armour Institute of Technology.

Registration will be by departments as listed. Students will then pay in the Cashier's office on the second floor, Main Building.

Register as follows:

Mechanical Engineers, in the Mechanical Laboratory, basement of Main Building.

Electrical Engineers, in the office of the Electrical Department, second floor, Main Building.

Civil Engineers and Architects, in the office of the Civil Engineering Department, 2nd floor, Chapin Hall, 3327 Federal Street.

Chemical Engineers, in the office of the Chemical Engineering Department, fourth floor, Main Building.

Fire Protection Engineers, in the office of the Deans, Main Building.

Enrollment in classes may also be completed on the days mentioned by presenting receipts and tentative programs to the instructors.

For those who are unable to take advantage of early registration, the above program may be followed on Monday, February 8th.

News Staff Positions Open to All Students

Freshman and sophomore students are invited to try out for places on the staff of the Armour Tech News. Men who have had previous experience, and new men are urged to report at the News Offices at 3323 Federal Street on Friday evenings after 5 o'clock.

The work involves writing stories, heads, interviewing of faculty members, speakers, and students, proof reading and general newspaper work at the printer's.

Valuable experience not otherwise available can be acquired through publications activities. Successful efforts are regularly rewarded by appointments to staff positions which eventually lead to editor-in-chief and associate editors.

Opportunities for business experience are open to those interested in that line. This work includes selling of advertisements, subscriptions, and general business experience.

All those interested are asked to be present at the News office this Friday at 5 o'clock, ready for work.

A. I. Ch. E. Will Hold Meeting This Friday

Bruce K. Brown, a patent attorney for the Standard Oil Company of Indiana, will talk on "Patent Law in Engineering" at the first meeting of the Armour branch of A. I. Ch. E. this Friday, January 15.

The meeting will be held at 10:30 A. M. in the Physics Lecture room and should be well attended by everybody, especially seniors, since they are studying the subject at this time.

G. E. Film Shown To A. I. E. E. Men

Last Friday, January 8, the A. I. E. E. held a meeting in Science Hall at which four reels of motion pictures were shown. As was the case at the previous meeting the General Electric Company donated the films. The subjects, taken from the G. E. "Marvels of Science" series, were:

1. Conquest of the Cascades.
- 2-3. Induction Voltage Regulators.
4. Vitreous Enameling Process.

Washington State's picturesque Cascade Mountains were first crossed by a railroad in 1902, when the Great Northern Railway accomplished this task. In 1909 they completed a tunnel two and a half miles in length. This sufficed until 1925, when, due to the high maintenance cost of snow sheds, they decided to bore another tunnel eight miles in length, to eliminate the major part of this difficulty. This undertaking was accomplished in 3 years by simultaneously boring from both ends and from the center outward. The completed tunnel was twenty-two feet high and sixteen feet wide.

Induction voltage regulators are "the middle-man between voltage supply and demand", their time of response being one-quarter of a second. Their present high state of development required 40 years of engineering and operating practice. The two reels devoted to this subject covered in detail the entire construction of these useful pieces of equipment.

The General Electric enameling furnace has the special feature of taking in the work at a point below the heating element, thus conserving a considerable portion of the heat that is lost in other types of furnaces. This furnace can handle 5,000 to 6,000 pounds of cast iron per hour, or 4,800 pounds of sheet steel per hour.

Professor Scherger To Lecture at Sinai

Dr. George L. Scherger, head of the department of history, will deliver a lecture every Friday evening at 8:15 P. M., at Sinai Temple, 4600 South Parkway.

This program of lectures is intended to serve as a story of the personalities who have created and advanced the modern modes of civilization and thinking.

There are some who believe that the voices which called man "to prayer" no longer exist. But whether with us or not, their work abides and still leads men to adventure.

