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March 30, 1943

Sigma XI elects 18 new members

Nine full members and nine associate members have been elected to the Illinois Tech chapter of Sigma XI. This was announced by the membership committee after an election meeting held last Thursday.

All persons elected to full membership have proven themselves outstanding workers in their respective fields, and have established a noteworthy reputation among members of their professions.

Those elected to full membership are: Dr. Ralph E. Peck, Assistant Professor of chemical engineering; Dr. Rudolph Samuel, visiting professor of physics; Mr. Albert Gail, assistant professor of aeronautical engineering; Dr. Willis Blaine Catton, instructor in mathematics; Dr. Max Dehn, visiting professor in mathematics; Dr. George Whitelaw Mackey, instructor in mathematics; Dr. Francis J. Frere, analytical chemist; Dr. Isaac Opatowski, mechanical engineer; Mr. Harold John Holmquest, mechanical engineer.

The associated members elected to Sigma XI are, with one exception, graduate students who have shown definite promise in their chosen fields of research. The only recently elected undergraduate student is Robert Joseph Mahassek who in addition to high-scholastic achievement, has revealed the qualities of a research worker.

The graduates elected to associate memberships are: Kenneth A. Rees, department of chemical engineering; Ted Zie-

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Tech time table

Tuesday, March 30

- 2:00 p.m. ITSA. East Dining Room
- 2:00 p.m. Girls Glee Club. Apartment
- 5:30-6:30 p.m. Orchestra. Auditorium
- 7:30-10:30 p.m. A I Ch E smoker. Auditorium

Wednesday, March 31

- 5:30-6:45 p.m. Dance Club. Auditorium.

Thursday, April 1

- 5:00-6:30 p.m. Glee Club. Auditorium

Friday, April 2

- 9:30-11:00 a.m. Army-Navy Examinations

Saturday, April 3

- 8:30 p.m. Illinois Tech Hockey Hop. Lounge

**WATCH FOR TECH NEWS
ISSUE THIS THURSDAY
IMPORTANT NEWS
BREAKING**

Russian woman speaker at all school assembly

John Briggs, president of the Western Society of Engineers, has announced that IIT will have the privilege of hearing Mme. Nila Magidoff at a general assembly Friday, April 9, in the Auditorium.

Mme. Magidoff, a young and energetic representative of Russian womanhood, is the wife of NBC's correspondent in Moscow. At the outbreak of the German invasion of Russia Mme. Magidoff plunged into war work, serving as an air raid warden, making sand bag protections for buildings, and guarding rooftops from incendiary bombs. Most of her nights during the blitz against Moscow were spent in the subway air raid shelters. Because of the rule requiring the evacuation of wives and children of American correspondents abroad, Mme. Magidoff was obliged to come to this country, despite her desire to participate in the defense of her native land.

A tall, striking figure, Mme. Magidoff, has toured hundreds of cities as a speaker for Russian War Relief. She has spoken on the same platforms with former Ambassador Joseph E. Davies, Mme. Litvinov, Lady Marley, and many others. "This is my war work. She says, "It is my contribution to the joint ef-

forts of my own country and yours."

During a recent speech, she said, "You cannot imagine how hard our Russian women are working to win this war. Russian women are as feminine and as home-loving as women anywhere in the world, but they cannot stand aside from a war in which their own elementary rights as human beings and as women are threatened. They drive locomotives; they mine coal; they pilot ambulance planes; and devote their talents in a million ways to winning the war. Half of the surgeons at the front are women, and almost all the nurses go into the thick of battle to bring out the wounded under fire. Russian women do not serve in actual battles; but they are performing vital services in industry and medicine without which the Red Army could not have put up its splendid resistance."

"In Russia we had expected and prepared for this war for a long time. The day that fighting began, the Russian women were organized and ready. In this country, when war came to you, I do not think you recognized the gravity of the situation. But now every hour brings greater realization of the serious tasks ahead. Now you understand it is not play."

Gloves, whistles, caps for Pi Tau pledges

Pi Tau Sigma, national honorary society for mechanical engineers, pledged fifteen new members last week. These men were selected on the basis of outstanding scholarship and participation in school activities.

The new pledges are Robert Bontham, Frank Carqueville, Charles Rowbotham, James Carroll, Thomas Dunsheath, Earl Goldberger, Ernest Hedeon, Lowen Shearer, Jack Soderberg, Bert McCleneghan, Charles Farr, Markus Heidmann, Byron Round, Robert Schneller, and Robert W. Erikson.

