AIEE HEARS TALK ON WIRES; THREE PLEDGED TO HKN

Analogous both in function and essentiality to the veins and arteries of the human body, electrical cables and wires were discussed at length at the April 4 meeting of the AIEE. These industrial life-lines were explained by Robert Zane, former Armour student, who is now an engineer for the Okanite cable company. After spending his freshman year at Armour, Zane went to Illinois, from which University he graduated in 1933.

After reminiscing briefly on his Armour days, Mr. Zane briefly described his company's products. Extra high voltages, the undergraduate electron engineers were told, must be conveyed in paper-wrapped cables. A myriad of other insulations for lesser pressures was also enumerated and described.

On the 66,000 volt transmission cables employed by the Edison company, mechanical pressures of up to 115 pounds per square inch were produced between cables by the heavy currents passing through the cables, according to Mr. Zane. Other engineering problems were also discussed.

After the speech, a sound film produced by the Okanite company and narrated by the famous Lowell Thomas was shown in room U2W, Student Union meeting room. American steel, Canadian asbestos, Amazon rubber and cop-

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Wilcox and DeCicco To Represent IIT At AMS Meeting

Of the fifty-six papers being presented at the three hundred and seventy-eighth meeting of the American Mathematical Society, ten are products of either present or former members of the faculty of Illinois Institute of Technology. The meeting will be held at the University of Chicago on April 11 and 12.

Four of the papers are being developed by two present members of the faculty: Professor L. R. Wilcox in the field of algebra and Dr. John De Cicco in the field of geometry and topology. The topic of Dr. Wilcox's talk will be "Extensions of Semi-bodular Lattices". This subject is the result of recent study by the speaker, and it represents very modern mathematical concepts.

Three papers will be presented by Dr. De Cicco. Their titles are: "The Differential Geometry of the Laguerre Group B6," Infinite Groups Generated by Equilong Involutions and Symmetries," and "Lineal Element Transformations which Preserve Dual-isothermal Families." Dr. De Cicco studied under Professor Kasner at Columbia University, obtaining his doctorate in 1938.

The other men who were former members of the faculty and are also presenting papers are: Dr. G. E. Hay, Dr. A. T. Lonseth, Dr. I. M. Niven, Dr. W. T. Scott, and Dr. Sam Perlis.

LAMBDAS PRESENT "SWING THING" AT ROLLING GREEN C.C.

Did you have fun at the Gamma Rho Spring Thing? Well then, by all means be sure to be at the Sigma Omicorn Lambda's Spring Swing! Any resemblance to formality or dignity is purely unimaginable and unintentional as the Lambda's are noted for having the most informal dances of any given at Lewis.

As is usual in the choice of the sites for their dances, the girls have chosen the Rolling Green Country Club with its charming spaciousness that is so conducive to the "one-big-happy-family" atmosphere for which the girls strive. In keeping with the carefree tempo, the dress for the affair will be informal to allow the merry-makers better opportunity to relax and have a good time. Who could help but have a good time amid attractive decor of the country club, the lonely enclosed veranda, the well-kept rolling greens, from which the club derives its name, and the soft beams of the moon which the weatherman positively guarantees to come up about midnight, just in time to shine on the height of the festivities.

The country club is located on Rand Road at Euclid, a location which you could probably find even with your eyes shut, but in case you are unfamiliar with the territory, it is near Arlington Heights. The bids for this jig-fest are selling for $1.25, a new low in dance price quotations! For this nominal fee, there will not only be dancing to your favorite tunes, but some novel entertainment which the girls are keeping a seret at the present time. The girls have promised to make this year's event even bigger and better, and so buy your bids now and be there promptly at 9:30, Saturday, April 19, when the first strains of the day will officially open the fourth annual Lambda Spring Swing!

FACULTY BRIEFS

Professor M. W. Fodor, member of the social science department, spoke at the annual meeting of the American Academy of Political and Social Science in Philadelphia last Friday night. His subject was "The Revolution Is On."

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Professor V. I. Komarewsky plans to remain in St. Louis for three weeks following the American Chemical Society meeting to study explosives. Upon returning, Prof. Komarewsky is to present a course in this subject to Engineering Defense students.

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Mr. J. I. Yellott, director of the Engineering Defense Training and head of the mechanical engineering department flew to Atlanta, Georgia, to attend the spring conference of the American Society of Mechanical Engineers. While there Mr. Yellott presented a talk on the E.D.T. program.

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Coming as a shock to the faculty and student body of Armour College of Engineering was the death of Dr. George Scherger on March 31st. Dr. Scherger was affiliated with the faculty of Armour from 1899 to 1933, and served as the Institute's Chaplain until the merger last year.