In order to present the work of these men to the public, Dr. Scherger, yielding to popular demand, will lecture on the following:

- Jan. 8—Gandhi—The Voice of present day India.
- Jan. 15—Briand—The Voice of Conciliation.
- Jan. 22—Ramsay MacDonald—The Voice of present day England.
- Jan. 29—Mussolini—The Voice of Fascist Italy.
- Feb. 5—Stalin—The Voice of Bolshevik Russia.
- Feb. 12—Lincoln—A Man for the Ages.
- Feb. 19—Bruening—The Voice of new Germany.
- Feb. 26—Thomas Jefferson—The Father of Democracy.
- Mar. 4—Goethe—The Apostle of Culture.
- Mar. 11—Emerson—The Voice of Idealist America.
- Mar. 18—Tolstoi—The Count who Lived Like a Peasant.
- Mar. 25—Schopenhauer—Exponent of the Philosophy of Pessimism.
- Apr. 1—Nietzsche—The Philosopher of the Superman.
- Apr. 8—Robert Browning—The Mystic Poet.

F. U. SMITH SENDS GREETINGS

F. U. Smith, Secretary and Comptroller of Armour Institute until September, 1920, sent Christmas greetings to his many friends of Armour through the Armour Tech News.

SELECT PICTURES NOW

The members of the faculty and students who have had their pictures taken for the Cycle at Bloom's Studios should make their selection immediately.

If the proof to be used be marked on the back, and the proofs deposited in the Cycle box in the bookstore, they will be sent downtown without delay.

Play Presented At Yule Concert

This year's Christmas Concert took place on the Thursday morning before the holidays. The Armour Tech Musical clubs give a concert every year before the holidays, but this year, from the opinion of most of the students and faculty, they put on the best one in a long time.

The musical clubs consist of the orchestra, glee club, Stresses and Strains, and the newly-formed band. Besides these, the Dramatic Club, another recently formed organization, gave a short, one-act play. From the remarks of the audience it was evident that all the older organizations improved wonderfully, and that the two newer ones had a permanent place in the school. The Dramatic Club, especially, startled the students. Its formation was looked upon with levity and many went to the concert prepared to joke at the play. However, the performance was received with genuine pleasure and their next presentation is expected to be a real treat.

A great amount of preparation on the part of all the students resulted in the following program:

"Poet and Peasant," by Von Suppe, was the opening piece played by the orchestra. This was followed by a violin solo, "Cavatina," by Raff, played by Philip Korrell. The orchestra then played a medley of Christmas songs, "Beneath the Holly" Stresses and Strains, our popular-music orchestra, played four numbers, including "Goofus," with Earl Bollinger at the piano, Bernard Loesche and Paul Troemper at the violins, and Walter Hornberger on the bass.

The Glee Club gave as its contribution in the concert four songs, and its new quartet sang "Sylvia," by Oley Speaks, and a new Christmas carol written by Dr. Protheroe. "A Night at the Inn" was then enacted by the Armour Players. The band played as its part two marches, "National Emblem," by Bagley, and "The Thunderer," by Sousa, under the direction of Walter Hornberger.

The entire program was arranged by the Musical Clubs officers and they deserve credit for the well-balanced performance. These officers are: J. E. Walker, president; J. S. McCall, vice-president; E. W. Carlton, business manager; T. A. McGill, secretary-treasurer; Professor C. W. Leigh, faculty adviser.

Junior Chemicals to Visit Glass Company

Due to a change in arrangements, the junior students in the department of chemical engineering will make an inspection trip to the Inland Glass Company in Clearing, Illinois, someday this week.

The date has been tentatively set for Friday, and definite information will be posted on the bulletin board in due time.

F. B. ATTWOOD VISITS SCHOOL

F. B. Attwood, '31, a former Editor-in-Chief of the *Armour Tech News*, visited the school last Thursday. He did some work in the Industrial Chemistry Laboratory while at the Institute.

A Christmas card was received by the News from Fred Attwood wishing the "Noos" gang a Merry Christmas. Attwood is now selling filtration equipment and a solution for locker room floors to prevent "Athlete's Foot."