Among the duties of the pledges are the wearing of an engineer's cap, gauntlet gloves, whistle, and red neckerchief. They must also carry a ten inch wrench and notebook with the history of Pi Tau Sigma, names of chapters, and list of active members. The pledges must blow a whistle and courteously ask for the signature of each active every day for two weeks, and faculty names every other day for two weeks. Pledges must also answer all questions about chapters and history of the fraternity.

Dr. Krathwohl stumps 'em all

Professor W. C. Krathwohl recently decided to see how much plane geometry the members of his math 102 class actually knew. He thereupon presented his students with a problem that any high-school math student should be able to solve. Naturally no one in the class could arrive at a solution.

Two of his students took the problem to the Technical Drawing Department where typical reactions were: "There's a solution, but I don't know how you get it," and "It can't be done without using parabolas." Several graduate students were similarly perplexed. It seemed that the only person who knew how to solve the problem was Dr. Krathwohl. Finally he enlightened his class with the solution.

When this brilliant piece of high-school mathematics was shown to the Technical Drawing Department, Professor Spencer stated that he may use the solution in the next edition of his book. The problem, a construction, involves the use of a theorem with which nobody except Dr. Krathwohl was familiar.

Total Navy V-12 program is known

Dr. Grinter attends welding conference

Dr. Linton C. Grinter, dean of the graduate school, attended a meeting held by the Stress Committee of the American Welding Society at Schenectady, New York. The main problem before the group was the elimination of internal stresses in welded structures. Dr. Grinter proposed that a new research program be set up to study forces in welded diaphragms, and invited the Navy's Model Testing Basin to cooperate with IIT in this undertaking. Lee Van Griffis, professor of civil engineering, is doing work along this line, utilizing a specially constructed machine which imposes three dimensional stresses. The machine applies simultaneous longitudinal load and internal pressure.

The processes which are now in use heat metals unevenly, causing shrinkage and warping in structures, thus creating internal stresses. This greatly reduces the effective load which may be applied. Improvements in welding techniques may do much to increase the torpedo-resisting qualities of our ships, and the overall strength of our weapons of war.

According to Dr. Grinter, inspection of German tanks has shown that in many cases, welding is of a poor grade. This is in direct contrast to the high quality of welding that has been applied on the tanks of the United States.

Dr. Clouse speaker at chemical society

Dr. Ruth Cowan Clouse, chairman of the department of home economics at Illinois Institute of Technology, was the featured speaker at a special meeting of the American Chemical Society of South Bend, Indiana, Wednesday night, March 24.

Her address on the topic, "Current Problems and Recent Research in Human Nutrition," was given before the St. Joseph section of the national society at its annual "ladies night" program.

A specialist in foods, Dr. Clouse discussed how the housewife can supplement rationed commodities with other foods to guarantee adequate meals. She also reviewed recent findings of experts on human dietary requirements.

Curricula allied to engineering

Examinations, qualifying students for the Navy's new V-12 program, will be given this month. The exams will be for those students who want to enter the reserve, as well as for those who are already in some other branch of the Navy program. Details of these exams are given below.

At first, there were three divisions in the Navy's reserve set-up. The V-1 program was for freshmen and sophomores who fulfilled the mental, physical, and age requirements. The upper classmen entered the V-5 or V-7 programs, one for training deck officers, the other for engineering officers. After the V-1 men had completed four semesters of college work, they were to take a test, given by the Navy. Upon passing this, they would be transferred into V-5 or V-7 according to their individual preferences.

However, last December, this set-up was changed, when the Army and Navy closed their ranks to enlistment. The two branches of the service each adopted a reserve training program. The Navy's is called V-12. The V-12 program provides for engineering training, not only for those boys who are already in college, but also for those who will graduate from high school. Any student not, at present, in some reserve, who enlists in the Navy training program will at once come under V-12. Those men who are now in V-1 or V-7 will be absorbed into V-12.

As mentioned above, students in the V-1 program were to take an examination at the end of their sophomore year; those who passed it would go into V-5 or V-7. This same procedure will be followed with one exception: men who pass the exam will be transferred into V-12. Thus, in time, everybody who is in the Naval Reserve training program will be in V-12.

IIT students who are at present enlisted in the V-1 program will take this test on Tuesday, April 20. Dr. Krathwohl will supervise the exam, sessions of which will be held both in the morning and afternoon. It is very important that all V-1 men take this examination, so that they may qualify for V-12.

This exam will take care of those who are already enlisted in some Navy program other than V-12. However, students who are not in any reserve program, and who are from 17 to

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