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Dr. Thomas C. Poulter, scientific director of the Research Foundation and technical adviser to the Secretary of the Navy has returned to the campus after a week's defense tour. The first part of the week, Dr. Poulter spent in Washington at O.P.M. board meetings. Following these meetings, Dr. Poulter went to the Picatinny Arsenal at Dover, N. J., to study munitions production and following this spent a day at the Naval Research Laboratory.

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Mr. F. Ashley-Montagu, editor of a quarter centenary volume has invited Professor Grant McColley to contribute a study of 30,000 words to this volume. Dr. McColley's subject will be "Relations of Science and Literature during the 17th century." On Tuesday evening, April 29, Dr. McColley is also to give a talk on "Paradise Lost" at a meeting for the Chicago Poetry Circle at the Auditorium Hotel.

RECESS HOP

Wed. April 9, 1941

Armour Auditorium

Gents 50c **Ladies Free**

Five Armour Profs To Talk At American Chemical Society Meet

Department of chemical engineering at Armour will be very active at the American Chemical Society meeting in St. Louis, April 7 to 11. Dr. B. B. Freud will participate in the council which is the governing body of the organization. Five other men shall present to the meeting papers on research. These men are Dr. V. I. Komarewsky, Dr. Bruce Longtin, Dr. Hugh J. McDonald, Dr. S. Winstein, and Dr. M. J. Murray.

"Effect of silver ion coordination upon the Rama spectra of some unsaturated compound" is the title of the paper to be presented by Dr. Murray. The project is the work being done towards a master's degree by Mr. H. J. Taufen and is being directed by Dr. M. J. Murray. Dr. F. F. Cleveland of the physics department has assisted in the preparation of the paper. The problem concerns the state of the unsaturated hydrocarbons dissolved in silver nitrate and water. Upon investigation of the spectra a considerable difference has been found between the solution of pure unsaturated hydrocarbons and the solution of the same, dissolved in silver nitrate and water. This fact supports the idea of Dr. S. Winstein and Dr. Lucas (of California Institute of Technology) the idea being that the silver ion attaches itself at the double bond by coordination.

Dr. Winstein will present a paper entitled "The effect of neighboring groups and the nature of the reaction medium on the steric results of some replacement reactions." Dr. Winstein began work upon the project at Harvard University and now at Armour has been assisted by Mr. R. E. Buckles who is working toward a doctor's degree and Mr. H. V. Hess who is working for a master's degree. The paper pertains to the steric aspects or organic replacement reactions. Ordinarily in a replacement reaction the product is a mere image of what one might expect. In other words, a carbon atom turns inside out in the course of being substituted. The work being reported demonstrates that certain groups near by the carbon atom being substituted. may intervene during the replacement process to give unlooked for intermediates. The net steric result of replacement reaction with such neighboring groups present in the molecule, turns out to be the retention of configuration. In illustration, the carbon atom concerned has been turned inside out or inverted twice during the replacement process. Practical result of the finding is that it becomes possible by controling the reaction condition to obtain either reversion or retentions as a steric result, thus where the product of one steric result is the useful one and the other one is not, it becomes possible to obtain the desired product.

"The liquid vapor composition of the ethyl alcohol — glycerol-benzine system." is the paper being presented by Dr. McDonald. Dr. McDonald has been assisted in research by Mr. Ralph Petri who graduated in chemical engineering in 1940.

"Catalytic dehydration and dehydrogenation of butyl and amyl alcohol" is the subject matter of Dr. Komarewsky's paper. As a result of such findings Dr. Komarewsky has been able to produce butadiene which is used in makeing synthetic rubber. Also he has been able to produce isoprene which is the basic matter of natural rubber.

Dr. Longtin is presenting "A theory of the effects of molecular shapes and constitution of the thermodynamic properties of solutions" which relates to the heat of mixing of two liquids and the liquid vapor equilibria of two component systems. By modifying one of the constants of Langmuir's theory, who had developed one which was not valid in all cases, Dr. Longtin was able to make an equation, making the experimental data better and give the statiscal mechanics the basis for modification.

Recess Hop—

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be decorated with streamers and balloons — the balloons to be released upon the heads of the dancers at an appointed hour. The Student Lounge and the cafeteria will both be open on this evening.

The high spot of the evening's entertainment will be reached when the "Hungry Five" (or is it six?) give out in song and when Charles Faris, the singing cowboy, recalls those fond memories of the golden West. There are many more surprises in store for those who will attend the RECESS HOP.

Mike Todd's never offered such a program as this!!! Replete with entertainment thrills and merriment and appealing not only to proletarian whims, but also to the most discerning esthetic tastes, the RECESS HOP will go on record as T H E social event of the year. If you have a date, — fine, — bring her along (you won't have to pay admission for her!); but if you are without the satisfying company of a "little woman," come to the RECESS HOP and find satisfaction.