SOCIAL MEETING OF NEWS STAFF IS HELD TONIGHT

All of the members of the staff of the Armour Tech News have been invited to attend a social gathering at the home of Professor Walter Hendricks, 5523 University Avenue, this evening at eight o'clock.

The purpose of the meeting, besides being a get-together of those who work on the News, is to announce and install the members who are being promoted to new positions on the staff. It is customary for the editors to turn over the reins to the new men in the middle of the year so that they may remain as an advisory board to help out until things are running normally.

Reviewing the similar meeting of last year, it is probable that the greater part of the evening will be spent in smoking, card-playing, and entertainment.

A crowd of approximately fifty editors, assistants, reporters, and miscellaneous workers are expected to be present. Everyone in any way connected with the Armour Tech News is urged to attend.

Students Advised to Make Programs Early

Dean Penn has requested that students make out their programs as soon as possible. In this way a delay that often occurs between semesters may be eliminated.

Any conflicts in the schedule should be reported to the Dean's office at once.

The present program, posted in the main lobby, shows an important change as regards freshmen classes. All freshmen will take shop in the afternoon, instead of in the morning as has been the custom during the last five years.

This choice has come about as a result of trial. Afternoon shop for freshmen had been the custom for thirty years, but it was thought that offering shop in the morning would result in more efficient programs. This system was then tried for the last five years, but was found to be less efficient, and has now been discarded in favor of the old plan.

Aurora-Armour Club Has Holiday Meeting

The holiday meeting of the Aurora-Armour Club was held Saturday evening, December 26, at the home of T. W. Twichell, E. E. '99. The business meeting included the election of officers for the following year. New officers are Ray Winsler, '08, President; Otto Staib, '33, Vice-President; and Harold Bodinson, '33, secretary-treasurer.

CALENDAR

Tuesday, January 12
4:30 P. M. Basketball, Y. M. C. A. College vs. Armour at Armour.

5:00 P. M. Orchestra Rehearsal.
8:00 P. M. Armour Tech News Smoker at home of Professor Hendricks.

Wednesday, January 13
8:30 P. M. Boxing, 124th Regiment Armory vs. Armour at 52nd Street and Cottage Grove Ave.

Thursday, January 14
3:30 P. M. Swimming, Crane vs. Armour at Crane College.

Friday, January 15
10:30 A. M. W. S. E. meeting in Physics Lecture Room.
10:30 A. M. A. R. A. meeting in Electrical Lecture Room.

10:30 A. M. W. S. E. meeting in B. Mission.
Saturday, January 16
8:00 P. M. Augustus vs. Armour at Rock Island.

Cycle Pictures Taken Wednesday

Group pictures for the 1932 Cycle will be taken Wednesday, January 13, in the gymnasium and in the assembly hall, starting at 9:30 a. m. It was decided to do this indoors in order to avoid any delay that might be caused by unfavorable weather.

Students having classes which interfere with the picture-taking schedule will be excused for the necessary time.

All groups except the Orchestra, the Glee Club, Stresses and Strains, and the Band will have their pictures taken in the gymnasium. A tentative schedule giving time and place has been organized by the Cycle staff and appears on another page of this issue.

Athletic teams are requested to appear in their uniforms. The orchestra and the Glee Club should wear the usual costume of white trousers and dark coats.

The editors of the Cycle have requested that all seniors who have not as yet had their pictures taken do so as soon as possible. Senior pictures are by Bloom studios, located on the twelfth floor of the State-Lake building.

In years previous all group pictures were taken on the same day, outside, in Ogden Field, but weather conditions ruffled hair and turned up collars and so on; this showed up too well due to the detail of such pictures. This accounts for the decision to have the smaller group pictures taken indoors.

Pictures of classes and of professional societies will be taken as usual in March.

Chemicals Visit Lead Refineries in Indiana

To conclude the series of inspection trips for 1931, the senior chemicals visited the U. S. S. Lead Refining Company, the International Lead Refining Company, the Grasse Chemical Company of East Chicago, Indiana, during an all day trip on December 17.

The U. S. S. Lead Refining Company was visited during the morning. Guides explained the method of manufacturing electrolytically pure lead by the Betts Process, while the equipment was inspected.

In the crude lead obtained from the western part of the United States, there are such impurities as silver, gold, copper, bismuth, tellurium, etc. and these are removed in the electrolytic chambers.

Silver and gold are electrolytically removed from the rest of the impurities and sold. Receipts from their sale almost cover the operating expense of the plant.

The International Lead Refining Company was then inspected. They manufacture pure lead by the Betts process and white lead by an electrolytic process developed by Sperry.

The next and last stop of the trip was the Grasse Chemical Company. Just recently this plant has been taken over by the Du Pont Company and is now open to inspection by everybody.

Lunches Must Not Be Eaten in Classrooms

During the past few months many students have been using the various laboratories, drafting, locker, and class rooms of the Institute as places in which to eat box-lunches, and lunches brought from home. An unsanitary condition has resulted from paper and remnants of these lunches.

Because of this, a room has been provided in the basement of the Mission Building for all those who bring their lunches. The room is open for this purpose from 11:00 A. M. to 1:00 P. M.

The lunch room at the north end of Ogden Field is open as usual from 11:30 A. M. to 1:00 P. M., and may also be used by those who bring their lunches.

RIFLE TEAM BUSY IN PRACTICE FOR COMING MATCHES

To Compete with Big Ten, Western Electric, and Others

BEAT AUSTIN GUN CLUB

Sharpshooters of the Armour Tech Rifle Club will be busy the next few weeks proving their skill against many of the best teams in the middle west.

Entry blanks were sent Wednesday by the manager to the Illinois State Rifle Association for participation in the matches for the state championship. The matches run for a period of six weeks beginning the latter part of January, and Armour has entered a five man team in the fifty foot division for iron sights; also two individuals are entered in the same division. The Tech men will shoot their matches on Fridays, on their own range, using targets sent by the Illinois State Rifle Association.

Another match of importance is that with Humboldt Park Rifle Club on January 14; this is the first shoot of the year for the silver cup, and will be an indoor match.

In the contest for the state championship last year, Armour won as a team, and also took the first five places for individual shooting. Humboldt Park also lost the cup to Tech shooters last year.

The noted Westric team of Western Electric will engage Armour in a shoulder-to-shoulder match at Hawthorne Gun Club on February 6. This club has a fine range and the men will have the opportunity to shoot through steel tubes 75 feet long; this is a new arrangement to eliminate effects of wind.

Armour men easily won the vacation match with Austin Gun Club at Austin, on a 75 foot range, with a score of 918 to 879. A seven man team shot this shoulder-to-shoulder match.

The third match with the New York Stock exchange ended in a Tech victory by a score of 1883 to 1868. Armour won all three matches with this club; last year the Stock exchange won four out of five shoots with A. I. T.

The Rifle Club is anxiously awaiting matches scheduled by the manager with several universities for the next two months. One shoot will be with the State University of Iowa, 1931 Big Ten champions. Fifteen men will shoot, and the ten high scores will count.

Four such matches are on schedule: University of Illinois and Indiana, and Iowa State College are included. These teams will all consist of R. O. T. C. men, and the shooting will be in the military offhand stand position, which is unusual for Armour men.

First Jewelry Order For Seniors Delivered

The first order of senior class jewelry has been delivered, and quite a number of fourth-year men have been seen displaying their new rings and keys. A second order has been turned in to Spies Brothers.

The best expectations of the members of the committee were realized, for a total of seventy-five seniors have purchased insignia. This committee was made up of the following men:

- E. A. Scanlan, Jr., Chairman.
- E. W. Carlton.
- W. H. Hornberger.
- W. A. Holland.
- G. W. Schodde.

Anyone else desiring to purchase one of the rings or keys may still do so by going to the offices of Spies Brothers at 27 E. Monroe Street. The same prices are in effect as are listed with the samples in the display case outside Mr. Allison's office.